

HEALTH MESSAGES AND INSTRUCTIONAL PRACTICES: UNDERSTANDING THE
CONTENT AND DELIVERY OF HEALTH MESSAGES IN AEROBIC CLASSES FOR
WOMEN

by

MICHELLE LEE D'ABUNDO

(Under the Direction of Laura L. Bierema)

ABSTRACT

The purpose of this study was to understand the content and delivery of health messages in aerobic classes for women. This study applied a theoretical framework influenced by principles from adult learning and instruction, critical and feminist theory, and health education. This qualitative research explored the practices of five aerobic instructors working at nonprofit or wellness focused facilities using information gathered from interviews and participant observations. Three major conclusions were reached in this study involving the health messages in classes and the instructional practices of aerobic instructors. First, there was a limited amount of general, preventative health information conveyed by aerobic instructors that was predominately focused on physical health with little attention paid to intellectual, emotional, social, spiritual and environmental health. The second conclusion was that there were contradictory messages of health, aesthetics, and women's physicality conveyed by aerobic instructors. Finally, aerobic instructors used instructional techniques that included teacher, content and learner centered methods.

Despite the nonprofit and wellness based environment of the exercise facilities in this research, there was still an over emphasis on the physical aspect of aerobic classes. Therefore, the potential wellness-related benefits of aerobic classes for women especially in environments that identified themselves as wellness facilities were diminished. In order to create a “healthy aerobics classroom,” information and recommendations about adult education techniques and wellness focused orientations discussed in this research must be applied to aerobic classes for women.

INDEX WORDS: Adult education, Adult instruction, Health education, Learner-centered instruction, Wellness, Mind and body learning

HEALTH MESSAGES AND INSTRUCTIONAL PRACTICES:
UNDERSTANDING THE CONTENT AND DELIVERY OF HEALTH MESSAGES IN
AEROBIC CLASSES FOR WOMEN

by

MICHELLE L. D'ABUNDO

B.A., American University, 1995

M.S., University of North Florida, 1998

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2004

© 2004

Michelle L. D'Abundo

All Rights Reserved

HEALTH MESSAGES AND INSTRUCTIONAL PRACTICES:
UNDERSTANDING THE CONTENT AND DELIVERY OF HEALTH MESSAGES IN
AEROBIC CLASSES FOR WOMEN

by

MICHELLE LEE D'ABUNDO

Major Professor:	Laura L. Bierema
Committee:	Ronald M. Cervero Sarah K. Fields Juanita Johnson-Bailey Sharan B. Merriam

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
May 2004

DEDICATION

To my family

Carol, Anthony, and Denise,

your love and support have been the most influential force in my life.

ACKNOWLEDGEMENTS

I would like to thank all of the people that influenced and contributed to this research including: Dr. Laura Bierema, soon-to-be Dr. Tuere Bowles, Dr. Ron Cervero, Dr. Sarah Fields, Dr. Juanita Johnson-Bailey, soon-to-be Dr. Candice Hollenback, Dr. Sharan Merriam, Dr. Kim Oliver, and Dr. Tom Valentine. I would also like to thank my mentor, Dr. Pamela Chally, who provided so many opportunities for me to learn and gain experience in the academic setting.

I would also like to thank my family and friends who each played a role in getting me to this point. Carol, my best friend and mother, has passed on her love and respect for education to me. My mother is the wisest, most talented and loving person I know. My father, Anthony, has taught me the value of hard work, respect for others, and the importance of family. As a child, my sister, Dr. Denise D'Abundo, inspired me with her intelligence and individuality. Today, I am inspired by her strength and compassion. Finally, thank you to Lee Hall, my home away from home.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	v
LIST OF TABLES	vi
1 CHAPTER ONE: BACKGROUND OF THE PROBLEM	1
Introduction	1
Problem Statement	11
Purpose of the Study	12
Significance of the Study	12
Definition of Terms	14
2 CHAPTER TWO: REVIEW OF THE LITERATURE	15
Introduction	15
Women's Health	16
Physical Activity and Health	20
Women's Physical Activity	28
Critical Perspectives of Women's Physical Activity	36
Aerobic Classrooms	49
Adult Education and Instruction	57
Chapter Summary	71
3 CHAPTER THREE: METHODOLOGY	75
Design of Study	75

Sample Selection	78
Data Collection	81
Data Analysis	87
Pilot Study	88
Validity and Reliability	89
Researcher Bias and Assumptions	91
4 CHAPTER FOUR: PARTICIPANT AND CLASS DESCRIPTIONS AND	
FINDINGS	94
Aerobic Instructor Participants and Aerobic Class Descriptions	95
Findings	112
Health Messages	113
Instructional Practices	138
5 CHAPTER FIVE: CONCLUSIONS, DISCUSSION, AND	
RECOMMENDATIONS	155
Conclusions and Discussion	155
Recommendations for Practice	188
Future Research	195
Conclusion	196
REFERENCES	199
APPENDICES	210
A APPENDIX A INTERVIEW GUIDE	211
B APPENDIX B CONSENT FORM	212
C APPENDIX C PARTICIPANT INFORMATION	213

LIST OF TABLES

	Page
Table 2.1: Summary of Theories and Models Used in Physical Activity Research.....	27
Table 4.1: Aerobic Instructor Demographics.....	96
Table 4.2: Instructional Practices and Messages	113

CHAPTER ONE

BACKGROUND OF THE PROBLEM

Introduction

Exercise is a powerful medium to positively affect women's mental and physical health. However, the Surgeon General's Report on Physical Activity and Health states that 60% of adult women do not get the recommended amount of physical activity, while more than 25% participate in no physical activity (Women's Sports Foundation, 2002). Statistics show that 33% of women in the United States are considered obese by body mass index (BMI) standards as established by the government (National Center for Health Statistics, 2002). In addition to obesity, out of 144 million women in the United States (US Census Bureau, 2002) an estimated 7.2 million American women are victims of eating disorders (The National Association of Anorexia Nervosa and Associated Disorders, 2002). Obesity, inactivity, and dietary restriction result in unhealthy lifestyles that affect the quality of life for American females. The irony of such health issues for women is the disparity between poor health and the amount of time, money, and energy spent in the pursuit of wellness.

The World Health Organization (WHO) defines health as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 2003, ¶ 1). The National Wellness Institute defines wellness as "an active process of becoming aware of and making choices toward a more successful existence" (The National Wellness Institute, 2003, ¶ 1). Wellness includes attention to social, occupational, spiritual, physical, intellectual and emotional

factors affecting people's lives (The National Wellness Institute, 2003). The Office of Women's Health states that "A woman's health reflects both her individual biology and her sociocultural, economic, and physical environments. These factors affect both the duration and the quality of her life" (United States Department of Health and Human Services, 2001, ¶ 2). The health of women in the United States is not only related to the state of the body, but affected by many factors including gender, race, class, ethnicity, religion, access to medical care, occupation, family, and lifestyle. In fact, "Most of the health care burden in the United States stems from chronic illness, more than half of which may be related to lifestyle and behavioral factors" (United States Department of Health and Human Services: Office of Women's Health, 2001, ¶ last paragraph). Therefore, women's health issues reflect the intersection of social, economic, environmental, and biological factors in women's lives.

Exercise is a key factor in creating and maintaining the health of women. The physical benefits of exercise include reduced risk of high blood pressure, heart disease, and diabetes; development and maintenance of bones, muscles, and joints; weight control; and reduced body fat (United States Department of Health and Human Services: Office of Women's Health, 2003). The mental benefits of exercise include stress reduction, decreased feelings of depression and anxiety, and increased psychological well-being (United States Department of Health and Human Services: Office of Women's Health, 2003). Despite the mental and physical benefits of exercise, many females are not participating in physical activity resulting in negative health consequences for American women.

