

**“A LITTLE BIT OF WEIGHT IS TAKEN OFF”:  
A PHENOMENOLOGICAL STUDY OF CELTIC FOLK DANCE AS A  
STRESS MANAGEMENT STRATEGY FOR WOMEN IN MIDLIFE**

by

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**THESIS SUBMITTED IN PARTIAL FULFILMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF EDUCATION  
in  
COUNSELLING**

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**THE UNIVERSITY OF NORTHERN BRITISH COLUMBIA**

**November 2000**

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**0-612-62503-6**

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## ABSTRACT

This investigation sought to study the phenomenological experience of participation in a Celtic folk dance class and to determine the relationship between participation in an exercise program based on Celtic folk dances and stress reduction. This research was conducted as part of the Northern Interior Health Region Women's Mid-Life project which is part of the B.C Women's Health in Mid-Life Project (WHIM). A dual methodological approach -- descriptive phenomenology and quantitative testing -- was used to investigate the indepth experience of midlife women participating in a beginner level Celtic folk dance class.

Women ( $n=25$ ) ages 33 to 65 participated in seven introductory level classes based on Scottish Country Dances and Irish Set Dances. Participants completed a demographic questionnaire during the first class. The 40 item Speilberger's State Trait Anxiety Inventory-Form Y (STAI), a commonly used instrument in research on exercise and stress, was completed pre- and post- class during the first and sixth weeks. Feedback from the participants ( $n =17$ ) on the STAI results was obtained during a group activity conducted at the beginning of the seventh class. All participants also filled in a brief guided journal after each class. Five women who fit predetermined criteria -- 1) age 45 to 65, 2) present for at least 6 of the 7 classes, and 3) indicated above average stress levels on the preliminary questionnaires -- participated in audiotaped interviews designed to explore their phenomenological experience of the dance classes.

Phenomenological analysis of the interviews, guided journals and group activity yielded a thematic structure around the two core themes "Increase in Stress" ("Social Stress", "Stress from the Dancing", "External Stress", "Challenge") and "Decrease in Stress" ("The Group of Women", "Movement and Music", "Change of Focus", "Fun and Laughter"). The core phenomenon that emerged was described, in the voice of one of the women as, "A Little Bit of Weight is Taken Off". Two other themes emerged as keys to balancing and managing the stress implicit in the dance class, "New Learning and Mastery" and "Leadership".

The researcher proposes that participation in a physical activity program, based on Celtic folk dances, is a potentially effective method for managing stress.

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## **ACKNOWLEDGEMENTS**

There are a number of people to whom I would like to direct my acknowledgement. Without their input, guidance and support this thesis could not have come into existence.

Thanks first and foremost to all the dancers who donated many hours from their busy lives to participate in this research. My gratitude goes especially to those five women who gave selflessly of their time to be interviewed and to provide feedback on the transcripts and thematic structure. Without the involvement of all of these women this research could not have been undertaken. It is my hope that the participants in this study have derived as much from the experience as I have.

I would like to express my sincere appreciation to my thesis committee -- Dr. Barbara Herringer, my thesis advisor, and Dr. Paul Madak and Dr. Tom Strong, my committee members -- for your expertise, guidance and support. This document is as much a testament to your time, assistance and valuable input as it is to my own efforts. Thankyou especially for having the confidence in me to allow me to undertake a unique research design.

I would be remiss if I did not also acknowledge the important part played by Dr. Colleen Haney, both for inspiring this research and for her assistance during its preliminary stages.

Last, but not least, I would also like to thank my husband, Peter, and my daughters, Julia and Janette, for their patience and understanding as I travelled this academic journey.

## CHAPTER ONE: INTRODUCTION AND CLARIFICATION OF TERMS

### Introduction

“Mature women dancing” sneers Kate Mundy as her sisters enthusiastically chatter about plans to join the dancing at the Lughnasa festivities. The sarcastic tone of her voice and her disapproving demeanour make it clear that this is not something that “mature” women do; so, despite their wild enthusiasm and love of dancing, the five single sisters do not go. This scene from the movie “Dancing at Lughnasa” (O’Conner, 1998) is set in pre-World War II Ireland, but the attitude circumscribing the choice of activities deemed acceptable for mature women, combined with the social and cultural realities of women’s lives, continues to limit the possibilities for a potentially more healthful lifestyle for women as they enter mid-life. In spite of the acknowledged physical and psychological benefits that accrue through regular participation in physical activity, “few women are active enough to benefit their health” (Vertinsky, 1998, p. 81). According to Vertinsky,

it is important to critically evaluate the challenges inherent in achieving social equity in opportunities for healthy physical activity for all women. As we gain new understandings about how health gains can be achieved by reducing social inequity rather than providing more medical care, we can see how involvement in healthy exercise is closely entwined with the social and economic status of women, disempowering stereotypes of the female body and the issue of control over women’s bodies. (p. 82).

Wells (in Vertinsky, 1998) asserts that inadequate exercise is a major health issue for women today. In spite of the disintegrating barriers to female participation in athletic activities and extensive government campaigns to encourage participation, women in every age group are less active than men. Vertinsky reports that “in Canada, only 15% of women over the age of 10 report an activity level sufficiently frequent and intense to develop fitness” (p. 84) and participation rates decrease as age increases. Not only are women less active than men, they are also more stressed. A recent report from Roper Starch Worldwide (Stress Affects Women, 1999) informs us that women all over the world, across economic and social categories, suffer more stress in their lives than men. The report adds, “the world needs to develop stress-busters to ease the lives of these women”(p. 16).

This research project is motivated by my love of dance and firm belief in the psychological

benefits to be derived from physical exercise. I am a woman in mid-life who is currently involved in promoting and teaching Celtic folk dances and who also participates in dancing for the “sanity break” it provides. I am also well acquainted with stress as my life includes combining full-time employment as a social worker with university studies, family responsibilities and teaching dance classes. I am a person who seeks out stress as a motivation for action and change and who manages my responses to stress through physical activity.

This research has special meaning for me as it combines facets of all my post-secondary education. In 1967, I graduated from a Physical Education degree program which I undertook because of my abiding conviction in the important role physical activity plays in a holistic, healthy lifestyle. I struggled to teach physical education from a cooperative, egalitarian philosophy in an athletic milieu that valued competition and distributed a disproportionate amount of resources to boys and athletic teams. I attempted to impart basic skills and enjoyment of physical activity to all children, talented or otherwise, in order that they could pursue a physically active lifestyle throughout their lives. I also demanded equal gym time and resources for girls and recreational sports. Thirty years later, in 1997, I received my BSW. In this degree program my egalitarian values were affirmed. I also developed a greater understanding of structures that maintain the society in which we live, where a disproportionate portion of the resources and rewards (including leisure time) are controlled by the few. My current interest in stress management along with promotion of physical activity (through dance) as a key component of psychological health arises from my third degree program, Education (Counselling).

### **Objective**

This research focuses on lifestyle change as an intervention for managing stress. The investigation sought to study the experience of participation in a Celtic folk dance class and to determine the relationship between participation in an exercise program based on Celtic folk dances and stress reduction. In order to undergo this study I conducted 7 dance classes at an introductory level. My thesis presents participation in a physical activity program, based on Celtic folk dances,

as a potentially effective method of stress management that is well suited to women at this stage of life. Until recently midlife women have been paid little attention by the research community (Walker, 1993). What research has been done in the areas of mid-life women and stress management has not included the voices of the women participants. Vertinsky (1998) suggests that “it is essential to listen more carefully to what women ... say about their own experiences in their lived bodies and how they see them as providing a location for health and healthful practices” (p. 99). As the baby-boomers approach their fifties, the population of women in midlife is rapidly growing and along with these burgeoning numbers, interest is increasing in the health concerns of women in this group. Lifestyle interventions, directed toward preventative health care during midlife, could conceivably ameliorate or postpone many geriatric problems. However, changes in lifestyle must be accompanied by challenging systemic cultural barriers that shape and limit female participation in physical activity.

Through this research I investigated a specific strategy of stress management - exercise in the form of Celtic folk dance - as a therapeutic alternative for managing stress for women in mid-life. As well as providing an introduction to this study, Chapter One provides Clarification for the terms “mid-life”, “stress”, “Celtic” and “Celtic folk dance”. Chapter Two provides a review of the literature from several areas -- women in mid-life; stress, coping and stress management; music, exercise and dance, women and leisure -- as a backdrop for this study. In this second chapter, I also present a rationale for Celtic folk dance as a particularly suitable activity for women in mid-life as well as a justification for considering dance as a feminist issue. Chapter Three provides the philosophical basis for my study and delineates the methodology and the method I adopted. A dual methodological approach -- descriptive phenomenology and quantitative testing -- was used to investigate the in depth experience of mid-life women participating in a beginner level Celtic folk dance class and to give recognition to and build on, the body of quantitative research that has already been done in the area of exercise and stress. Data from interviews, guided journals and a group activity were examined using a phenomenological method of analysis suggested by Giorgi (1985). Particular attention was given to experience that suggested a connection with the concepts

of stress and stress management. Along with the phenomenological component, analysis of Spielberger's (1983) State-Trait Anxiety Inventory (STAI) (Form Y) using paired t-tests was used to document changes in anxiety, a commonly accepted measure of stress, over the course of two classes. The results of this testing were given to the participants for their feedback. Chapters Four and Five present the results from this investigation. Chapter Four documents the outcome of the phenomenological analysis and offers a thematic structure based on the lived experience of the women while and immediately after they danced. The voices of the women are used to illustrate and support this thematic structure. The results from STAI testing were analyzed using SPSS. The results of this analysis along with the feedback from the dancers on these results can be found in Chapter Five. A discussion and recommendations based on the findings from this research are offered in the concluding chapter.

I hope that my research will 1) broaden our understanding of mid-life women's experience of dancing; 2) add to the existing body of knowledge in the fields of dance, exercise and stress; 3) expand the choices of exercise activities for stress management; and 4) encourage a health promotion program based on wellness

Vertinsky (1998) identifies a number of issues that preclude women's participation in physical activity as a health promotion strategy. These include both misconceptions about the physical abilities of women and cultural assumptions about roles and appropriate activities for women. I am hoping that through this research, I may bring attention to the need for community programs and facilities that will address the needs and interests of women in mid-life and broaden the choices of physical activities for women.

### **Clarification of Terms**

#### **Midlife**

This study took place within the context of the "Women's Health in Midlife Years Project" (WHIM)(Pilot materials, 1999) - "an initiative designed to assist women in B.C. to make informed choices about managing key mid-life health issues". The definition of mid-life begins

with the age range identified by this project -- 45 to 65 years.

Mid-life is commonly equated with menopause, however, midlife is more than just a reproductive stage of life. For many women it can be a time for personal development and pursuit of personal goals. A woman's attitude toward this period of her life is determined by a number of factors including societal and personal beliefs. Within North American culture menopause has been a taboo topic and the worth of older women has been denied. Older women become invisible or are encouraged to remain forever young. Within other cultures and times this is not always the case. Northrup (1995) informs us that in Celtic culture the maid is seen as the flower, the mother as the fruit and the older woman, or crone, as the seed. "The seed is the part that contains the knowledge and the potential of all the other parts within it" (p. 431). The older woman is given the role of reseeding the community with her truth and wisdom.

### Stress

Since the term "stress" was coined by Hans Selye in 1936 to refer to "the reaction of the organism to some sort of outside threat" (Singer & Davidson, 1991, p. 37), the concept of stress has evolved to encompass a large variety of phenomena. Roskies (1991) informs us that there is no precise definition of the term stress or stress problems and there is lack of agreement as to what exactly stress means. Lazarus (Monat & Lazarus, 1991) suggests that the term "stress" be used as a collective term to describe a field of study. This is the manner in which the term "stress" is used for the purposes of this study.

### Celtic

In the present day, the term "Celtic" has become synonymous with Ireland although the influence of Celtic culture can be found throughout Britain, Ireland, Man, Wales, Cornwall, Britany in France, and Nova Scotia in Canada. For over five hundred years the Celts were a major cultural presence throughout Europe (Spangenberg, 1999; Wallace, 1996; Wangsbickler, 1997). Celtic domination was terminated by Roman conquest, however, evidence suggests that Ireland remained

untouched by the Romans and retained a Celtic identity well into the fifth century AD (Pierce, 1989; Wallace, 1996; Wangsbickler, 1997) when Christianity spread into Ireland. According to Pierce much of this Celtic identity remains in Ireland to this day. The term Celtic also refers to a language group in the Indo-European family. The Celtic family of languages is divided into two branches - Insular Celtic languages and Continental Celtic languages (Pierce, 1989). Celtic Insular languages are spoken throughout Britain, Ireland, Isle of Man and Britany. There are many native speakers of both Irish and Scottish Gaelic in Ireland, Scotland and Nova Scotia and Breton is spoken in Britany. The term Celtic refers to both a cultural and linguistic heritage. For the purposes of this project, it refers to the Celtic cultural influence on folk dance forms as they were developed in Ireland and Scotland and have been disseminated to other countries.

### **Celtic Folk Dance**

According to Silver (1981), the function of a dance identifies it as folk dance. Folk dance differs from theatre or art dance in that the “participants of folk dance [are] physically involved in a communal activity” (p. 4). Active physical involvement as a part of a group is the key aspect of folk dance but not the only aspect. There is also a suggestion of ethnicity, or linkage to the socio-cultural tradition of a group with a sense of identity based on origin (Silver, 1981; Hanna, 1988a). Typically, folk dances are executed in various formations, such as open circles, closed circles, squares, lines, trios and pairs. Participants hold hands, have arms around each others waists, link shoulders, or link elbows. Dancers learn to hold their actions together with the rest of the group to create a unified whole. There are many opportunities for social interaction and dances frequently included changing partners (Silver, 1981). The term, Celtic folk dance, includes but is not limited to, the ceili, country and set dances of the Irish and Scottish people. Ceili (ceilidh) dances are simple popular dances commonly danced at parties and may be couple dances, round dances, line dances and progressive line dances (Harrison, 1998). Scottish Country Dancing and Irish Set Dancing are derived from forms of dancing that were at one time popular throughout Euope. These forms of dancing were imported by dance masters and adapted to the music and styles of the local people.

These three types of dancing will form the basis for the proposed program.

Chapter One has presented an introduction and overview for my thesis research on the experience of mid-life women as they engage in the folk dances from Ireland and Scotland. The following chapter presents a review of the literature that forms the framework for this study.

## **CHAPTER TWO: FRAMEWORK FOR THE STUDY**

### **Introduction**

Literature for this study spans the fields of menopause, stress and stress management, exercise psychology and physiology, music and dance. This review begins with a discussion of the connection between women, menopause and stress. Research which suggests that symptoms of menopause are due more to life circumstances than hormonal factors is introduced. A brief overview of the fields of stress research and stress management strategies is then presented. Dance combines elements of both music and exercise, thus research in these two areas can be applied to dance. Stress theory and research from all three fields will be reviewed. This is followed by a section on laughter and stress, as laughter is an integral component of Celtic folk dancing. A concluding section of the literature review provides a discussion of the ingredients in Celtic folk dance that may make it especially appropriate for women in mid-life and an argument that participation in activities such as dance should be a "feminist issue".

### **Mid-Life and Stress**

The recently released Heart and Stroke Foundation's (2000) Annual Report Card on Canadian's Health reported that 43% of Canadians over thirty years of age report being stressed on a frequent basis. This report ranked workplace stress as the most common source of stress, with family and money worries not far behind. Time pressures were reported as the prime contributing factor. The report suggested that both men and women may be cutting out important aspects of their life, such as hobbies and recreation, in an effort to meet the demands of work and home. While little difference seems to exist between the genders in feeling pressured for time, "stress caused by attending to the needs of family members was higher among women than men" (no page).

Women of any age are likely to experience certain stressors more than men. In a 1989 study, Lowe enumerated several stressors peculiar to Canadian women. According to Lowe, the majority of women in Canada work a double day and consequently are faced with balancing work,

familial and personal demands. Many of the most stressful occupations - those that combine low status, monotony and low-decision making - fall to women. Women also make up the majority of employees in caring professions, such as health care, education and social services, where job burn-out is common. Additionally, in these leaner economic times, funding cut backs in the public sector place a burden on those who rely on these services. As services are cut back, women are called upon to take up the slack by filling caring roles.

Mid-life is a time of shifting roles, responsibility, and relationships, resulting in stressors peculiar to this life stage. Several major events are characteristic of the middle period of the lifespan. For women with families, this time coincides with children passing through their teen years or leaving, and sometimes, returning home. The current generation of mid-life women have been dubbed the "sandwich generation" as many are faced not only with caring for adult children but also aging and ailing parents. Women face their own mortality as their parents die and they become the older generation. At mid-life, those women who have devoted their lives to raising children, look back at career, educational and creative pursuits that they may have abandoned (Kass-Annese, 1999). Some feel too old to take them up again. Others are re-entering educational institutions whose programs and activities are directed toward the young. Women attempting to re-enter the labour force may not be marketable. Society does not provide opportunities for these women in the form of affordable employment training programs and opportunities such as it does for its youth.

The youth-oriented society in which we live sends negative messages about aging and limitations of older women (Kass-Annese, 1999 ; Page, 1993). According to Page, the cultural meanings our society attaches to menopause are ample cause for stress. Some women feel their usefulness is over when they can no longer fulfill the function of bearers and caregivers of children. The conventional medical mindset views menopause as a deficiency disease and this natural process is medicalized and pathologized (Northrup, 1995). Women are viewed as no longer able to produce or as declining in function. In our ageist culture women face a media barrage of negative messages about aging. Northrup points to the oestrogen companies and the medical

community who plant seeds of fear in women that as soon as they go through menopause their bodies will rapidly decline and they will lose their attractiveness. We do decline, but not totally as a result of aging. Decline is more a consequence of our attitudes toward the capabilities of women at this time of life, compounded by unhealthy lifestyle. As Kass-Annese (1999) points out, "Some anthropological studies have shown that, in cultures in which the elderly are revered and supported, physical and emotional health greatly surpasses that of the elderly in the Western world and that women have fewer symptoms associated with menopause"(p. 38).

Juggling home and work, going to school and raising a family, feeling unfulfilled, tending to aging parents, reparenting adult children, trying to find one's own niche in life - any of these can be stressful. Page (1993) declares, that, given the life circumstances surrounding mid-life women in North American society, it is not surprising to find signs of stress appearing in physical and/or emotional forms.

The period of time preceding and following menopause is referred to as the climacteric. "Some research has demonstrated that, during the climacteric, women who have more stress in their lives also have more 'climacteric complaints' than others" (Kass-Annese, 1999, p. 44). Many symptoms, such as insomnia, fatigue, shortness of breath, heart palpitations, hot flushes or chills, irritability, and memory difficulties, are common to both stress reactions and the climacteric (Kass-Annese, 1999) and are blamed on hormonal changes rather than life circumstances.

Evidence suggests, however, that psychological symptoms associated with menopause may be related more to stressful factors such as family, environmental and economic circumstances rather than endocrine changes. A study of middle-aged Australian women conducted by Dennerstein, Smith and Morse (1994) found that menopausal status did not significantly affect well-being. Well-being was related to current health status and psychosocial and lifestyle variables rather than endocrine changes. Bromberger and Matthews' (1996) research with American women also discovered that, while the occurrence of stressful events and high score on trait anxiety were predictors of depressive symptoms, change in menopausal status was not related to occurrence of depression.

## **Stress, Coping and Stress Management**

### **Stress**

Stress has been a part of human existence since earliest recorded history (Hanna, 1988a) but the name “stress” and the concept of coping with it are relatively new. The topic of stress deals with how people respond to changing and conflicting demands in their lives. Potential stressors can be found in the fabric of everyday life - lifestyle transitions, workplace, family and community relations, crises, inadequate resources and disparity between aspirations and ability or opportunity. The vast majority of adults who complain about suffering from stress complain about jobs, family stresses, and a multitude of minor challenges and threats that occur repeatedly and frequently (Roskies, 1991). Roskies reports that a number of empirical studies suggest that these “daily hassles” may be more important for adaptation and health than catastrophic events - especially if frequent. This, says Roskies, helps explain why seemingly “normal” persons living in “normal” circumstances complain about stress and develop stress related health problems.

“Although a correlation between stress and health (mind and body) has been discussed for centuries by philosophers and scientists, it is only in the past few years that stress has been considered a definite risk factor for ill health” (Kass-Annese, 1999, p. 38). Kass-Annese and Lowe (1989) estimate that stress can be linked directly or indirectly to 50-80 % of all illness. Research has determined that stress plays a major factor in a multitude of human health problems including hypertension, cardiovascular disease, depression, gastrointestinal disorders, headaches, low-back pain, suppression of the immune system and susceptibility to disease (Hanna, 1988a; Kass-Annese, 1999; Pelletier & Lutz, 1991). Stress is not the cause of ill health but, in the body’s attempt to adapt to stress, physiological conditions arise that pre-dispose the body to disease. Stress also plays a role in health related behaviours, such as drinking alcohol, smoking, pressured lifestyle and lack of sleep - all ways of coping that can be damaging to health (Monat & Lazarus, 1991; Pelletier & Lutz, 1991).

### **Stress Research Traditions**

Generally research on stress falls into two broad categories - physiological and

transactional. The physiological notion of stress is exemplified by the research of Selye (Singer & Davidson, 1991). Although the focus of my research is on the psychological aspects of stress, the connection between the psychological and the physiological is fundamental. “The two systems are really aspects of the same unitary process” (Singer & Davidson, 1991, p. 46). It is important to have a basic understanding of the individual’s physiological response to stress as negative health effects of stress, such as high blood pressure, hardening of the arteries, heart disease, ulcers and nervous disturbances, can be due to the body’s physiological response to stressors. Hans Selye, considered to be the father of modern stress theory, gave the field its name and provided one of first systematic descriptions of the sequence of hormonal and tissue change dubbed the “stress response” in a model of stress he called General Adaptation Syndrome (GAS). This model consists of three phases. During the *alarm phase* the body prepares itself for action by releasing hormones into the blood stream that facilitate the release of energy in the form of glycogen and free fatty acids, speed up the heart rate and increase blood flow to the muscles and brain and, at the same time, decrease the blood flow to the stomach and intestine. This reaction cannot be maintained continuously (Selye, 1991) and is followed by a further release of hormones designed to return the body to normal. Blood pressure and heart rate decrease, digestive processes resume and energy is conserved during the *stage of resistance or adaptation*. With continued stress resistance declines and the body reaches the *stage of exhaustion*. According to Selye, the body’s response to stressors is “non-specific” to a variety of dissimilar situations, including “emotional arousal, effort, fatigue, pain, fear, concentration, humiliation, loss of blood, and even great and unexpected success” (Selye, 1991, p. 22). This concept of non-specificity (reaction occurs in response to every stressor) has implications in that the “effects of stress are cumulative, such that each episode leaves behind a residue that may add up across stressful exposures” (Singer & Davidson, p.38). The wisdom of Selye’s work “lies in the recognition that ultimately the effects of the struggle against the invader might be more harmful than the direct effects of the noxious agent itself” (Roskies, 1991, p. 413).

The transactional tradition of stress research defines stress as “the outcome of interactions

between the organism and the environment . ... In the transactional model, an event in the environment is considered to be a stressor only if the organism's appraisals of it, and of its own resources, suggests that it is threatening or disturbing" (Singer & Davidson, 1991, p. 37). The individual's appraisal of the situation will be influenced, among other things, by the situation, by past experiences, and by the person's resources. The transactional model allows researchers to understand and explain situations that are difficult to comprehend in the reactionary physiological model, such as the ability of individuals to withstand seemingly very difficult circumstances or the escalation of apparently minor problems into stress.

### Coping with Stress

Monat and Lazarus (1991) describe coping as "an individual's efforts to master demands that are appraised as exceeding or taxing his or her resources" (p. 5). Folkman and Lazarus (1991) suggest a taxonomy of coping composed of two categories - problem focused and emotion focused. Problem focused strategies are directed at altering the person-environment relationship.

Table 1

#### Folkman & Lazarus Multidimensional Coping Process (Monat & Lazarus, 1991)

Problem-Focused	Emotion-focused
1) confrontive and interpersonal 2) planful problem-solving	1) distancing 2) escape avoidance 3) accepting responsibility or blame 4) exercising self control over expression of feelings 5) seeking social support 6) positive reappraisal

Emotion-focused strategies refer “to thoughts or actions whose goal is to relieve the emotional impact of stress” (Monat & Lazarus, 1991, p. 6). Table 1 displays various types of coping as sub-categories under problem- and emotion-focused coping. People rely on both problem-focused and emotion-focused forms of coping in managing the demands of stressful encounters. Which coping style is used will be influenced by the condition being faced, the options available, and the individual’s personality. In most situations individuals use both styles of coping at different times. Neither style is inherently superior to the other, although, traditionally, emotion focused coping (particularly defense mechanisms such as denial) have been looked on by some researchers as pathological or maladaptive (Folkman & Lazarus, 1991). The key factor, as identified by Folkman and Lazarus, in determining the coping effectiveness is whether or not the choice of coping strategy fits the possibilities for coping in the encounter.

### **Stress Management**

Stress management involves a wide variety of techniques employed to reduce stress or to alleviate its harmful effects. It can be a form of therapy aimed at reducing problematic emotional states and behaviour for a wide variety of clients. It can also be used to prevent pathology in individuals who are currently at risk, such as individuals in the midst of life transitions, victims of trauma, and people employed in stressful occupations. For these individuals the aim of stress management would be to reduce emotional distress and head off deteriorating functioning. The wide array of situations and clientele to which stress management is appropriate leads Roskie (1991) to comment that “the most instinctive characteristic of stress management as a treatment is its universality; there is no one for whom treatment is unneeded or inappropriate” (p. 412). Because of its widespread popularity it is tempting to dismiss stress management as a fad. Roskie, however, points out that research has shown it to be a “fruitful” way to treat human distress.

Monat and Lazarus (1991) categorize stress management interventions into the three basic categories - Environment/Lifestyle, Personality/Perceptions, and Biological Response. Within the Environment/Lifestyle category, they include strategies such as time management, proper nutrition,

exercise, and cessation of harmful coping strategies such as smoking and drinking. Assertiveness training, thought stopping and stress inoculation are contained in the Personality/Perception category. The Biological Response category involves strategies such as progressive muscle relaxation, meditation and biofeedback exercises. The effectiveness of some of these methods have not been thoroughly tested and ongoing research is necessary to determine the effectiveness of the various techniques and to determine under which situations and for whom they are useful (Monat & Lazarus).

### **Music, Exercise, Dance and Stress Management**

The use of music, physical exercise, and dance as stress management strategies falls within the environmental/lifestyle category. Only a limited amount of research has been conducted on the music–stress relationship but results indicate music is effective for stress management particularly in medical situations (Maranto, 1993a;1993b). That exercise is a useful intervention for stress management is part of commonly accepted wisdom. There is little empirical research in the area of dance although dance/movement therapy and other forms of therapeutic dance are used in a diversity of settings and with a variety of populations. The following section presents an overview of the stress research in the areas of music, exercise and dance.

### **Research on Music and Stress Reduction**

The use of music to treat various physiological and psychological problems extends throughout history, but, as Thaut wrote in 1989, there is still “very little quantified data about the efficacy and mode of action of music-based treatment techniques” (p. 155). Music can be used either as the primary form of intervention to reduce anxiety, or it can be used in a supportive role with some other stress management technique such as imagery or one of the abbreviated progressive relaxation techniques.

The limited literature dealing with affective responses to music has been predominantly concerned with the power of music to influence mood. The findings to date (Maranto,

1993a;1993b) suggest that : 1) music has the ability to influence mood and affective responses, 2) music training appears to influence mood intensity and mood response to music, 3) findings on the influence of gender on mood responses to music are contradictory, 4) the existing mood of the listener affects subsequent reactions to music and preference for the music may interact with the mood in terms of music's potential to alter mood, 5) music has been shown to alter mood significantly both in positive and negative ways, 6) psychological and cognitive responses to music are unique for each individual, and, 7) music may have an enhancing or diminishing effect when combined with other methods of treatment.

Most studies using music to treat anxiety have been conducted either on college students or on patients in connection with medical procedures. That the results of these studies are inconsistent may be due to lack of standardized methodologies or may be due to lack of universal definition of "relaxing" music. Research suggests that the type of music used for relaxation and the music preference of the subjects may influence the potential for anxiety reduction (Maranto, 1993a). While results have generally been contradictory, the vast majority of studies report music has significant positive effects as a treatment for anxiety prior to surgery, in general hospital or intensive care units and labour and delivery rooms (Maranto, 1993a; 1993b). Consistent positive results have also been found in the application of music in relief of anxiety during dental procedures and in pain relief (Maranto, 1993a). Studies combining or contrasting music with other relaxation strategies have shown that music appears to enhance techniques involving progressive relaxation, autogenic methods, imagery and suggestion. Music's effectiveness compared to other modes of relaxation training varies (Maranto, 1993a).

Four research studies demonstrate the contradictory results of research in the use of music for stress management. Rohner and Miller (1980) found that music (sedative or stimulating) had no effect on anxiety. Russel (1992) and Thaut (1980), on the other hand, found that music did decrease anxiety. Research done by Davies and Thaut (1989) indicates that the choice of music by the individual plays a major role in the effectiveness of the music for anxiety reduction.

Rohner and Miller (1980) examined the possibility of using music for relaxation with high

anxiety university students using four different types of music: familiar sedative, unfamiliar sedative, familiar stimulating, and unfamiliar stimulating. Results proved to be statistically insignificant, implying that music has no reducing effect on state anxiety. However there did seem to be a trend noted for sedative music to have some anxiety reducing effects on high state anxiety subjects. A confounding factor in this research was that classical music was used. Because the subjects were university students, this may not have differentiated subjects adequately in terms of familiarity and unfamiliarity.

Russel (1992) compared the effectiveness of the following listening activities for reducing anxiety in highly anxious university students -- familiar sedative music, guided imagery, guided imagery augmented by familiar sedative music and a cognitive behaviour intervention tape -- using the experimental design of pretest-post test with control group. Students who received the music plus imagery treatment showed significantly lowered state anxiety than did the students of any other group, however, all groups (including the control) showed significant decreases in state anxiety from pretest to post test. Trait anxiety scores also decreased significantly for all groups except the cognitive behavioral group.

Thaut (1989) measured music-evoked experiences in music therapy through self-reports of 50 male prisoner-patients, ages 18 to 45, in a correctional psychiatric hospital. Interventions consisted of music group therapy, instrumental group improvisation and music accompanied by progressive muscle relaxation. Significant differences were found between pre- and post- test ratings on a relaxation-rating scale developed by the researcher.

Davis and Thaut (1989) sought to measure the physiological and psychological responses to preferred, relaxing music. Introductory psychology students and individuals from the community listened to relaxing music of their own choosing. The wide variety of music chosen -- classical, soft rock, hard rock, folk, Christian, jazz -- defied more traditional classifications of music as sedative or stimulative. Listening to preferred music was found to be associated with significant decreases in state anxiety along with enhanced relaxation.

### **Research on Exercise and Stress Reduction**

According to the Canadian Heart and Stroke Foundation (1997), “physical activity is one of the most effective stress remedies around” (p. 29). Research has consistently demonstrated the potential psychological benefits of exercise. Investigators have found that both acute exercise and chronic exercise can result in reduction in psychological stress, especially anxiety and depression (Berger & Owen, 1992; Fillingim & Blumenthal, 1993; Long & Haney, 1988a;1988b). Long and Haney (1988a; 1988b) found that participation in a jogging program appears to be as effective for stress reduction as participation in a progressive muscle relaxation program. Rudolf and Kim (1996) demonstrated the potential mood benefits of aerobic dance and soccer. Berger and Owen’s (1988) research indicates the effectiveness of Hatha yoga for stress reduction. In a 1988 study, Berger, Friedman and Eaton found that jogging and practice of the relaxation response were more effective in reducing stress than a group discussion, although all were more effective than a control group. Repeatedly, exercise has been shown to be as effective as other stress-management techniques such as progressive muscle relaxation or stress inoculation in a variety of populations (Berger, 1994). An added advantage to the use of exercise for stress management is its highly substantiated health and fitness side effects.