Improvements in women's health may be accomplished through prevention via health education conducted in many settings including universities, schools, hospitals, community centers, and worksites. Health education is defined in many ways and encompasses a wide variety of activities including disease prevention, treatment, rehabilitation and long-term care (Glanz, Lewis, & Rimer, 1990). The WHO (2004) describes health education:

Health education involves the communication of information concerning the underlying social, economic and environmental conditions impacting on health, as well as individual risk factors and risk behaviours, and use of the health care system. Thus, health education may involve the communication of information, and development of skills that demonstrates the political feasibility and organizational possibilities of various forms of action to address social, economic and environmental determinants of health. (p. 14)

This definition reflects a critical perspective of health education that is not always evident in health education programs and instruction.

Health education initiatives often focus on exercise. However, few health education efforts promoting exercise for women are informed by critical issues of gender, health, and learning. Program design and instruction in health education may be improved for women through the application of adult education techniques and strategies that recognize social, economic, and environmental determinants of health and learning. Linkages of social issues with learning may occur through increased awareness of facilitators and learners. Hart (1990) suggests creating an environment of learning with attention to gender, experience and knowing:

an analysis of sexual oppression, a grounding of this analysis in everyday experience, and a structure of analysis that calls for reciprocal, interactive relationships among knowers who are linked by common experiences, as well as between knowers and their object of knowing. (p. 48)

With attention to gender, efforts informed by adult education may influence health education by improving instructional strategies used to teach women about health and physical activity.

With all the benefits associated with exercise for women, it seems natural that society would accept and encourage women's participation in physical activity. Throughout history, however, women have struggled to gain access to the male-dominated realm of sport and physical activity. Progress has been made regarding women's access to sport. In 1972, Title IX was enacted prohibiting sex discrimination in educational programs of all kinds including sport activities (Greendorfer, 1998). As a result, opportunities for girls and women to participate in sports have increased. However, current attempts to downsize Title IX demonstrate a backlash against women's participation in sport. This backlash may be explained by the role sport plays in maintaining gender roles.

The ideological control of women in sport assists in maintaining patriarchal hegemony where male dominance is the norm (Birrell & Theberg, 1994; Bryson, 1994; Willis, 1994). Guthrie and Castenuovo (1994) explored how ideologies of women's physicality are related to the oppression of women through socialization of inferiority, helplessness, and vulnerability. Cole (1994) describes the ideological power of sport in culture: "Sport remains a particularly powerful ideological mechanism because it is

centered on the body, a site of semiotic condensation whose manifest meaning is intimately bound to the biological” (p. 15). In other words, biological differences deeming men’s bodies better equipped for physical activity are used to discourage women’s participation and achievement in sports.

Women’s participation in sport is influenced by societal norms of femininity and beauty. Requirements of femininity include passivity, dependence, nurturing and attention to appearance. Sport is often associated with masculine traits like strength, power, and domination (Lenskyj, 1986). If girls and women conform to behaviors viewed as feminine, they would not be prepared or encouraged to participate in physical activity and sport.

Attention to appearance promoted by femininity is explained by Bordo (1995) who details how women are socially motivated to constantly partake in self-modification through disciplines of diet, makeup, and dress. With much of women’s time and effort focused on modification of appearance, Bordo says women “are rendered less socially oriented and more centripetally focused on self-modification” (p. 166). In other words, women are socialized to base their worth on their appearance, rather than on their mental, physical, and social capabilities. Krane (2001) discusses how women’s athleticism is affected by social expectations of femininity. For example, in competitive body building, women are judged based on their ability to build muscle while conforming to social definitions of femininity such as having breasts, and attending to make-up, hair, and clothing.

The effects of ideologies of femininity are apparent in the underrepresentation, trivialization, and sexualization of women’s physical activity. Research has documented

how the physical activity of women is discounted by society through unequal amount and quality of coverage of women's sports (Duncan, Messner, Williams, & Jensen, 1990; Birrell & Theberge, 1994; Eastman & Billings, 2000; Messner, Duncan & Cooky, 2003). Sports commentary often trivializes female athletes by focusing on physical appearance, family structures, and relationships. The sexualization of women's participation in sport is perpetuated by the media and society through emphasizing physical appearance and femininity (Birrell & Theberge, 1994; Lensky, 1986; MacNeil, 1994; McDonald, 2000; Messner, Duncan & Cooky, 2003). For example, female athletes are more often pictured with make-up in poses emphasizing their femininity rather than in action sport shots.

Next to walking, aerobic classes are the second most popular form of exercise for American women with 23 million women participating per year (National Sporting Goods Association, 2001). The popularity of aerobics may indicate that participation in aerobic classes is a socially acceptable way for women to be physical active. Therefore, participation in aerobic classes seems to be "sport" for women.

The experience for women in aerobic classes is influenced by a number of factors including the environment, the instructor and the learner. The environment is determined by the frame of the organization, the physical surroundings and the social setting of the class. All of these factors contribute to the experiences of the aerobic instructors and class participants in aerobics classes. Based on the environment, aerobic classes may be a comfortable place for women to be physical. However, the aerobic classroom can also be an exclusive and uncomfortable environment for women where Western ideologies of femininity and appearance are promoted and reproduced. By focusing on aesthetic outcomes, like weight loss and toning, exercise classes with an aerobic orientation such

as step, high-lo, or interval classes may reinforce societal expectations of appearance for women.

Sport sociologists and feminists have criticized the fitness industry, especially aerobic classes, as “practices that can promote objectification, fragmentation, and heterosexualization of women’s bodies” (Birrell & Theberg, 1994, p. 352). Haravon (1995) discusses how health messages are often hidden by the aesthetic focus of aerobic classes: “It is significant that this form of exercise [aerobics] is not seen purely as a means to improve health. The effect of aerobics on personal appearance is equally, if not more, important to many exercisers” (p. 25). Mutrie and Choi (2000) ask “whether aerobics truly empowers women, or whether it in fact enslaves us” (p. 544). In reference to aerobic classes, they believe there are “physical and psychological benefits that long-term adherence brings...it can be potentially enslaving through extrinsic motivations, such as beauty related outcomes and exercise to benefit others” (p. 548).

With so much attention to “outward” appearance, people often forget the physical and mental benefits resulting from exercise. While aerobic classrooms most often focus on aesthetics, some aerobic instructors recognize the need to emphasize the health benefits of exercise. As Johnson (2002) describes, “A woman with a healthy heart, expansive lung capacity, and strong thighs can run farther and faster, hike higher and longer—live more exuberantly. Being fit can contribute to women’s long-term health and happiness” (p. 49). Aerobic classrooms may benefit by shifting from an aesthetic orientation to focusing on the health of participants.

Findings in research about the effects of participation in aerobic classes for women were similar. Research has shown contradictions between aesthetic focus and

physicality (Loland, 2000; Maguire & Mansfield, 1998; Markula, 1995; McDermott, 2000; Haravon, 2002). A quote from Maguire and Mansfield (1998) summarizes the contradictions “The women interviewed intended to empower themselves via their exercise experiences but found themselves subject to the unintended consequences of confirming to social norms” (p. 135). Loland’s (2000) research disclosed similar findings, but in reverse order where women initially participated in aerobic classes to improve their bodies rather than to empower themselves. Loland (2000) found “Several of the women felt empowered and in a position to challenge traditional femininity ideals in terms of bodily appearance and use” (p. 111). Overall, research found that aerobic classrooms are both reproductive and resistant to social ideologies of femininity and appearance for women.

Research (Haravon, 2002) indicates the potential of aerobic classes to be resistant to social ideologies. Costa and Guthrie (1994) discuss empowerment and oppression in terms of resistance and transformation. They support the notion that women’s physical activity is a site of both resistance and transformation of gender inequalities. Resistance, where people in disempowered societal positions refuse to submit to the status quo, occurs when learners and instructors challenge sexist, racist, and power issues occurring both intentionally and unintentionally in learning environments (Hayes, 2000). Resistance in aerobic classrooms is illustrated by research examining feminists who participate in aerobic classes and how they practice agency in an environment deemed oppressive to women (Haravon, 2002).