Exercise, however, does not inevitably lead to stress reduction. While the majority of research on exercise and stress supports the supposition that exercise reduces stress, there have been some contradictory results that hint there are other factors in play. For example, Berger and Owen (1986; 1988; 1992) have obtained non-confirming evidence for participants in swimming, fencing and body conditioning.

Berger and Owen (1988) suggested that, rather than testing the exercises one-by-one to determine their effectiveness for reducing stress, a taxonomy should be developed to help distinguish physical activities that are most stress reducing. They proposed a taxonomy which consisted of the following four characteristics that facilitate the psychological benefits of exercise: aerobic, non-competitive, predictable (to allow the participant to tune out the environment and focus on their own thoughts), and rhythmical or repetitive (to allow for introspection). In addition to these

characteristics, the exercise must be pleasurable, regular, of moderate intensity and of at least 20 to 30 minutes in duration. Berger and Owen's (1988) study produced non-confirming evidence for the proposed taxonomy. The participants of a hatha yoga class, not an aerobic activity, reported feeling significantly better after exercise -- less tense, depressed, angry and confused. This, along with Goldwater and Collis' (in Berger and Owen) finding that low-intensity exercise led to significant reductions in anxiety, suggests that the aerobic component of Berger and Owen's taxonomy requires further investigation.

The evidence that aerobic exercise is effective in decreasing the harmful effects of stress is increasing (Long & Haney, 1988). Yet, although the need for aerobic quality is frequently cited, there is little research investigating this characteristic (Berger & Owen, 1988). Fillingim and Blumenthal (1993) describe aerobic activity as repetitive movements of large muscle groups in which the energy is derived from aerobic metabolism, such as in jogging, biking, swimming, and walking. "The main criterion of aerobic exercise is that it be continuous and of sufficient intensity to elevate the heart rate to a particular level' (Fillingim & Blumenthal, 1993 p. 453). There are numerous indications that aerobic exercise is not an essential ingredient for stress reduction. In one study (McPherson et al. in Long & Haney, 1988) both conditioning and a recreational comparison group showed significant reductions in anxiety. Increasingly, research also supports the use of low-intensity exercise such as walking, Hatha yoga, and bicycling (Berger, 1994). In general, studies show that both acute and chronic exercise, mild to moderate in intensity, enhance mood in normal and clinical populations (Fillingim & Blumenthal, 1993) but "the aerobic benefits of exercise appear not to be entirely responsible for these effects; mood changes have occurred with non-aerobic exercise, and the mood changes following aerobic exercise often occur before any aerobic adaptation would be expected" (p. 452).

Hughs, Casal, and Leon (in Long & Haney, 1988) found that subjects exercising alone reported minimal changes in psychological functioning despite achieving improved fitness levels. This suggests that social aspects, as well as some other unknown psychological mechanism, may be responsible for the improved mood states that accompany aerobic exercise in groups.

Landers (1994) conducted an abbreviated review of the literature on the effects of exercise on reduction in anxiety, depression and stress reactivity in order to determine if, in fact, there is an empirical relationship between exercise and stress reduction. He found 159 studies on anxiety reduction following acute (one time only) or chronic (regular) exercise. Eighty-two percent of the reviews on this topic concluded that there is a small to moderate reduction in state/trait anxiety and physiological indicators of anxiety. Studies done on the antidepressant effect of exercise “concluded that exercise was related to less depression and that it was a better antidepressant than were relaxation and other activities” (p. 129). The two reviews of over 34 studies that examined stress reactivity concluded that exercise/fitness was related to less stress-reactivity. In spite of all this Landers concluded, “It is tempting to believe that exercise is the root cause of reductions in anxiety, depression and stress-reactivity. However, it remains to be seen whether it is exercise per se or something associated with the exercise program (expectations, self-efficacy, weight loss etc.) that affects these dependent variables” (p. 132).

A 1996 study by Rostad and Long reviewed the research, published between the years of 1978 and 1993, on exercise as a coping strategy for stress. Overall, the results give support for exercise as a coping strategy for stress. Based on this review, Rostad and Long made suggestions for future research. Amongst their recommendations were clear specification and implementation of programs in order to make them replicable and the use of Spielberger’s State Trait Anxiety Inventory for psychological assessment in exercise and stress research.

Folkman and Lazarus’ (1991) theoretical approach to stress and coping can provide us with a useful approach to explore exercise as a coping strategy (Rostad & Long, 1996). Exercise may be used as a coping strategy in several ways. As a way of releasing excess tension, it can be looked at as a strategy for regulating emotions. Some types of exercise may facilitate problem solving by providing time to think through a problem. Exercise also has the potential to enhance personal resources by improving physical fitness and enhancing self-esteem

### **Research on Dance and Stress Reduction**

“Since early history, dance has been one means to cope with stress.” (Hanna, 1988a, p. xi). According to Hanna, dance can help ward off the debilitating effects of stress and reduce its impact through catharsis, tension dissipation, and physical and psychological relaxation. Thus dancing has become an important part of some health or wellness programs.

Why dance rather than use other forms of exercise or passive approaches to handle stress? There is no question that there are alternative methods to alleviate or prevent stress. Passive methods such as meditation, and progressive muscle relaxation break the train of everyday thought along with reducing the activity of the sympathetic nervous system. Active methods such as exercise also develop physical fitness, provide an outlet for built up tension, lead to reduced anxiety, and help develop higher tolerance levels for stress. Like dance, exercise uses up the potentially harmful biochemicals when it mobilizes against stress. Hanna (1988a) suggests that dance is more than physical exercise for fitness. Dance is a result of physical and mental processes and a form of human communication. It permits emotional and intellectual exploration in addition to aesthetic involvement and movement satisfaction. Dance is also usually accompanied by music which offers people gratification and functions in ways similar to dance to reduce stress. Thus one may enhance the other.

It has been the “fathers of stress” who have dictated the progress and direction of research in this area and have developed the theory and techniques. Techniques, such as progressive muscle relaxation and stress inoculation have an individual focus. According to Domar and Dreher (1996), “men tend to gravitate toward directive techniques with clear cut instructions, such as progressive muscle relaxation” (p. 41). Women have traditionally relied on social support and group connections for emotional release and problem-solving (Belle, 1991). The stress reduction properties of dance and some other exercise formats may be due to their group format and thus, may have great applicability to groups whose historic modes of stress relief have been through connection. It is probably no coincidence that many researchers in the use of exercises in groups for stress management are women. Dance can offer an alternative mode of physical exercise in a

group that might appeal to individuals not attracted to sport-type activities.

There are few statistically-based and analyzed control studies that demonstrate specific relationships between dance and stress “however, compelling supportive case material exists” (Hanna, 1988a, p. 7). Kuettel (1982) examined the relationship between participation in a dance therapy group and the expression of affect. This study found that subjects receiving dance therapy experienced less feelings of anxiety than the control groups. Feelings of depression were also less frequently reported by the participants in dance therapy groups. Lesté and Rust (1990) studied the effects of modern dance on anxiety while controlling for physical exercise and music. This study found that participation in modern dance reduced anxiety, but participation in control groups using physical exercise and music did not. McInman and Berger (1993) concluded their study on aerobic dance with the suggestion that “aerobic dance appears to be particularly effective in enhancing mood for female exercisers” (p. 137). Ritter and Low (1996) used meta-analysis to summarize the existing literature on the physical and psychological effects of dance therapy. Psychological variables included anxiety, fatigue, self-esteem, trust, depression, sexual differentiation, friendliness, and anger. They found that dance/movement therapy (DMT) produces the greatest psychological changes in the areas of anxiety and depression.

Silver’s (1981) research provides what appears to be the sole study on the psychological benefits of folk dance. She commented, “no empirical research has been found to date regarding the effect of folk dance techniques on dance clients of any type” (p. 52). In the ensuing years nothing seems to have changed. Silver investigated the effects of participation in folk dance and exercise classes on self-concept and body-concept. Self-concept and body-concept scores, for both dance and exercise groups, at the end of the treatment period and four weeks later, demonstrated a strong improvement compared with the controls. As a part of this study, Silver did a qualitative analysis of participant’s reasons for involvement in the class and benefits they felt they derived. Folk dancers wanted a group experience that would be socially stimulating and provide exercise in a form that would not feel like work. Of the 26 folk dance participants, 6 reported tension release, 14 reported fun and diversion and 16 reported positive social contact -- all benefits

associated with stress reduction. Silver concluded that “Folk dance holds exciting possibilities with regard to therapy since this is an activity which can be conducted in a large group, allows for integration of individuals into the larger whole, provided opportunities for mastery and individual creativity, and has not been stigmatized with the fear-provoking label of ‘therapy’” (p. 187).

### **Eustress**

Even though the focus of my argument thus far has been on relief from the deleterious effects of stress, it would be negligent to ignore the positive benefits that can accrue from stress. Too much stress greatly detracts from one’s quality of life but some stress is highly desirable (Berger, 1994). Selye (1974) identified two types of stress: distress, which has a negative impact on health, and eustress, which Selye called the “pleasant stress of fulfilment”. Selye emphasized the importance of eustress in health promotion. Lazarus also wrote about stress, distress and eustress. Lazarus (in Wells, 2000) suggested that the mental characteristics of an individual combine with environmental circumstances to shape cognitive appraisals. The individual’s cognitive appraisal classifies the situation as either challenge (eustress) or threat (distress). Positive stress has the potential to motivate, challenge, excite and energise. Selye (1974) described stress as the “spice of life” (p. 85) and Berger (1994) asserts that “some stress is needed to add excitement, stimulation and color to our lives” (p. 100).

Stress is associated with all types of activity and could only be avoided by doing nothing. We suffer from both excess stress and lack of stress (boredom). Selye (1974) emphasized the importance of meeting stress effectively and enjoying it through learning more about it and developing a philosophy of life that includes effective management of stress. He advised that each person needs to identify his/her optimum stress level, that is, the particular stress level at which the person feels most comfortable, and then to regulate the amount of stress in one’s daily lives and to develop the skills necessary to control one’s stress responses. According to Berger (1994), “physical activity is an ideal way to both raise and lower one’s stress level” (p. 100).

In his address to the 1992 American Academy of Kinesiology and Physical Education,

Meier (1994) pointed out that to view stress unidimensionally as negative is limiting and excludes the important positive aspects of stress. Stress can provide relief from an otherwise boring existence. Individuals regularly seek out the fun and excitement of stress in such activities as white water rafting, fair rides, or playing athletic games. In situations such as these, positive stress creates challenge and has the potential to stimulate personal growth and development. Meier quotes Frank "A stressor should be identified as either negative or positive depending on 'whether the experience led the person toward higher levels of mental, social, or physical health'"(p.141). In his address, Meier charged professionals from the realm of sport and play to invite students, athletes and clients into a world of challenge, "providing intrigue and facilitating exhilaration" (p.142). Meier went on in this address to suggest that the positive consequences of stress induction, rather than stress reduction, could be used as a promotional device to attract participants into the "challenging and stimulating world of physical activity and playful sport" (p.143).

People seek stressful situations to relieve boredom or for a break from other stressors. Stress can be enjoyable if it is accompanied by positive feelings of accomplishment and pleasure. Selye asserts that "Motivation - preferably an ambition to accomplish something that really satisfies you and hurts no-one - is essential" (Selye, 1974, p.82) to experience feelings of eustress. McGuigan (1999) emphasizes the importance of control over a situation as a key to experiencing stress as positive. He describes eustress as "the attainment of an optimal level of stimulation characterized by a sense of accomplishment"(p.81). According to McGuigan, the more often we are in a state of eustress, the less often we can be in a state of distress.

McGuigan (1999) states that, "In particular, stresses related to what we call 'hope', 'love', and 'happiness' may have beneficial effects on health" (p.81). The classic illustration of the ability of some stresses to have a positive impact on health is the story of Norman Cousins (1979). In his book *Anatomy of an Illness*, Cousins described how he healed himself from a debilitating illness through the use of humour and laughter. McGuigan (1999) suggests that a possible reason for the healing effect of laughter lies in the fact that, in the presence of this happy emotion, the body releases beta-endorphins that mimic the pain relieving and mood enhancing effects of drugs such as

opium. Research undertaken by Lee Berk (Roach, 1997; Wooten, 1996) support the health-giving properties of laughter. Berk found that humour and laughter served to significantly increase various measures of immune function. Bennet (1998) investigated the healing properties of laughter with healthy adult women. Her findings also indicate that laughter has the potential to reduce stress and temporarily increase immune system activity.

Wooten (1996) asserts, "Finding humor in a situation and laughing freely with others can be a powerful antidote to stress. Our sense of humor gives us the ability to find delight, experience joy, and to release tension" (online, no page). Our ability to perceive a potentially stressful situation as humorous and to laugh at it gives us a sense of control over the situation. Wooten recommends laughter as an effective self-care tool for professionals in high stress caring professions.

### Summary

The connection between stressful living and compromised health is abundantly clear. Mid-life women in our society are at a lifestage with abundant potential for stress due to personal, occupational, physical, political, social and cultural circumstances. This stress may create increased risk for health problems. Physical activity has been shown to play an important role in stress management.

Stress and coping literature supports the use of a variety of strategies -- both emotion and problem focused -- in managing stress. The usefulness of the strategy is determined by the situation and the coping resources of the individual. Ojeda (1998) counsels the importance of developing good coping skills and suggests that exercise may be one of our best strategies.

It is unclear from the literature exactly what role or combination of roles exercise plays in stress reduction. One suggestion is that the distraction, break, or "time-out" from the stressors of everyday life provided by exercise activities is a crucial factor (Hanna, 1988a; Kass-Annese, 1999; Morgan & Ellickson, 1989). Researchers also point to the social aspects of exercise (Hanna, 1988a; Berger & Owen, 1992). Exercise can also be a strategy for regulating emotions (Rostad &

Long, 1996) or releasing tension (Hanna, 1988a). Repetitive exercise activities provide individuals with the opportunity to think and problem solve (Berger & Owen, 1988; Rostad & Long, 1996). It may be that exercise can reduce the physiological effect of stress by triggering the relaxation response (Kass-Annese, 1999). It is also possible that exercise may enhance personal resources for coping by improved physical fitness and enhanced self-esteem (Rostad & Long, 1996). An active lifestyle can also replace negative coping behaviours that jeopardize health. Whatever the mechanism or combination of mechanisms at play, we do know that individuals who engage in habitual activity report that exercise makes them feel good (Morgan & Ellickson, 1989).

The health benefits of exercise are clear and not new. Even though the mental and physical health benefits of exercise are well known, many women chose a sedentary lifestyle, often because of time stress and the inability to make self-care a priority. In addition, for those who do try to make a commitment to exercise, dropout rates are high (Fillingham & Blumenthal, 1992). "It is known that approximately 50% of the sedentary individuals who adopt an exercise program return to their sedentary lifestyle within several months" (Morgan & Ellickson, 1989, p. 170).

### **Why Celtic Folk Dance for Mid-life Women?**

The problem of adherence leads me to the question of "Why is Celtic folk dance a particularly appropriate activity for mid-life women?" This dance form provides women with an option for physical activity that they may continue well into their later years. In a study by McInman and Berger (1993), 50% of the women had been participating in aerobic dance for more than a year and 43.75% had been involved for one month to a year. This suggests that women may continue with a dance program. An exercise program must be an activity a person can incorporate into her or his life and to continue as a regular lifetime program (Ojeda, 1995). Scottish Country dance groups in large centres typically include women well into their sixties and seventies and sometimes into their eighties

According to Robertson and Hutera (1990), "The urge to dance in the human psyche [is] a universal impulse ... but today we watch dance being performed by youthful, svelte and beautiful

bodies who act as our surrogates. Most of us no longer feel free enough to express our emotions in maypole or morris dances” (p.8). Participation in folk dance provides women with the opportunity to surrender to this natural impulse to move to music. Many women love to dance but are prevented from the opportunity by social morés that prevent dancing with members of the same sex. In most social settings and social dance classes, women require a man to dance and are precluded from participation by lack of a willing partner. Folk dance participation does not require a partner as women customarily fill the positions danced by men.

An important component of Celtic folk dance is the music. Davis and Thaut (1989) demonstrated the importance of preferred music for relaxation. The soaring popularity of Celtic music attests to desirability. The lilt of the harp, the skirl of the pipes or the pulsating of an accordion and fiddle will set your feet in motion. As Knight (1996) says, “Scottish music is wonderfully exhilarating, dancing to it is always a pleasure”(p.8). Wangsbickler (1997) describes his experience listening to a Celtic album in a music store.

Other patrons in the store started to look at me funny when I gave a hollar (sic) and started tapping my feet. I swear that, had I not been tethered to the music counter by my headphones, I would have broken (sic) out in a jig right there and then (electronic media, no page).

Another key feature of Celtic folk dance is that it provides a pleasurable social activity. Berger and Owen (1988) stress the importance of enjoyment for stress reduction. In Silver’s (1981) study on international folk dance and exercise, individuals who were seeking a social experience chose dance. As well the people who chose dance wanted exercise that did not feel like work. Fourteen participants in folk dance ( $n=26$ ) reported experiencing “fun and diversion” as compared to four in the exercise class ( $n=25$ ).

Celtic folk dance, and particularly Scottish Country dance, has a number of features that make it more appropriate for participation by women in mid-life than some other forms of folk dance. Dances from many countries are particularly vigorous and include running, bouncing and leaping steps which require a great deal of energy and are hard on older feet that are unused to pounding activity. Dance steps from some countries are quite intricate and complicated, requiring a great deal of skill. Both Irish Set and Scottish Country dancing are done at a mild to moderate pace

that is within the ability of individuals beginning an activity program. In addition, steps are quite simple and can be learned quickly so new-comers can have an immediately rewarding experience.

### **Is Dancing a Feminist Issue?**

In spite of the fact that dancers, such as Isadora Duncan, Martha Graham and Ruth St. Denis were part of women's liberation movement at the turn of the century (Hanna, 1988b), feminists generally rank physical activity as low on their list of priorities (Lensky, 1995). According to Lensky (1995), they "fail to see the links with key feminist issues such as health, control over one's body, and equality of opportunity" (p.9). She adds, "feminists who are concerned with issues of women's mental and physical health need to recognize that women's generally low participation in regular physical activity has negative implications for our overall health and well-being" (Lensky, p.6). The cultural, social and economic context of women's lives serve as determinants for female participation in physical activity in general and dance in particular.

"Although there is nothing about dance which is innately feminine or effeminate, it has, within American society and through much of the Western world, become largely so in practice" (Kraus, 1969, p. 345). Dancing is popularly conceived of as a female activity and males who dance are often viewed as effeminate and possibly homosexual (Hanna, 1988b; Kraus, 1969; Thomson, 1995). This belief that dance is effeminate is reinforced by the fact that females are major participants in dance classes and companies (Thomson, 1995). Thus boys are hesitant to show an interest in the activity. According to Kraus (1969), another factor restricting male children from learning dance skills is the lack of co-educational physical education programs. Implicit in this statement is the message that boys can not dance with boys. Nevell (1977) describes his experience with dance while growing up. "I wouldn't say I grew up hating dancing, but I would say that I grew up not really knowing what it is to dance because dancing was not something boys did" (p.4). He adds that boys do not dance for the enjoyment of dancing, but rather for some ulterior motive, like holding a girl up close. Lack of interest and ability on the part of boys and men, ultimately, has the curious effect of restricting recreational dancing for women. North American society is not

accepting of same sex couples dancing together and many women are prohibited from social dancing by the fact that their male partner does not dance. "Women dancing with women brings all the stereotypes to the fore and often causes them to back away from enjoyment they could have" (P. Vertinsky, personal correspondence, August 25, 1999). As women get older, the numbers of available male dancers decreases. According to P. Vertinsky, "One of the problems older women have is that many love ball room dancing but as they are widowed dont [sic] have partners anymore - our studies show that they are often unwelcome at social dances as men partners are scarce and their wives don't like sharing them!!! " (personal correspondence, August 25, 1999).

Societies generally designate occupations according to sex. Males dominate the prestigious, well-paid jobs while occupations typically performed by women are seen as lower status and thus are lower paid (Hanna, 1998b; Thomson, 1995). The low prestige career of dancing (Hanna, 1988b) ranks with other poorly paid, female dominated occupations. While women are the dancers (workers) men are disproportionately recognized as the leading teachers, choreographers and managers (Hanna, 1988b; Kraus, 1969).

Ballet has a long and respected tradition (Kraus, 1969) and is considered by many to be highest form of dance. The images projected by this dance form, on stage or through the mass media, send negative social messages. According to Hanna (1988b), ballet contains recurring messages of male domination and protection of women through partnering as well as the "strong man supporting and manipulating the woman on her pedestal of *pointe*" (p.xiv). She lists other persistent themes in dance productions as: sexuality (love won or lost, reciprocal dependency, and tension between partners), gender scripting and differentiation through movement styles that are recognizably male or female, and women as objects of male definition. Repeatedly the female is defined as a body that belongs to someone.

Women in our society are socialized in ways that promote body-hating attitudes. Females learn that others value them for their physical attributes rather than intellect or achievement. The basic standard of heterosexual attractiveness always includes thinness (Lensky, 1995). The excessively thin, narrow hiped, elongated, young body, which is the norm for dance companies

emulates the distorted western view of the ideal female shape (Hanna, 1988b ; Thomson, 1995). “At the recreational level, too, the media’s preoccupation with dance exercise classes led by ultrathin instructors does little to encourage women of average size or larger women, to join a fitness class” (Lensky, 1995, p. 8). The vast majority of girls and women do not have perfect bodies as measured by mainstream fashion standards (Lensky, 1995). Issues of body image continue to interfere with girls’ and women’s enjoyment and commitment to physical activity (Blackwood et al., 1995). Because of a lack of ease with their physical bodies, many females avoid activities, such as dance, that expose their bodies to the scrutiny of others (Lensky, 1995).

Leisure generally refers to free-time, recreational activity and/or meaningful experiences (Henderson, Bialeschki, Shaw & Freysinger, 1999). “Leisure researchers suggest that no aspect of human behavior holds greater potential for self fulfilment than does leisure” (Henderson et al., 1999, p. 19); however, studies of women’s leisure inform us that men and women are unequal in their opportunities to access leisure activities and that the gap women experience in access to leisure time is due to the inferior status women hold in our society. Women in all segments of society have less opportunity for leisure activities and less time and resources for leisure than men (Green & Hebron, 1988; Henderson et al., 1989; 1999; Woodward & Green, 1988). The feminist concentration on employment has expanded job opportunities for women (Lensky, 1995), thus enhancing their financial well-being and capacity to pay for leisure activities. At the same time, women’s double or triple workday constitutes a primary barrier to participation in leisure time physical pursuits. According to Henderson et al. (1999) the increases in the number of women engaged in paid employment in recent years have been accompanied with an increase in time stress and stress-related disorders and a commensurate decline in time for leisure. While paid employment has the potential to facilitate women’s participation in leisure activities through provision of personal incomes and time away from home, the double responsibility women face due to paid employment and household/childcare responsibility create a situation where women simply do not have the time necessary to commit to regular leisure pursuits. To the woman juggling paid employment with childcare, domestic work and part-time study or volunteer work , the idea of

entitlement to leisure may seem ludicrous (Lensky, 1995). According to Lensky,

Regular physical activity for physical and mental health falls into the category of 'self-care' - a problematic one for many women, and for many feminists. Research has shown that for many women, the socialized expectation to put others' needs before their own overrides their sense of entitlement to leisure. Self sacrifice combined with low self-esteem may lead women to believe that their personal needs for recreation are not worth considering, or that self-care is only important insofar as it enhances the happiness of their children or male partners" (p.8).

Authors from the fields of women and health (Bepko & Krestin, 1990; Domar & Dreher, 1996) and women and leisure (Henderson et al., 1989; 1999) cite women's feelings of lack of entitlement, combined with an ethic of caring, as major constraining factors in preventing women from choosing to engage in healthful leisure pursuits. According to Domar and Dreher (1996), women are often too guilt ridden to take time for themselves for pleasures, health, growth and development. They comment, "many of us lack the healthy sense of entitlement that forms the foundation for self-esteem" (p.111). Many women feel that taking leisure time for themselves is selfish and that they must consider others' leisure needs before their own. They cannot conceive of a lifestyle focused on self and are unwilling to permit themselves to spend time or money on themselves (Bepko & Krestin, 1990). Often they support and facilitate the leisure interests of other family members and at the same time remain stuck in patterns of self-neglect in spite of high levels of awareness (Domar & Dreher, 1996). Women derive positive feelings of self-worth and personal rewards from this ethic of care; nevertheless, commitment to caring for others and relationships creates a major constraint to personal leisure and self care.

Literature in the field of leisure studies documents the impact male partners can have on the ability of women to take part in leisure activities. According to Henderson et al. (1999), many men feel they have the right to approve or disapprove of their wives' leisure activities - where they go, if they go, who they go with and what they do. Green and Hebron (1988) maintain that men are also assumed to be more automatically entitled to leisure and the leisure needs of male partners can dominate the leisure of women. Male leisure often relies on the female partner providing the domestic labour and/or childcare necessary to sustain male and

family leisure activities. This can lead to restraints on the leisure of women. Deem's (1986) work supports this assertion that women are restricted from leisure pursuits by the men they live with. Deem found that "even women who are able to challenge or resist some of the constraints surrounding the possibilities of achieving leisure outside the home and inside it, are limited by the extent to which male dominance permeates society" (p.39). Male partners significantly control the extent of women's leisure by their willingness (or lack thereof) to assume household and childcare tasks, by their tolerance of wives going out on their own, by their approval or disapproval of various activities as appropriate, and by their own working hours.

Social class is a barrier to self care through physical activity for women (Lensky, 1995). A positive relationship exists between recreational experiences and income, and lack of economic resources impacts women more than men (Henderson et al, 1999). Women who are disadvantaged economically or dependent on someone else may perceive lack of freedom to take advantage of opportunities for leisure. Poorer women, with few financial resources, are unlikely to spend money on themselves. Women's incomes are generally lower than men's and those who are homemakers do not have independent incomes. Often these women, who are dependent, are reluctant to spend family money on their own leisure. As well, women with children have to factor childcare costs into their leisure expenses.

Dancing IS a women's issue, and a group of mid-life women getting together to do folk dances is a profoundly political activity. It challenges our ageist cultural assumptions about the type of bodies that are acceptable as dancers and the age of women who are entitled to the exhilaration of moving to music. Women dancing together without men flaunts heterosexist attitudes about same sex people dancing together. It allows women the opportunity to take a break from busy lives to make time to care for themselves and have fun. This study documents the experience of such a group of women.

This research sought to investigate the phenomenological experience of a group of women dancers during and immediately following a beginner level Celtic folk dance class.

Particular attention was given to experiences that appeared to be connected to the concept of stress. The literature supports my proposition that participation in a folk dance class could be an appropriate and effective method of managing stress for mid-life women. Having established this support, this inquiry moves to the next chapter which outlines my philosophical position, methodology, research methods, data collection and analysis.

## CHAPTER THREE: RESEARCH METHODOLOGY - A DUAL APPROACH

### Introduction

Review of the exercise-stress management literature indicates a preponderance of quantitative studies seeking to demonstrate a causal relationship between exercise and stress reduction. The difficulty with this approach becomes clear as each study concludes that while a program of physical exercise generally leads to reduced levels of stress, we cannot know whether the reduced stress is due to exercise per se or to other factors such as participation in a group or a particular environment (Berger & Owen, 1992), time to think through problems (Owen, 1994; Berger & Owen, 1988), distraction (Berger & Owen, 1988; Long & Haney, 1988a), the attitudes or personal characteristics of the person who leads the program (Berry, 1979) or some other undetermined factor. Folk dance presents even more elements to be considered -- presence of music, laughter, social interaction and the combined effort to create a unified, cooperative whole. Berry discussed the difficulty of adapting a causal approach and suggested that, when dealing with "complex behavioral phenomena, such as dance, dance education and therapy, it is not always possible to isolate a single or even a few variables" (p. 480). Quantitative studies also presuppose an objective, expert stance on the part of the researcher. Thus, as researchers seek to explain why a particular activity contributed to/ failed to contribute to reduced levels of stress, they fail to involve, in their discussions, the very individuals who have experienced the phenomena, and thus have first hand knowledge. Another problem with the sole use of quantitative studies is the desirability of using random assignment, which is not always feasible or practical. Berger (1994) supports the use of other methods to investigate the exercise-stress management relationship:

Somehow, present research efforts are incomplete in capturing the stress-management benefits of exercise. Use of qualitative approaches ... may be useful. We need careful analysis of the current literature combined with imaginative, theoretical approaches as we continue the quest to understand the relationship between physical activity and stress (p.111).

The dearth of research on the psychological benefits of folk dance has been commented upon earlier. An extensive literature search uncovered only one research study with the

psychological benefits of folk dance (Silver, 1981) as its focus. This, in spite of the fact that dance, in general, is a popular recreational activity and interest and participation in Scottish Country dance, in particular, continues to grow. As well as enhancing the field of knowledge in the area of exercise-stress management, my study seeks to broaden the knowledge about the psychological benefits of folk dance.

### **Philosophical Basis - Feminism and Phenomenology**

The philosophical basis for my research is located in two traditions - feminism and phenomenology. As stated earlier, participation in dancing as a leisure pursuit for both mental and physical health is a feminist issue. Feminists involve themselves with analyses of gender issues and strive for social change to bring about equality for women. This research was guided by a feminist philosophy. As I taught the class, I strove to promote values of mutuality, cooperation and sociability. The very essence of the folk dance is its communal nature. All must work together to create the whole. There are no individual performers. Sociability is promoted through eye contact, smiling at each other and helpful giving of hands. The use of semi-structured interviews has become the principle means by which feminists have sought to achieve the active involvement of their respondents in the construction of data about their lives (Reinharz, 1992, p.18). Open-ended, semi-structured interviewing maximizes the opportunity to elicit a full range of experiences and leaves open the possibility for new discovery. Interviewing also “offers researchers access to people’s ideas, thoughts and memories in their own words rather than the words of the researcher. According to Reinharz, this asset is particularly important for the study of women” (p. 18) who have for centuries been silenced or had their ideas interpreted for them. Interviewing is also consistent with a philosophical base that strives to develop connectedness and avoid controlling others. I hoped that active involvement of the participants in discussion of the Spielberger’s (1983) State-Trait Anxiety Inventory (STAI) results would contribute to an empowering experience, a key aspect of feminist research. Feminist research is also directed toward social change. This research is intended to give back to women the joy of dancing along with the skills for a lifelong healthful

activity, as well as to encourage women to make self-care a priority. It is also attempting to encourage a health promoting program based on prevention and wellness.

Feminist research is driven by its philosophical stance and subject matter rather than methodology, and feminist researchers will use any method or grouping of methods necessary to answer the research question (Reinharz, 1992). According to Reinharz, multiple methods research, also sometimes referred to as triangulation, is a form of research used by feminist researchers. She informs us that "There may be a greater proportion of triangulated feminist research" (p. 197) and adds that feminists choose multiple methods for a variety of reasons including their commitment to thoroughness, the desire to be open-ended and a willingness to take risks. A multimethod approach increases the likelihood that researchers will have a clear picture of what they are studying and persuade others of the accuracy of their findings. Use of multiple methods can also enhance understanding by adding layers of information and using one type of data to validate or refine another. Reinharz also suggests that "By combining methods, feminist researchers are particularly able to illuminate previously unexamined or misunderstood experiences" (p. 197).

Phenomenology is a twentieth century philosophical movement, dedicated to describing structures of experience as they present themselves to consciousness, without resorting to theory, deduction, or assumptions. Phenomenologists "maintain that any effort to understand human behavior must take into account that human beings are cognitive beings who actively perceive and make sense of the world around them, have the capacity to abstract from their experience, ascribe meaning to their behavior and the world around them, and are affected by those meanings" (Palys, 1997, p.16). The philosophical term, phenomenology, is used to emphasize a focus on people's subjective experiences of the world (Rubin & Babbie, 1993). Literally the word phenomenology means the study of description of phenomena. Phenomenon refers to anything that appears or presents itself to someone (Hammond, Howarth & Keat, 1995). "Thus phenomenology involves the description of things as one experiences them" (Hammond et al., p.1). Hammond et al. describe phenomena as those things which we perceive through the senses -- seeing, hearing, touching -- as well other conscious activity such as believing, wishing, deciding, feeling emotions

and experiencing bodily actions. No actual theory arises from phenomenology as “phenomenology is concerned not with theories about phenomena, but with descriptions of their existence” (Sheets, 1970, p.34). Research approaches that describe themselves as phenomenological make understanding human perceptions their focus (Palys, 1997).

Phenomenology developed as a reaction to the empirical tradition derived from the physical sciences that accrues privilege status to reality that is objectively measured (Hammond, Howarth & Keat, 1995). The aim of this physical science, or positivistic, approach is to establish functional relations among explanatory concepts. Ideally these are expressed in mathematical form (Palys, 1997). Phenomenologists believe imposing a quantitative measurement removes researchers from truly understanding human experience. They argue that any science of human behavior that does not take people’s perceptions into account is incomplete (Palys, 1997). Positivists believe the use of mathematics make scientific statements more precise. They seek explanation of which variables most significantly affect human existence “Being able to identify these factors and to predict their occurrence and magnitude becomes the acid test of understanding” (Palys, 1997, p.18). Phenomenologists reject the idea that statistical criteria can ever define understanding. An important phenomenological principle is that understanding comes from what Max Webber described as *verstehen* -- intimate and empathetic understanding of those who we observe from their perspective -- their feelings, their views of reality, and the special meanings of what we observe to them (Palys, 1997 ; Rubin & Babbie, 1993). Phenomenologists reject the positivistic idea of narrowing human experience to measurable data that can be perceived by the senses and objectively measured. An objective of a phenomenological approach is to enlarge and deepen our understanding of a range of experiences in order to give the phenomenon a “ ‘fuller and fairer hearing’ than traditional empiricism has accorded them” (Speigelberg, 1994, p.680).

The German philosopher, Edmund Husserl, is generally considered to be the father of phenomenology (Hammond, Howarth & Keat, 1995; Osborne, 1990). Husserl rejected the notion, expounded by empirical scientists, that the only real measures of things are those that can be measured and quantified. He was interested in the way the world is actually experienced during the

process of daily living and believed that the only real properties of things are those that we experience in everyday life (Hammond et al., 1995). Husserl “reasoned that if consciousness is our window on the world, then an understanding of human knowledge would best be based upon an understanding of consciousness” (Osborne, 1990, p. 80). “To the things themselves” - the banner slogan of the phenomenological movement, coined by Husserl, “bids us turn toward the phenomena which had been blocked from sight by the theoretical patterns in front of them” (Speigelberg, 1994, p.681). Husserl’s significant contribution is the notion of intentionality which he used to refer to the idea that consciousness always has an object. An individual exists co-constitutionally with his or her world, that is, the person and world constitute an interdependent unity (Osborne, 1990). Osborne describes the implications of such an attitude for research. The study of phenomenological experience is a good starting place for understanding of what it is to be human as the focus of such an approach is the comprehension of human experience rather than the generation of explanatory laws. Thus, phenomenological research is descriptive. Exploration and description of human experience may lead to later hypothesis testing but should not be seen as an inferior preliminary step. Phenomenological description is a science in its own right (Osborne, 1990).

### **Descriptive Phenomenology and Quantitative Testing**

This study attempted to combine qualitative research with a quantitative component. I believed that, by use of such a design, my research could profit from the positive components of each. While opting for a phenomenological approach, I also wished to make use of the knowledge gleaned from many years of existing quantitative research in this area. Neuman (1997), Palys (1997) and Beck (1993) suggest that qualitative and quantitative methods of research are not mutually exclusive. They can be looked at as complimentary parts of the same whole. Quantitative indicators may be incomplete and fail to incorporate certain perspectives, particularly the perspective of the participants. Qualitative studies can reveal the subjective experiences of the participants in a study and give us what Max Webber described as *verstehen* - understanding of the feelings and

experiences of those we seek to study from their own point of view - an important phenomenological principle. Qualitative research can identify unexplored factors and suggest which of several factors are most important. In the case of this research, I hoped that the use of a phenomenological approach would shed some light into the ambiguity created by quantitative studies which seek to demonstrate a causal relationship between exercise/dance and stress management. However, fundamental differences do exist between these two philosophically opposed research methodologies, and it must be made clear that, consistent with phenomenological philosophy, at no time do I attempt to describe a causal relationship.

### **Descriptive Phenomenology**

Berry (1979) suggests the appropriateness of a phenomenological approach to investigate the relationship between experience (dance) and behaviour (stress reduction). The major thrust of this research was to discover what the dancers experienced while they were dancing and immediately afterward. I hoped to connect the essence of this experience with the concept of stress.

According to van Manen (1997), "Phenomenology aims at gaining a deeper understanding of the nature or meaning of our everyday experience"(p.37). A phenomenological approach asks, "What is this experience like?" By gaining insightful descriptions of the way individuals experience the world, we are afforded the possibility of insight into the world of the experience. Phenomenology emphasizes a focus on people's subjective experiences and interpretations of the world (Rubin & Babbie, 1993). It seeks to discover the "essence" of a phenomenon, that is, nature or core of a phenomenon. I wanted to explore how mid-life women experience Celtic folk dance with all its components and to explore the relationship of this experience within the context of the phenomenon we call "stress".

According to Osborne (1990), there is no such thing as *the* phenomenological method; however, Spiegelberg (1982) suggests that all phenomenological perspectives have the same characteristic core to their method. He identifies the following three steps as common to all phenomenological perspectives: "1) Investigating a particular phenomenon, 2) Investigating general

essences, and 3) Apprehending essential relationships among essences” (p. 682).

Investigating particular phenomena includes three operations which are closely related: the intuitive grasp of the phenomena, their analytic examination, and their description. Phenomenological intuiting requires total concentration on the object being intuited without becoming so absorbed that one is no longer looking critically. Speigelberg suggests that there is nothing mystical about intuiting and the beginning phenomenologist can begin by “‘opening his eyes’, ‘keeping them open’, ‘not getting blinded’, ‘looking and listening’” (p. 682). He recommends that “some help in the attempt to grasp the uniqueness of specific phenomena can be obtained by comparing them with related phenomena, giving special attention to similarities and differences” (p. 682) and by watching trained practitioners. Phenomenological analysis is the training of the elements and structure of the phenomena obtained by intuiting. It includes discerning the phenomena as well as exploring relations and connections with adjoining phenomena. Phenomenological describing is based on a classification of the phenomena within a framework. “The main function of a phenomenological description is to serve as a reliable guide to the listener’s own actual or potential experience of the phenomena” (p. 694). Description can never exhaust all the properties of a phenomenon. To the extent that it must necessarily be selective, it already entails a consideration of essences.

Investigating general essences is the operation in which we proceed from the particular to the universal. According to Speigelberg (1982), “In order to apprehend the general essence we have to look at the particulars *as examples*, i.e., as instances which stand for the general essence” (p. 697). Intuiting of particulars provides the basis for grasping the general essences. Speigelberg advises that one way of proceeding from particular to general essences is to line up particular phenomena in a continuous series based on the order of their similarities. Certain groups of phenomena that appear to belong together will seem to cluster around cores. When particular phenomena share such an affinity we can know they share some common underlying pattern or essence. “The intuitive apprehension of these general essences is obviously to be followed by the same operations of analysis and description as those we distinguished from intuiting in the case of

particular phenomena” (p. 699).

A phenomenological study includes more than analysis of the components of an entity. It also includes the discovery of certain relationships or connections pertaining to these relationships, that is, apprehending essential relationships among essences. Essential relationships can be either relationships within a single essence or relationships between several essences. The former is concerned with determining whether the components of an essence are essential to it. In the latter, essential relationships between several essences are established.

I followed the four stage process of analysis, described by Giorgi (1985) in his article “Sketch of a Psychological Phenomenological Method”, to conduct the phenomenological analysis of the data obtained from the interviews, the guided journals and the group activity. The first step of this process entailed reading the entire description in order to get a sense of the whole. Once a general sense had been grasped, the second step was to read through the text again with the aim of discriminating “meaning units” (Giorgi) from within a psychological perspective and with a focus on the phenomenon being researched. The third step was to express the psychological insight contained in the meaning units. The final step is was to synthesize all of the transformed meaning units into a consistent statement of the participants’ experiences.

### **Quantitative Component - STAI**

The goal of my research was not to determine if participation in folk dance reduced stress; however, in view of my desire to connect the dance experience with the concept of stress management, I felt it would be useful to demonstrate that participation in the folk dance class did result in altered stress levels, over the course of the evening, as measured by the most commonly utilized instrument for this purpose, Speilberger’s State Trait Anxiety Inventory (1983). I went a step farther than other researchers in that I gave the results to the dancers and asked them if the results were consistent with their experience and how they would explain the results themselves.

Rostad and Long (1996) recommend the use of Speilberger’s State Trait Anxiety Inventory (STAI) as a good assessment of an individual’s phenomenological experience of stress, for

psychological assessment in exercise and stress research. STAI consists of 40 items (20 measuring state anxiety and 20 measuring trait anxiety) measured on a 4 point scale from “not at all” to “very much so”.

For example:

	Not at All	Somewhat	Moderately So	Very Much So
I feel nervous	1	2	3	4

Speilberger was probably the first to categorize anxiety as having either state or trait qualities (Anshell, 1994). State anxiety is transitory and fluctuates over time according to personal and situational circumstances. Trait anxiety is a “relatively stable and acquired behavioral disposition, often depicted as a personality trait” (Anshell, 1994, p.66).

### **Method Used in This Study**

#### **Context**

This research was conducted as part of the Northern Interior Health Region’s (NIHR) Community Based Health Education and Promotion Initiative for Mid-Life Health in Women Living in Northern British Columbia, otherwise known as the Mid-Life Project. This initiative, which was undertaken between March, 1999 and March, 2000, was part of the B.C. Women’s Health in Mid-Life Project (WHIM). The project is designed to assist women living in the North Central region of British Columbia to make informed decisions on health care issues associated with mid-life, earlier defined as ages 45 to 65, and to support women in this region to design and implement programs focusing on healthy choices and lifestyles. Activities were conducted in several communities throughout the Northern Interior. Those held in Prince George included weekly drop-in time where women could consult with a nurse, art sessions, journalling workshops, daily walking, story-telling, an “unfashion” show and Celtic dance lessons. While mid-life is generally accepted to be between the ages of 45 and 65, the NIHR health promotion initiative strives to include women in the age range of 35 to 65, as it is felt that women need information about mid-life before they reach it.

As part of my research , women were given the opportunity to participate in seven introductory level Celtic folk dance classes. The program was based on ceili dances, Scottish Country Dances, and Irish Set Dances and emphasized maximum physical activity at a low to moderate intensity. Dances included a variety of formations including square sets, lines and circles. The basic steps as well as the distinctive styles for both types of dance was included to facilitate continuing participation in local Celtic dance groups. The classes were conducted in St. Giles Church Hall during eight weeks in October and November 1999 with the financial support of the NIHR Mid-Life Project.

### **Participant Recruitment**

Potential participants for this study were invited, through, advertisements (Appendix A) to attend an information meeting. These advertisements were placed in the Prince George Citizen , the St. Giles Newsletter and "The Well", a Mid-Life Project publication. As well they were posted on bulletin boards at the Prince George Regional Hospital and Northern Interior Health Unit. An advertisement was also faxed to public schools in Prince George and to the Hospice House. An announcement regarding the information session and invitation to attend was made to the Caledonia Scottish Country dance group and to the Prince George Celtic Folk dance group.

### **Information Meeting**

During the information meeting I introduced myself to the potential participants, discussed the focus of the research and described my qualifications to conduct the study. I also explained the parameters around participation. These included the request that participants attend all dance classes, complete all forms and make regular brief journal entries after each class. The dance program was offered free to women who wanted to participate in the research process. Women who wanted to dance but did not want to participate in the research were asked to pay a nominal fee for hall rental. All who participated in the program chose to be involved in the research. I considered the idea of having everyone pay a small fee and then refunding it to everyone who

attended to the end but rejected the idea because then the idea of freedom to drop out at any time became meaningless. Also, drop-outs would play a role in ensuring that the class approximated the experience of a typical folk dance classes. Those who elected to participate in the study were requested to fill out a consent form (Appendix B) and a survey (Appendix C). They were given time to fill these out at the information meeting but were also given the option of returning them at the first class. The survey was designed to determine demographic features of the group, stress levels, type of stresses individuals were coping with, expectations as to the effectiveness of dance for managing stress, as well as prior and current exercise, dance, and stress management experience. The women were shown copies of the guided journal that they would be asked to complete at the end of every class. These journal entries (Appendix D) were designed to allow the women to make brief notes that would assist in describing their dance experience in the class during later interviews. Participants also were requested to be willing to take part in two interviews following the last dance class. The information session also included an hour of dancing simple, quick to learn dances so that the women would have an idea of the type of dancing they were committing themselves to.

Three women called me before the information session to say they were interested in taking part in the study but could not attend on the information night. I met with them individually. As well, three other women heard about the study too late to attend on the information night so they came early to the first dance class. Of the latter three, one did not return although her results are included in the STAI results for the first occasion as she had filled in the Consent document and her results were part of the group results for the evening.

### **Ethical Considerations**

Approval for this research was given by the University of Northern British Columbia Ethics Committee. The Informed Consent Document, which was part of the proposal submission to the Ethics Research Board, was distributed and explained at the information meeting. I drew attention to the freedom to withdraw from the research at any time and the measures that would be taken to ensure confidentiality. The confidentiality of the participants was protected through use of a coding

system that identified dancers by letter and number codes and use of pseudonyms. Codes consisted of the first two letters of the month of birth, the two digit date of birth and the first two letters of their mother's name. Thus someone with the birth date October 28, with a mother by the name of Dorothy would be OC28DO. The women were asked to print this code name on the Consent Forms. These became the code key and are stored in a separate locked place from the other materials. Questionnaires, journal entries and all other written items from the class were identified only by the code name. These materials are stored in a locked filing case and will remain there for five years. These will be accessed only by myself and my supervisor. The women who participated in the interviews were asked to chose their own pseudonym. At the time of the information session , the potential participants were also invited to discuss, either at that time, after the meeting or during the following week over the telephone, any concerns they had about joining the dance class, particularly in terms of their own physical limitations or ability to take part.

### **Participants/Dancers**

Throughout this thesis the women who took part in the research will be referred to as either participants, in keeping with phenomenological and feminist philosophy (Osborne, 1990; Reinharz, 1992 ) or as dancers, in recognition of the fact that the role of the women as dancers was vital to the research. For a short period of time each week the women shed their roles as mothers, wives, grandmothers, employees and became dancers.

Women of all ages were invited to participate in the dance classes and be involved in all elements of the study except the interviews. This was consistent with the NIHR Mid-Life Project philosophy of including women in the age range of 35 to 65. It also ensured that the experience more nearly approximated that of the local dance groups which include individuals of all ages. I planned to restrict participation in the phenomenological interviews to women between the ages of 45 to 65. As well as fulfilling this age criterion to be interviewed, the women had to be present for at least six of the seven classes. A third criterion for participation in the interviews was that the individual must have indicated that stress was a problem on the initial questionnaires where the

participants rated the impact stress had on their lives on a scale of 1 to 7. Only women who recorded a rating of 4 or higher on this initial questionnaire (Appendix C) were interviewed. Only four dancers fulfilled these criteria so the age was extended to include one 43 year old. Ultimately five dancers were included in the phenomenological interview process.

Twenty-five women completed consent documents and demographic questionnaires. Of these 24 were present during the first class when the initial STAI testing was done. Sixteen women attended the sixth class, during which STAI was completed for the second time and 17 were present for class seven when the group feedback activity took place. At the information meeting the women were asked, if they were not able to continue with the class, to let me know why. Of the women who gave an explanation for quitting ( $n=6$ ), one left town, four had health problems and one suffered too badly from vertigo to continue. The others did not give reasons.

The demographics for the group are based on the results of the questionnaires completed during the information session. The dancers who took part in this program represented a wide spectrum of women. The variety of body shapes and range of ages defied societal stereotypes of the term "dancer". Of the 25 women who completed the questionnaire, 15 were between the ages of 45 and 65 and 10 were between 33 and 44. Eleven had full time paid employment and nine were unemployed (including three retired). The women, who were employed, represented a broad selection of occupations including teacher, social worker, teacher's aide, receptionist, health records technician, Supported Child Care consultant, personnel assistant and secretary. These would all be designated as either "helping" professions or occupations where the women fill a supportive role. Sixteen of the women were married, five were separated or divorced, one was widowed, two were single and one gave no response to marital status. All of the women, except one, had children and the ages of the children ranged from six months to 39 years. The dancers varied in the amount of exercise they regularly participated in from vigorous gym workouts ( $n=7$ ), through moderate activity, primarily walking, aquafit and dancing ( $n=11$ ) to none at all ( $n=7$ ). More than half of the participants ( $n=14$ ) reported having not had any stress-management training prior to the dance class. All but 4 had some experience with dance before registering for this program.

As part of the questionnaire, the women were asked to list the stressors in their lives. Table 3 summarizes their responses. Contrary to the literature, which suggests coping with multiple roles and responsibilities is a major issue for women, only a little more than one third of the participants in this study identified this issue as a stressor and, of these, only one said “juggling her timetable” was a major stress. Three areas generated the most stress for the participants -- family, work or lack of work and finances. Coping with family members created the most stress for the women. The wide range of problems in this area included -- husband’s health, husband’s work location, children’s behaviour and schedules, single parenting, home schooling, divorce and financial responsibility for adult children. Work related issues -- including relationships with colleagues, workload, meetings and lack of employment -- created the second largest category of

Table 2

Summary of Stressors Identified by the Participants

	Major And Minor Stressors Combined	Major Stressors
Family Members	19	14
Work Related	14	13
Finances	9	5
Personal	7	4
Not Enough Time/ Role Conflict	7	1
Other	5	2
Health	4	0
None		6

stressors. Financial problems were the third largest group of stressors. Paid employment does not seem to guarantee absence of money problems as six of the nine women reporting fiscal problems were employed. Few of the women reported coping with health ( $n=4$ ) or personal issues ( $n=7$ ).

Personal issues that were reported included weight/body image ( $n=1$ ), trusting self and having voice heard with men ( $n=1$ ), isolation ( $n=1$ ), decision making ( $n=1$ ) and lack of self confidence/low self esteem ( $n=1$ ). This, too, is contrary to literature which suggests that the self esteem of middle aged women suffers in a society which devalues aging. Other stressors reported were home organization, having tires slashed, social commitments, building a straw bale house, involvement in an international community and legal issues.

Of interest is the fact that, within this group of women, which included 19 women between the ages of 40 and 55, none reported stress due to menopause or menopause related problems. Only one woman, who filled out the questionnaire but did not return, listed menopausal mood swings as a stressor.

### **Procedure**

#### **Class Format**

Following the information session I conducted seven dance classes. The first six classes followed a similar format. The class began with announcements and a 10 minute warm-up followed by a simple mixer dance. At the beginning of the first class handouts on Healthy Dancing, What to Wear, and Celtic Folk Dance (See Appendix G) were distributed during the announcements. For the first three classes the simple mixer dance was followed by teaching one or two simple Scottish Country dances and reviewing previously learned dances. Classes four through six were devoted to teaching the figures of an Irish Set Dance and, again, reviewing previously learned dances. See Appendix F for the actual program of dances. Every class ended with a short cool-down focusing on stretching. At the end of each class the women spent a few minutes writing in the guided journal about how they were feeling at that moment, the dance experience that day, and what stood out for them that day. The latter was meant to elicit responses regarding the class but, as this was not clearly stated, some women chose to comment on what stood out for them during the day prior to the class. At the end of the sixth class the dancers also filled out a short second questionnaire (Appendix C). The class format was altered for the final session. This class began with a group

activity, the results of which are included in the data for analysis. Following this group activity, dances of the women's choice were reviewed and danced.

### **Speilberger's State-Trait Anxiety Inventory**

Prior to and following the first and sixth classes the women completed Speilberger's State-Trait Anxiety Inventory - Form Y (STAI) (Speilberger, 1983). Testing and scoring was completed according to the guidelines suggested in the manual accompanying the test. While the term "anxiety" was not used during the testing, as suggested by the manual, it was known that the focus of the research was on stress, so women were probably aware that it was a test for stress levels. The participants were given their own STAI results, along with the group results as part of the group activity during the seventh class and their feedback was invited. As discussed previously, these results were also used during the second part of the individual interviews.

### **Group Activity**

The final class began with a group activity designed to obtain feedback from the group as a whole. Initially this was conceived of as a group discussion; however, as group discussions can end up being dominated by the vocal few and their opinions can sway others, I decided to make the group activity a written activity to ensure that everyone would feel free to give her own honest comments. I also wanted to ensure that I obtained as much feedback as possible in the designated one hour time frame. At the beginning of this activity the participants were given a one page handout ( See Appendix H for a sample) which contained the following: An introduction to STAI, state anxiety and trait anxiety, individual results, group results and the norms for adult women. I elaborated on state and trait anxiety, then explained how to read the information on the charts. The charts allowed the participants to compare their own results with the class as a whole and with the norms established by Speilberger (1983). The women were invited to ask questions for clarity. Each woman was then given a number of "sticky" papers. The following questions were written on the top of flip chart papers in the order given:

- 1) How would you explain your state anxiety results pre- and post- class?
- 2) How would you explain your trait anxiety results pre- and post- class?
- 3) How would you explain the group results?
- 4) What would you identify as the major factor contributing to reduced stress?
- 5) What other factors contributed to reduced stress?

1=Most important; 5=Least important

- 6) Any other comments? Women - Stress - Dance

These questions were presented one at a time and the women were given time to answer them on the “sticky” papers and place their answers on the flip charts. Once they were finished, the women read everyone’s answers on the charts and were invited to comment.

### **Interviews**

Four dancers who met the previously mentioned criteria - age 45 to 65 years, missed no more than one class, and indicated stress was a problem on the preliminary questionnaire - plus one 43 year old were selected to participate in the interviews. The interviews, which ranged from 50 to 70 minutes in length, were conducted at mutually agreed upon locations. Three of the women chose to be interviewed in their own homes and two interviews were conducted in my home. The interviews were recorded by an audio-tape transcribing machine. Prior to beginning the interviews the women were reminded that (as per the signed agreement) they could discontinue the interview at any time or request that parts of the interview not be recorded. They were also told that they could choose to review the transcripts of the interview to make additions, deletions or changes. The women were also told that it was important for my research to learn about the experience of dance and stress from their points of view, since participants’ experiences and interpretations are often excluded from this area of research. I also explained how the equipment worked and asked how each person was doing in an attempt to make her comfortable. The interview questions followed the format of the interview guide (Appendix E) beginning with the phenomenological question “How would you describe your dance experience?” All of the questions were written on file cards so the

women could read as well as hear the questions. They were asked to indicate when they were finished with a particular topic by turning over the card. Thus they exercised some control over the process. Basic interviewing skills, such as empathetic statements, requesting clarification and elaboration, summarization, probes and rephrasing were used to encourage the women to explore their experiences. The guided journals and a list of the dances that had been learned were provided to assist the women to remember their experience during the classes. After the last question was asked, the women were asked if they would like to add to their description of the dance experience. While I attempted to make the interviews as conversational as possible, I consciously tried to refrain from saying too much, or anything, that may direct the conversation.

Using a transcribing machine, I transcribed the recorded interviews verbatim for analysis. I then listened to each tape in its entirety to verify the accuracy of my transcription. The transcribed interviews were distributed to the women with an invitation to elaborate or make changes and to provide further verification of the accuracy of my transcription. I highlighted interesting phrases for them to comment on and requested that they consider if they had any more to add, particularly to their experience of the dance. Feedback was received from all five women. Following this I completed a preliminary analysis (which will be discussed later) and developed a thematic structure which, along with a brief summary of the themes, was again distributed to the women for their feedback as to the congruency between their own experience and the thematic structure. Two of the dancers provided feedback on this structure.

### **Treatment of the Data**

#### **Phenomenological Analysis**

Van Manen (1997) describes three approaches to discovering the thematic aspects from lived-experience descriptions: 1) the holistic approach, in which we attempt to capture the fundamental meaning of the text as a whole; 2) the selective or highlighting approach, in which we highlight statements or phrases that seem essential or revealing or essential about the phenomenon being described; and 3) the detailed, line by line approach, in which we look at every sentence or

sentence cluster and ask what it reveals about the phenomenon. I chose the selective approach as I was interested in statements or phrases that were revealing about folk dance, stress reduction and the interplay of factors that might lead to increases or decreases in stress.

As previously mentioned, the format I used for conducting the phenomenological analytic process was informed by the procedure suggested by Giorgi (1985). I chose to begin with the data collected from the interviews, before considering data from the guided journals and the group activity. From this preliminary analysis of the interviews I got an overall sense of the experience and developed a preliminary thematic structure. Because I had transcribed the interviews myself, before I even began the process of analysis, I had a good sense of the whole and I was conscious of key concepts, such as “fun”, “laughter”, “all women” and “respite”. After reading the transcripts thoroughly twice, I read again with the aim of identifying meaningful words and phrases that might illuminate the focus of this study. Essential phrases were highlighted and the lines were coded for ease of locating them later. I will describe this process using the words of one dancer, Gwyneth as an example. Highlighted words are italicized.

*It was very enjoyable. Okay. I've loved dancing since I was very young. I basically learned to dance before I learned to walk with my grandpa so its something I've always really really enjoyed. Its an excellent reliever before I knew that there was stress. I used to do all types of dancing. I used to teach dancing. The only thing I have found really interesting is that nobody else in my family dances. So I'm one of these closet dancers. Like when there's parties we don't go or we sit. My husband does not dance. Um my daughter's trying to learn and my sons enjoy it a little bit but its never been like in courting days we never went dancing and that was the one thing that I always would have liked to have done. So when this opportunity came up I thought, why not, I'm not as young as I used to be. I enjoy dancing and the idea that it was all women really appealed to me because I felt right now to get out and to go dancing and to do it with a bunch of women who were basically in the same age group going through the same changes that I am that it could end up being something that was good and it was very good. I really enjoyed it. I got to looking forward to it. That come the [sic] ... Well Mondays are Mondays. Coming Wednesday I would start to feel like, "Oh boy, I'm glad tomorrow's thursday", and thursday all day would be, no matter how bad the day was, some days they get stressful just with work, not necessarily bad things but you just feel like little stressed and so then I'd know that 7:00 Thursday night I was dancing and then I just felt great. And the dancing itself, yes I really enjoyed that. Its not something I've ever done.*

Each line was numbered: G1, G2, G3, G4, etc. Once meaningful phrases had been identified, I

went through them and summarized them with a single word or phrase that I felt encapsulated the substance contained in the highlighted text. An example, from the above text, is the phrase *“learned to dance before I learned to walk with my grandpa so its something I’ve always really really enjoyed.”* The essence of this phrase was encapsulated with “brings back positive memories from childhood”. Another phrase, *like in courting days we never went dancing and that was the one thing that I always would have liked to have done*, was summarized as “regret at lost opportunity”. These essences were numbered G1, G2, G3, G4, etc so the original phrases could be identified later and included with the results. The next stage for me was to write the essences with their numbers onto papers and cut them apart. Tentative thematic headings were written on large sheets of paper and the essences were sorted and clustered and reclustered into groups that appeared to be related. For example, the phrases “making new friends”, “regular contact with same people”, “camaraderie”, and “expression of caring about each other” were clustered under the heading “social”. New headings were created and some clusters were collapsed with others. From the final groupings of clusters, I attempted to identify a pattern in the themes and construct a preliminary thematic structure that contained all the themes from the dancers who were interviewed. The guided journals and results of the group activity were then analyzed with a view both to locating phrases that would support the thematic structure as well as for statements that might add to the thematic structure or be contradictory. This analysis followed the same process as that of the interviews. The thematic structure was revised to include information from these sources. As Osborne (1990) suggests, I presented this structure to the dancers who I had interviewed for feedback as to its validity in describing their experience. Based on their feedback, I created the final thematic structure.

### **Achieving Quality - Reliability and Validity**

I begin my discussion of reliability and validity in the context of phenomenological research by reiterating that phenomenological methodology is based on different theoretical assumptions from those of the natural sciences (Osborne, 1990). Whereas natural science aims

at objectivity through explanation, control and prediction, phenomenological research aims at “the elucidation of meaning and understanding of human existence from an individual’s point of view” (Osborne, p.86). In contrast to natural science, which concentrates on statistical generalizability, phenomenological research strives for empathetic generalizability. Interpreted structure from the research participants should be found in other’s experience if it has empathetic generalizability. Natural science focuses on objective, measurable reality, whereas, phenomenology examines the actuality of human experience as the “primordial” reality (Osborne, 1990). Natural scientific research seeks explanations. Phenomenological research is descriptive.

**Reliability.** The phenomenological researcher’s approach to the question of reliability is based on the observation that “human perception is perspectival and conceptual” (Osborne, 1990, p. 87). There may be several interpretations or perspectives on the same phenomenon. Since there are no absolute interpretations of the data and interpretations can produce contradictory as well as confirming results, the best a researcher can do is “argue a particular interpretation as persuasively as possible, supported by references to the data, and leave the final judgement to the reader”(p. 87).

**Validity.** Osborne (1990) offers four ways to assess the validity of a phenomenological researcher’s interpretation. First, by bracketing the researcher’s orientation to the phenomenon and carefully describing the procedure and data analysis, the researcher provides the reader with the opportunity to understand her interpretations of the data. Existential phenomenology recognizes the unavoidable presence of the researcher in the formulation of the research question, determination of what will be chosen as data, and the data interpretation. Rather than trying to avoid or eradicate the influence of the researcher, the researcher attempts to articulate biases and predispositions through a process of rigorous self-reflection called bracketing (Osborne, 1990). By doing so the reader will be able to take the

researcher's perspective into account when judging the interpretation. My position, as I have stated before, is one of a mid-life woman currently engaged in participating in and teaching dancing. I have a firm conviction about the positive mental and physical benefits that will accrue from participation in physical activity, in general, and folk dancing, specifically. As well, in the process of completing a literature review for my research proposal, I familiarized myself with current stress research in the areas of exercise, dance, music and women. I also acquainted myself with the fields of stress and stress management. My philosophical stance is feminist.

Johnson (1997) suggests two further strategies to avoid allowing one's personal views and perspectives to affect how data are interpreted and how research is conducted. He identifies the key strategy as reflexivity, whereby the researcher actively engages in critical self-reflection about his or her potential biases and predispositions. Through reflexivity, researchers become more self-aware so they can monitor and attempt to control their biases. Another strategy, suggested by Johnson to reduce the effect of researcher bias is called negative case sampling, whereby the researcher purposefully watches for samples that disconfirm their expectations. During the course of data analysis I consistently and consciously sought data that were contrary to what I expected to find. The weekly guided journals were an important source of non-confirming data and were instrumental in forcing the development of a more comprehensive thematic structure which encompassed both decreases and increases in stress as a result of participation in dancing.