The reproduction of social ideology in the aerobic classroom may be challenged through transformation or social change. Brooks (2000) explains transformation as a

narrative process where both personal and societal levels are considered. The instructor and learner must think critically and share experiences grounded in emotional, spiritual, and physical change with consideration to the past and the future. Haravon (2002), an aerobic and hatha yoga instructor, discusses transformation:

The extent to which these feminist aerobic participants disrupt or inconvenience gender roles or the structure of their aerobic classes may be minimal, but it exists nonetheless. Furthermore, the mere presence of feminist consciousness in an aerobics class affects the way the messages in class are received and interpreted by the feminist participant. (p. 107)

Haravon's belief that aerobic classes have the potential to be empowering is in agreement with Costa and Guthrie's (1994) argument that sport can be a catalyst for gender equality in society through economic and cultural struggle leading to change.

Even though some instructors and participants are aware of the oppressive aspects of aerobic classes, it seems the majority of aerobic instructors whether consciously or unconsciously continue to perpetuate social ideals of femininity and beauty while failing to promote messages of health in their classes. Johnson (2002) writes that as a feminist and an aerobics instructor "I've struggled to reconcile my feminist politics with my involvement in an industry that feminists have (rightly) criticized for helping create toxic, unobtainable representations of women and encouraging downright unhealthy behavior" (p. 50). Veldez (1995), a former aerobics instructor, concurs with Johnson "I knew better than to encourage women's obsession with their appearance, including my own" (p. 15). Veldez recognized how aerobics classes create, support and reinforce social ideologies:

It was a great relief to finally recognize the female obsession with thinness and fitness as an extension of the hurt we suffer at the hands of patriarchal society, a society that even convinces us to hurt ourselves, so that we are kept from the real business of our lives. (p.19)

As illustrated by Haravon (1995, 2000), Johnson (2002) and Veldez (1995), some aerobic instructors recognize their power in the creation and resistance to social ideologies of appearance and femininity for women participants. Haravon (1995) believes women can be empowered in aerobic classrooms by incorporating feminist pedagogy, a style of teaching and learning attending to gender, feminist theory, and position in the educational process (Maher & Tetreault, 2001). Haravon (1995) uses feminist pedagogical instructional strategies such as increasing comfort, creating interaction, and encouraging personal expression in the aerobic classroom. Tisdell (1998) discusses how she applies feminist pedagogy to create and maintain empowering learning environments for women:

My goal is to create activities that will help participants explore the connection between who they are as individuals and the structural systems of privilege and oppression (such as gender, race, and class) that partially inform how they think, how they teach and learn or construct knowledge on an individual level, and inform what is constructed as the “canon” or “official knowledge base” of a particular field. (Tisdell, 1998, p. 139)

Current aerobic classes may be negatively affected by contradictions of aesthetic focus and physicality. Those contradictions may be particularly damaging to women who do not prescribe to or fit societal standards of femininity and beauty. Negative

experiences in aerobic classes may result in poor self-image, distorted views of health, pressure to conform to social norms of appearance, and negative views of physical activity. However, instructional strategies that promote health, community, and learning in aerobic classrooms may create a more inclusive, effective, and empowering experience for women.

Problem Statement

With 23 million women participating in aerobic classes per year (National Sporting Goods Association, 2001), a large percentage of North American women are being socialized to pursue aesthetic outcomes rather than the health benefits of exercise. The aesthetic focus of aerobic classrooms is perpetuated by aerobic instructors who promote beauty-related outcomes with little attention to mental and physical health. While many studies have examined the effects of aerobic exercise, much less research has explored aerobic classes. Participation in aerobic classes may result in mental and physical benefits for some women. However, research has shown contradictions between aesthetic focus and physicality that may send confusing and damaging messages to women. In literature reviewed, no studies were found that examined perhaps the most consequential aspect of aerobic classes-- the health messages conveyed in aerobic classrooms by aerobic instructors.

Little research has explored the instructional practices of aerobic instructors in aerobic classes for women. The integration of health messages in aerobic classrooms via instructional strategies informed by adult education may create a more inclusive, empowering, and effective environment for female learners.

Purpose of the Study

The purpose of this study is to understand to content and delivery of health messages in aerobic classes for women. The following research questions will guide this study:

1. What health related messages are conveyed by instructors in aerobic classes for women?
2. How do health messages shape the environment of aerobic classes?
3. What cultural and aesthetic messages are conveyed by instructors in aerobic classes for women?
4. What instructional techniques do aerobic instructors use to convey health messages in classrooms?

Significance of the Study

The practical application of this study will be how instructors can change strategies and practices perpetuating social ideologies of femininity and beauty by incorporating health messages in aerobic classes for women. Information about current aerobic instruction may inform how aerobic classrooms can be more inclusive and empowering for women. Improved instruction in aerobic classrooms may enrich the experience of participants resulting in improved exercise adherence, mental and physical health for women.

This study will advance two areas of literature: adult education and health education. This research will contribute to an often neglected topic in adult education: the instruction of women in non-formal learning environments. The context of this project is unique, because physical activity has traditionally been associated with

masculinity. Thus, the setting of the aerobic classroom, where women's physicality is the subject, provides a rich context for research where social, physical, and mental factors interface. Perhaps, the most salient aspect of this project is that non-formal educational settings such as aerobic classes can be sites of social change.

While sites of health education include public, private, corporate, school, and college classrooms, health education seems to have overlooked an obvious site of promoting health: the aerobic classroom. Rather than learning about health, students are more likely to learn about social ideals of femininity and beauty. Consequently, this project will support the need for the expansion of health education contexts to include aerobic classrooms.

Despite the paucity of health messages in aerobic classrooms, the fitness and aerobic industry is categorized under the field of health. Issues examined in this work will provide needed information about health to be used for education and consciousness-raising of the fitness industry, aerobic instructors, participants, and women in general.

Finally, the information produced in this study has both theoretical and practical applications for program planners in health education. Social, physical, mental, and environmental issues are addressed in program planning models in health education. However, health education often lacks the critical perspective needed to understand how women's health is affected by social norms. The critical perspective of this work may inform program planning in health education by providing insight about how to effectively communicate health information to women in non-formal settings like aerobic classrooms.

Definition of Terms

The definitions included are important to understanding this research:

Aerobic classes- Group exercise experiences with an aerobic (to increase oxygen consumption) orientation such as step, high-lo, or interval classes.

Aerobic instructor- Fitness professionals that lead exercise classes with an aerobic orientation.

Aesthetics- the art and theory of beauty.

Feminist pedagogy- a style of teaching and learning attending to gender, feminist theory, and positionality in the educational process (Maher & Tetreault, 2001).

Health- a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 2003, ¶ 1).

Non-formal education- learning and instruction conducted outside of traditional educational institutions.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

The majority of American women are not participating in any type of physical activity. Sedentary lifestyles negatively affect the health of women and exclude them from the potentially empowering effects of physical activity. Many women who are participating in physical activity are motivated by the pursuit of beauty with little consideration to the health benefits of exercise.

Participation in physical activity for health reasons may resist social ideologies that lead to the restriction of women's bodies. Exercise for self-modification creates tendencies toward restriction of women's behaviors as seen in disorders with biological and social etiologies such as eating disorders. Less emphasis on physical modification for aesthetic outcomes may enrich women's experiences with physical activity resulting in increased exercise adherence and improved health outcomes. In the larger context, exercise in the pursuit of beauty perpetuates ideologies of femininity that create standards of appearance and behavior leading to negative social, economic, physical and mental effects for women.