The second strategy Osborne (1990) suggests to strengthen the validity of the researcher's interpretation is to dialogue with the participants during collection and interpretation of data. This became a means of checking on the congruence of the researcher's interpretation with the participants' account of the experience. On two occasions, during the process of this study, I solicited feedback from the women who were interviewed. Full transcripts of the interviews were given to them for corrections, additions and changes. The thematic structure along with a short description was also provided for them and their important feedback was used in the development of the final thematic structure.

According to Osborne (1990), the most crucial means of validating interpretations of phenomenological data is the process of presenting coherent and convincing arguments. Johnson (1997) suggests that while writing the research report, use of low inference descriptors, such as verbatim quotes, is a good way to help the reader experience for themselves the participants perspectives and personal meanings. Verbatim quotations from the interviews, journals and group activity are included throughout my Results section in order to afford the reader direct insight into the dancers' viewpoints, thoughts, feelings and experiences.

A final check on the validity of the interpreted structure, according to Osborn (1990), is the extent to which it resonates with individuals who have experienced the phenomenon but were not in the study. The final thematic structure from this research was presented to two dancers who did not participate in this research for their feedback. Both agreed that the thematic structure reflected their own experience.

Johnson (1997) recommends that a fifth way to improve the internal validity of qualitative research is the use of methods triangulation and/or data triangulation. Methods triangulation can refer to different methods of research as well as different types of data collection procedures. During this research, I used multiple methods to collect data. Data used for analysis were not restricted solely to data obtained from the interviews, which were the primary data source. Data were also obtained from other sources including the guided journals filled in weekly by the dancers and the responses during the group activity. These supplementary data sources played the important role of allowing the voices of all the dancers to be heard and encouraged free expression through anonymity, thus affording me a more complete picture of the phenomenological experience of dance for the women.

### **Quantitative Analysis**

Data obtained from Spielberger's (1983) State Trait Anxiety Inventory (STAI) was subjected to paired t-testing using Statistical Package for the Social Sciences (SPSS)(SPSS Inc.1995). Mean anxiety levels for the group pre- and post- class were also obtained from this

analysis. The results of the  $t$ -testing and the means are displayed on bar graphs and tables in Chapter Five: Quantitative Results. The graphs and tables demonstrate the changes in anxiety (the measure of stress) pre- and post- class for two occasions. As well, changes in trait anxiety from the first class to the sixth are presented. This information was also compared to norms established by Spielberger (1983) to demonstrate an increase in the numbers of dancers whose scores fell below the 50th percentile after dancing. Statistical significance of STAI results was determined by comparing  $t$ -test results to critical  $t$  values with an alpha level of .05. The intent of this study was not to demonstrate a causal link between dancing and reduced stress. Rather, the intent was to explore the dance experience from the perspective of the dancers. Thus, more important than the statistical results is the feedback from the dancers as to the consistency of the results with their experience and their explanations for the results. This feedback was obtained during the individual interviews and from the group activity.

### **STAI - Reliability and Validity.**

Spielberger's (1983) State Trait Anxiety Inventory (STAI) provides a measure of anxiety levels. As was previously mentioned, Rostad and Long (1996) recommend use of this instrument as it provides a good assessment of an individual's experience of stress. Thus, even though my research was on stress, I am discussing anxiety here. Anxiety can be measured by observations of overt behaviour, physiological indicators and self report. According to Raglin and Hanin (2000), anxiety in sport settings is most commonly assessed through self-report. Assessment of behaviours can be time consuming and even misleading. Commonly used physiological assessments, for example heart rate, are sometimes unrelated to anxiety and can be invasive. Self-report measures of anxiety, such as STAI provide advantages over most physiological assessments; however they also have limitations. The validity and reliability of self-report measures can be affected by verbal ability as well as level of self awareness of the respondents. Responses may be invalidated by social desirability and expectations. Repeated assessments over a short time span can result in habituation, or stereotypical responses.

“Despite these problems most researchers agree that appropriately used, validated self-report measures provide accurate assessments of anxiety” (Raglin & Hanin, 2000, p. 94). Reliability is a measure of whether a particular technique applied repeatedly to the same individuals would yield the same results. One way of assuring reliability is to use measures that have proven their reliability in previous research. According to Rostad and Long (1996), “The STAI is widely accepted in research and practice” (p. 213), and these researchers recommend the use of this instrument in exercise and stress research. Validity is the extent to which a measure adequately reflects the real meaning of the concept under consideration. STAI is a well-validated measure of anxiety and as has been mentioned, STAI is the most common psychological instrument used to measure stress in experiments using exercise. Revision of the scale was undertaken in 1979 to develop a purer measure of anxiety. During the course of this research the participants were asked for feedback as to how well the STAI results reflected their stress levels.

**External Validity.** The generalizability of the results of this study must be tempered by a number of limitations regarding the sample utilized and research design. Participants were volunteers and one might guess that only those women who would experience stress reduction from participation in dancing would offer to take part. It is important not to overestimate the generalizability of subjects who are self-motivated, interested and choose to participate in a study. This, however, is an unavoidable limitation of virtually all research investigating the relationship between stress and exercise or dance. Most research subjects for these studies have been students who had registered in a chosen activity. Even in studies such as that of Haney and Long (1988a), which involved random selection, the participants were volunteers who knew they could be assigned to a jogging group. As this study is limited to women between the ages of 35 and 65, the quantitative results are only generalizable to similar populations. There was also no control group for comparison. However, the qualitative results do support the quantitative findings.

**Internal Validity.** Internal validity refers to the extent to which the differences in anxiety levels can be attributed to the experimental treatment which, in this case, is participation in the dance class. Since my research does not attempt to demonstrate a causal relationship, internal validity is irrelevant to this study. As has been discussed already, it is meaningless to attribute reductions in stress to dance itself as there are too many alternative factors that might account for the observed results. One outcome of the study was identification of the factors that the dancers identified as contributing to stress reduction in the dance class situation and how much weight was attributed to these factors by the participants.

Contact with my research group over an extended period of time provided me with an extraordinary opportunity to collect data in a variety of formats –interview transcripts, guided journals, group activity charts, STAI results--and at several different times. The results of the phenomenological analysis of this data are presented in the following chapter.

## CHAPTER FOUR: THE PHENOMENOLOGICAL RESULTS

### Introduction to the Results

The results of my research are presented in this chapter as well as in Chapter Five, which contains the results from the Spielberger's (1983) State Trait Anxiety Inventory (STAI) testing along with feedback from the dancers on this testing. Chapter Four is divided into two sections. The first section introduces the five dancers who gave generously of their time to be interviewed and who provided feedback on the transcripts of the interviews and on the thematic analysis. These women are revealed through their weighty responsibilities, the effect that stress has on them and the coping strategies they typically employ to manage this stress. A key feature of this first section is the description of how the women feel when they are stressed.

The second section of this chapter presents the thematic analysis of the experience of the women as they danced and the effect participating in the dance activity had on their emotional state over the course of a class. This analysis is based on the interviews with the five dancers, supplemented by the guided journals and the responses from the group activity. The journals, originally conceived of as a memory tool for the dancers who would participate in the interviews, turned out to be a valuable tool to give voice to the dancers who were not interviewed. They supported and fleshed out the themes identified in the interviews. The anonymity of the journals allowed for free expression of negativity and I was able to obtain a clearer picture of the stress that was created during the class. The women who were interviewed, eager to be helpful and please, focused on the positive aspects of the dance experience. As is suggested in the interviews, the norm for this group was not to "show off" or accentuate individual ability. Thus, the dancers who were interviewed preferred to focus on group achievement, whereas, in the journals the women seemed more free to talk about feelings of self-achievement.

Analysis of the five interviews, guided journals and responses to the group activity identified two major themes: 'Increase in Stress' and 'Decrease in Stress'. Two subthemes -- "Movement and Music" and "The Group of Women" -- are located under each of these major themes. The subthemes, "Change of Focus" and "Fun and Laughter", which lead to

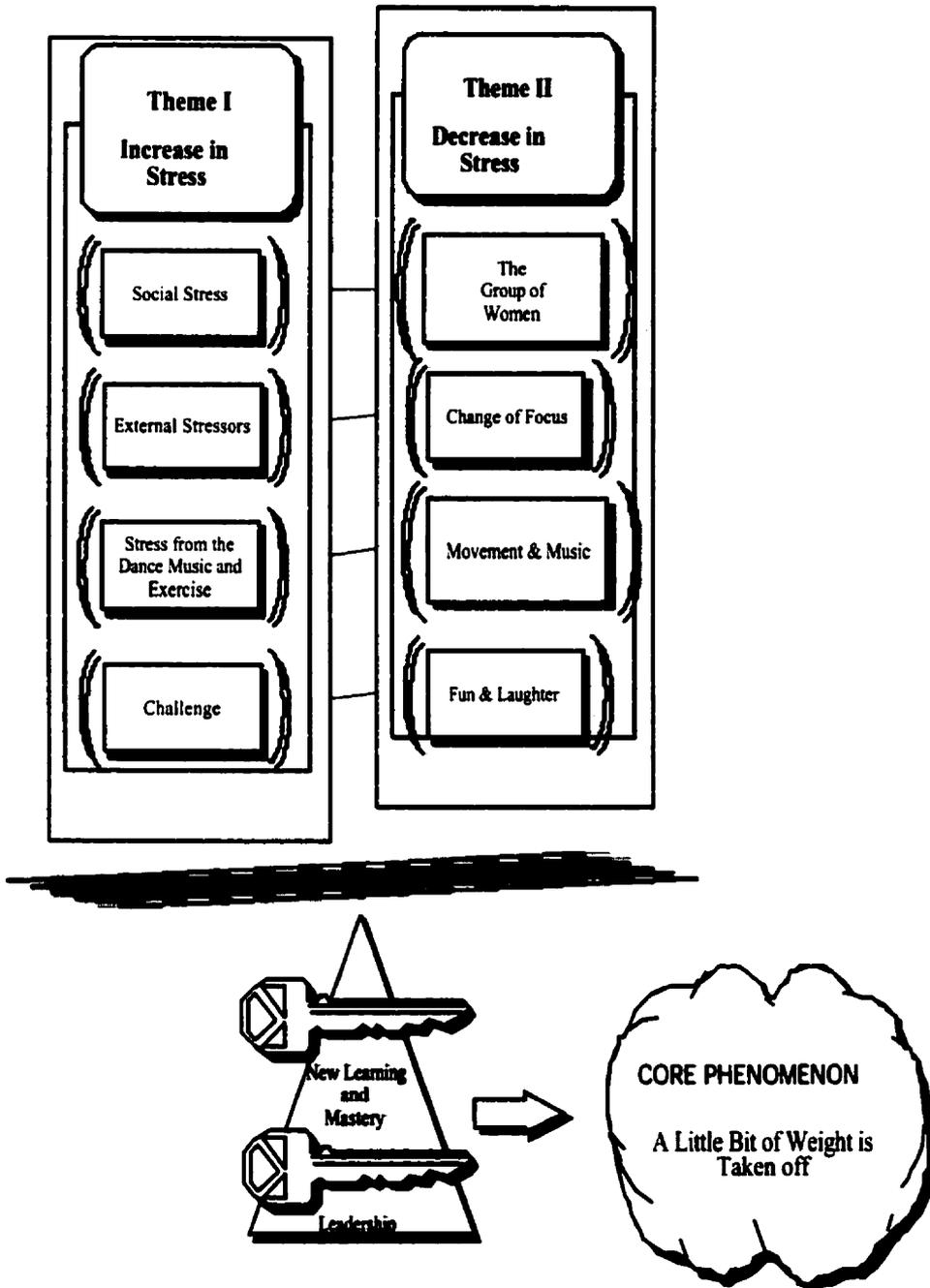


Figure 1. Thematic Analysis

reduced stress are balanced by two themes that increase stress -- "External Stress" and "Challenge". "New Learning and Mastery" and "Leadership" are two subthemes that are the keys to balancing and managing the stress present in the dance class. Figure 1 diagrams this thematic structure. The core phenomenological essence of the dance experience is encapsulated by the phrase "A Little Bit of Weight is Taken Off", a phrase used by one of the dancers to describe her experience of the dance class. This chapter concludes with a comparison of how the women feel when they are stressed and how they felt at the end of the dancing.

### **The Dancers Who Were Interviewed**

To preserve their anonymity, I will identify the dancers who took part in the interviews by their pseudonyms only. To give any further demographic information would reveal their identities to any of the members of the dance group who chose to read this study. Following the final dance class Amanda, Ruth, Aleisha, Gwyneth and Della selflessly gave about one hour of their busy time to be interviewed. These interviews, along with the questionnaires, journals and responses to the group activity, combined to produce more than a mere snapshot of what happened for the women during the dance class. I was given a glimpse into the lived experience of these women. The picture that developed was one of women weighted down by the sheer burden of responsibility. When presented with the question, "Could you describe your dance experience", the women who were interviewed talked about the dancing but they also took pains to situate it within the context of their lives, thus giving more meaning to the experience. They shared previous and current experience with dancing along with stressors they were struggling with. They welcomed the dance class as a respite from an otherwise busy and often stressful life.

The responsibility shouldered by my five interviewees was impressive indeed. Among the five women, they were responsible for:

- 1) the daytime care of a grandchild
- 2) raising a child as a single parent

- 3) caring for a foreign student whose expectations of “service” far exceeded what we would consider the norm.
- 4) financial responsibility for an adult child with a family
- 5) administrative management of a large professional office
- 6) a disabled spouse
- 7) a spouse with health problems
- 8) organizing a religious group
- 9) financial support for her family, which required holding two jobs
- 10) managing a household on income assistance.

These women were not unique in their responsibility, but were a fair representation of the women who gathered for this dance group. Twenty-two of the twenty-five women, who completed the questionnaire, reported major stress in their lives, the bulk of this centring on family, work and finances. For a brief period of time, once a week, the women were offered an interval of mutual support, minimal responsibilities, enjoyable exercise and uninhibited fun. They emerged invigorated and revitalized, ready to face the world again. Dance offered a brief lifting of the weight, with little pressure, freedom to be themselves, a break from regular daily life, feeling of satisfaction from accomplishment along with group connection and support.

During the interviews the dancers were asked “What is feeling stressed like for you?” and “How do you usually manage stress in your life?” A summary of their responses is presented in the following section. This chapter concludes with a comparison of how the dancers feel when they are stressed and how they felt after dancing.

### **How Everyday Stress Affects the Dancers**

#### ***“Tense and an ongoing feeling that ... that you’re under pressure”***

Where, at some points of the interviews, the five women were at a loss for words, there was no hesitation in responding to my query about how stress affected them. They described psychological and physical symptoms plus altered sleep patterns. Stress had an omnipresent, oppressive effect. Amanda summed the effect of stress up by saying, “It’s not fun.” For Amanda stress is a “tense and an ongoing feeling that ... that you’re under pressure” without any

relief. She feels agitated and wonders if things will get better. She gets headaches and feels “low and sort of tired”. Aleisha, who is normally a very active person, recognizes that she is stressed because she has a tendency toward unhealthy living patterns which exacerbate the effect of stress.

When I'm stressed I kind of roll up into a ball and put my cover, and put my head under the cover and forget about the world [...] Um, I don't sleep well. I don't eat well. Um, I drink too much coffee to keep awake. And just, Ya that's when I'm feeling stressed. I won't go for my walks. Somehow I won't be energetic.

Aleisha also suffers from “sleepless nights, thoughts going on and on” and “second guessing herself”. Ruth described stress for her.

Oh God ..... A feeling in the pit of my stomach that never goes away. ... ..  
And I can get distracted during the day, but at night, that's the part that bugs me.  
I'll wake up at night and worry fret and stew and try and figure things out.

Gwyneth is troubled by high blood pressure and a “fluttery chest feeling”. She also gets tired. As well as affecting her physically, stress has a social impact on Gwyneth.

Its sometimes not being able to say exactly what you want to say. .. I'm not normally hung up for words. If I'm feeling stressed, I don't always know how to express myself and I want to sometimes say something that, I think “Oh Gwyn you shouldn't have said that. It makes me sound stupid”. Or I won't respond at all.

Della was the only dancer who gave recognition to the concept that stress was not necessarily negative. But for Della, negative stress dominates her mind and causes sleeplessness.

*Sigh ... Feeling stressed is when ... I don't know, I guess there's good and bad stress but um ... Feeling stressed is being so anxious that that just monopolizes all your thoughts. That's what feeling stressed is I think. So if you're able to ... um ... Sort of ...uh .... Find methods to sort of ... Um ... distract you from that, that's a good thing, although some stresses you know never go away. You'll have to really just deal with them but um, .... feeling stressed is um ... where you can't sleep cause you're worried about your problems ... (Della)*

### **How the Dancers Cope**

#### ***“To help to ease the stress”***

No strangers to stress, all of the women interviewed were able to share the means they used for managing it. Four of the women used physical activity to cope with stress. They described walking as a way to manage the physical side affects of stress and a way to provide time to think. One of the women also “worked out” in a gym, preferably with music as this enhances the stress-

reducing property of exercise for her. The women also provide themselves with respite - hot baths and candlelight - and distract themselves by such activities as reading, doing needlework and being with other people, all of which are coping strategies that would be identified as emotion focused (Folkman & Lazarus, 1991).

Ruth and Gwyneth both described coping strategies that would be described as problem-focused (Folkman & Lazarus, 1991).

Trying to figure out solutions, try to get to the bottom of what is it that's stressing me [...] and even talking about it with other people who are uninvolved, it does help. ...Um ... But uh ya and often times it helps ... helps too to develop some solutions, to give some another thing to try to help to ease the stress (Ruth).

And, sometimes talking. .. Like if there's something that's really, really, really bothering you. Like you can only pussy foot around it for so long. Sometimes you just have to take the bull by the horns and... stir it up and talk about it.. Ya (Gwyneth).

As mentioned earlier, neither emotion- or problem-focused coping are inherently superior. The use of emotion-focused strategies for coping assists these women with “managing emotions and maintaining self-esteem and a positive outlook, especially in the face of irremediable situations” (Lazarus & Folkman, 1991, p.205). Many of the burdens these women shoulder, for example single parenthood, a disabled spouse or coping with two jobs in order to support the family, cannot be alleviated by problem-focused coping. They are situations with which the women must learn to live.

### **Limitations for Use of Dancing as A Coping Strategy**

#### ***“Today, in Prince George where can I just go to dance?”***

All of the dancers expressed satisfaction with their experience of the dance classes. I was particularly heartened to hear this from Amanda, who alone among the interviewees said she had never danced before. This suggests that prior experience with dance is not necessary to experience the pleasure and stress-relief properties of dancing. Both Ruth and Gwyneth danced as children. Two of the women who were interviewed, Aleisha and Ruth, were regular members in other dance groups. Della, who stated that she has “always liked music and movement,” pointed out that this class was an opportunity. Dancing is not an activity that is readily available for mature women in

Prince George and they are further limited by the interests of their spouses. Aleisha asked the question, "Today, in Prince George where can I just go - because I'm feeling stressed - to go dance?" For two of these dancers the class was another chance to involve themselves in an activity that they enjoyed as children.

***"He can't dance"***

Women of this age group can particularly be restricted from social dance by being married to men who do not dance. Two of the women who were interviewed commented that their husbands did not dance and one expressed regret at the loss of opportunity for dancing because of this.

The only thing I that have found really interesting is that nobody else in my family dances. So I'm one of these closet dancers. Like ..when there's parties we don't go or we sit . My husband does not dance. Um ..... like in courting days we never went dancing and that was the one thing that I always would have liked to have done. (Gwyneth)

She added, "So when this opportunity came up I thought, well why not, ... I'm not as young as I used to be".

***"Dance has always been a happy time"***

These same two women shared their memories of dancing as children. These were memories of happy, enjoyable times and for these women it was a special opportunity to be able to participate in this very positive activity from their youth.

I haven't been dancing for years and then ... to come back and do this it was a real ... really neat experience. I enjoyed it very much. And to find that I could do it without too much trouble. That was a plus ... So I danced as a child but you know I haven't really done much since. (Ruth)

For Gwyneth, dancing brought back recollections of dancing with her grandfather. At one time dancing filled her life.

I've loved dancing since I was very young. I basically learned to dance before I learned to walk with my grandpa... so it's something I've always really, really enjoyed. It was an excellent reliever before I knew that there was stress. ... I used to do all types of dancing. I used to teach dancing.

In my upbringing and that, like dance has always been a happy time. When I was quite a bit younger, we used to, I used to well, I .. danced. If there was dancing I did it.. My grandparents put me in tap lessons. I was in square dancing. I was in any kind of dancing that there could be that we could afford. .. I was in. I danced .. with my grandfather. He

would carry me ... and when I was able to stand up I would stand up on his feet and dance. Like it was just something that I always associated with happy times.

For Ruth, to come back to dancing after many years was a “really neat experience” and she commented, “I’ve sort of found something again that I used to enjoy so much and ... Um, I haven’t done it for a long time and I’ve found it again and now I don’t think I’d like to leave it”. This theme was picked up in the journals by another participant whose enjoyment of a lesson was enhanced by the familiarity with the flow and step combinations from childhood.

Simply returning to a pleasurable activity from their childhood may have contributed to the stress reducing properties of dancing. Guided imagery, used for stress reduction, begins with phrases such as “Go in your mind to a special place that you love, a place where you have felt relaxed or know you would feel relaxing” (Domar, 1996, p.67) to transport people to safe, happy places. Clearly a return to these happy times of dancing would enhance the women’s feelings of peace.

### **What Happened During the Dancing?**

*“A wonderful experience just to kinda lift me up!”*

The overwhelming image produced by the dancers who were interviewed was one of women burdened by stress. The core phenomenon, or essence, of the dance experience seemed to be encapsulated by Amanda’s phrase, “A little bit of weight is taken off”. The notion of lightening or lifting was repeated throughout the data. In presenting the synthesis of my data information I will describe the core themes that led to this sensation of lightening the load. Two complimentary themes - ‘Increase in Stress’ and ‘Decrease in Stress - provide the core for the thematic analysis of the data. A series of sub-themes range under these main themes.

During my analysis of the data, four sub-themes -- The Group of Women, Change of Focus, Movement and Music, Fun and Laughter, -- seemed to march directly toward reduction of stress. But I could not ignore the handful of other themes -- Stress Created by the Dancing; Social Stress; External Stress and Challenge -- which also begged for attention. The themes danced in my head as I sought some meaningful order. Like the chord at the beginning of a dance commanding attention, my moment of insight came as I saw the seemingly opposite sub-themes

walk hand in hand onto the floor in the same formation as a Scottish Country Dance Set. Four pairs of subthemes positioned themselves adjacent to each other in two parallel lines. Figure 1 diagrams this formation. Like dancers across the set, the seemingly opposites face each other and reeling together created the total dance experience. In reality they are not opposites but complementary sides of the same dance card. The social setting both contributes to increased stress due to working with unfamiliar people and reduces stress through social support and the group activity. Likewise, dance, exercise and music lead to both increases and decreased in stress. While the dance situation allows a brief respite and change of focus for the dancers, some external stressors continue to impinge on the experience. The stress of challenge is balanced by fun and laughter. Two other themes “New Learning and Mastery” and “Leadership provide” the keys for balancing the stress in the dance situation and contributing to the “lifting of the weight” from the shoulders of the dancers.

### **Introduction to the Themes**

***“Sometimes I felt more stressed during a dance session and sometimes I felt quite relaxed”***

This section presents the subthemes under the headings of “Increase in Stress” and “Decrease in Stress” as the complimentary pairs that they are:

**“Increase in Stress” -- “Decrease in Stress”**

“Social Stress” -- “The Group of Women”

“External Stress” -- “Change of Focus”

“Stress from the Dancing” -- “Movement and Music”

“Challenge” -- “Fun and Laughter.”

Each pair will be presented beginning with the factors that contributed to increased stress. This will be followed by the factors that contributed to stress reduction. The important role “New Learning and Mastery” and “Leadership” play in managing the stress is also discussed. All of the dancers reported experiencing a change in emotional state during the weekly classes. This chapter concludes with a comparison of how the dancers reported feeling after the dance classes with how they describe feeling when they under stress.

### Social Stress - The Group of Women

#### Increase in Stress - Social Stress

##### *"Felt a little self-conscious at first"*

At the beginning of the dance classes, the dancers were confronted with the uncertainty of meeting new people and, as Ruth pointed out, "To learn with people I did not know very well, in a situation where all your mistakes are on view, can be daunting." Gwyneth summed up the initial experience, the uncertainty and the aloneness.

And that was the first week and I think a lot of that was just, not sure what you're getting into, what it's going to be like, maybe not wanting anybody to know that you're feeling a little stressed. But actually just, I didn't know anybody.  
(Gwyneth)

As the women got to know each other they could relax and not feel quite so self-conscious; however, even though most dancers stated that the dancing consumed their attention, they had time to watch each other and make comparisons. For some, like Aleisha, comparing herself to others led to a feeling of self-satisfaction.

You know some of the dances which I could master uh, even some of the new dances that I've never done before I kind of had an idea and when I would see other people struggling with something which was quite simple in my eyes and yet I could master it I felt, okay, I, you know, I'm really always hard on myself. Its not that bad, look at how better you did from everybody else.

Others struggled with feelings of inadequacy. In the guided journals the dancers were asked to record the things that stood out for them that day. For one dancer, the most outstanding thing one day was, "not berating [her] self so much when [she] goof[ed] up". She wrote, "I felt I was very clumsy and upset the whole group" (Journal Entry). Another dancer wrote in her journal about her struggle with balancing her "insecurities against others". She described the difficulty of "building others up w/out degrading myself overly much" and added, "I find this a struggle in real life as well. Even when I manage to find the maturity to not compare myself with others, I feel others are still doing it".

Many Scottish Country Dances begin with the head couple dancing alone. Gradually all the other dancers join the dance. Much like a dance, the women came alone then became part of the group.

### Decrease in Stress - The Group of Women

#### *“I found that they were so supportive”*

The enjoyment of moving rhythmically in synchrony with others helps to create a sense of community. An important feature of the dance experience, for all of the dancers who were interviewed, was the element of being in a group. This theme was also found throughout the journals. Not just any group, however, but a supportive, non-judgemental group of women working together for joint accomplishment. Dancers who were experiencing difficulty received assistance and acceptance from the others. Even though some dancers appeared more experienced and capable than others, they did not use this fact to try to build themselves up by looking better.

Gwyneth commented,

I really found it was a really good group and the women were ... you know, very supportive. Very friendly. Nobody had any airs of being any better than anybody else. Like I know some of the ladies that are there have been doing this for a while but it didn't matter. Like we're all on the same level. There wasn't anyone who was, you know, sort of one upping anybody.

Aleisha too noted that no one was showing off and everyone seemed to be of even ability learning together. She also commented on the cooperative spirit of this group.

I felt that we were all on the same level so there was no competition or anything like that no showing off, or anything, because I find sometimes with a group of women, there will be that sort of competition and that little bit showing off that I am better than you are type of thing or whatever. But there was no showing off or anything. Everybody was on the same level.

Ruth stated a norm for this group of not trying to make yourself look too good when she commented on her difficulties learning Montgomerie's Rant, a Scottish Country Dance taught in another class. [It] sort of set me back on my heels. .... Um I think maybe I was getting a bit cocky, thinking uh ... oh boy you're pretty good here Ruth and then I got taken down a peg or two and that was good.”

Even though dancers who were less able could create stress, the group was not critical of others if they could not catch on quickly. There was an acceptance of what individuals were able to manage. As Della commented,

Well there's really not much *laugh*. I was probably one of those that were making mistakes. Learning requires practice so we couldn't do much if the group didn't

'get it'. Just more practice was needed or more clarification was needed. ... But uh it was uh it was just kind of interesting to see, you know, that you weren't the only one perhaps having problems. What was your thing? Right of left or you know How many steps back, so, I mean it was it wasn't a problem for me. I .. you just sort of accept that there would be some problems uh you know uh ... catching on.

There was good camaraderie and support. As Ruth commented, " We didn't pull each other apart you know. It was good. Yeah." Like dancers along the side of a set, the dancers reached out to support each other. This form of dancing encourages social support in a number of ways. Rules of social etiquette encourage good manners, anticipation and awareness of other dancers, and courteous use of hands. An important feature of progressive dances is the egalitarian philosophy that each couple has a turn at the top.

***"Enjoyed the way the group caught on together"***

**Joint Effort.** Another key feature of the group was the fact that the dancers were working cooperatively toward a joint goal. It was fun for the women to see if they could "get it all together and make it work" (Della). Team work is an essential component of both Scottish Country and Irish Set Dancing. No matter how good the individual technique and knowledge of the dancers they can fail to create the dance if they do not have a sense of teamwork. Another dancer remarked,

I liked the idea that everybody worked together and we all sort of relied on each other .. as opposed to other types of dancing where you're your own sole pair and you do your thing. It was very open and was ... really good. (Gwyneth)

Numerous journal entries commented on the rewards of joint accomplishment. The following are excerpts from three.

"The group seemed much more together tonight than they were last week. I'm glad I came"

"Sense of accomplishment when group 'gets it' "

"I liked our foursome today - we worked well together. After today's [sic] session I was thinking I'd like to find out more about joining the Celtic dancing group"

The cooperative effort on the part of the dancers to create a unified movement, rather than competing with other, contributed to minimizing stress.

*"I really enjoy this and I almost think it would be a shame to ruin it with men!"*

**Women only.** Gwyneth was attracted to the group because it was for women only.

I enjoy dancing and the idea that it was all women really appealed to me because I felt ... right now to get out and to go dancing and to do it with a bunch of women who were basically in the same age group going through the same .. Um changes that I am that it could end up being something that was good, and it was very good. Sometimes people aren't as comfortable in a mixed group.

Later in the interview she commented

I think, um, one of the things that was mentioned is, if we continue dancing some people wanted their husbands or spouses or men to come and ... I very much enjoy that type of dancing too but I think, just my thoughts, that if there were men involved, a lot of us wouldn't have felt as relaxed and as comfortable and as able to have the fun. You know sometimes I think what happens is um ... we're all not shaped the same. Were not all ... and not everybody feels comfortable with that always. I think we have to go ... there's still a lot to be done for women to feel comfortable with who they are, whether they've got an extra roll or an extra tire or whether they're, they're twiggy thin. And I just think that this group was so good for that, because we had all different shapes and sizes and we were able to just, all just relax and it just didn't matter.

The fact that this was a "women only" group freed the dancers, who might otherwise have felt self-conscious, to act in an unreserved and unselfconscious manner. Released for a period from the constraints of socially prescribed behaviour, the women felt comfortable to laugh and giggle and be uninhibited. During the group activity during the final class this idea was voiced and discussed. In her interview, Aleshia commented on this discussion.

And I think something that some of the ladies mentioned when we were there was that ... as a group of women together, we have so much, you know we open up, we're ourselves we let ourselves be ourselves. We'll giggle and laugh and be silly, but yet when we're with a group of men we kind of hold ourselves stiff and we won't let ourselves be who we are. ... So that was really interesting. To me that really sticks out in my mind ... That comment really sticks out in my mind.

This theme was taken up in the journals too with comments such as, "The women in general are uninhibited as they have no men to make them feel shy or dummy." The fact that the group was women only allowed the dancers to feel freer to relax and enjoy themselves. They were less self-conscious of their bodies and behaviour than they would have been if men were present. The homogeneity or sameness was an additional factor that appeared to contribute to reduced stress.

***“And the camaraderie with all the other women”***

**Social.** The sociability of dancing comes from meeting new friends as you progress down a set or around the room. The group became more than just a group of women getting together to dance. It became a chance to make new friends who cared about each other and had meaningful conversations. Regular contact with the same people led to a feeling of group solidarity and the dancers looked forward to their times together. As Aleisha put it,

meeting with other people, laughing with them, uh, and I think on a weekly basis when, when I'm coming with a group of people on a weekly basis you kindaf build up some sort of rapport with each other. Say "Gee you seemed a little hurried today. Are you okay? Or "How is your week?" or "You look stressed" or this or that. Or the same thing that I'm interacting with other people, noticing where they're coming from, things like that . It sort of gave me that rapport over the eight weeks that I was going to see this group of people for eight weeks and we were all together all sort of united.