The second most popular form of exercise for American women is participation in aerobic classes. Research indicates there are positive effects of participation in aerobic classes for women. However, aerobic classes are also marred by contradictions between aesthetic focus and physicality. Some aerobic instructors promote an aesthetic focus through the promotion of body modification thus reproducing norms of femininity and beauty. Rather than reinforcing contradictions between aesthetic focus and physicality,

aerobic instructors could alter their practice by sending more constructive and positive messages of health to their students.

The purpose of this study is to understand how aerobic instructors convey health related messages in aerobic classes for women. This information may provide guidance for the creation of a healthier, more empowering environment for women's participation in aerobic classes. This chapter focuses on five areas: women's health, physical activity and health, women's physical activity, aerobic classes, and adult education and instruction.

Women's Health

Most people would agree that health is not merely the absence of disease, but rather, encompasses physical, spiritual, social, emotional, and intellectual states of human beings (Lawson, 1992). However, in the past there was a very limited view of women's health that was primarily associated with reproductive health. The availability of birth control served as a catalyst for social change in women's health. A report by the Office of Women's Health (2002) summarizes the changes in concepts of health for women:

By the last decade of the century, the definition of women's health had expanded to include many other social, legal, medical, and economic issues. Topics such as stress, violence, poverty, and discrimination began to find their place within debates and discussions about women's health. Women were also more likely than men to be victims of child abuse, domestic violence, and gender discrimination, problems that were increasingly recognized as public health issues. (p. 1)

Concepts of women's health have changed to be more inclusive as displayed by current priority health issues for women: heart disease, cancer, stroke, chronic obstructive pulmonary disease (COPD), HIV/AIDS, autoimmune disease, mental illness, substance abuse, smoking, violence, reproductive health, environmental health, chronic disabling conditions, and disease prevention/health promotion (United States Department of Health and Human Services: Office of Women's Health, 2001). Even though the definition of women's health is more inclusive, issues of access to optimal health exclude many American women who face personal and structural barriers to health.

Barriers to Women's Health

Women encounter barriers to achieving health that are often influenced by socioeconomic issues, health research, and access to health information. Women with less than a high school education, those living in poverty, and minority women have shorter life spans, higher rates of illness, injury, disability, and death (Office of Women's Health, 2001). Access to health insurance also affects women's health. In 1998, 18 % of women under the age of 65 were uninsured (Office of Women's Health, 2001). Socioeconomic related issues such as women's roles as caregivers also influence the health of women.

Women are more likely to be caregivers leading to responsibilities that include work outside and within the home. The intersection of personal and societal expectations of women is displayed by stress in the workplace:

Gender-specific work stress factors, such as sex discrimination and balancing work and family demands, may have an effect on women workers above and

beyond the impact of general job stressors such as job overload and skill underutilization. (National Institute for Occupational Safety and Health, 2000, ¶ 7)

The expectations of traditional gender roles is complicated by public responsibilities affecting the physical and mental wellness of women (Rosenfield, 2001).

Medical research has neglected to include women and minorities as participants. A report by the Department of Health and Human Services' Secretary's Task Force on Black and Minority Health indicating disparities regarding disease prevalence, progression, and health outcomes was the catalyst for the creation of the Office of Research on Women's Health (National Institute of Health, 1997). As a result, guidelines were established for all National Institute of Health (NIH) funded research that required the inclusion of women and minorities. There are still fewer long-term population studies focusing on women's health than on men's health in the United States. Consequently, most medical treatment for women is based on research conducted with male participants (Rosenfeld, 2001). Bias in medical research negatively affects healthcare and outcomes for women.

Another barrier to women's health is treatment in health care. With advancements in healthcare, medical procedures, research, and increased knowledge about nutrition, exercise, and health behaviors, it seems improvements in healthcare for women would be made. However, based on gender, women receive unequal treatment from healthcare providers that reflect bias in medical research. Access to healthcare is complicated for women:

Compared with the treatment given to men, health providers may give women less thorough evaluation for similar complaints, minimize their symptoms,

provide fewer interventions for the same diagnoses, prescribe some types of medications more often, or provide less explanation in response to questions.

(Office of Women's Health, 2001, ¶ 2)

Health professionals such as doctors, allied health practitioners, and health educators may do a poor job of disseminating information about health. Distribution of health information to the public is difficult and in many cases an unsuccessful task as displayed in this quote:

An ever-increasing knowledge base gained through research about health, health practices, and health promotion strategies tends to remain isolated, fragmented, and stripped from its broader ecological context. Paradoxically, most health problems (e.g., eating disorders, obesity, substance abuse, stress) are multidimensional, raising serious doubts about the import of the unidimensional research perspectives found in each subject field or “discipline”. (Lawson, 1992, p. 108)

The lack of communication among patients and practitioners may negatively affect health outcomes for women.

In summary, education, poverty, race, lack of health insurance, bias in medical research, and access to health care information are factors that interface with gender to create health disparities for women in the United States. Such social, biological, economic, and environmental factors affect health and influence the mental and physical experiences of women in society. The health of women affects all aspects of their lives including education, work, and leisure. This paper focuses on how health is affected by women's physical activity. The relationship between physical activity and health will be

summarized to provide support for the promotion of health messages into aerobic classrooms.

Physical Activity and Health

The definition of physical activity is “bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above the basal level. Physical activity can be categorized in various ways, including type, intensity, and purpose” (U.S. Department of Health and Human Services, 1996, p. 20). Physical fitness is defined as “the general capacity to adapt and respond favorably to physical effort” (Hoeger & Hoeger, 2002, p. 9). Exercise is defined as “A type of physical activity that requires planned, structured, and repetitive bodily movement done to improve or maintain one or more components of physical fitness” (Hoeger & Hoeger, 2002, p. 3). The terms exercise and physical activity can be used interchangeably. However, physical activity usually describes leisure activities such as gardening, or dancing, while exercise describes activities such as walking, jogging, aerobics, and strength training that are most often used to obtain physical fitness (Hoeger & Hoeger, 2002). Both physical activity and exercise fall into the category of sport defined as “an active pastime” (Webster’s II, 1984).

Physical fitness is usually categorized as endurance or muscular activity. Endurance describes cardiorespiratory fitness and is also referred to as aerobic capacity. Aerobic refers to the maximal oxygen consumption (VO₂ max). Common aerobic exercise include participation in aerobic classes, walking, and biking. Muscular fitness includes activities that emphasize strength, flexibility, balance and coordination (U.S. Department of Health and Human Services, 1996). Exercise deemed as muscular fitness

include weight lifting, yoga, and sculpting classes. Both endurance and muscular fitness are recommended to achieve optimal health.

Recent exercise recommendations say people should participate in some type of physical activity each day. For optimal benefits, especially for cardio-respiratory health, people should engage in at least 30 minutes of moderate intensity exercise such as fast walking most days, if not daily. It is also recommended that some type of muscular fitness be included in exercise routines. Health benefits increase with intensity and frequency of physical activity and exercise (U.S. Department of Health and Human Services, 1996). Therefore, it is advisable to find a physical activity that can easily be done each day.

The health benefits associated with an active lifestyle are lower mortality rates for younger and older adults. The top three leading causes of death among women are heart disease, cancer, and cerebrovascular diseases (stroke) (Madlon-Kay, 2001). Participation in physical activity reduces the risk of developing many diseases. In fact, “For adult females, the greatest public health challenges are in increasing physical activity, reducing obesity, and obtaining immunizations” (Maiese, 2002). The prevalence of sedentary lifestyles in Americans contributes to disease resulting in public health burdens.

Even though coronary heart disease (CHD) is most often associated with men, it is the number one killer of women in the United States. Heart attacks are more deadly for women, because symptoms of heart attacks are different for women and men resulting in misdiagnosis for women (Office of Women’s Health, 2001). Heart disease may be prevented by discontinuing the use of tobacco, lowering cholesterol and blood pressure, and by increasing physical activity (Madlon-Kay, 2001). Studies indicate that physical

activity reduces the risk of heart disease and mortality from CHD (U.S. Department of Health and Human Services, 1996).