For women in this age group, the ease of making friends and becoming involved in activities through joint interest in children has disappeared. In their busy lives of work and home, it becomes more difficult to meet friends. The transient nature of this community also makes developing friendships challenging. Gwyneth commented on this difficulty.

I need to meet more people. I find that I've been here for about 3 1/2 years. I know my immediate neighbours. I don't belong to any other clubs, groups or organizations. And I used to. Uh, Before I moved here I was very involved in many things. As the kids grew, up of course, you're not so involved any more. And I was starting to feel, like I need something... so I was hoping to get some of that, and it did.

Journal entries also commented on making "contact with familiar faces" and "conversations that came from the heart - beyond the how do you do and the weather" This entry added, "this was very affirming and made me feel positive again".

***“My goodness, there's certainly enough of us out there!”***

**Menopause.** A feature of this class was its connection with the Women's Mid-Life Project. Information from the project, particularly regarding menopause, was distributed to the group. The women shared and discussed this information before class and during breaks. Gwyneth was the only participant who commented about menopause to me. For Gwyneth the

opportunity to bring menopause into the open and sharing the experience was important. The fact that these women discussed an intimate topic such as this indicates the level of the friendships that were established.

It's the whole idea I think of um the women going through the different changes. We don't understand it. We don't know a lot about it. It's been hidden for so long. Not hidden, as in just, not really brought out in the open. At least not in the open. You know it's been one of those "hot flashes" *snicker*, you know, kind thing. You know, the memory lapses. Boy do they happen, short term memory lapses *laugh* and it's it's, it was comforting to go through this to find that there were so many other women ... in the same boat. Like I'm really not losing it. So I think even that in itself was good. (Gwyneth)

This sharing led to stress reduction as the women found they shared the same experience as others and were not alone.

### **External Stress - Change of Focus**

#### **Increase in Stress - External Stressors**

##### ***"Go, go, go all day"***

Many of the stressors that were affecting the dancers during the classes were due to influences external to the dance situation. Women reported arriving fatigued and low on energy as a result of such factors as an exhausting day or lack of food. Fatigue and generally feeling low were also attributed to the lack of light, characteristic of our winter months. Journal entries mentioned the lack of sunlight. "The lack of sunlight I think is really effecting me feeling depressed. I realized this tonight. I think I'll get some lights." Reduced energy compromised the dancers ability to learn the patterns, do the steps and enjoy the experience. Journal entries also commented on fatigue.

"felt a little off the beat as I was tired"

"I wish I weren't so tired as I would have had more fun and enjoyed myself"

"somehow I couldn't get the hornpipe step and didn't have the mental energy to really try it"

Women also arrived with physical problems, such as colds, sore feet and pulled muscles that added to the stress of the dance situation. At least one dancer was coping with hot flashes, common to

menopausal women, as well as other menopausal symptoms. This was exacerbated by the warmth to the hall we were using. Gwyneth described her struggle with the symptoms that were negatively impacting her enjoyment of the dancing.

There was the odd time. There was one night, one or two nights that um ... I really felt frustrated but that wasn't the dancing. That was just bad weeks or bad days. One of the things, I don't know if you need to know, or if it will come up is I'm on oestrogen replacement and I've gone to injections as opposed to a daily dosage so I get them once a month or whenever I need them, and it was the span where I needed my injection. My body was telling me you need it and you need it yesterday and I couldn't get in to see my doctor for over a week. So ... things felt a little bit more disproportionate than they normally would have. ... I had a harder time concentrating. I felt like I was all left feet. I thought, "This is crazy. Why am I doing this? Don't be so stupid, You're enjoying it. Do it." Um, I was so hot that I was sure that when I moved there'd be a little puddle on the floor behind me, like it was just an incredible feeling, just incredible. But on the whole I just noticed every day, .. except for the day that I felt a little frustrated, even when I was feeling frustrated, I enjoyed it. So every one of them there was always something good.

The dancers reported that dancing provided a nice relief from the stressors in their workplaces and at home but, while the dancing allowed a break from the stresses of the day, it could not eradicate all intense feelings. Emotions about people from outside of the dance class sometimes remained -- the grief over the death of a teenager, concern about a daughter driving out of town on winter roads, rage over the unfair treatment a child received at school. These things lingered in the backs of the dancers' minds.

***"The "coming to" the dance event was stressful !"***

For some of the women who joined the dance group, maintaining the commitment to coming was challenging. Competing priorities created stress. Dancers struggled with family discord over their attendance. One woman had to bring her four children in order to fulfill her commitment to attend. Visiting relatives also provided a conflicting priority. The classes were held during the season prior to Christmas, typically a busy time. Dancers reported their struggles to meet this commitment.

I did better and enjoyed myself. I almost went Christmas shopping instead as this is my night out of the house a week when most stores are open. I'm glad I didn't - or I would have always struggled with a defeated feeling. I feel triumphant - or at least slightly overcoming rather than overcome (Journal Entry).

I really enjoyed the group thing that we did at the end. And, uh, that was a day that I was not going to make it and I told myself "No, this was a commitment that I had made um I need to stick to this"(Aleisha).

Due to school midterms I felt pushed for time but I made the decision to come and make the most of the time before and after the class. I also had arranged for someone to give me a ride - pick me up - I was looking forward to this opportunity to connect and get to know this person. So came. Making a commitment to myself and maintaining that is a challenge for me (Journal Entry) .

I have enjoyed the dancing for the last few weeks but felt stressed many times and almost didn't come - but I had made a commitment (Journal Entry).

The women also struggled with rushing to get to the class after work or after racing children to their activities. All reported they were glad they maintained the commitment and some, who could not, mentioned they were sorry if they had to miss. Absent dancers, who were not as committed, also created stress in those who were there. One dancer wrote in her journal, "I find myself feeling a little frustrated with those I work with that missed last week, and don't know what they are doing."

### **Decrease in Stress - Change of Focus**

#### ***"Get so concentrated here you forget all other concerns"***

Successful dancing requires total concentration. Whether dancing or waiting to join the dance, each dancer must observe all that is happening and anticipate what is about to take place. While dancing, the dancers require an awareness of their position in relation to the others and in relation to the music. In response to the question "Describe how the dance sessions affected your stress levels" during the group activity, many of the women responded by referring to the focus dancing required. Focusing on the dancing provided respite from the stresses of everyday life. The following response from one participant is characteristic:

Once we started the class/dancing, I forgot about everything else for the length of the class. I seemed to come to terms with my external worries and right now, at least, I feel less anxious about them. (Group Feedback)

All five of the dancers who participated in the interviews described dancing as offering a break from everyday life by providing a change of focus. For Aleisha, "Listening to music helps [her] to

shut down everything else down". Della found it fun to spend "a little bit of time away from uh so called problems that uh you encounter during the day or what you might have in your mind".

Ruth commented that she believed dancing contributed to stress reduction because "at the time when we're dancing ... you don't have time to think about anything else." She continued.

I was focused, I was really focused in the dancing where I didn't think of anything else because some of, a lot of the dances were new and I wanted to get them right and so I I concentrated on what we were doing. And um ... and uh I felt that I, you know, was using my body and feeling that I was getting some exercise and uh ... that made me feel good and um ..... But, as I said I was really concentrating on what we were doing and ... the dance was everything.

Gwyneth also appreciated the break the dancing provided. She commented,

All the days I was feeling really (pause), like I was ready to pull somebody's hair out. ... I think ... it gives me something else to focus. Like when you're there and you're dancing, it doesn't matter what type of dance you're doing, I, to me anyway, dancing. You feel the music, you're into the steps, into the mood of it. It just gives you something to focus on and when you're there and you're dancing, ... that's all there is. It doesn't matter that so and so ... ironed something crooked, or it doesn't matter that the phones wouldn't stop ringing all day and it doesn't matter that maybe that report you were looking for wasn't done. It doesn't. Just, what we have now is what we have and ... that's good.

This important theme was also found throughout the journals. The following are representative samples from three dancers:

"Completely present - not thinking about anything else besides being here with these people"

"There's no time to feel insecure or worried because I'm focusing on the music and my body"

"It helped me to focus on the dance and not the turmoil I was feeling today"

For some women, the soothing distraction provided by dancing also helped to change the way they felt about problems. One group activity response read, "Being exposed to something else, it just takes away from how I feel, or felt, about an issue earlier". Della too commented on this phenomenon.

I guess when you go into .. Um .. This situation, you .. Have recently just left, you know, whatever you have to deal with during the day and so you might feel anxious or whatever about the days experience and then, so, after the dance, um I guess, it really wasn't that big a deal ..... Being exposed to something else, it just takes away from how I feel, or felt, about an issue earlier.

### **Stress from the Dancing - Movement and Music**

#### **Increase in Stress - Stress from the Dancing**

***“One of the things with the dancing was there was a certain amount of stress in not knowing what you were doing”***

There are many stressors implicit in the dance situation itself, particularly if individuals are at the introductory level of learning. Participants periodically expressed that the dancing was confusing but this was not surprising and not necessarily distressing to them. As Amanda said, “Of course it would be confusing because I wasn’t used to the dancing”. At times the confusion added to the hilarity. At other times the confusion did create negative feelings but these were eventually overcome.

The dancers were challenged with learning new dances with unfamiliar patterns, unaccustomed footwork and with unfamiliar people. For one dancer, the hard work and the concentration at the beginning compromised the enjoyment of the activity. Her journal entry read, “One has to work very hard & concentrate & at the beginning it takes away the pleasure”.

A few dancers, periodically, became discouraged and frustrated by their own inability to dance as well as they would have like to. Their journal entries reported on the discontentment these women were experiencing.

***“I can do the dance step - but not during the dance - Its [sic] so frustrating!”***

***“I felt bad that I didn’t get the last dance”***

***“A little sad - I find I have two left feet, and feel sorry for my partners”***

***“When I didn’t pick up the dancing steps, my anxiety levels went up”***

Some dancers found the challenge of dancing in the lead (man’s) position or switching back and forth from male to female positions difficult. The following journal entry said it all: “confused about the gender role not used to dancing as a man - didn’t know what to do, where to move, what to hold.”

Dancing with partners also contributed to stress. Some individuals found it uncomfortable to dance in contact with people they did not know and expressed a preference for personal space.

As well dancing in contact with another was restrictive for some of the dancers.

With the Irish dance, when it was the individual dancing it was okay but when I, when I was dancing in the waltz hold with a partner. I found that a little stressful because then I had to really ... because I was the leader I had to be really aware of how I was .. leading my partner and so I found that a little stressful because even in the best of times, even when I'm just doing social dance I prefer, maybe dancing with a partner, but not hand in hand [...]. So, that type of dancing is always I feel is restricting for me and so the Irish dance ... That to me was a little more stressful. (Aleisha).

It was not uncommon for dancers to cope with partners who were having difficulty. Ruth described this experience aptly. "It's sort of like moving a tank around." This created stress, not only for the better dancer but also for the person who was having problems. On the day that Ruth grappled with the challenge of leading a partner who was struggling, her partner wrote in her journal,

My partner was more experienced and our personalities didn't jive, even at my attempts to do my best. I found that I was uncomfortable for part of the dancing trying not to frustrate my partner.

The women who were having difficulty not only affected their partners, they also provided a challenge to whole sets.

It wasn't difficult to know what the step was to be, but it was difficult not to run into the couple in front of you - especially in our group as they were always two beats behind on changing position. When we needed to move to that spot - they were occupying it. -Made us all ball up - tying up the couple behind us. (Journal Entry)

For many of the women, dancing was a lot more physical exertion than they were used to in their daily life and they found themselves having difficulty keeping up and feeling hot and exhausted.

Um .. I found the Irish ones a little bit .. um .. as you said in the beginning, a little bit more involved *Laugh* a little bit more upbeat, more energy was needed in there *laugh*. It was nice to go back to the Scottish just to sort of calm down and thinking "Oh I must be getting old" *laugh. laugh. laugh*. And you know uh the energy level was really not there (Della).

getting in step all the time for me was quite difficult as I need to get in shape and move faster (Journal Entry)

Many dancers reported dizziness from both the Scottish ceilidh dances and the Irish Set Dances.

For some women this was experienced as giddiness and others were challenged by it

The Irish was quite dizzying. *laugh* Some other people found that too. But I enjoyed it all. ... Even though it made me dizzy (Amanda)

challenge to be more grounded - stay on my heels. When I did I was less dizzy and had more control (less likely to collide) (Journal Entry)

But, for the few women who suffered from vertigo, this took away from the enjoyment of the dancing and made the experience more stressful.

Some of the dancers found the Irish music less enjoyable than the Scottish and this affected their enjoyment of the dancing. One journal entry commented "The Irish music was way too fast and I didn't enjoy dancing to it." The type of music also affected how easily the dancers did or did not learn the dances. Another journal recording read, "The type of music/beat really makes a difference as to how I catch on - tonight I didn't!!".

### **Decrease in Stress - Movement and Music**

*"I enjoy the rhythm and the exercise involved in dancing"*

In spite of all the stress of coping with a new experience and unfamiliar people, with the exception of the women who suffered from vertigo, the dancers reported they had an enjoyable dance experience and used descriptors such as great, fun, wonderful, exhilarating, positive, GOOD. As mentioned in the literature review, dance combines three important elements, dance, music and exercise, all of which have been shown to have stress-reducing properties. How movement and music interact has not been studied, but it is possible that the combination of movement and music is more effective than either one by itself.

*"Dance ... just makes me feel good"*

**Movement - Exercise and Dance.** In spite of feeling hot and exhausted at the conclusion of the dance sessions, most dancers reported feeling better, more awake, relaxed and invigorated, after getting some exercise. The dancers appreciated dancing as a form of exercise in an enjoyable mode and within their ability. Journal entries commented "good exercise", "a good workout", "notice legs seem to be a lot stronger", "my legs seem to be 'building up' ". During the group feedback one dancer, in responding to the question about how dancing affected her stress levels,

wrote,

The muscles in my legs & feet have become much stronger which has made my posture better & improved the difficulties I've had with my feet. This is physical, but over all it has made me a happier person, making me feel more confident ... So because of the physical benefits my stress level has become less. I have also had more energy.

The dancers who were interviewed also commented on the exercise benefits of dancing. Ruth commented, "I felt that I was using my body and feeling that I was getting some exercise and that made me feel good". At another point in her interview she said,

And I thought uh I thought it would make me fitter and um ... I felt it did and I think I've achieved that. Its sort of made me want to keep moving so I've started walking more in between and uh ..... And uh ...like the feeling that my body is responding ... You feel better.

Gwyneth, too, particularly enjoyed dance as an enjoyable form of exercise.

One of the top things is I need to get out and get exercise. .... I really enjoyed the physical aspect of it. I haven't turned into a body beautiful overnight but I'm getting out, I'm doing something. It's an exercise I can do. I'm not one for aerobics. I don't like running. But dance has always been a fun sort of exercise.

The benefits of dancing extended beyond simply providing a pleasant form of exercise. One dancer, in her journal, reflected on her "desire to learn actual dances - not simply exercise". Dance was valued as an opportunity for the dancers to express themselves in an artistic manner. Aleisha described the "freedom of movement" as a "wonderful experience". She stated

I've been able to express myself. ... I'm not an artist and I'm I'm not creative. To me I feel I'm not creative as far as handicrafts and cooking and things like that. Movement, freedom of movement has always been something for me. So after dance I really feel that I've been able to let go of myself emotionally and its okay. And I always feel better after any dance.

The dancers enjoyed the "elegance" and "stateliness" of the Scottish Country Dancing. Many found it easier, and therefor, more relaxing, than the Irish Set, *Sliabh Luachra*. But many dancers also enjoyed the challenge and vigour if the *Sliabh Luachra* Set. Most enjoyed both forms of dance. In her journal, one dancer described the experience of accomplishing a dance as "magically beautiful". Dance was particularly enjoyable if the women had a partner who "caught on quickly". Dancers also commented that they enjoyed the "mental stimulation" of the dancing and the "close contact with people" dance offered. Dancing for some also provided an "exciting"

way for some women to connect with their heritage.

***“The music is really relaxing and makes me feel happy”***

**Music.** Comments on the music suggested the ability of the music to affect emotion.

Dancers described it as “happy”, “soothing”, “comfy” and “melodic”. One dancer commented in her journal that “The music is so fast & lively, you can’t help but feel energetic listening to it”.

Another dancer recorded

The second the music started playing my spirits were lifted. I knew they would be & as I walked in tonight a woman from the parking lot asked how I was. I replied, “I’ve seen better nights.” But all the intellectual talk does not go as deep as the music does when I hear it.

Aleisha contributed the notion that she preferred going “to an aerobic class rather than just do [her] individual workout because music itself is a stress reducer for [her]. She added

So ya, I’ll come home. If I’m very stressed then I’ll take my walkman and put some really, um, I’ve got some different types of music that I’ll play. If I’m really really weepy, I’ll play some sort of music that will make me weep *Laugh* so I’ll weep it out or I’ll put some music that is really hyper which will kind of sort of dance me out and get me going so that I find reduces my stress.

Music not only contributed to emotional state, as mentioned earlier it also augmented the learning of the dances. The following journal entries record the ability of the music to enhance the learning:

“I was allowing myself to feel like I was a burden on my partner and then I decided to ‘let go’ of that and listen to the beat of the music - get out of the way of myself & enjoy.”

“The strathspey [a step used in Scottish Country dancing] took a long time to come back to me but once the music started it fell into place.”

**Challenge - Fun and Laughter**

**Increase in Stress - Challenge**

***“I want to beat that one now. I don’t want it to beat me”***

Participating in a dance class was a stress that the dancers could cope with successfully.

The women expressed determination to master the dances and expressed feelings of satisfaction and achievement when they did. Ruth had difficulty with one dance and was determined to

conquer it.

Well as I mentioned before to you, I did have trouble [...] when we had that one dance that I (Laugh) I got completely ...fuddled ... with that one. But I would really like to try that one again to see if, if uh, if I've got it through my head now. If I would have as much trouble.

Gwyneth was attracted to the Irish dancing because of the potential for learning more intricate footwork.

I liked the Irish with the idea of the more intricate footwork and where you can get more intricate with it. You can be very plain or we noticed from the videos that some of the footwork that you can get quite, quite fancier and that's something that I think I would like to do but I wouldn't like to do just that.

Dancers expressed their enjoyment of challenge in the journals too.

- challenging patterns were nice, good to try different partners and change groups
- was quite challenging but entertaining & enjoyable all the same
- Wish we had more time to master some of these dances and do them a little more frequently.

The body of research into the effects of exercise, music and dance has focused solely on the reduction of stress. In doing so it has failed to recognize the important role that positive stress, as Selye coined it -- eustress, plays in relief from boredom and in challenging individuals to stretch their capabilities. For most of the dancers the stress created by challenge encouraged them to strive for accomplishment. This positive stress led to the satisfaction of accomplishment and mastery.

### **Decrease in Stress - Fun and Laughter**

#### ***"Everyone seemed to have fun"***

All of the women who were interviewed talked about fun. Without a doubt, one of the most frequently used words, repeated throughout the interviews and journals was the word "fun". And fun was derived from various factors. For some the fun came from making demands on themselves physically and mentally. For others fun was derived from being and doing new things together with other women. For yet others, fun was derived from extending themselves physically. Fun also came from learning and doing the dances together. For one woman fun was "spending a little bit of time away from uh so called problems that uh you encounter during the day or what you

might have in your mind” (Della).

***“Laughed today like I probably haven’t laughed in years”***

Along with the fun came laughter. Laughter served an important purpose of relieving some of the stressors created by the new learning situation. The women laughed together as they were challenged to master the patterns and broke into hysterics when they got tangled up.

So anything that is um ... As I said, uh causes you to release those endorphins, uh you know, physical exercise, laughter um that helps to reduce stress. ... There were ... times when we could just couldn’t get it together. We were just laughing, you know, everybody was just giggling and laughing and just wondering and uh As I say, Just made you stop. You Know, You couldn’t think about anything else except, you know “How did we get into this thing?” (Della).

Inadvertent body contact too resulted in giggling. The women laughed with enjoyment as they danced, and clapped enthusiastically with the successful completion of a dance. Women made such comments in their journals as:

“It was a great group of women. We were all able to laugh at our mistakes, and just have a great time.”

“It was hard not to giggle as we all fumbled through the steps. I feel GOOD!”

“I’m learning to laugh and smile more”

“Last week we went home in hysterics! Thanks.”

We cannot underestimate the rejuvenating power of gaiety and laughter. Della pointed out that often we do not have fun and laughter in our lives and become run down for this lack.

Ya, to have fun and to laugh. I think that uh today’s lives are too serious, you know with all the problems it brings and, you know, and I uh as I said. ... Not that I like dance to be viewed as a distraction, You know, but there are, It is important that you find things that you enjoy doing and I think that helps you um .... your outlook on how distress is affecting you and other people. .. If you .. you know continue to deal uh with your stresses and there’s no hope of uh, you know, having some fun out of it I think you get worn down like.

**New Learning and Mastery**

***“Once and a while you get used to too many ... familiar things and its nice to do something different”***

None of the dancers who were interviewed joined the class for stress reduction or relaxation,

although Aleisha did say that she knew “innately that dance is a good experience for reducing stress”. Amanda wanted to dance because she enjoys learning and doing something different. Aleisha was curious to know how she would score when her stress level was measured. She also came for the “thrill of movement” she experiences when dancing. Ruth had joined one of the existing Celtic dance groups earlier out of curiosity. The experience was rewarding enough for her to decide to join another one. She thought, dancing twice a week would be more exercise and [she could] help with an educational thesis. Ruth also relished the personal challenge. Gwyneth joined for fun, exercise and an opportunity to meet new people. Della came for a “little break” from what she normally did. These women might all be described as “stress seekers”. Stress is a part of any new situation and these dancers were seeking novelty, stimulation and exercise.

***“I think we all wanted ... to learn something”***

All of the dancers who were interviewed expressed the pleasure and satisfaction which they derived from learning the new skills. They looked forward each week to learning new steps and dances. For Aleisha, this learning was crucial.

I think the biggest thing here was .. it was women, we were together, we were doing something. We were not just sitting in a circle with a cup of coffee “lets have a talk session”. This was not a talk session. If we exchanged a little bit of talk here and there, it was all right but this was not a talk session. This was something we were learning together and I think that was where the fun came .. was we could put the other gossip, gossip *laugh* behind because we were learning something together.

Gwyneth has done a significant amount of dancing throughout her youth and taught dancing as an adult. She looked forward to the situation where she could be a learner again, instead of a teacher.

In all my years of dancing, I've never done this type. .. I've never done this type of dancing so it was a chance for me to be somewhere ... learning as opposed to instructing. Lately when I've been in any sort of dance group I've been helping or teaching - so to be an absolute beginner was something that interested me and I really enjoyed it.

For Della, it was heartening to know that she can still learn.

Dancing was an activity where I was learning & processing new info. It was something new [...] its nice when you know when a group can get together and, you know learn, something and do it. *Laugh* so that's encouraging that, you still can learn, *laugh*. You know they say sometimes that old dogs can't learn new tricks but *laugh* Well you know its just your attitude towards lots of things, you know, I think

we all wanted ... to learn something, you know, new and uh this was a fun way of doing it.

Throughout the journals, the dancers expressed their enjoyment of learning in phrases such as “enjoyed learning the new dances”, “felt good to learn new steps”, “It was great! Learned a nice dance using the strathspey” (a Scottish Country dance step).

***“Good, nice to come back to earlier dances we learned - relaxing “***

The women relished the challenge of new learning and thrill of mastery, but they also appreciated and were relaxed and calmed by the familiar. Aleisha is a very competent Scottish country dancer already and expressed her enjoyment of the Scottish dancing because she “knew where [she] was coming from”. One dancer expressed, in her journal, particular enjoyment of a lesson where “most of the flow & step combinations are ones [she has] been familiar with since childhood”. As the classes progressed, what seemed overwhelming at first seemed to become easy.

At first the Scottish seemed like, “Oh my god we’ll never learn all this!” and then after we’d done it for a couple of weeks when we moved into the Irish, Scottish seemed so much simpler. (Gwyneth)

Della expressed relief at the return to familiar Scottish dancing after a challenging first class of Irish Set Dancing.

I found the Irish ones a little bit .. um .. as you said in the beginning, a little bit more involved *Laugh* a little bit more upbeat, more energy was needed in there *laugh*. It was nice to go back to the Scottish just to sort of calm down.

Journal entries too expressed enjoyment of the familiar.

“Felt more comfortable with steps I am more familiar”

“Its starting to feel more familiar as we get in to more patterns.”

“Dance was more vigorous than previous nights - I enjoyed that, but also enjoy returning to the old familiar, more relaxing dances we’ve learned - the variety is nice.”

“I have an easier time to pick up the new steps, I enjoyed especially the last dance. (The dance we learned from before!)”

***“I have accomplished a lot today!”***

Ruth summed up the feeling of satisfaction the dancers derived from mastering the dances.

Oh uh. .... I feel I've accomplished something. I feel that I've Uh ... uh I enjoy dancing, I enjoy moving and its, its a really exhilarating experience to have accomplished this. And usually after we've done a dance and we've done it well ... uh with out too many mistakes its uh ... it feels ... Uh ... You get a sense of accomplishment.

Feelings of accomplishment also dominated the journals with entries such as the following:

“more challenging but happy I participated proud I got the hang of the somewhat difficult dances”

“worked through some real slow periods and many of us not getting the jist of the dance. Frustrating at times, but stuck with it - was grateful questions were answered and worked through the group where I feel we mastered it - not perfect and not exactly perfection - but a smooth rhythmic co-operative working together.”

“I was frustrated when I didn't get a step and we went on to the next - I thought I wouldn't get it in sequence if I missed one - but I trusted the process and the teacher is very good at hearing us all out and repeating the steps over and over until I was very satisfied - actually Joyful!!!”

“What stands out for me today - Accomplishment”

“pleased I caught on so well. It felt great to accomplish the steps when at first it felt overwhelming”

“I am feeling very proud of myself and very contented & quite at the top of the world”

“tired but proud I got the hang of a difficult dance”

The women experienced the self-satisfaction of achievement as they learned the dances. As well, familiarity with the dances and with each other resulted in a reduction of stress.

**Leadership**

Only a few dancers commented on the role of the instructor, but those who did indicated a recognition of the importance of the role this individual plays. The leader of the dance class is charged with “choreographing” the experience -- organizing the group process so that the women have a positive social experience and creating a atmosphere in which people feel free to relax and have fun. It is up to the instructor to monitor the abilities of the dancers to rise to the challenge of any particular dance and make adjustments when necessary. The ability of the dancers to learn

depends on the presence of an instructor who can teach. That this is a taken for granted role is evident in Della's statement, "And, of course, you could clarify uh *laugh* if you saw us fluffing along or, you know ... So you would stop and you know advise us". This is as it should be. Group confidence in the instructor contributes to a more relaxing atmosphere. Some women did take time in their journals and during the group activity to comment on the teaching with statements such as the following:

"Just how very good an instructor you are. You explain so well!"

"Thankyou Carol. You are an excellent teacher - very non-judgmental."

"The teacher is very good at hearing us all out and repeating the steps over and over until I was very satisfied"

"No pressure to "do it right" - it's just fun"

These comments also allude to the role the instructor plays in creating the non-judgmental, non-threatening atmosphere. Both the group environment and the movement and music have potential to contribute to as well as to reduce stress and the instructor plays a key role in creating an atmosphere where an optimum stress level -- one that motivates without discouraging -- is present. It is also up to the instructor to develop a program that challenges and encourages achievement in a setting that allows the stress created by this challenge to be dissipated by fun and enjoyment.

For a brief time the women were freed from their responsibilities. This also contributed to reduced stress. Ruth talked about this freedom from responsibility and described it "leaving a trail of debris and not having to clean up after yourself". The women were happy to leave responsibility - for remembering, for organizing, for caretaking - in the hands of the leader while they frolicked and played like carefree children.

### **Change in Emotional State**

***"You feel a lot better"***

All of the dancers who participated in the interviews reported a change in feeling state from the beginning of the class to the end. Some emerged from the class feeling more relaxed. Others reported feeling energized. As Amanda put it . "you feel a lot better. ....A little bit of weight is

taken off” She also reported “I feel the stress come off of me”. Aleisha spoke about particularly stressful life circumstances happening in her life during the same time period as the dance classes. Dancing helped to relieve the stress.

Especially in those seven or eight weeks that we did our dance that specific set of dances for those eight weeks I found my stress level was coming up, way, this high really high then somehow by the end of the evening my stress had really gone down even though I was really tired some days. .... I remember that first time we did the um we did the test [Speilberger’s STAI], there was some really stressful things that were happening at home and um it was just everything sort of there and it was quite interesting to see that - wow! - it [stress level] really dropped in that one hour or that one-and-a-half-hours that we danced and when we took the test again after the dance it kinda, looking at it thinking -wow- did it ever drop!

Aleisha added, “I always feel better after any dance.” Ruth found the experience “really exhilarating”, whereas Della found it “relaxing”. This theme of change of emotional state was also found in the journals.

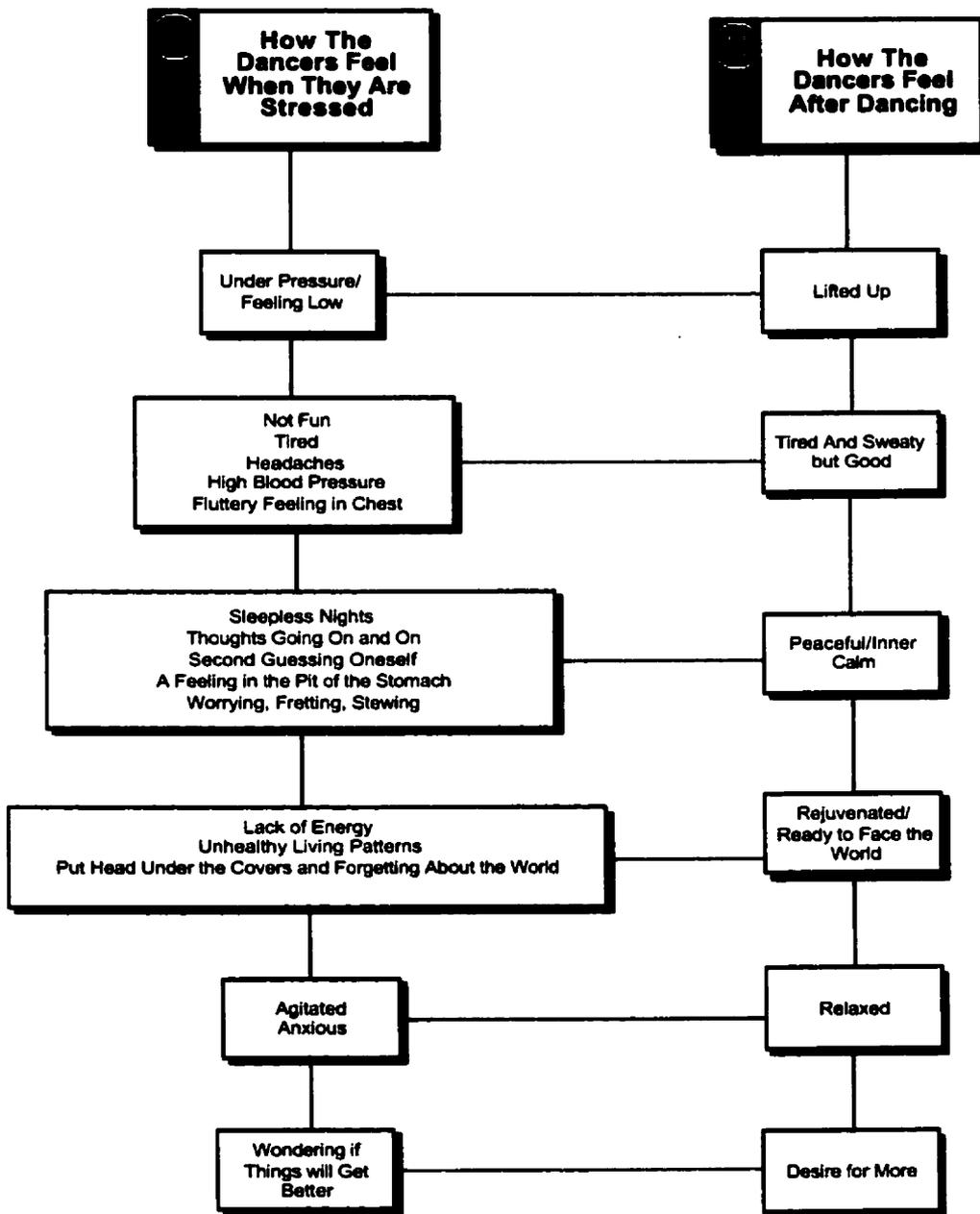
“very sad inside because of the loss this week of a nineteen year old friend of my son. [Dancing] helped me relax for a few seconds now and then, also I was able to think about ways to see the loss in a less futile perspective.”

“Sometimes (like last week especially) I was really tired before I came out, but felt very energised after dancing”

“When I came here I was rather tense - trying day at work ... After being able to relax and dance I feel much better. Looking forward to next week.”

“ I came out of the experience more relaxed after a hectic day; with granddaughter getting tired and cranky”

The overwhelming impression of how the women felt after the dance class was “the Lifting off of a Weight”, the core phenomenon . Women used phrases such as “A little bit of weight is taken off”, “I feel stress come off of me”, “ just a wonderful experience just to kind a I don’t know lift me up”, “I feel like I’m a little lighter”, “Whenever I come here my being is uplifted!”. The dancers also reported feeling “hot”, “tired” and “sweaty” and “out of breath”but “good”. Some also described a “peaceful, inner calm” using words like “mellow”, “calm”, “internal”, “peace”, “centred”, “whole” and “contented”. Other dancers reported feeling “exhilarated”, “energised” and “invigorated”, “ready to move on to something else”. Some felt “happy”, “sunny”, “cheerful” and “like laughing and talking”. Others were more “relaxed” and “loose”. Many dancers expressed a desire for more either as wishing dance class was longer,



**Figure 2.** Comparison of How the Dancers Feel When They are Stressed Compared With How They Feel After Dancing.

wanting to learn the next dance or continue with the dance we finished with, wanting the dance classes to continue beyond the seven week session or wanting to dance in the future. One dancer wrote in her journal “don’t want to stop, feel I could dance all night”. As mentioned previously the dancers also expressed feeling of accomplishment and pride. Figure 2 summarizes how the women reported feeling after dancing and how they reported feeling when they are stressed. As this figure illustrates demonstrates, the feelings at the end of class are the opposite of what the women experience when they are feeling stressed.

The next section of this paper, Chapter Five, presents the quantitative results obtained from the completion of Spielberger’s State-Trait Anxiety Inventory. These results are discussed in terms of the interviews and the final group activity. Also in this chapter, a connection is drawn between the themes identified from the interviews and key factors in reduced levels of stress, as identified during the final group activity.

## CHAPTER FIVE: QUANTITATIVE RESULTS

### Introduction

Analysis of the data obtained from the administration of Speilberger's State-Trait Anxiety Inventory (STAI) - Form Y (Speilberger,1983) support the supposition that participation in Celtic Folk Dance has a relationship with reductions in stress as measured by reductions in state and trait anxiety. As mentioned previously, anxiety is a common measure of stress in research involving stress and exercise. State anxiety is transitory and varies with environmental factors. Trait anxiety is considered to be a stable part of the personality. This chapter presents a summary (Figures 3 to 10) of the pre- and post- class STAI scores. These scores demonstrate a trend for reduced anxiety scores from the beginning of the dance classes to the end and an increase in the number of dancers whose scores fall below the 50th percentile of the population (as assessed against norms established by Speilberger) after dancing. Pre- and post-class test results for STAI were subjected to paired *t*-tests. The resulting *t* scores demonstrate a statistically significant link between participation in dancing and changes in stress levels. As part of this research, the dancers participated in a group activity centred around the group results and individual results on STAI. This chapter will conclude with a discussion of the findings in light of the group feedback.

### Speilberger State-Trait Anxiety Inventory

Speilberger State-Trait Anxiety Inventory (STAI) - Form Y (Speilberger,1983) was used to measure the stress level of the dancers prior to and after the class on two separate occasions --the first class and the sixth, or second last, class. As was mentioned earlier STAI is the most common instrument used to measure stress levels in research on exercise and stress (Rostad & Long, 1996). The results of this testing is reported for two different groupings: the group as a whole ( $n=25$  for the first testing and  $n=16$  for the second) and the women who would be identified as mid-life, that is ages 45-65 ( $n=18$  for the first testing and  $n=13$  for the second). For STAI, a score of 20 is the base score, representing no anxiety. As anxiety increases, the scores increase to a maximum of 80. Figures 3 to 10 summarize the state and trait anxiety scores recorded by the dancers for both

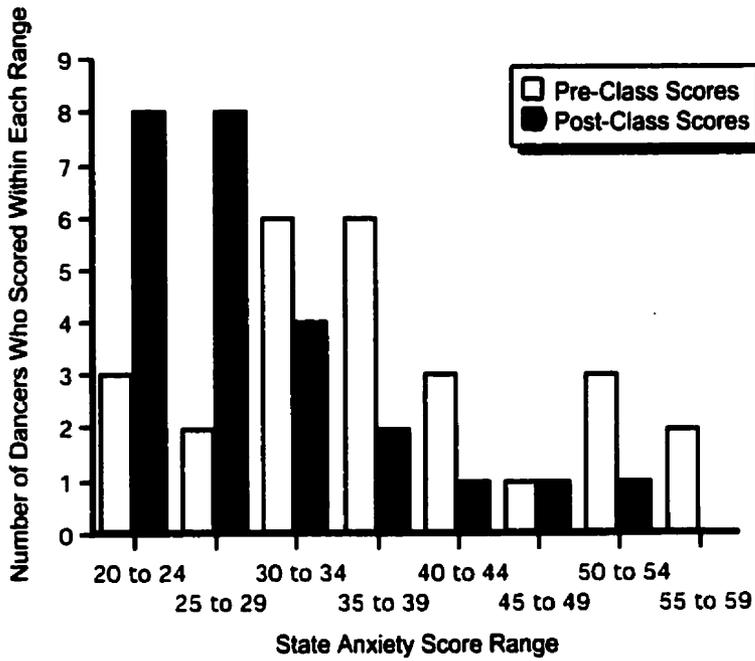


Figure 3. State Anxiety Scores Pre/Post - Class 1 -- Entire Class (N=25)

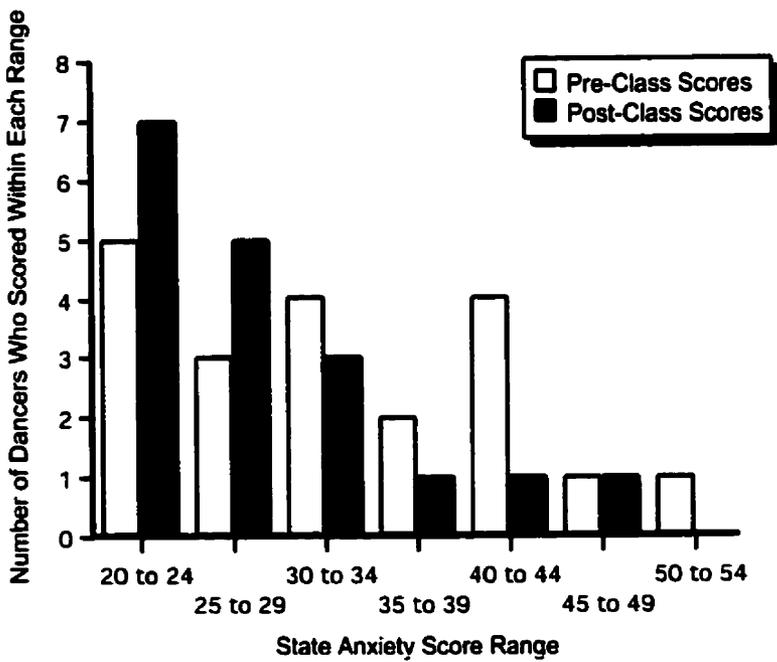


Figure 4. State Anxiety Scores Pre/Post - Class 1 -- Ages 45 - 65 (n=18)

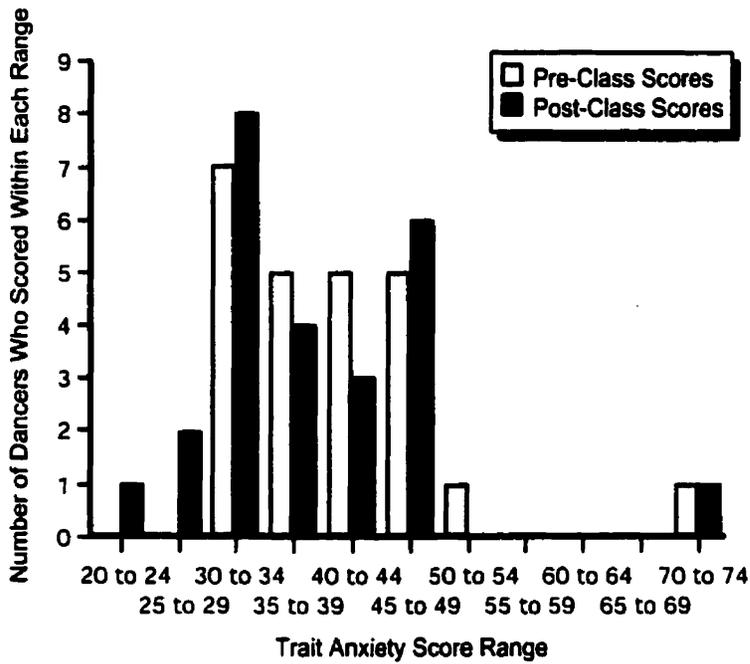


Figure 5. Trait Anxiety Scores Pre/Post - Class 1 -- Entire Class (N=25)

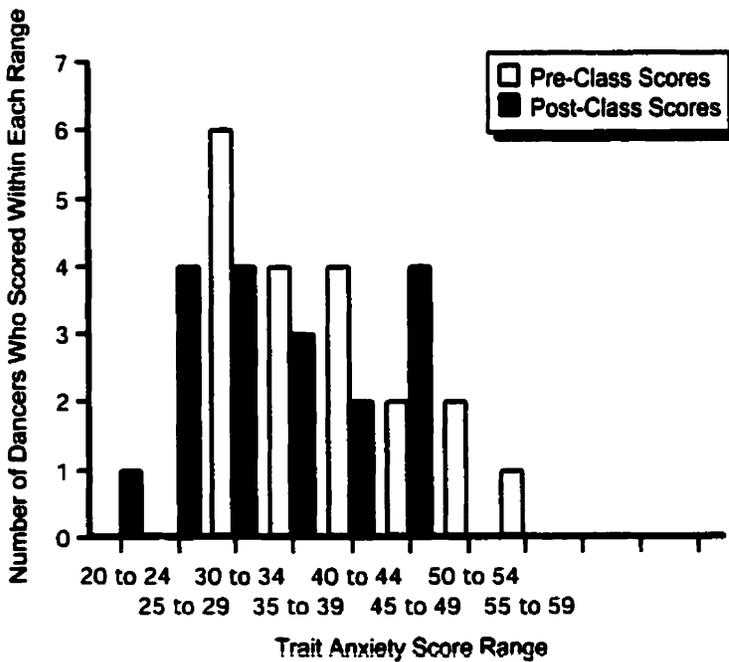


Figure 6. Trait Anxiety Scores Pre/Post - Class 1 -- Ages 45 - 65 (n=18)

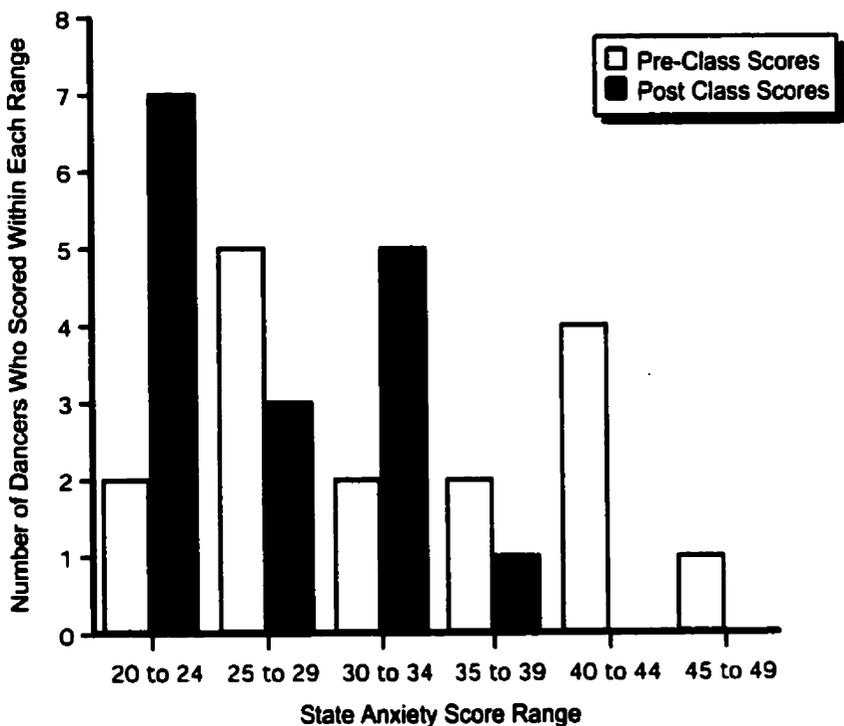


Figure 7. State Anxiety Scores Pre/Post - Class 6 -- Entire Class (n=16)

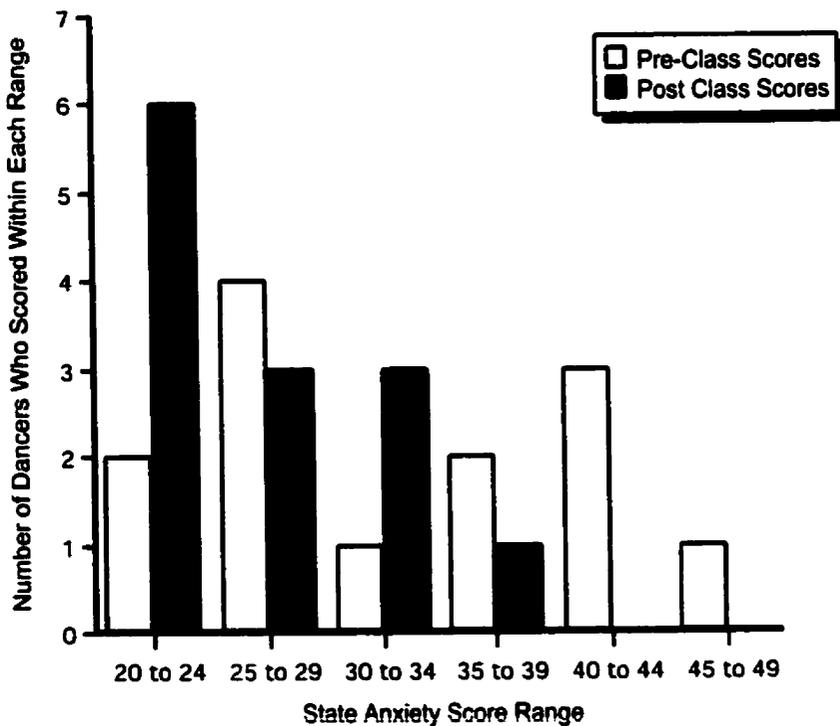


Figure 8. State Anxiety Scores Pre/Post - Class 6 -- Ages 45 - 65 (n=13)

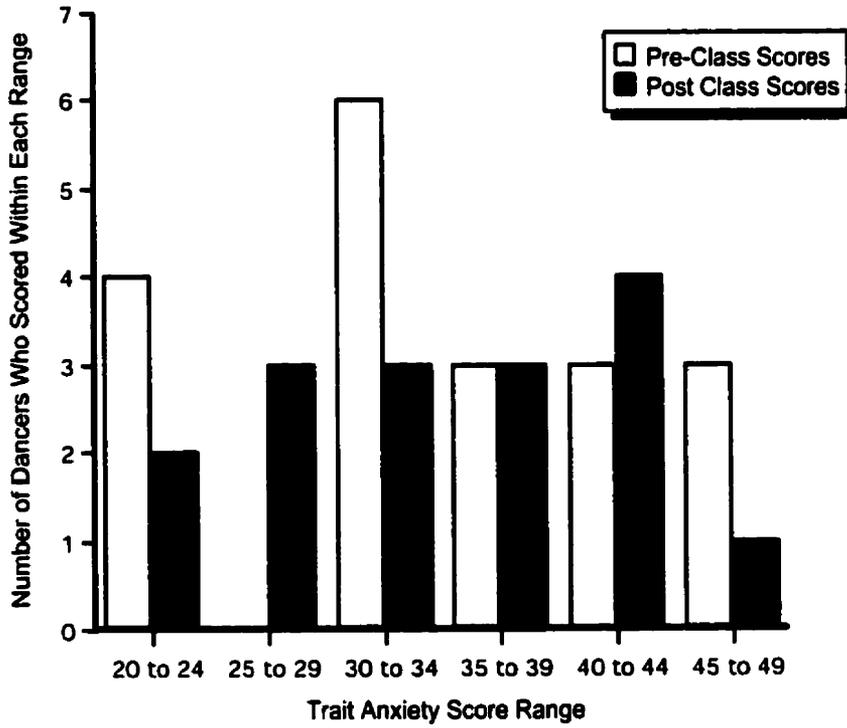


Figure 9. Trait Anxiety Scores Pre/Post - Class 6 -- Entire Class (n=16)

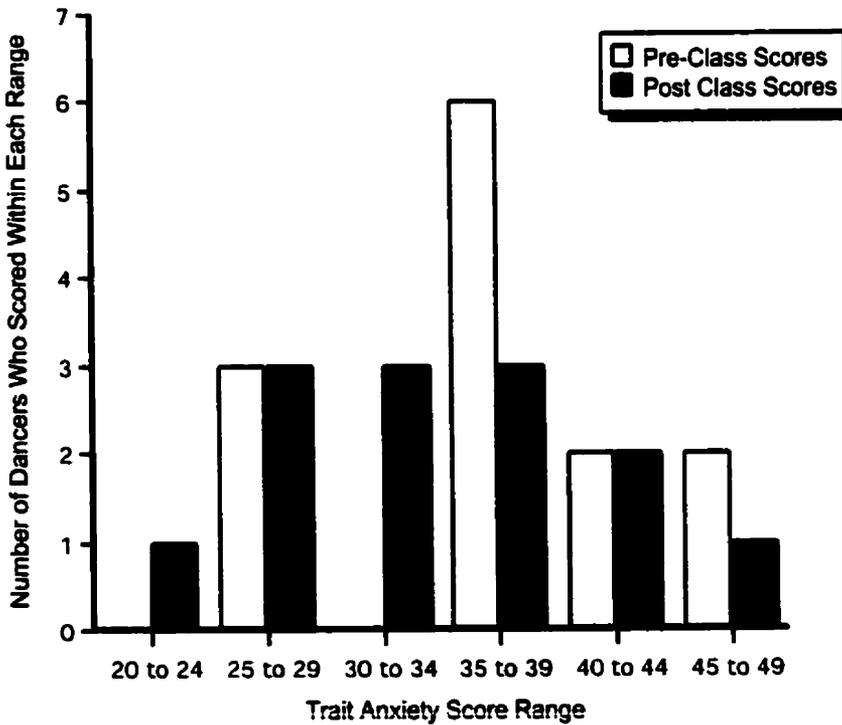


Figure 10. Trait Anxiety Scores Pre/Post - Class 6 -- Ages 45 - 65 (n=13)

testing occasions. The bar graphs indicate a general trend for both state and trait anxiety scores to be reduced from the beginning of each class to the end. Spielberger (1983) provides the norms for state and trait scores for women of this age group. The fiftieth percentile for all age groups falls within the 30 to 34 range of scores. Using the top of this range (34) as a cut off point, we can discern how many dancers scored above and below the 50th percentile before and after class on each occasion. The trend toward reduced state and trait scores is clearly indicated on Table 4 which shows the number of dancers who scored below the 50th percentile pre- and post- class for both class 1 and class 6.

**Table 3**  
**Number of Dancers Who Scored Below the Fiftieth Percentile Pre and Post Class**

		Number Who Scored below the 50th Percentile- Pre Class	Number Who Scored below the 50th Percentile- Post Class
<b>Class 1</b>			
All Dancers(N=25)	State	11	20
	Trait	7	11
Dancers 45-65 (n=18)	State	11	15
	Trait	6	9
<b>Class 6</b>			
All Dancers(n=16)	State	9	15
	Trait	4	8
Dancers 45-65 (n=13)	State	7	12
	Trait	3	7

SPSS program was used to perform paired *t*-tests to compare the pre- and post-class STAI means to determine if the apparent trend toward reduced state and trait anxiety scores was significant. Table 5 summarizes these results for both groups, the class as a whole and dancers in the 45-65 year age group. Using an alpha level of .05, the results from all STAI testing -- with the exception of the first state testing for the 45-65 age group -- were statistically significant: ( $t(24) = 4.24, p = .000$ ;  $t(24) = 4.38, p = .000$ ;  $t(17) = 3.91, p = .001$ ;  $t(17) = 2, p = .062^*$ ;  $t(15) = 2.52, p = .024$ ;  $t(15) = 5.13, p = .000$ ;  $t(12) = 2.48, p = .029$ ;  $t(12) = 5.05, p = .000$ ). From this I can conclude that these results reflect a real relationship between participation in the dance classes and decreases in overall stress, as measured by STAI, and are not due to chance factors. Furthermore, reductions in trait anxiety for all groupings are significant at least to the .01 level.

The first state anxiety testing for the 45 to 65 year old group did not reach significance ( $t(17) = 2, p = .062$ ). The fact that six of the eighteen women in this age group had pre-class state scores of less than 30 could have impacted this result. As one dancer commented, "I probably really threw off the results, as my life is so stress free anyway. There wasn't much room to lower the stress any further." Increases in the scores of women who had very low pre-test scores could have been due to regression toward the mean. Another factor to be considered is the repeated administration of the same instrument on the same day to the same individuals. This could have resulted in smaller variations in means for this group.

I believe this is a modest statement of significance for a number of reasons. High stress levels were not a criterion for inclusion in the study, so the results include women who demonstrated low levels of stress to begin with. Given that the repeat testing was done ninety minutes after the initial testing, one would not expect significant changes, particularly in trait anxiety which is supposed to be relatively stable.

As the topic of this research was known by the participants to be Celtic folk dance and stress management, there may have been a tendency on the part of the participants to provide answers that would assist the researcher to find that dancing reduced stress. Reduced stress may have been seen to be the socially desirable result. However, it is important to note that the women

who took part in this study knew that they would receive copies of their results. These results would be meaningless to them if they were not honest in their answers. Scoring sheets were identified only by code names to hide the identity of the respondents from the researcher and thus encourage them to give accurate responses to the questions.

Table 4

Results of Paired- t Tests for Pre- and Post- Class Results

		PreClass Means/ SD	PostClass Means/ SD	t - value	df	2-Tailed Significance (p)
<b>Class 1</b>						
All Dancers (N=25)	State	34.8/ 9.60	27.6/ 7.76	4.24	24	.000
	Trait	40/ 9.22	36.52/ 10.06	4.38	24	.000
Dancers ages 45-65 (n=18)	State	31.33/ 8.70	26.50/ 7.20	2.00	17	.062
	Trait	38.22/ 8.03	34.22/ 7.95	3.91	17	.001
<b>Class 6</b>						
All Dancers (n=16)	State	31.38/ 8.67	26.25/ 5.52	2.52	15	.024
	Trait	36.19 9.22	32.38/ 10.06	5.13	15	.000
Dancers ages 45-65 (n=13)	State	31.38. 8.84	25.54/ 5.33	2.48	12	.029
	Trait	35.84/ 6.30	31.69/ 7.02	5.05	12	.000

Table 5

**Results of Paired- t Testing Showing Reduction in Trait Anxiety -- Pre-Class 1 to Pre-Class 6**

		PreClass 1 Mean/ SD	PreClass 6 Means/ SD	t - value	df	2-Tailed Significance (p)
All Dancers (n=16)	Trait	37.38 7.56	36.19 6.65	1.16	15	.265
Dancers ages 45-65 (n=13)	Trait	36.54/ 8.70	35.84/ 7.20	.59	12	.566

Table 6

**Results of Paired- t Testing Showing Reduction in Trait Anxiety -- Post-Class 1 to Post-Class 6**

		PostClass 1 Mean/ SD	PostClass 6 Means/ SD	t - value	df	2-Tailed Significance (p)
All Dancers (n=15)	Trait	33.67/ 7.14	32.27/ 7.96	1.09	14	.292
Dancers ages 45-65 (n=12)	Trait	32.80/ 7.38	31.50/ 7.29	.98	11	.348

**Note.** One dancer did not complete the trait-anxiety portion of STAI after the first testing, thus there is a discrepancy between pre- and post- class numbers.

Paired *t*-tests were used to measure the reductions in trait anxiety only over the course of the program, from Class 1 to Class 6. State anxiety is situation specific, thus this change was not measured for state anxiety results. The results include women who were present for both testing occasions (all dancers,  $n = 16$ ; ages 45 - 65,  $n = 13$ ). While the results from these tests (Tables 6 and 7) show a reduction in trait anxiety for all groups from week 1 to week 6, this reduction is too

small to be considered statistically significant:  $t(15) = 1.16, p = .265$ ;  $t(12) = .59, p = .566$ ;  $t(14) = 1.09, p = .292$ ;  $t(11) = .98, p = .348$ . However, there is a consistent reduction in both groupings and the direction does suggest that over a longer period of time or with more frequent opportunity to dance, there may be potential for reduction in trait anxiety through participation in dance classes of this sort.

In spite of the fact that the results point to a relationship between the Celtic folk dancing and stress reduction we can not assume a causal relationship between dance and stress reduction as many factors are at play in the dance class situation. Many researchers examining the effects of exercise and dance on stress have come to the point of discovering a relationship, then suggest other factors in the situation might also account for the results. This study took the additional step of presenting the results to the dancers and asking them how they would account for the reduced levels of stress.

### **How the Dancers Viewed the Results**

As part of a group activity dancers ( $n=17$ ) were asked to identify what they each thought was the major factor contributing to reduced stress in the dance class. Table 8 presents the compilation of their answers to this question clustered into related groups. Alongside these clusters of factors are the sub-themes identified during the interviews as the experience of dance. The sub-themes identified - "Movement and Music", "Change of Focus", "Fun and Laughter", "The Group of Women" - and the factors identified by the women as contributing to stress reduction coincide. Judging from the number of responses matched with each sub-theme, the women place an equal emphasis on all four factors.

When the dancers were also asked to identify all other factors that they believed contributed to stress reduction, the sub-themes identified from the interviews and journals were repeated over and over. The following are a small sampling:

Fun and Laughter - "the fun and 'silliness' we enjoyed as a group", "laughing", "having fun", "no pressure to 'do it right' - it's just fun", "being instructed to smile"

Table 7

**Group Feedback to Question “What Would You Identify as the Major Factor Contributing to Reduced Stress?”**

Responses to the Question	Themes Identified During the Interviews
<ul style="list-style-type: none"> <li>• The joy of dance</li> <li>• Exercise</li> <li>• The physical exertion &amp; resulting increase flow of oxygen</li> <li>• Physical exercise</li> <li>• Exercise - physical activity</li> <li>• Creative outlet</li> </ul>	<ul style="list-style-type: none"> <li>• Movement and Music</li> </ul>
<hr/> <ul style="list-style-type: none"> <li>• Diversion</li> <li>• Complete absorption in the class</li> <li>• You can't worry about the cares of the day when you are trying to remember the steps of the dance.</li> <li>• Change of focus</li> </ul>	<ul style="list-style-type: none"> <li>• Change of Focus</li> </ul>
<hr/> <ul style="list-style-type: none"> <li>• Laughter</li> <li>• Doing fun things</li> <li>• Being able to have fun &amp; laugh at yourself</li> <li>• Laughter</li> </ul>	<ul style="list-style-type: none"> <li>• Fun and Laughter</li> </ul>
<hr/> <ul style="list-style-type: none"> <li>• Group participation</li> <li>• We were all equals no one as more experienced or less experienced no competition or reprimand</li> <li>• Interacting while exercising ie. Accomplishment/fun with others</li> </ul>	<ul style="list-style-type: none"> <li>• The Group of Women</li> </ul>

- Movement and Music-**“the pleasure gained from joy of dancing with others”, “physical activity that is not work”, “vigorous activity is exhilarating”, “musical stimulation of the brain with Happy Music”, “the music is really nice - makes me feel close to my Irish-Scottish roots!!”
- The Group of Women-**“a whole group of people working together to create one enjoyable experience”, “friendly atmosphere”, “people continued to return to class”, “human touch and camaraderie”, “getting help from others”, “interaction with others”
- Change of Focus-** “focusing on remembering dance steps takes your mind off stressors bothering you - it gives your worry a break”, “getting out of the usual environment that, although wonderful, is still the major source of stress in my life”, “focusing on something other than responsibilities & problems”, “leaving stressful situations behind”

In the listing of all factors contributing to stress reduction, more themes from the interviews were also repeated. These include “learning something new”, “challenge” and “feeling of accomplishment”. One person identified “revisiting” something I did a lot of in earlier years” as a factor in stress reduction.

The dancers were also asked to give feedback regarding their own STAI results. In particular, they were asked to comment on how well the results reflected their own experience. Their responses are informative and insightful and suggest that the anxiety levels measured by STAI provide a good, but not perfect measure of stress levels. For the women whose test results indicated reductions in state anxiety, the general feeling was that these results were an accurate reflection of their state at the time. The women reported feeling more “relaxed”, “satisfied” and “positive” at the end of an evening of dancing. They attributed their own results to the same factors that they identified as the major factors contributing to the overall group results: “mind [occupied] with fun things like dancing”, “any type of physical and especially social physical activity, brings stress down”, “people were friendly so [I] felt better at the end”, and “doing something new, different and exciting”. One dancer commented, “Even if the lesson was challenging and ‘I didn’t get it’, I still felt physically relaxed”. Some surprise was expressed at the small reductions in state anxiety compared to how much stress reduction they experienced. One dancers commented, “I am surprised by how small the drop in group mean is between pre- and post- compared to how I felt before and after.

Surprise was also expressed by some of the dancers whose results indicated increases in state or trait anxiety. The following is a selection of their comments:

“I can’t explain the slight increase on the first session as I had a wonderful, relaxing time.”

“Probably I was somewhat anxious because of lack of dance experience but I did feel more relaxed at the end of the night.”

“I can not really explain how it is my results went up, if a higher score post test indicates your stress is up but I felt like my stress was gone!”