The second most prevalent cause of death for women is cancer. Lung cancer kills the most American women followed by breast cancer and colorectal cancer (Office of Women's Health, 2001). Modifiable risk factors associated with cancer are use of tobacco, poor nutrition, alcohol consumption, and occupational exposure (Madlon-Kay, 2001). Studies indicate physical activity reduces the risk of colon cancer, while results from studies of physical activity and breast and prostate cancer are inconsistent (U.S. Department of Health and Human Services, 1996).

Cerebrovascular disease or stroke is the third leading cause of American women. Stroke occurs when blood flow to the brain is prevented. In the United States, women account for 61% of deaths from stroke (Office of Women's Health, 2001). Modifiable risks associated with stroke are high blood pressure, use of tobacco, and high cholesterol (Madlon-Kay, 2001). Studies are inconclusive regarding the relationship of physical activity and stroke (U.S. Department of Health and Human Services, 1996). However, exercise does help to prevent and control high blood pressure and high cholesterol, which are contributing factors to stroke.

Exercise positively affects health factors such as high blood pressure and high cholesterol. High blood pressure is considered a systolic pressure (upper number) of 140 mmHg or greater or diastolic pressure (lower number) of 90 mmHg or higher. While rates of high blood pressure are declining, 20.8 % of American women are still affected. At 33.8% black women have higher rates of high blood pressure, than white women (19.3%) (CDC Fact Book, 2000/2001). Participation in physical activity prevents or

delays high blood pressure, while reducing blood pressure in adults with existing hypertension (U.S. Department of Health and Human Services, 1996).

The measure of high cholesterol is greater than or equal to 240mg/dL. About 20% of black and white women in the United States experience high cholesterol (CDC Fact Book, 2000/2001). As cited in Jaffe (2001), a study by Greendale, Bodin-Dunn, Ingles, Haile, and Barrett-Connor showed that exercise elevates HDL and lower LDL levels. Research indicates that exercise is an important strategy to prevent and manage high cholesterol and blood pressure.

Physical activity has positive effects on other diseases. Because exercise maintains muscle, joint structure, and function, it may be beneficial to women with arthritis and may prevent osteoporosis by promoting skeletal development (U.S. Department of Health and Human Services, 1996). Physical activity is also associated with the prevention of diabetes (U.S. Department of Health and Human Services, 1996).

Obesity is a condition that contributes to heart disease, cancer, and stroke. People with BMI scores greater than 30 are considered obese. As women age, rate of physical activity falls and obesity rises. In fact, 18.5% of women ages 20-34 years of age are obese, while 33.7% of women ages 55-64 are considered obese (Maiese, 2002). Sedentary lifestyles along with poor nutrition contribute to obesity in the United States. Exercise is positively associated with the reduction of body fat (U.S. Department of Health and Human Services, 1996) and is “the only nonpharmacological method of effective weight control and prevention of obesity” (Jaffe, 2001, p. 94). Physical activity as a strategy to manage weight in obese women may be less costly, and have fewer risks than pharmaceutical treatment, diet restriction, or medical procedures.

Mental health affects the quality of life and the physical wellness of many American women. In fact, depression affects 12 % of women which is almost twice the rate of depression in men (CDC Fact Book, 2000/2001). Women have higher rates of anxiety, panic, and phobias (Office of Women's Health, 2001). Women's participation in physical activity improves symptoms associated with depression, reduces stress and anxiety, and enhances mood (Jaffe, 2001). Participation in exercise may be a less costly endeavor than other treatments for less severe mental health issues.

In addition to the physiological and mental effects of exercise, Jaffe (2001) suggests there are social benefits for women who are physical active. Jaffe says physical activity is empowering by creating greater independence and self-sufficiency for women who exercise. She also believes participation in physical activity increases social and cultural networks for women. However, research about the effects of physical activity on self-esteem indicates both positive and negative outcomes related to socially defined gender roles (Krane, Waldron, Michalenok & Stiles-Shipley, 2001; Richman & Shaffer, 2000). The results of research about physical activity and body image are also mixed and influenced by social norms and context (Flintoff & Scranton, 2001; Kennedy & Reis, 1995; Vogel, 2000). The social consequences of physical activity for women will be further explored in the *Critical Perspectives of Physical Activity* section of this paper.

The three leading causes of death for women in the United States are related to health behaviors that may be modified to achieve better health outcomes. All three diseases or contributing conditions are positively affected by physical activity. Despite the mental and physical benefits of exercise, many females are not participating in physical activity. The Surgeon General's Report on Physical Activity and Health, says

60% of adult women do not get the recommended amount of physical activity, while more than 25% participate in no physical activity (Women's Sports Foundation, 2002). The prevalence of sedentary lifestyle of American women is influenced by social, biological, psychological, and environmental factors.

Theories and Determinants of Physical Activity

In order to increase exercise adherence and improve women's experiences with physical activity in America, it is important to understand the factors involved in physical activity for women. The field of health education has explored physical activity through many theoretical perspectives. Social-cognitive theory such as the health-belief model, self-efficacy theory, the theory of reasoned action have been used to “explain individual differences in the propensity to adopt to social behavior such as exercise” (Godin, 1994, p. 129). The health belief model explores exercise adherence relating to the individual's desire to prevent disease or to improve health (Godin, 1994). In self-efficacy theory and theory of reasoned action, the decisions are not tied to health, but are made based on attitudes, perceived barriers and past behaviors (Godin, 1994).

Perhaps the most popular theory used to address physical activity is the Transtheoretical Model or Stages of Change theory. This model consists of six stages including precontemplation, contemplation, preparation, action, maintenance, and termination/adoption (Prochaska & Marcus, 1994). The progression of a person's behavior modification begins with thought about making a change until the person permanently discontinues a negative behavior like smoking or adopts a positive behavior like exercise. Refer to Table 2.1 for a summary of the theories and models used in physical activity research.

While many theories explore the determinants of exercise behaviors, few attend to issues of gender in physical activity. A literature review of studies examining the correlates of physical activity in women listed sociodemographic, biological, psychological, and environmental factors as affecting behaviors. Biological factors included perceived health, health status, BMI, and health behaviors. Psychological factors include self-efficacy, attitudes and beliefs, stress, knowledge and past behavior. Environmental factors included social support, professional support, family structure, physical environment, and policy (Eyler, 2002). Consequently, the correlates of physical activity for women are multifaceted representing the aspects of daily life.

Some factors listed impacted women's physical activity more than others. Sociodemographic factors such as race and education were correlated with physical activity. Studies reviewed showed minority women had lower levels of physical activity than white women. Higher levels of education were positively related to physical activity. Biological factors such as perceived health and health status were correlated with physical activity. Psychological factors positively correlated with physical activity are self-efficacy, attitudes and beliefs, stress, knowledge and past behaviors. Environmental factors positively correlated with physical activity included social and professional support. There is little information about physical environment and policy, but studies indicate that they have some influence women's participation in physical activity (Eyler et al. 2002).

Table 2.1 Summary of theories and models used in physical activity research

Theory/model	Level	Key Concepts
Classic learning theories	Individual	Reinforcement Cues Shaping
Health belief model	Individual	Perceived susceptibility Perceived severity Perceived benefits Perceived barriers Cues to action Self-efficacy
Transtheoretical model	Individual	Precontemplation Contemplation Preparation Action Maintenance
Relapse prevention	Interpersonal	Skills training Cognitive reframing Lifestyle rebalancing
Social cognitive	Interpersonal	Reciprocal determinism Behavioral capacity Self-efficacy Outcome expectations Observational learning Reinforcement
Theory of planned behavior	Interpersonal	Attitude toward the behavior Outcome expectations Value of outcome expectation Subjective norm Beliefs of others Motive to comply with others Perceived behavioral control
Social support	Interpersonal	Instrumental support Informational support Emotional support Appraisal support
Ecological perspective	Environmental	Multiple levels of influence Intrapersonal Interpersonal Institutional Community Public policy

Source: U.S. Department of Health and Human Services. (1996). Physical Activity and Health: A report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services. Adapted from Glanz, K. & Rimer, B.K. (1995). Theory at-a-glance: a guide for health promotion practice. U.S. Department of Health and Human Services.