The interview with Amanda may give an explanation for this. Although she declared that she always felt relaxed at the end of classes, on the day of the first testing she wrote that she felt somewhat confused in her journal. Confusion was an item that would increase the score on STAI. Others, whose scores registered increases, felt the results were consistent as they were feeling more stressed at the end of the class for reasons such as “expectations of self”, “thinking about problems” and “being tired after a week or so of peri-menopausal difficulties”.

A few dancers began the class with very low scores. These women’s post-class scores stayed the same, or registered very small increases or decreases. These women all felt that STAI did not reflect their state of relaxation after the class. During the discussion after the group activity, some commented that, for women with very low scores to begin with, there was no provision to register their more relaxed state.

Trait anxiety is considered to be a personality characteristic, and, as such, would be expected to remain constant. Yet the STAI results indicated the most significant change for trait anxiety. For two of the dancers who were interviewed, their trait anxiety scores decreased even as their state anxiety scores went up. The women suggested a number of possible explanations for reductions in trait anxiety. One dancer suggested that the results may be due to the euphoria of the moment. A number suggested that reduced trait anxiety might be due to a more positive and confident outlook due to better feelings about themselves. Several also thought that there was a possibility that the trait score actually reflected the person’s state anxiety. It was also posited that having had a break from problems by participating in a relaxing activity might change the way one views them. One dancer even commented, insightfully, “People might guess that the study was hoping to show

decreased anxiety and so might tend to answer in that way as women tend to like to be polite and helpful”.

The group mean scores for all age groups in this study were higher than the 50th percentile norm for STAI. One dancer reflected on this and wondered if this might be due to seasonal or geographical factors. These classes were held during the time of year when winter is approaching and the days are shortening. As was noted previously, dancers did comment in their journals about the effects of lack of sunlight. Perhaps a more important factor in the difference between the mean for this group and the norms established for STAI is the fact that the norms were established in 1983. Because of increasing expectations for women to assume roles as wage earners as well as homemakers and mothers of well rounded children, women are under considerably more stress to cope with an increasing number roles and 1983 norms may no longer reflect women’s actual stress levels. Gwyneth and Della, both commented on increasing role expectations. Gwyneth believes that, “If it was changed and ... I could be all of a sudden a retired, at home mom, even though I have adult children, I think that you would [find] my stress levels would be way down”. Della reflected,

I’m thinking ... I know, like it seems like when you think back to days gone by like even to your mother and grandmother, I mean ... Their lives were busy too, physically, you know really busy. Not that ours aren’t physically. We seem, you know, to have a job too. ... And there’s always children and that always keeps us busy too. So, ya, I know. Its a a lot of roles that females have to take on now.

## CHAPTER SIX: DISCUSSION

I undertook this research to explore the experience of women during and immediately after participation in Celtic folk dance classes and to connect that experience with the concept of stress. My thesis was that this type of dancing is a particularly appropriate activity to provide stress relief for women in mid-life. In order to conduct the research I taught a series of seven Celtic folk dance classes during a period of seven weeks. Over this time I was afforded the opportunity to employ different research methods to obtain and analyze a variety of data:

- 1) administration of a quantitative testing instrument - Spielberger's (1983) State Trait Anxiety Inventory - Form-Y (STAI) - prior to and following two different classes,
- 2) a group activity designed to obtain feedback on STAI results,
- 3) phenomenological analysis of three sources of data
  - a) five interviews
  - b) guided journals completed by all dancers immediately following every class
  - c) the above mentioned group activity

The results of STAI testing provide evidence that, over all, participation in the dance class resulted in significant short term reduction in anxiety levels -- a commonly used measure of stress. As well as a clear trend toward increased numbers of women scoring below the 50th percentile (a measure of decreased anxiety), the results of paired *t*-tests, with the exception of the first state testing for the age 45 to 65 group, reached significance at alpha .05. The results of the first state testing for the women ages 45 to 65 may be explained by the proportionately significant number of women in this group who had low pre-class measures of stress. The results from this study are consistent with the body of literature that indicates participation in most physical activities results in temporary reduction in stress. However, while one can say that participation in dance leads to stress reduction, this unidimensional view tells us nothing about the phenomenon of stress as it is experienced during dancing or any physical exercise. The results of quantitative testing are too simplistic to give a true understanding of stress as it exists during the dance experience.

Phenomenological analysis provided a deeper and clearer understanding of the stress

experience throughout the dance classes. This analysis suggests that a unidimensional view of the interaction between physical activity and stress is inadequate to explain the dance/exercise - stress relationship as there are many factors implicit in the dance situation that contribute to increases in stress - both positive and negative. Common sense suggests that this would be true of other physical activities, such as swimming and jogging. While the overall effect of exercise and dance on stress is generally reduction, we are remiss if we do not acknowledge the positive ability of stress to motivate individuals, thus contributing to personal growth through achievement. For the women in this research, feelings of satisfaction derived from accomplishment and feelings of rejuvenation from renewed energy were as much a part of the experience of stress as were feelings of relaxation.

During the interviews, the women were asked to describe how they feel when they are stressed. They recounted physical symptoms such as “fluttery feeling in chest”, headaches, a feeling “in the pit of the stomach”, and lack of energy. They also described psychological symptoms such as sleepless nights, worrying, fretting, stewing, feeling anxious, under pressure and agitated. While under stress they wanted to hide from the world and wondered if things would get better. These descriptions of how women feel while stressed are in direct contrast to their description of how they feel after dancing – lifted up, good, peaceful and relaxed, wanting more. The dancers described a change over the course of each dance class; arriving tired, tense and stressed then emerging rejuvenated and felt ready to face the world again.

With the body of literature supporting the physical activity--stress reduction relationship it IS tempting to suggest a causal relationship but, as researchers point out time after time, there are too many coexisting factors implicit in the exercise situations. Throughout my review of the literature researchers posited alternative reasons for stress reduction and several gave reasons when physical activity failed to reduce stress. But none of the researchers in the studies I located asked their participants -- the people who should know -- to what they would attribute their reduced levels of stress or lack of change in their stress levels. I presented the results of the STAI testing to the dancers in this study for their feedback as to the factors they would identify as responsible for

reduction in overall stress levels over the course of the two testing situations. Their feedback suggests they give equal weight to four variables: Exercise, Diversion, Fun and Laughter and Group Participation. This group feedback directly links the STAI testing to the phenomenological results as the factors identified during the group activity cluster around themes that are identical to the essences earlier identified as contributing to stress reduction: "Movement and Music", "Change of Focus", "Fun and Laughter" and "The Group of Women".

### **Implications for Researchers**

The existing body of research on the interaction of dance/exercise with stress focuses on the stress reduction properties of physical activity. Positive results are measured only by reduced stress. As is common with the majority of studies in the area of exercise, the measure of psychological health is restricted to absence of negative affect (Lox & Rudolph, 1994). This focus on pathology comes from the clinical disciplines, such as medicine and psychology, and spills over into recreational activities (Jackson, 2000). The State-Trait Anxiety Inventory (Spielberger, 1983) used in this research is, in fact, not a unidimensional scale. STAI uses a combined score of anxiety derived from adding anxiety present (negative affect) and anxiety absent (positive affect) items to yield a combined score. Increase in low scores are not necessarily negative but could be seen to indicate arousal or movement in the direction of what Selye (1974) described as an optimum stress level. Nevertheless, STAI focuses only on absence or presence of anxiety, a negative psychological state.

The dancers reported feelings at the end of dancing - "exhilarated", "energized", "invigorated", "like talking and laughing", "cheerful", "pride" - that are more a reflection of increase in positive mood than they are of reduced anxiety. STAI is the most commonly used instrument for psychological assessment in exercise and stress research and its use is recommended to facilitate cross-study comparisons (Rostad & Long, 1996); however, two other testing instruments bear consideration for use as they measure both positive and negative mood states and may give a more comprehensive picture of psychological well-being. The Profile of

Mood States (POMS) (McNair, Lorr & Droppleman, 1971), which is utilized by, among others, Berger and associates (Berger & Owen, 1992; Berger & Owen, 1988; Berger & Owen, 1986; McInman & Berger, 1993), contains both positive and negative subscales: tension/anxiety, depression/dejection, anger/hostility, vigour/activity, fatigue/inertia and confusion/bewilderment. Use of this scale would facilitate comparisons with studies done by these researchers. In an effort to provide a more multidimensional approach to the exercise--well-being relationship, McAuley and Corneya (in Lox & Rudolph, 1994) have developed the Subjective Exercise Experiences Scale (SEES) which measures positive well being, psychological distress and feelings of fatigue. Use of this scale is still limited, however, Lox and Rudolph (1994) suggest that this exercise specific instrument "appears to provide a more comprehensive measure of subjective exercise experience than most employed in the exercise literature in that it takes into account physical (e.g., fatigue), cognitive (e.g., discouraged), and affective states (e.g., great) generated by physical activity participation" (p. 838).

The discussion of the multidimensionality of stress does not negate the very real potential that participation in folk dance, or other physical activities, has to counteract and modify the impact of negative stress from daily life. As an alternative to testing the mood benefits of an infinite number of physical activities, Berger and Owen (1988) proposed a typology to predict the stress reducing benefits of varying physical activities. According to the suggested typology, in addition to being enjoyable, the physical activity must be 1) aerobic, 2) non-competitive, 3) predictable, and 4) rhythmical. The latter two items would enable participants to tune out the environment, engage in free association and encourage introspection, allowing the mind to wander. Research does not support either the aerobic component (Berger & Owen, 1992; Owen & Berger, 1988; Rostad & Long, 1996) or the non-competitive (Rudolph & Kim, 1996) component of this typology. My study suggests that an activity that requires total focus would contribute more to stress reduction than an activity that allows the mind to wander or to engage in free association.

The results of this study hint that the context of the physical activity is as important as the characteristics of the activity itself in determining the capacity of the activity to reduce stress. I

suggest that any freely chosen physical activity that is of an intensity and complexity within the ability of the individual to enjoy will contribute to reduced levels of stress, assuming moderate to high levels of stress exist. The fact that Berger and Owen's typology has not been supported by research does not negate the usefulness of a typology to predict the stress reducing properties of various physical activities. I would like to propose an alternative typology, based on the thematic structure derived from this study, which includes the characteristics and context of physical activities that will contribute to stress reduction. The physical activity

- 1) should take place in a supportive group, preferably one working toward common goal. The group members should have similar abilities. Same sex or age groupings may also facilitate stress reduction.
- 2) will require focus that will distract participants from outside sources of stress.
- 3) should include enough challenge to maintain motivation balanced by fun. The challenge should be within the ability of the participants to master and lead to new learning and feelings of achievement.
- 4) must be engaged in continuously for 20 to 30 minutes.

Prior research supports this proposed typology. Hughs, Casal and Leon (in Long & Haney, 1988a) found that subjects exercising alone reported minimal changes in psychological functioning. All research demonstrating decrease in stress with physical activity has been done in group situations. The stress reducing properties of recreational soccer (Rudolph & Kim, 1996) could be attributed to the cooperative group effort necessary in a soccer game or, alternatively, could be due to fun. Characteristics of the leader, intensity and complexity of the activity, or challenge not balanced by fun could explain negative results for activities such as swimming and body conditioning (Berger & Owen, 1988; Berger & Owen, 1986). The issue of focus has not been addressed in prior research. The researcher should ensure that the participants are actually engaged in the activity being researched for the minimal amount of 20 to 30 minutes. Disconfirming results for activities such as fencing (Berger & Owen, 1988) and tennis (Rudolph & Kim, 1996) may be

more a reflection of actual participation than of the characteristics of the activity. One cannot assume continuous participation in these activities over the duration of a university class session.

As has been demonstrated in this research, physical activities have the potential to increase as well as decrease stress. Another feature, essential to this typology, is the involvement of a leader to manage and balance the above factors along with the stress implicit in a dance/exercise environment. While the participants in this study made few mentions regarding the role of the instructor, it is important not to underestimate the effect of the leadership on any group. The instructor must be able to create a program that is challenging enough to maintain interest but within the ability of the participants to enjoy and master and be able to teach in an organized and sequential manner. The leader establishes the group atmosphere, whether it be supportive and fun or competitive and oppressive. Berger and Owen's (1988) study attests to the effect of an instructor's "rigorous approach to exercise" (p. 22156) which resulted in high drop out rates and no positive mood changes. I believe my own philosophy, which stresses mutuality, cooperation and sociability, as well as my personal investment in dancing and the research contributed to the positive results of this study.

The majority of the research conducted in the area of exercise--psychological benefits has involved university students taking part in university physical activity programs. An exception to this are studies done by Long and Haney (1988a; 1988b) which examined effect of jogging on stress with stressed working women. These physical activities that have been investigated are not necessarily those that would be of interest or available to women prior to or during mid-life. In the 14 month follow-up done by Long and Haney (1988b), 11 of the 12 women who continued with a regular exercise regime chose activities other than jogging (walking, swimming and aerobic class). With increasing interest being paid to the physical and mental wellbeing of women in mid-life it will be important to include the voices of the women in determining activities to be investigated.

The review of the literature for this thesis revealed the dearth of research on the psychological benefits of any form of dance. Several studies involving Dance/Movement Therapy were located, however, "much of what is called dance therapy does not appear to be what we

usually call dance” (Hanna, 1988, p. 149). One study involving modern dance (Lesté & Rust, 1990) was unearthed. Silver’s (1981) study was the only one discovered that involved any form of social or folk dance. Silver’s research demonstrated the potential for participation in folk dancing to enhance body concept and self concept. A qualitative component of her research revealed that participants in folk dance classes derived the additional benefits of fun, diversion, tension release and positive social contact - key themes identified as contributing stress reduction by the women involved in my research. This present study suggests that along with the benefits identified by Silver, folk dancing can be part of a multidimensional strategy for stress management. Folk dance can provide relief from, and counteract, the damaging effects of negative stress. Dance can also provided the additional benefits feelings of rejuvenation along with self-enhancement and personal growth through challenge, achievement and mastery. Given the potential of dance for enhancing psychological well being, it behooves the research community to pay more attention to this very neglected but potentially life enhancing activity.

#### **Recommendations for Future Research:**

Based on this discussion and the results of this research I make the following recommendations for future research:

- 1) Many forms of dance that would be considered social – folk , line, square, ballroom, swing – are popular recreational activities with potential for lifelong participation. The psychological benefits of participating in these many dance forms should be researched and documented. In the efforts to document the mood enhancing benefits of physical activity, dance should not be a poor cousin of sport and exercise.
- 2) Phenomenological investigation of the stress experienced during dance has provided insight into the stress-exercise relationship that has been previously ignored by quantitative researchers. Further phenomenological study of other physical activities could be equally fruitful.
- 3) An important feature of my research design was the use of mixed methods and a variety of data sources. This allowed the development of a more complete picture of stress during and after

dancing that use of any single method or data source would have. Data from the guided journals were particularly useful, because of their anonymity, for supplementing the data from the interviews as this data provided disconfirming evidence, thus forcing the development of a more comprehensive thematic structure.

4) Further research directed toward stress management -- physical activity -- mid-life women should ask the women which activities might best fit their interests and the context of their lives.

5) Use of multidimensional instruments that include both positive and negative scales, such as Profile of Mood States (POMS) and the Subjective Exercise Experiences Scale (SEES), in research on the psychological benefits of physical activity may afford a more comprehensive picture.

6) Development of a typology to predict the stress reducing potential of various physical activities and contexts could be a worthwhile enterprise. As two items of the typology proposed by Berger and Owen (1988) have been refuted by research and I question the usefulness of the other two, I offer a new typology for scrutiny, critique and revision of future researchers.

### **Implications and Recommendations for Counsellors**

This thesis was completed within the context of the requirements for a Masters Degree in Education (Counselling) and a number of implications for counsellors arise from this research. These centre around three areas: assumptions about women in mid-life and the source(s) of their problems, prescription of exercise as a stress management activity, and promotion of lifestyle change. As was stated earlier in this paper, this research was undertaken from a feminist philosophical base. Some feminist counsellors seek to effect change for their clients through education and advocacy in communities (Laidlaw & Malmo, 1991; Lerman & Porter, 1990). The results of this study also suggest the necessity for social change to ensure equal access to physical activities for all groups of society.

The women who took part in this study raise questions about the stereotypical view of women in mid-life. A review of the literature would lead one to believe that women at this stage of life would be riddled with insecurities as a result of low self-esteem, poor body image and social

pressures to remain youthful. In fact, very few women in this study identified any of these issues as stressful. The medical community would have us believe that mid-life is about menopause and deteriorating health. An interesting aspect of this study was the fact that women did not identify problems due to menopause as stressors. This is consistent with research findings that suggest anxiety and depression in middle-age have their source in life circumstances rather than hormones (Bromberger & Matthews, 1996; Dennerstein, Smith & Morse, 1994). Many of our ideas about menopausal women are informed by the health and psychology community which tends to focus on the negative. As Jackson (2000) notes, "Historically the health disciplines have focused on problems and pathology rather than wellness and prevention' (p.136). The sample of women who took part in this research may not be representative of all women in mid-life. Women who might see dancing as a threatening activity would not have volunteered. Additionally, those who volunteered were clearly individuals who could and would take some time for self-care. Nevertheless, the picture of women in mid-life that emerges from this research is one of strong, competent women, weighted down with responsibilities; but, at the same time, vibrant and alive women seeking new and unique activities and learning.

The existing body of research on exercise and stress reduction indicates that exercise is as effective as progressive relaxation and stress inoculation in a variety of populations (Berger, 1994). This research suggests that participation in Celtic folk dancing is yet another physical activity that can be recommended as an important part of a program for stress management and one that is particularly suitable for women in mid-life. An initial proposition of this research was that Celtic folk dance was an activity that would be particularly attractive to women between the ages of 45 and 65. Examination of retention rates for this class suggest that this may so. While only 64% of the total group ( $n=25$ ) of dancers continued throughout the course of the classes, 72% of the women who were between the ages of 45 and 65 ( $n=18$ ) danced to the end. In spite of the fact that dance and other exercise forms provide an effective means of stress reduction along with other potential health benefits, counsellors should exercise caution in insisting that middle-aged women should pursue stress relief through physical activity. Many women, having suffered through physical

education classes focused on competitive sport, associate sport and exercise with humiliation and pain (Vertinsky, 1998, p.88). Prescribed participation in activities that have previously caused them grief may do nothing but cause more psychological distress. Davis and Thaut (1989) found that preference for music led to stress reduction. Likewise, preference for physical activity is important. It is important to note that, for some women, dance has the potential to be an alternative healthful physical activity that does not have the connotation of sport. An additional consideration for recommending regular participation in dance as a stress management activity is the lived reality of women's lives and the lack of available opportunity. As Aleisha so succinctly put it, "Today, in Prince George where can I just go - because I'm feeling stressed - to go dance?"

Monat and Lazarus (1991) categorized physical activity as an "Environment/ Lifestyle" form of stress management intervention. The words of the women in this research suggest that counsellors should acknowledge the difficulties faced by women when attempting to undertake a lifestyle change. The women in this study, echoed the literature in the field of women and leisure (Green & Hebron, 1988; Henderson, Bialeschki, Shaw & Freysinger, 1989; 1999; Woodward & Green, 1988) which suggests that knowledge and provision of opportunities may not be sufficient to enable women to make pro-active choices to participate in leisure activities that will enhance their personal well-being. They voiced how difficult it was for them to make "choices" and "lifestyle changes". For many of the dancers commitment to one night of dancing created significant stress and some were unable to continue this weekly commitment. A multitude of conflicting priorities and responsibilities - all of which have claims on women's time - limit the ability of women to make lifestyle changes. Family, home, work, traditions, study - all conspire to impact possibilities for "choice". The women in this study enumerated numerous constraints including the following: husbands objecting to time out of the house, having to arrange for childcare or bring kids dancing, husbands' work, visiting relatives, household responsibilities, their own work and business travel and preparations for Christmas. Prior to this thesis research, a woman, who currently dances with one of the local groups, confided that she would love to take part in the study and dance twice a week but she could not because going out more would cause too much "stress" between herself

and her husband. Economic considerations impacted on the ability of participants to continue dancing following the conclusion of the research. For the women in this study who were on income assistance, the fact that the dance classes were free was an important consideration. The Celtic folk dance classes resumed in February, after the conclusion of the research, but none of the women who were on income assistance returned to the class. One of these woman planned to continue but elected not to when she discovered there would be a fee involved. Another dancer with low income obtained employment, thus securing the resources she needed to continue dancing. After paying the fees to dance, she discovered that, with her increased responsibility, she did not have time.

Along with giving recognition to the difficulties that women face when making lifestyle changes, counsellors need to encourage women to make self-care a priority and to ensure that self-care is a priority for themselves. As well, counsellors can influence other family members to “allow” women time for self-care. Counsellors also need to beware of perpetuating limiting social and cultural assumptions that determine women’s activities and that continue to circumscribe and limit women’s access to and participation in health promoting leisure activities.

The interests identified by the dancers in this research along with the factors constraining women’s access to leisure activities point to a number of considerations for planning programs for women of this age group. These women sought a novel experience that involved new learning, challenge and a social experience, thus corroborating Meier’s (1991) suggestion that physical activities be promoted as challenging and stimulating. Innovative programming is needed to provide a larger variety of satisfying physical activities for women prior to, during and after mid-life. Aquacise classes, once such an innovative program that attracts primarily women, are now a regular part of the pool landscape. Likewise, jazzercise and aerobic dance appeal mainly to women. A newcomer to the field of innovative programming directed toward women is dragon boat racing for survivors of breast cancer (McKenzie, 1998). The popularity of this program, begun in 1996, is attested to by its rapid spread across Canada (including Prince George), the United States, Australia and New Zealand. A Celtic folk dance group started 5 years ago in Prince George with a small

group of 10 individuals and has since grown to include two groups of approximately 24 members each. If the programs are offered women will come. As the women in this research group suggest, women specific and age specific activities would be appealing.

Difficulties with long term commitment suggest the appropriateness of short duration programs or programs conducive to “drop-ins” to attract women. Considerations to facilitate ongoing commitment include childcare and location in a neighbourhood centre. Public transportation is limited in Prince George and women are limited by the availability of family vehicles. Start times should be later in the evening allow women to fulfil other commitments -- such as meal preparation and clean up, transportation of children to their activities, completion of employment related responsibilities -- and thus reduce the stress involved around attendance.

The fact that the research dance classes were free was an important factor to enable low income women to attend. This attests to the importance of low cost recreational programs for women. Where possible, if fees must be involved, gradual payment rather than lump sum fees may encourage more women to participate.

Counsellors who desire involvement in social action might become an active participant in a group such as the NIIIR Mid-Life Project, thus becoming part of innovative health promotion activities for women. Alternatively, a counsellor could form or become part of a group that works toward public policies that provide more equitable access to opportunities for physical activities for people of all ages - policies that might include provision of low cost, accessible facilities along with resource and training grants.

The results of my research give positive support for Celtic folk dance as an activity that can play an important role in a plan designed to help manage the negative effects of stress. More importantly, the dancers who took part in this study have raised an awareness that stress is not a unidimensional concept. Increase in stress -- both “eustress” and “distress” -- is as much a part of dancing as is its decrease, even though the overall effect can be a reduction in stress. Increases in positive stress can provide the motivation for achievement that contribute to feelings of well-being.

These women have contributed valuable insights into the experience of stress during and after the dance situation and into what they identify as the factors responsible for stress reduction. From the experience, as they describe it, I have identified a number of implications both for researchers engaged in the areas of exercise/dance and stress management in general and dance in particular and for counsellors dealing with mid-life women and their issues.

It is my hope that through this study I have been able to shed some light into the complicated relationship between physical activity and stress. It is also my sincere desire that my efforts will stimulate more interest in the study of a popular recreational activity that shows so much potential for enhancement of psychological well-being -- Dance.

## REFERENCES

- Allen, K. (2000). Women's health in mid-life: A report on activities in the northern interior. (Available from the Northern Secretariat B.C. Centre of Excellence for Women's Health, 3333 University Way, Prince George, B.C. V2N 4Z9).
- Anshell, M.H. (1994). Sport psychology from theory to practice. Scottsdale, Arizona: Gorsuch Skarisbrick Pub.
- Beck, C.T. (1996). Qualitative research: The evaluation of its credibility, fittingness, and auditability. Western Journal of Nursing Research, 15 (2), 263-266.
- Belle, D. (1991). Gender differences in the social moderators of stress. In A. Monat & R.S. Lazarus (Eds.), Stress and coping: An anthology (3rd ed.) (pp.258-274). New York: Columbia Press.
- Bennet, M.P. (1988). The effect of mirthful laughter on stress and natural killer cell cytotoxicity. Dissertation Abstracts International: Section B: The Sciences and Engineering, 58 (7B), 3553-3559.
- Bepko, C. & Krestan, J. (1991). Too good for her own good. New York: Harper Perennial.
- Berger, B.G., Friedman, E. & Eaton, M. (1988). Comparison of jogging, the relaxation response, and group interaction for stress reduction. Journal of Sport and Exercise Psychology, 10 (4), 431-447.
- Berger, B.G. & Owen, D.R. (1986). Mood alteration with swimming: A re-evaluation. In L. Vander Velden & J.H. Humphreys (Eds.), Current selected research in the psychology and sociology of sport(Vol.1) (pp. 97-113). New York: AMS Press.
- Berger, B.G. & Owen, D.R. (1988). Stress reduction and mood enhancement in four exercise modes: Swimming, body conditioning, hatha yoga, and fencing. Research-Quarterly-for-Exercise-and-Sport, 59 (2), 148-59.
- Berger, B. & Owen, D.R. (1992). Preliminary analysis of a causal relationship between swimming and stress reduction: Intense exercise may negate the effects. International Journal of Sport Psychology, 23 (1), 70-85.
- Berger, B.G. (1994). Performance, stress and health: Overall reaction. Quest, 46, 100-119.
- Berry, J.M. (1979). Analysis of ideas about dance and psychology of dance. Unpublished Masters Thesis. York University, Department of Education.
- Blackwood, F., Bouw, J., Larkin, J., Robertson, S., Scherer, S.E., Vail, S.E., Wilson, C. (1995). Editorial. Canadian Women's Studies, 15 (4), 3.
- Bromberger, J.T. & Matthews, K.A. (1996). A longitudinal study of the effects of pessimism, trait anxiety, and life stress on depressive symptoms in middle-aged women. Psychology and Aging, 11 (2), 207-213.
- Cousins, N. (1979). Anatomy of an illness as perceived by the patient: Reflections on regeneration and healing. New York: Bantam Books.

Davis, W.B. & Thaut, M.H. (1989). The influence of preferred relaxing music on measures of state anxiety, relaxation, and physiological responses. Journal of Music Therapy, XXVI (4), 168-187.

Deem, R. (1986). All work and no play? Philadelphia: Open University Press.

Dennerstein, L., Smith, M.A. & Morse, C. (1994). Psychological well-being, mid-life and the menopause. Maturitas, 20, 1-11.

Domar, A.D. & Dreher, H. (1996). Healthy mind, healthy women. New York: Henry Holt & Co.

Filligim, R.B. & Blumenthal, J.A.. (1993). The use of aerobic exercise as a method of stress management. In P.M. Lehrer & R.L. Woolfolk (Eds.), Principles and practice of stress management (2nd ed.) (pp.443-462). New York: Guilford Press.

Folkman, S. & Lazarus, R.S. (1991). Coping and emotion. In A. Monat & R.S. Lazarus (Eds.), Stress and coping: An anthology (3rd ed.) (pp.207-227). New York: Columbia Press.

Giorgi, A. (1985). Sketch of a psychological phenomenological method. In A. Giorgi (Ed.), Phenomenology and psychological research (pp.8-21). Pittsburg: Duquesne University Press.

Green, E. & Hebron, S. (1988). Leisure and male partners, In E. Wimbush & M. Talbot (Eds.), Relative freedoms women and leisure (pp.33-36). Philadelphia, PA: Open University Press.

Hanna, J.L. (1988a). Dance and stress: Resistance, reduction and euphoria. New York: AMS Press Inc.

Hanna, J.L. (1988b). Dance, sex and gender signs of identity, dominance, defiance, and desire. Chicago: University of Chicago Press.

Harrison, B. (1998). A brief overview of Irish dancing. Retrieved July, 1999 from the World Wide Web: <http://www.inex.net/~mardidom/rdance.htm>.

Heart and Stroke Foundation. (2000). Annual report card on Canadian's health. Press release

Henderson, K.A., Bialeschki, M.D., Shaw, S.M., Freysinger, V.J. (1999). Both gains and gaps: Feminist perspectives on women's leisure. State College, PA: Venture Publishing.

Henderson, K.A., Bialeschki, M.D., Shaw, S.M., Freysinger, V.J. (1989). A leisure of one's own: A feminist perspectives on women's leisure. State College, PA: Venture Publishing.

Jackson, S.A. (2000). Joy, fun, and flow state in sport, In Y.L. Hanin (Ed.), Emotions in sport (pp.135-156). Windsor, Ont.: Human Kinetics.

Johnson, R.B. (1997). Examining the validity structure of qualitative research. Education, 118 (2), 282-293.

Kass-Annese, B. (1999). Management of the perimenopausal and post menopausal woman: A total wellness program. New York: Lippincot.

Knight, P. (Ed.). (1996). Scottish country dancing. Glasgow: Harper Collins publishers.

Kraus, R. (1969). History of the dance in art and education. New Jersey: Prentice-Hall Inc.

Kuettel, T.J. (1982). Affective change in dance therapy. American Journal of Dance Therapy, 5, 56-64.

Laidlaw, T. & Malmo, C. (1991). Feminist therapy. Canadian Journal of Counselling, 25 (4), 392-406.

Lerman, H. & Porter, N. (Eds.). (1990). Feminist ethics in psychotherapy. New York, NY: Springer Publishing Co. Inc.

Landers, D.M. (1994). Performance, stress and health: Overall reaction. Quest, 46, 123-135.

Lenskyj, H.J. (1995). What's sport got to do with it? Canadian Women's Studies, 15 (4), 6-10.

Lesté, A. & Rust, J. (1990). Effects of dance on anxiety. American Journal of Dance Therapy, 12 (1), 19-25.

Long, B. & Haney, C. (1988a). Coping strategies for working women: Aerobic exercise and relaxation interventions. Behaviour Therapy, 19 (1), 75-83.

Long, B. & Haney, C. (1988b). Long-term follow-up of stressed working women: A comparison of aerobic exercise and progressive relaxation. Journal of Sport and Exercise Psychology, 10, 461-470.

Lowe, G.S. (1989). Women and life stresses: New directions for research. Ottawa: Canadian Advisory Council on the Status of Women.

Lox, C.L. & Rudolph, D.L. The Subjective Exercises Experiences Scale (SEES): Faactorial Validity and effects of acute exercise. Journal of Social Behavior and Personality, 9 (4), 837-844.

Maranto, C.D. (1993a). Music therapy and stress managements. In P.M. Lehrer & R.L. Woolfolk (Eds.), Principles and practice of stress management (2nd ed.) (pp.407-442). New York: Guilford Press.

Maranto, C.D. (1993b). Applications of music in medicine. In M. Heal & T. Wigram (Eds.), Music therapy in health and education (153-174). London, U.K.: Jessica Kingsly Pub.

McInman, A.D., & Berger, B.G. (1993). Self-concept and mood changes associated with aerobic dance. Australian Journal of Psychology, 45 (3), 134-140.

McKenzie, D. C. (1996). Abreast in a boat - A race against breast cancer. Canadian Medical Association Journal, 159, 376-378.

McNair, D.M., Lorr, M., & Droppleman, L.F. (1971). Profile of mood states manual. San Diego: Educational and Industrial Testing Service.

McGuigan, F.J. (1999). Encyclopedia of stress. Needham Ht., MA: Allyn and Bacon.

Meier, K.V. (1991). Physical activity and stress: The road not taken and the implications for society. Quest, 46 (1), 136-145.

Monat, A. & Lazarus, R.S. (1991). Introduction: Stress and coping - Some current issues and controversies. In A. Monat & R.S. Lazarus (Eds.), Stress and coping: An anthology (pp.1-15). New York: Columbia University Press.

Morgan, W.P. & Ellickson, K.A. (1989). Health, Anxiety, and Physical Exercise. In D. Hackfort & C.D. Spielberger (Eds.) Anxiety in sports: An international perspective (pp. 165-182). New York: Hemisphere Publishing Corp.

Neuman, W.L. (1997). Social research methods: Qualitative and quantitative approaches (3rd ed.). Needham heights, MA: Allyn & Bacon.

Nevell, R. (1977). A time to dance. New York: St. Martin's Press.

Northrup, C. (1995). Women's bodies, women's wisdom. Toronto: Bantam Books.

O'Conner, P. (Director). (1998). Dancing at Lughnasa. [Film].

Ojeda, L. (1995). Menopause without medicine. Alameda, Calif.: Hunter House Inc.

Ojeda, L. (1998). Her healthy heart. Alameda, Calif.: Hunter House Inc. Publishers.

Osborne, J. (1990). Some basic existential-phenomenological research methodology for counsellors. Canadian Journal of Counselling, 24 (2), 79-91.

Page, L. (1993). Menopause and emotions. Vancouver: Primavera Press.

Palys, T. (1997). Research decisions: quantitative and qualitative perspectives (2nd ed.). Toronto: Harcourt Brace & Co., Canada.

Pelletier, K.R. & Lutz, R. (1991). Healthy people - healthy business: A critical review of stress management programs in the workplace. In A. Monat & R.S. Lazarus (Eds.), Stress and coping: An anthology (3rd ed.) (pp.483-498). New York: Columbia University Press.

Pierce, K.L. (1989). The society and culture of the Celts focusing on Ireland. Retrieved July, 1999 from the World Wide Web: <http://www.greyhawkes.com/text/celts.txt>

Pilot materials. (1999). Evaluation forms for educational resource kit materials. (Available from the BC Women's Health Centre, 4500 Oak St., Vancouver, B.C., V6H 3N1).

Raglin, J.S. & Hanin, Y.L. (2000). Competitive anxiety. In Y.L. Hanin (Ed.) Emotions in sport (pp.95-111). Windsor, Ont.: Human Kinetics.

Reinharz, S. (1992) Feminist methods in social research. Oxford: Oxford University Press.

Ritter, M.& Low, K.G. (1996). Effects of dance/movement therapy: A metanalysis. Arts-in-Psychotherapy, 23 (3), 249-260.

Roach, M. (1997). The power of laughter. Retrieved February, 2000 from the World Wide Web: <http://members.aol.com/annettenay/Laughter.htm>

Robertson, A. & Hutera, D. (1990). The dance handbook. Boston: G.K. Hall & Co.

Rohner, S.J. & Miller, R. (1980). Degrees of familiar and affective music and their effects on state anxiety. Journal of Music Therapy, XVII(1), 2-15.

Roskies, E. (1991). Stress management: A new approach to treatment. In A. Monat & R.S. Lazarus (Eds.), Stress and coping: An anthology ( pp.411-431). New York: Columbia University Press.

Rostad, F. & Long, B. (1996). Exercise as a coping strategy for stress. International Journal of Sport Psychology, 27 (2), 197-222.

Rubin, A. & Babbie, E. (1993). Research methods for social work (2nd ed.). Pacific Grove, Ca.: Brooks Cole Publishing Co.

Rudolph, D.L. & Lim, J.G. (1996). Mood responses to a recreational sport and exercise in a Korean sample. Journal of Social Behaviour and Personality, 11 (4), 841-851.

Russell, L.A. (1992). Comparisons of cognitive, music, and imagery techniques on anxiety reduction with university students. Journal-of-College-Student-Development, 33 (6), 516-523.

Selye, H. (1974). Stress without distress. New York: J.B. Lippincot Co.

Selye, H. (1991). History and present status of the stress concept. In A. Monat & R.S. Lazarus (Eds.), Stress and coping: An anthology ( pp.21-35). New York: Columbia University Press.

Sheets, M. (1970). Phenomenology: An approach to dance. In M.H. Nadel & C.G. Nadel (Eds.), The dance experience (pp.33-48). New York: Praeger Publishers.

Silver, J.A. (1981). Therapeutic aspects of folk dance: Self concept, body concept, ethnic distancing and social distancing. Unpublished Doctoral Dissertation. University of Toronto, Department of Education.

Singer, J.E. & Davidson, L.M. (1991). Specificity and stress research. In A. Monat & R.S. Lazarus (Eds.), Stress and coping: An anthology ( pp.37-47). New York: Columbia University Press.

Spangenberg, L.L. (1999). What are the Celtic languages? Retrieved July, 1999 from the World Wide Web: <http://hometown.aol.com/lisala/celtfaq.html>

Spiegelberg, H. (1994). Essentials of the phenomenological method. In The phenomenological movement. (3rd ed.). (pp. 677-719). Boston: Kluwer Academic Publishers.

Speilberger, C.D. (1983). Manual for the state-trait anxiety inventory: STAI (form Y). Palo Alto: Consulting Psychologists Press.

SPSS Inc. (1995). SPSS Graduate Pack for the Macintosh. Chicago, Ill.: SPSS Inc.

Stress affects women more around world. (1999, August 5). Prince George Citizen, p.16.

Thaut, Michael (1989) The influence of music therapy interventions on self-rated changes in relaxation, affect and thought in psychiatric prisoner-patients. Journal of Music Therapy, 26 (3), 155-166.

Thompson, P. (1995). In dialogue with the body. Canadian Women's Studies, 15 (4), 100-101.

Van Manen, M. (1984). Practicing phenomenological writing. Phenomenology and Pedagogy, 2, 36-69.

Van Manen, M. (1997). Researching lived experience: Human Science for an action sensitive pedagogy (2nd ed.). London, Ont.: The Althouse Press.

Vertinsky, P. (1998). "Run, Jane, Run": Central tensions in the current debate about enhancing women's health through exercise. Women & Health, 27 (4), 81-111.

Walker, V. (1993). Women, aging, & exercise: The scope of the problem. Retrieved July, 1999 from the World Wide Web: <http://www.sfo.com/~wholebody/fitnessworlds.html>.

Wallace, M. (1996). A short history of Ireland. New York: Barnes and Noble Books.

Wangbickler, M. (1997). Origin of the Celts. Retrieved July, 1999 from the World Wide Web: <http://www.celticcorner.com/>

Wells, G. (July, 2000). Creating opportunities for success experiences in competitive swimming: Eustress and its influence on human performance. Retrieved February, 2000 from the World Wide Web: <http://www.torontoswim.org/eustress.htm>

Wilson, E. (1970). Problems of balance in curriculum change. In M. Halberman & T.G. Meisel (Eds.), Dance an art in academe (pp.83-86). New York: Teacher's College Press.

Woodward, D. & Green, E.. (1988). 'Not tonight dear!' The social control of women's leisure. In E. Wimbush & M. Talbot (Eds.), Relative freedoms women and leisure (pp.131-146). Philadelphia, PA: Open University Press.

Wooten, P. (1996). Humor: An antidote for stress. Retrieved February, 2000 from the World Wide Web: <http://www.mother.com/JestHome/artantistress.html>

**APPENDICES**

**Appendix A**  
**Advertisement**

**Appendix A: Advertisement**

The advertisement (see next pages) were:

- distributed to School District #57 schools, Hospice House, and members of current Celtic Dance Groups
- posted on Prince George Regional Hospital and Northern Interior Health Unit Notice Boards.
- included in "The Well" - Midlife Project publication

A shorter version was placed in the Prince George Citizen and the St. Giles Newsletter.



**Try Celtic Dancing**



**... For free**

As part of the Northern Interior Health Region Women's Mid-Life project, women of all ages will have the opportunity to participate in 7 introductory level Celtic folk dance classes. The program will be based on Scottish Country Dances and Irish Set Dances and will emphasize maximum physical activity at a low to moderate intensity. The basic steps for both types of dance will be included to facilitate continuing participation in local Celtic dance groups. Class size will be limited to 24 participants.

**An information session will be held Thursday, October 7, 1999 at 7:00 in the St. Giles Church hall.** Individuals who are interested in participating in this group must attend this information session. Come to this meeting prepared to dance. Classes will be held Thursdays, beginning October 14, 1999 in the St. Giles Church hall and will run from 7:00 to 9:00 PM. This program is offered as part of a University of Northern British Columbia Masters of Education thesis research study into the use of this type of folk dance as part of a stress management program. Participation will be free for women who volunteer to be an active participant in the research. Individuals who are not interested in being part of a research study are welcome to join in the dancing, but will be charged a nominal \$20.00 fee to help pay for the hall rental. Classes will be conducted by Carol Usher, BPE., BSW., M.Ed. (counselling) candidate. Carol currently coordinates, teaches, and dances with the Prince George Celtic Dancers. For further information you can contact Carol Usher at 561 0501.





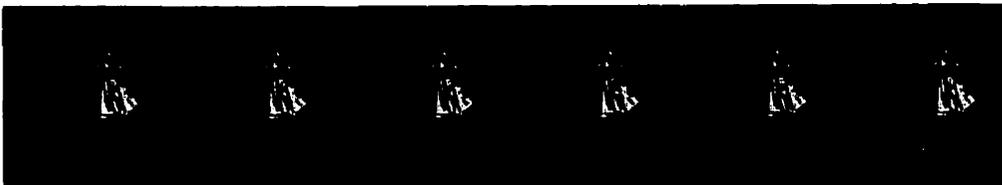
**Be Part of the UNBC Research Project: Mid-life Women, Celtic Folk Dance and Stress Management**

**Purpose:** This investigation seeks to study the experience of participation in a Celtic Folk Dance Class and to determine the relationship between participation in an exercise program based on Celtic folk dances and stress reduction.

**Investigator:** Carol Usher, BPE., BSW., M.Ed. (counselling) student

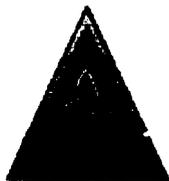
**Procedure:**

**As a participant you will be asked to attend 7 Celtic folk dance classes. Participants will be asked to fill out a short questionnaire at the beginning and end of the study as well as to complete Spielberger's State Trait Anxiety Inventory during the first and sixth weeks. Participants must also be willing to be contacted for an interview about your dance experience within the week after the classes finish plus a follow-up interview. You will be contacted by phone about these interviews.**



**Appendix B**  
**Informed Consent Document**

Appendix B



**Informed Consent Document**

**Title:** Mid-life Women and Celtic Folk Dance and Stress Management, a Phenomenological Study

**Purpose:** This investigation seeks to study the experience of participation in a Celtic Folk Dance Class and to determine the relationship between participation in an exercise program based on Celtic folk dances and stress reduction.

**Investigator:** Carol Usher, BPE., BSW., M.Ed. (counselling) student

**Procedure:**

As a participant you will be asked to attend 7 Celtic folk dance classes. The program will be based on Scottish Country Dances and Irish Set Dances and will emphasize maximum physical activity at a low to moderate intensity. The basic steps for both types of dance will be included. Participants will be asked to fill out a short questionnaire at the beginning and end of the study as well as to complete Spielberger's State Trait Anxiety Inventory during the first and sixth weeks. You will also be asked to keep a brief journal to be filled in at the end of each class. Participants must also be willing to be contacted for an interview about your dance experience within the week after the classes finish plus a follow-up interview. These interviews will take from 1 to 1 1/2 hours. You will be contacted by phone about these interviews.

**Consent:**

This is to certify that I, \_\_\_\_\_ agree to participate in this study on dance and stress. My participation is voluntary and I understand that I am free to withdraw my consent and terminate my participation at any time. I also understand that as part of my participation, there will be no charge for this activity.

I also understand that my opinions and experiences will be solicited during the study but I am free to refrain from answering any questions.

I also understand that I may be contacted with a request to be interviewed. The interviewer has my consent to tape record and take notes during the interview, however, I can stop the interview at any time and decide not to continue. I can also request that certain parts of the interview not be

recorded. I will have the choice of reviewing the transcripts of the interview and at that time any relevant information can be added or changed. If I participate in the interviews, I can receive, upon request, a copy of the final results.

I have been informed that measures will be taken to ensure confidentiality as to my statements and personal information that is collected as a result of this study. Confidentiality will be ensured by a coding system that identifies participants by letters and number only plus use of pseudonyms in the final thesis document. All materials will be kept by the researcher in a locked place and will be accessed only by the researcher and her supervisor. Audiotaped interviews will be erased after transcription is completed. Written data, including transcribed interviews, will be secured in a locked container under the control of the researcher for five years after the study is completed, then destroyed.

The information gained from this research will be used by Carol Usher for her thesis report, publications or presentations. I understand that every effort will be made to protect my identity but that particulars of some incidents may appear familiar to individuals who know me.

I have had the opportunity to ask any questions and clarify any concerns I have about this study, particularly in terms of any physical limitations I may have and/or my ability to participate. I understand that I may ask questions any time during the study, and may contact the student's thesis supervisor, Dr. Barbara Herringer, at UNBC 250 960 6643

I also acknowledge that participation in any physical activity has inherent risks and I am not aware of any pre-existing physical condition that would preclude me from participation.

Date

Participant's Signature

Researcher's Signature

**Appendix C**  
**Questionnaires**

Appendix C: Questionnaires

Questionnaire I

Code name: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Age: (as of October 1, 1999) \_\_\_\_\_

Occupations: (Please include homemaker if it applies. If you are involved in two or more occupations, such as teacher and homemaker, please list them all in order of their stress demands)

\_\_\_\_\_

Number of hours employed for a wage per week: \_\_\_\_\_

Marital Status: \_\_\_\_\_

Do you have children? \_\_\_\_\_ Please give their ages: \_\_\_\_\_

Number of children living at home: \_\_\_\_\_

Are you caring for anyone outside your nuclear family? \_\_\_\_\_

If so, who? \_\_\_\_\_

Please mark the point on the following scales where you would rate yourself

	Not at All						Very Much
Stress is a problem in my life	1	2	3	4	5	6	7
I believe that dancing is a beneficial activity for stress management	1	2	3	4	5	6	7

Please identify the stresses that you would identify as playing a role in your life.

Major:

Minor:

Are you concerned with the effect of  
stress on your health? \_\_\_\_\_  
menopause on your health? \_\_\_\_\_

Please describe any physical activity you are regularly involved in (include frequency and duration).

Please describe any stress management programs that you participate/have participated in.

Have you danced before? When? What type?

**Questionnaire II**

**Code name:**

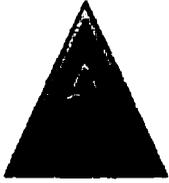
**Please rate the point on the following scales where you would rate yourself**

	Not at All						Very Much
<b>Stress is a problem</b>	1	2	3	4	5	6	7
<b>I believe that dancing is a beneficial activity for stress management</b>	1	2	3	4	5	6	7
<b>Dancing is an activity I would like to continue.</b>	1	2	3	4	5	6	7

**Any comments on this exercise program as a stress management activity or on the research**

**Appendix D**  
**Guided Journal**

Appendix D: Guided Journal



**Guided Journal**

Date:

How I am feeling  
1) right now

2) about the dance experience today

What stands out for me today

**Appendix E**  
**Interview Guide**

**Appendix E: Interview Guide**

**Interview Guide**

The purpose of this research is to study the experience of Celtic folk dance particularly as it applies to stress management

**Phenomenological question:**

How would you describe your dance experience?

(Journal entries will be available for use to assist in remembering)

(Empathetic statements, clarification, summarization, probes will be used to encourage the individual to explore her experience)

**Other Questions:**

What did you hope to achieve by joining a dance class? Were your expectations met?

Could you comment on your STAI results? Are they consistent with your experience?

What is feeling stressed like for you?

How do you feel after dance?

Do you believe that dance contributes to stress reduction? Can you give me some examples from your experience?

How do you usually manage stress in your life?

Could you describe your personal supports?

**Final questions:**

Do you want to review/ comment on your transcript before our second meeting?

Can you comment on your experience of the research process?

Is there anything else you would like to add?

These questions will also be provided in writing on cards to the participants.

**Appendix F  
Schedule of Activities**

## Appendix F: Schedule of Activities

Week		Program
1	Information Session, Survey - Questionnaire I	Steps: walk, advance and retire, shuffle, skip Dance(s): Strip the Willow, Waves of Tory
2	STAI, guided journal, Scottish Country Dance	Steps: advance and retire, skip change of step, cross, swing, cast Dance(s): Highland Welcome, Barley Bree
3	guided journal, Scottish Country Dance	Steps: figure 8, four hands across, setting step, reel of three Dance(s): Dashing White Sergeants, Reel of the 51st Division
4	guided journal, Scottish Country Dance	Steps: right hands cross, reel of three in tandem Dance(s): Butterscotch and Honey, Gay Gordons
5	guided journal, Irish Set Dance	Steps: House, Body, Ladies Cross Dance(s): Sliabh Lauchra Set
6	guided journal, Irish Set Dance	Steps: Square the House, Hornpipe Dance(s): Sliabh Lauchra Set
7	STAI, Questionnaire II, survey, guided journal, Irish Set Dance, Post request sheet for next weeks dances	Steps: Dance(s): Sliabh Lauchra Set
8	Distribution of Results, Group Activity	Review of Requested Dances

**Appendix G**

**Handouts:**

**Healthy Dancing**

**What to Wear**

**Celtic Folk Dance**

## Healthy Dancing

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Scottish Country Dancing is not only great fun; it is also good exercise. It promotes pleasant social interaction and aerobic activity, both important parts of good mental and physical health. As with any exercise, it is important to dance properly to maximize enjoyment and prevent injury. Dancing includes warming up before dancing and cooling down afterwards; it is also important to stay in good condition. Most dance injuries come from overuse of certain muscles, especially when combined with under-use at other times.

### Keep in Shape

Cardiovascular fitness : regular aerobic exercise, for example: brisk walking, aerobics, bicycling, cross country skiing, swimming, dancing. Your heart rate should be elevated for 15-20 minutes of continuous exercise (30 minutes including warmup and cool down), 3 times a week. It is better to exercise on alternate days (e.g., Saturday, Monday, Thursday); this allows the body time between sessions to strengthen and rebuild. Don't smoke.

### Warmup

Before dancing, warm up with light activity and stretching. Warmups increase blood and oxygen supply to the muscles, raise body temperature, relax muscles, increase coordination and prepare you to move.

1. Joint rotation facilitates motion by spreading synovial fluid to lubricate joints. Rotate toes, ankles, knees, legs, trunk/waist, neck, shoulders, elbows, wrists, fingers and knuckles.

2. Walk or move to raise muscle temperature and increase blood circulation before trying to stretch. If the weather is very cold, or if you are feeling very stiff, take extra care to warmup before you stretch.

3. Do slow, gentle stretches (no bouncing). Tense and relax muscles, then stretch again. Be sure to include arches, calves, and thighs in your stretching. Also stretch your torso, arms and hands. Work the tension out of your shoulders. Stretch gently and hold for 15-20 seconds; if it hurts, back off a little. While stretching, take slow, relaxed breaths from the abdomen, this improves circulation and helps relax your muscles and your mind.

4. End warmups with some gentle skip change and pas-de-basque to get your feet, legs and mind

into the swing of dancing. Gently move to the rhythm of the music, without trying for great extension or flight.

### Dance Properly

Good dancing habits go a long way toward preventing injuries. Make the following suggestions an automatic part of your dancing:

Maintain control of your body. Keep your center of mass over your feet, especially when turning or circling. Shoulders over hips, hips over knees, over ankles will help maintain balance, which not only prevents injuries and falls, but is also less fatiguing and presents a better form to the viewer.

Maintain good posture

Avoid rigid muscles. Use your arches, bent knee and leg muscles to land gently and absorb impact - especially for pas-de-basque.

Use good handing. When turning by one hand, point elbow down and maintain firm muscles.

Floppy arms can result in injury to the shoulder/arm. If you lose your balance, good arms can help keep you from falling. Avoid "thumb" injuries by not grasping your partner's hand with your thumb. Cup your hand and "glue" your thumb to the inside edge of your hand.

Turn out from the hip, not from the knee, to prevent knee problems.

Don't dance if you know you are tired.

Do not attempt movements beyond your ability. Strive to improve technique, but be aware of your body's limitations - if it hurts, back off a bit. Dancing involves movements and muscles that you may not have used much, so work into it gradually. If you can't do a 90° turnout, settle for 80. If your feet won't take a full pas-de-basque, cut down on the height, while maintaining the rhythm. Never skip "step practice." This is your chance to develop and maintain the technique that will keep you going.

Be sure your shoes fit snugly, but not tight. Wear cushioned insoles to help absorb the impact when landing. If your shoes are too slippery, spray the soles with nonskid, apply rosin, or roughen the sole by scraping it with a knife or rubbing it against a rough surface, such as cement.

Moistening the sole with a damp towel can also temporarily keep you from slipping.

Avoid wearing rings when dancing, especially ones with rough stones that can dig into your hand or scratch people you dance with.

Keep your toe and finger nails trimmed.

### Cool Down

After dancing, cool down. Light exercise reduces tightness, cramping and soreness of fatigued muscles and may make you feel better. The cool-down is similar to the second part of the warmup, but in reverse.

1. Gentle dance-type movements. Like the last part of the warmups, do gentle skip-change, or walk for 5 to 10 minutes after dancing.
2. Relaxed stretching, as in the warmups. Stretch each body part, giving special attention to ones used in dancing. Assume a position and hold it with another part of the body for 15-20 seconds.

If you are still sore the next day, doing some light exercise and stretching may help.

### Treating Minor Discomfort and Injuries

Even if you stay in shape and dance properly, you may occasionally experience discomfort. For minor discomfort, the following may help:

Cramps are usually caused by reduced blood flow to a muscle, and build up of lactic acid. This may indicate insufficient warmup or cool down. Massage, careful stretching, calcium (e.g., milk, or 2 Roloids or Tums), or potassium (eat oranges or bananas) may help relieve cramps.

For acute pain, cold often helps. Soak feet/legs in cool water after dancing or rub sore muscles with ice.

First aid for minor acute injuries, remember the word RICE:

Rest the injured body part.

Immobilize the area by wrapping with an elastic bandage.

Cold or ice for 20 to 30 minutes several times a day for two or three days. Wrap ice in a towel to protect skin or move ice "popsicle" over injured area.

Elevate the injured part above the level of the heart as often as possible.

Start immediately, to limit swelling and further damage. For major injuries, consult a physician.

### Exercises

The most common injury dancers sustain is damage to the cartilage in the knee and hip joints. Ankles are also vulnerable. Damage is less likely if the muscles around these joints are strong. These exercises can be used to strengthen them:

**Knees :** Tighten muscles in the front of the thigh (move kneecap), repeating ten or more times several times a day.

**Hips, knees and abdomen :** Sideways leg lifts. Regular leg lifts. Repeat ten times each.

**Ankles :** Sit on one chair and face another. With heels on the floor, push out with the feet against the inside of the legs of the second chair.

**Arches and backs of legs :** Put a catalogue or 2 inch thick phone book on the floor against the sink. Stand barefoot with your toes and the balls of your feet on the phone book and your heels turned out, extending over the edge, touching the floor. Lift your heels up as high as possible, coming up onto tiptoe on the book, and then bring your heels slowly back down to the floor again. Use your hands for balance only, if you can, or for support if you have to. Move your heels toward each other a little and repeat.

Retrieved July, 1999 from the World Wide Web: <http://www.tm.informatik.uni-frankfurt.de/strathspey/other/healthy.html>

## **What to Wear**

### **Clothing:**

Wear comfortable and non-binding clothing.

As you will become warmer as the dancing progresses, you may be most comfortable with a sleeveless or short sleeved shirt under a long sleeved shirt that you can take off.

Many people prefer dancing in jumpers or loose skirts.

### **Footwear:**

**It is essential that you have footwear for safety (no socks or bare feet).**

We will be beginning with Scottish Country Dances which are typically danced with a soft-soled shoe. If you do not have soft-soled shoes, light runners or street shoes will do. If you have foot problems, please wear something supportive.

During the fifth class, we will begin Irish Set Dancing, which are typically done in hard-soled shoes or comfortable dance shoes. Again, if your feet require it, wear shoes that are supportive.

Please wear shoes that are non-marking.

## **Celtic**

In the present day, the term "Celtic" has become synonymous with Ireland although the influence of Celtic culture can be found throughout Britain, Ireland, Man, Wales, Cornwall, Brittany in France, and Nova Scotia in Canada. For over five hundred years, before the spread of the Roman Empire, the Celts (known to the Romans as *Galli* and the Greeks as *Keltoi*) were a major cultural presence throughout Europe. The Celts spread from Germany and Eastern Europe southward through the Balkans and Italy, westward into France and Iberia and north through Britain (England and Scotland) conquering and dominating the local peoples. They even went so far as to sack Rome in 390 BC and Delphi in 297 BC. Celtic domination was terminated by Roman conquest, however, evidence suggests that Ireland remained untouched by the Romans and retained a Celtic identity well into the 5th century AD when Christianity spread into Ireland. In spite of exposure to and acceptance of the Christian faith much of this Celtic identity remains to this day. The Celts generated some of the ancient world's most beautiful pieces of decorative art with its characteristic animals, plants and spiral patterns.

The term Celtic also refers to a language group in the Indo-European family. The Celtic family of languages is divided into two branches - Insular Celtic languages and Continental Celtic languages. The latter was spoken throughout continental Europe, however, there are no living native speakers today. Celtic Insular languages are spoken throughout Britain, Ireland, Isle of Man and Brittany. While the last native speakers of Cornish and Manx have died, there are many native speakers of both Irish and Scottish Gaelic in Ireland, Scotland and Nova Scotia and Breton is spoken in Brittany.

## **Celtic Folk Dance**

According to Silver (1981) the function of a dance identifies it as folk dance. Folk dance differs from theatre or art dance in that the "participants of folk dance [are] physically involved in a communal activity" (p.4). Hanna concurs that folk dance includes communal expression. Active physical involvement as a part of a group is the key aspect of folk dance but not the only aspect. There is also a suggestion of ethnicity, or linkage to the sociocultural tradition of a group with a sense of identity based on origin.

Typically folk dances are done in various formations, such as open circles, closed circles, squares, lines, trios and pairs. Participants hold hands, have arms around each others waists, link shoulders, or link elbows. Dancers learn to hold their actions together with the rest of the group to create a unified whole. There are many opportunities for social interaction and dances frequently included changing partners.

The term, Celtic folk dance, includes but is not limited to, the *ceili* and country dances of the

Irish and Scottish people. Ceili (ceilidh) dances are simple popular dances commonly danced at parties and may be couple dances, round dances, line dances and progressive line dances. They are simple to learn and thus encourage participation by all.

Country dances include Scottish Country Dancing and Irish Set Dancing. Both share a common heritage in the country dances that were universally popular throughout Europe during the 18th century. These dances were danced in a characteristic double-line formation. In both countries the dances developed distinctive characteristics adapted to the local music. Scottish country dancing added reels of three and four. Reels, said to be of Celtic origin, are the oldest surviving Scottish Social dances and can be traced back to the 16th century. After the Napoleonic wars elements of French quadrilles and cotillions were incorporated into the country dances. This influence can be seen in modern day square sets.

Country dancing declined during the 19th century except in Scotland where it continued to flourish thanks to the tradition of dancing in Scottish regiments and the support of the nobility and gentry. In 1923 the Royal Scottish Country Dance Society was established to practice and preserve country dances as they were danced in Scotland. By the outbreak of world War I there was a 200 year old unbroken history of Scottish country dancing. Scottish Country Dancing is a living, growing tradition including both dances recorded in early manuscripts and modern day creations. Today there are over 7000 different dances catalogued, of which 1000 are of lasting non-local importance. Most dances are done in sets of four couples arranged in parallel lines although there are some dances that involve square sets and round the room dances. Dances are done to reel, jig and strathspey steps. Dances are done with poise and erect body carriage. The steps are precise and toes are pointed at all times. The French influence is seen in the ballet foot positions.

Less than twenty years ago very few Irish country set dances were danced or even heard of outside their own locality. The present day revival of interest in Irish Set Dancing is riding on the wave of renewed interest in Irish music and all things Irish. The Gaelic League, was founded in 1893, with the expressed purpose of creating a separate Irish culture. Their aims were admirable, but in their attempt to rid the country of all English influences, they banned all old surviving, traditional dances including round and country dances, quadrilles, and reels that were much like the Scottish dances of the time. By 1929, the Gaelic league Dance Commission was established in attempt to resurrect some of the dances. Again, in 1935, the Public Dance hall Act attempted to stamp them out. In spite of this ban, some of the set dances survived in parts of the country that held strongest to tradition. The unfortunate result of suppression is the fact that, of nearly 150 ceili and set dances danced today, only four have a record of being continuously used as a form of social dancing for the past century. Irish Set Dances are generally danced by four couples arranged on the sides of a square set. The dances are divided into several figures and performed to jigs, reels and hompipes. Footwork is flat footed but intricate and exact, avoiding the pointed toes and leaping

movements of ceili dancing.

## References

Harris, J.A., Pittan, A. & Waller, M.S. (1968). *Dance a while* (4th ed.). Minneapolis: Burgess Publishing.

Harrison, B. (1998). A brief overview of Irish dancing. Retrieved July, 1999 from the World Wide Web: <http://www.inex.net/~mardidom/rdance.htm>.

Hanna, J.L. (1988). *Dance and stress: Resistance, reduction and euphoria*. New York: AMS Press Inc.

Pierce, K.L. (1989). Retrieved July, 1999 from the World Wide Web: <http://www.greyhawkes.com/text/celts.txt>

Silver, J.A. (1981). *Therapeutic aspects of folk dance: Self concept, body concept, ethnic distancing and social distancing*. Doctoral Thesis. University of Toronto, Department of Education.

Spangenberg, L.L. (1997-99). Retrieved July, 1999 from the World Wide Web: <http://members.aol.com/lisala/celtfaq.html>

Wallace, M. (1996). *A short history of Ireland*. New York: Barnes and Noble Books.

Wangbickler, M. (1996-97). Retrieved July, 1999 from the World Wide Web: <http://www.celticcorner.com/>

**Appendix H**

**Celtic Dance Research Results - Sample**

**JA16JO - Celtic Dance Research Results**

**Speilberger's State Trait Anxiety Inventory (STAI)**, has been recommended by researchers as a good assessment of an individual's phenomenological experience of stress and is the most commonly used instrument used for psychological assessment in exercise and stress research.

STAI consists of 40 items (20 measuring state anxiety and 20 measuring trait anxiety).

**State anxiety (S)** is transitory and fluctuates over time according to personal and situational circumstances. **Trait anxiety (T)** is a "relatively stable and acquired behavioral disposition, often depicted as a personality trait" (Anshell, 1994, p.66). Research results consistently show a reduction in state anxiety accompanying exercise, however, there is disagreement as to whether or not exercise influences trait anxiety.

**Results:**

**State:**

Pretest I Group Mean	Post test I Group Mean	Pretest I Personal	Post test I Personal	Pretest II Group Mean	Post test II Group Mean	Pretest II Personal	Post test II Personal
34.8	27.6	26	26	31.38	26.25	23	22

**Trait:**

Pretest I Group Mean	Post test I Group Mean	Pretest I Personal	Post test I Personal	Pretest II Group Mean	Post test II Group Mean	Pretest II Personal	Post test II Personal
40	36.52	34	31	36.19	32.38	27	22

**Percentile Ranks - Normal Adult Women (Speilberger, 1983)**

%	Age 19-39		Age 40-49		Age 50-69	
	State	Trait	State	Trait	State	Trait
25	27	28	28	26.5	24	24
50	33.5	34	33	33	31	31
75	42	42	43	39.5	38	37
100	67	62	67	63	66	54