While the Stages of Change model and other theories have been used to successfully modify behavior, many theories place responsibility solely on the individual without consideration to the larger social ideologies that may be influencing behavior. The aforementioned literature review of the correlates of exercise for women displays that participation in physical activity is affected by sociodemographic, biological, psychological, and environmental factors. Therefore, neglecting to consider social ideologies of gender in behavior modification, especially in physical activity where social ideologies greatly influence motivational factors, may negatively affect women's health outcomes.

In summary, physical activity generally has a positive effect on health in women. Many diseases are preventable or benefit from a minimal amount of physical activity. Even with all the benefits of exercise, many women fail to get to the recommended amount of physical activity. Social-cognitive theories of behavior provide information about participation in physical activity, but few address issues specific to women. In a literature review of the determinants of physical activity for women, it was concluded that sociodemographic, biological, psychological, and environmental factors play a role in the exercise behaviors of women.

Women's Physical Activity

With all the benefits associated with exercise for women, it would seem natural that society would accept and encourage women's participation in physical activity. However, the historical struggle of women to gain access to the male-dominated realm of sport and physical activity tells another story.

History of Women in Sport and Physical Activity

Even though organized women's physical activity most likely existed as early as ancient and medieval times (Kennard & Carter, 1994), most media depiction of women in sport began in the late 1800's. While there are minimal accounts of women's sports prior to the 19th Century, women are primarily left out of sport history.

Lenskyj (1986) discusses the exertion of male control over all aspects of women's lives and how it relates to women's physical activity. The author outlines the history of women's physical activity beginning in the 1800's when the medical community prohibited women's physical activity because of their "unique anatomy and physiology and their special moral obligations" (p. 18). The medical community used vitalist theories of physiology to support the frailty of females and thus limit women's physical activity. Lenskyj says "Vitalism held that energy for the human organism was derived from a "vital force," which, being limited and non-renewable, should therefore be expended only in the service of family, god or county" (p. 19). While most references to vitalism ceased by the 1900s, Lenskyj discusses how reproductive issues including menstruation and female physiology were used by the medical community into the 1960's to control women's participation in sport and physical activity. The medical and educational communities attempted to create physical activity that was appropriate for women and maintained women's gender roles in society.

Gender, Physical Activity, and Sport

Sport and physical activity play a significant role in the construction of gender. In Krane (2001), the discussion of women's athleticism and hegemonic femininity explores how status quo is perpetuated through dominant ideologies of gendered appearance.

Research by Flintoff and Scranton (2001) illustrates how young women's gender identities affect physical activity in formal and informal exercise environments. Social concepts of sport and physical activity as masculine or feminine was correlated with stereotypical ideologies of feminine and masculine physical activities (Koivula, 2001).

For the most part, sport and physical activity are seen as masculine, thus discouraging the participation of women. Birrell and Theberge (1994) explain:

So long as sport remains a male preserve, the contribution of sport to the construction of gender identities and gender relations will remain seemingly straightforward: Sport is what boys and men naturally do, and what girls and women either do or do at the peril of their own gender identities. (p. 342)

Sport assists in maintaining patriarchal hegemony where men are the norm (Birrell & Theberg, 1994; Bryson, 1994; Willis, 1994). Women's physical activity is often decentered, because of the dominant masculine ideology of sport. Bryson (1994) details the "masculinization" of sport:

Sport is so thoroughly masculinized that it seems unlikely that it can be reclaimed to serve women's interests. However, there is also the sense in which women cannot afford to allow its effect to continue unchallenged. Negative evaluations of women's capacities are implicit in the masculine hegemony in which sports is embedded. (p. 48)

Society still deems sport as a primarily masculine endeavor. However, social change has occurred that has created access for women into the world of sport and physical activity.

Title IX

Enacted in 1972, Title IX “represents a legislative solution to patriarchal practices that reproduced gender hierarchy” (Greendorfer, 1998, p. 70). The premise of Title IX is to prevent sex discrimination in any educational activity receiving federal funds. While Title IX affected many education programs and activities, the legislation seemed to attract the most attention to and have the greatest effect on sports for women. Title IX required women’s opportunities to participate in sport activities be equitable to men’s activities. As a result, girls and women gained access to many physical activities that were not available to them in the past.

While many believe Title IX created equality for women in sports, there are still inequalities, non-compliance, and resistance to the legislation. Since its enactment, Title IX has been a site of political and ideological struggle as Greendorfer (1998) explains:

Title IX problematizes the social construction of sport and the organizational culture of sport becomes contested terrain. To counter this challenge the discourse of backlash suggest that reverse discrimination is far worse than systematic discrimination and ignores decades of unequal access discrimination against women. (p. 86)

Resistance to Title IX is evident in the non-compliance of many colleges and universities, and lawsuits targeting the legislation as unfair. In order to protect Title IX, organizations representing women’s issues in sport have been established to promote, create and maintain opportunities for girls and women to participant in sporting activities. The Women’s Sport Foundation (WSF) in the United States, founded by Billie Jean King, states, “Our mission is to ensure equal access to participation and leadership

opportunities for all girls and women in sports and fitness” (Women’s Sports Foundation, 2002). This organization promotes activism and disseminates information about girls and women’s participation in sport and fitness. Other organizations with similar mission statements include the Canadian Association for the Advancement of Women in Sport and Physical Activity and the Women’s Sport Foundation in the United Kingdom (Hall, 1997).

Resistance to Women’s Physical Activity

Some people think of sport and physical activity as trivial matters and wonder why so much attention is given to creating equalities for girls and women in sport.

Theberge (1994) explains why the dominance of men in sport is a salient social issue:

Sport as a gendered cultural form bears significant relations to gender segregation and inequality in other realms of social life. While this assertion is probably widely accepted, it is argued further that most accounts of the impact of sport as a male preserve upon other manifestations of gender inequality misrepresent the nature of this relationship and underestimate its impact. (p. 181)

Resistance to activities and legislation that promote women’s sport and physical activity indicate that there is a lack of awareness, understanding, or resentment of the social, cultural, and economic implications of sport. Costa and Guthrie (1994) believe sport can be a site of social change regarding gender inequalities, because women’s physical activity includes resistance and transformation. Resistance is when people in disempowered societal positions refuse to submit to the status quo. Transformation is social change in the structure of power relations. The authors argue that sport can be a catalyst for gender equality in society through economic and cultural struggle leading to

social change (Costa & Guthrie, 1994). While sport has the potential to promote social change, sport continues to perpetuate gender roles. Reproduction of gender inequalities influenced by the continued underrepresentation, trivialization, and sexualization of women's sport and physical activity.

Women's underrepresentation in media including television, magazines, newspapers, and radio is shown through disproportionate coverage of men's sporting events in comparison to women's sports. Research has documented how the physical activity of women is discounted by society through unequal amount and quality of coverage of women's sports (Birell & Theberge, 1994; Duncan, Messner, Williams, & Jensen, 1990; Eastman & Billings, 2000; Messner, Duncan & Cooky, 2003). In 1990, the underrepresentation of women in the media was displayed by comparison of the coverage of women's sports and men's sports on television. Findings indicated that men's sports were overwhelmingly covered more than women's sports (Duncan, Messner, Williams, & Jensen, 1990). Thirteen years later a similar study showed some change in coverage, but mainly reinforced the findings that women's sport is covered less and sexualized by the media (Messner, Duncan, & Cooky, 2003).

Women are underrepresented in positions of power that influence sports and women's physical activities. Statistics compiled by the Racial and Gender Report Card (2001) indicate the representation of women as collegiate athletic directors is the lowest in Division I at 9% and increases to 25% in Division III athletics. (Women's Sports Foundation, 2002). Also stated by the Racial and Gender Report Card (2001), in professional sports, women have less representation in management positions than in the National College Athletic Association. For example, women hold 14% of management

positions in National Basketball Association and only 4% in Major League Baseball (Women's Sports Foundation, 2002). Women are often denied a voice in decision-making that influences the field of athletics.

The trivialization of women's physical activity is seen in media coverage of sports. Bryson (1994) outlines how commentary regarding female athletes is often focused on physical appearance, family structures, and relationships. For example, in Eastman and Billing's (2000) review of gender bias in sports casting, the dating practices and family situations of female athletes were mentioned more often than their male counterparts. Women athletes are trivialized by focusing on their ideological positions in society as girlfriend, wife, or mother instead of their athletic accomplishments.

Female athletes are often sexualized through emphasis on physical appearance, emotional displays, pictures, and poses. MacNeil (1994) examined how visual and auditory signs including body language, music, commentary, camera angles, and framing of images are used in an aerobic workout show and bodybuilding to sexualize women. The media is careful to promote the heterosexuality of female athletes (Birrell & Theberge, 1994; Lensky, 1986; McDonald, 2000; Messner, Duncan & Cooky, 2003) especially when the competitor does not meet social ideals of femininity. Women's fitness including bodybuilding, dance fitness or aerobics display how women's physical activity is sexualized by popular culture and commercialism (Lensky, 1986).

The underrepresentation, trivialization, and sexualization of women athletes do not occur independently of the other, but rather, all function together to support dominant masculine ideologies of sport. Messner, Duncan and Cooky (2003) detail incidences where the aforementioned factors intersect in sport broadcasting. For example, an

announcer stated “We’re your source for wrestling porn” (Messner, Duncan & Cooky, 2003, p. 41) in discussion of story about a female pro-wrestler posing for *Playboy*. In a broadcast where women’s sport is already underrepresented, more time was spent covering this story than any other about female athletes. The sportscaster also trivialized women and feminism by describing the wrestler “as a champion of women’s rights” (Messner, Duncan & Cooky, 2003, p. 41). Furthermore, women’s sports are trivialized by covering wrestling, a staged performance with an aesthetic focus, over other sports such as tennis or golf for women. Finally, the sexualization of women is displayed through overt comments and the association of sport to porn. This type of broadcasting is the norm displaying how the media’s underrepresentation, trivialization, and sexualization of women’s sports create restrictions for women’s physical activities.

In conclusion, resistance to women’s sport is reflective of a patriarchal society where physical activity is placed in the masculine realm. The reproduction of patriarchy is evident throughout society, but perhaps, is most salient in the media’s continued underrepresentation, trivialization, and sexualization of women’s sport and physical activity. Rather than recognizing women’s achievements in sport, the media and society give more attention to promoting women’s physical activity as a tool for modifying the body to achieve social standards of beauty. In order to make change regarding women’s physicality, there is a need to understand social gendered ideologies. Exploration of critical theories involving issues of gender, power and the body provide insight about the relationship of physical activities of women, femininity, and beauty.

Critical Perspectives of Women's Physical Activity

As displayed in the review of women's health, physical and health, and women's participation in physical activity, issues of gender and power like Title IX greatly influence women's lives. Much critical literature focuses on how power and control of women is influenced by social ideologies of femininity. The relationship of femininity, power, and control will be explored with emphasis on the women's physical activity.

Ideology of Femininity

A patriarchy is a society where dominant ideologies of masculinity establish the status quo. Masculinity is associated with strength, power, and domination, while femininity is defined by passivity, dependence, and nurturance (Lenskyj, 1986). Particularly for women, femininity entails self-modification focusing on appearance. According to Lenskyj (1986), "Femininity is therefore more than simply an aesthetic; it is the concrete manifestation of women's subordinate status" (p. 13). Gender differences are reinforced by norms of femininity:

The 'ideal' feminine shape is rooted in the patriarchal notion of femininity. It ensures that the distance between male and female muscularity is maintained and the continued common-sense notion that men have a greater biological potential for muscularity is continued. Female physicality has been intentionally obscured. (MacNeil, 1994, p. 282)

The categorization of men and women as masculine and feminine is not superficial, but serves to maintain gender roles and inequalities.

Roles of femininity dictate the behaviors of girls and women and contribute to inequalities relating to gender. Messner (1994) explains how women's attempts to be

feminine support gender inequalities: “Attempting to be viewed as feminine involves accepting behavioral and physical restrictions that make it difficult to view one’s self, much less to be viewed by others, as equal with man”(p. 72). Feminine ideals for behavior and appearance restrict opportunities for females. Bordo says, “At the farthest of extremes, the practices of femininity may lead us to utter demoralization, debilitation, and death” (p. 166). The restrictions created by femininity are seen in the relationship of physical activity and women’s bodies.

Bordo (1995) provides an analysis of women’s physicality and bodies as dictated by social ideologies of femininity. Bordo provides a summary of the complexity of the interaction of femininity, the body and society:

Through pursuit of an ever-changing, homogenizing, elusive ideal of femininity—a pursuit without a terminus, requiring that women constantly attend to minute and often whimsical changes in fashion—female bodies become docile bodies—bodies whose forces and energies are habituated to external regulation, subjection, transformation, “improvement”. (Bordo, 1995, p. 166)

Bordo (1995) details how women are socially motivated to constantly partake in self-modification through disciplines of diet, makeup, and dress. Women’s physicality related to outward self-modification of the body displays how:

The body is a significant site for the creation and ongoing maintenance of identity, and the sex of the body has an indelible effect on the meanings that can be transmitted by it. The seemingly disempowering nature of beauty work for women has been noted and contrast with the potential for empowerment that men experience through their physical activity. (Brace-Govan, 2002, p. 411)

The act of self-modification in the pursuit of beauty is never ending resulting in the restriction of women's behaviors and physical activity.

Bordo sees the body as a text where women subscribe to the ideological construction of femininity. The process of "learning femininity" may be most noticeable in verbal communication, but occurs in other daily interactions. Bordo (1995) explains that, "we learn the rules directly through bodily discourse: through the images that tell us what clothes, body shape, facial expression, movements, and behavior are required"(p. 170). The "learning of femininity" involves manifestation of traditional gender roles, especially those emotionally-oriented, reserved for women, such as caring for others first before caring for one's self. For example, in research by Eskes et al. (1998) about women's fitness, a participant discussed she was never able to focus on herself, because she was busy taking care of her family.

An interesting twist to modern femininity is that not only are women expected to represent feminine ideals, but now need "to embody the 'masculine' values of the public arena" (Bordo, 1995, p. 173). For example, when women enter the workforce they are expected to assimilate to the culture they are entering that in most cases has been male dominated. Women are expected to be unemotional, exert control, and self-mastery, yet remain passive and attentive to the needs of others. In reference to women and physical activity, similar expectations of the integration of feminine and masculine traits are reflected in current aesthetic ideals for females. Lenskyj (1986) explains, "the goal is to sculpt a thin, strong, muscular body the meets the current standards of glamour" (p. 127). Women are expected to be toned, but not too muscular to the point where they lose their femininity.

Connections of Power and Femininity

In critical theory, the concept of power is used to explain social inequalities. Those people, places or things considered powerful are viewed as having great influence over others. For people, power can be explained as negotiations of interests (Cervero & Wilson, 1994). However, places and things also represent power. Foucault's (1978) concept of power focuses on social relationships: "power is not an institution, and not a structure; neither is it a certain strength we are endowed with; it is the name that one attributes to a complex strategical situation in a particular society" (p. 93). Foucault believes power should be understood as culmination of factors and processes that affect the formation of a system of social hegemonies that are not dichotomous, but vacillate in varying contexts. Consequently, social inequalities change and vary over time and place. Foucault believed gender roles influence this distribution of power.

In *The History of Sexuality* (1978), Foucault theorizes that women's oppression is tied to eighteenth century mechanisms of power relating to the sexualization of women. As stated by Gilligan (1993), "For centuries, women's sexuality anchored them to passivity, in a receptive rather than an active stance" (p. 68). The social function of women is to reproduce thus relegating women to the private sphere of home and family. This division creates a dichotomy between private and public. Private work is defined as unwaged subsistence based tasks done by women and public work that which is waged, commodity driven and associated with men. Since the economy is driven by production for profit, public work is more respected and valued in society (Hart, 1991). The private realm is restricted, and controlled leading to social, economic, and environmental inequalities.

Connections of Control, Power and Femininity

In Foucault's vision, power in society is not always obvious, but may exist in social mechanisms of control. Bartky (1997) explores the elusiveness of power as “the disciplinary power that inscribes femininity in the female body is everywhere and it is nowhere; the disciplinarian is everyone and yet none in particular” (p. 142).

Social control is a mechanism of society that influences the flow of power at the macro-level. Bartky (1997) building on Foucault's idea of the panopticon, a prison tower where people are captive, but do not know who is guarding them, explains how social restriction and control function like a prison. The panopticon symbolizes structural mechanisms like femininity used to maintain and reproduce power relations. Such structural mechanisms of social control like ideologies of femininity may be difficult to identify (Eskes, Duncan, & Miller, 1998). Consequently, women may not be aware of the structural restrictions resulting from adherence to ideologies of femininity.

Processes of Social Control

Social control is practiced through surveillance such as panoptic gaze. Duncan (1994) says, “The look or gaze is perhaps the best exemplar of how public and private are ideologically conflated in women's body practices” (p. 49). The concept of gaze illuminates how women are visually and culturally surveyed by themselves and others. For example, Duncan (1994) says, “In the position of spectator, most women learn to compare their appearance with that of the patriarchal feminine ideal and thus become object for their own gaze” (p. 50).

Gaze contributes to the objectification of women. Fredrickson, Roberts, Noll, Quinn, and Twenge (1998) proposed the concept of objectification theory that explains

how females are socialized to develop images of their bodies based on other people's views. A summary of self-objectification theory is provided:

self objectification means that individuals think about and value their own body more from a third-person perspective, focusing on observable body attributes (e.g., "How do I look?"), rather than from a first-person perspective, focusing on privileged, or nonobservable body attributes (e.g., "What am I capable of?" or "How do I feel?"). (Fredrickson et al., 1998, p. 270)

The three components of self-objectification are sexual, trait, and state. In sexual objectification, girls and women are socialized as "objects to be evaluated on the basis of appearance" (Fredrickson et al., 1998, p. 270). Socialization occurs through females' learning that their place in the world is determined by their appearance. Secondly, women experience self-objectification to different degrees largely determined by traits or attributes. A survey was developed to assess how self-concepts of the body are affected by traits that are divided into those relevant to physical appearance and those connected to physical competence. The third area is how context affects self-objectification. It has been found that women are more likely to objectify themselves in "situations that accentuate their awareness of observers' perspectives on their bodies" (Fredrickson et al., 1998, p. 270).

The concept of self-objectification in women produces four outcomes as identified by Fredrickson et al (1998) that are self-consciousness, monitoring of appearance, effects on the mental performance and restrained eating. Objectification theory has significant relevance and implications for physical activity. First and foremost, are the explanations of the socialization of femininity and aesthetics in women.

This highlights the question of whether women are exercising for themselves or to please others. Secondly, objectification theory provides insight to the emphasis of women's images in physical activity. For example, while it is not necessary to have mirrors in a fitness classroom to follow an instructor, they are almost always present. Mirrors may promote competition among class members. Participants want to see themselves and others while they exercise illustrating preoccupation with appearance and the perception of self through others. Outside of the fitness classroom, women starting an exercise program are more often than not encouraged to change their eating habits. In objectification theory, restricted eating functions to illustrate societal beliefs that weight is a controllable way to relieve shame related to body appearance.

The phenomena of gaze and objectification have been explored further in literature about women's physical activity. A comparison of female ballet dancers, bodybuilders, and weightlifters examined the physical mastery or feelings of ownership of participants regarding their own bodies. Results showed activities like ballet and bodybuilding where "gaze" is used to judge participants led to disempowerment of the female athletes. Weightlifters experienced physicality as a quantifiable, objective measure (how much weight they could lift) leading to an empowerment self-concept of physicality. The implications of this study are "that to transcend the status of being an object, women may benefit from pursuing their bodywork instrumentally, not on the basis of appearance" (Brace-Govan, 2002, p. 403).

Panoptic mechanisms such as gaze and objectification are evident in popular media such as fitness magazines. Panoptic mechanisms are often used by fitness

magazines in two ways: the “Efficacy of Initiative” and “Feeling Good Means Looking Good” (Duncan, 1994). The “Efficacy of Initiative” means that:

that personal initiative and commitment are all that are needed to make major changes in one’s body and its appearance, and this suggestion is predicated on the assumption that all readers will naturally want to reshape their bodies much like the models on the pages of women’s magazines. (p. 51)

Success stories where readers discuss how they have changed their bodies illustrate how women are striving for the ideologically imposed feminine body. Pictures that compare before and after images impose panoptic gaze on both the subject of the story and readers. Such pictures are used to reinforce ideology that all women need to achieve the ideal body is the right diet, exercise, and discipline.

The second area “Feeling Good Means Looking Good” as defined by Duncan (1994), “emphasizes the importance of health but links feeling good to looking good so that real health issues are subordinated to beauty issues” (p. 51). Duncan uses the success stories in *Shape* to illustrate how health is secondary to beauty. Again, gaze is applied to before and after pictures with added ideology that looking better in terms of the dominant ideal of the feminine body means feeling better and being healthier. Also, the use of body statistics such as measurement further reinforces the ideal of monitoring and assessment that are hidden in the guise of health. If the focus were health, statistics such as improvement in blood pressure or cholesterol levels would be displayed to show success.

For both “Efficacy of Initiative” and “Feeling Good Means Looking Good,” Duncan (1994) discusses how shame and confessions encourage motivation and moral

urgency to the pursuit of body modification in the name of health. For example, women confess eating the wrong foods or not exercising. Duncan describes how guilt and confession function in fitness magazines:

We confess our sinfulness, our bodily inferiority to our friendly reader models, to the mirror or to the disembodied authority who resides everywhere and nowhere. This is no doubt the intention of the producers of *Shape*, as selling their magazine is predicate on producing feelings of shame in women about their bodily deficiencies. (p. 58)

Women's pursuits of fitness are influenced by processes of social control such as gaze and objectification manifest in the media. The result of social ideologies of femininity and processes of control are docile bodies.

Bartky (1997) interprets Foucault's concepts of docile bodies as subjected and practiced vessels directed by societal coercion that influence the body's time, space, and movement. Viewing the body as practiced vessels contributes to treating the body as a mechanical tool to be deconstructed into restricted, fragmented, and alienated parts. Shusterman (2000) believes concentration on the physical fragmentation is reflected in "our preoccupation with body measurements and with specialized "fitness" classes devoted to "abs," thighs, butts..." (p. 274). Fragmentation of the body is promoted in the fitness industry, media, and society. Society's current obsession with cosmetic surgery illustrates how the body is separated into parts that can be modified through surgery or fitness pursuits. Women's bodies become "docile" when outward appearance takes precedence over health.

Another example of docile bodies is illustrated by somatic restrictions as, “women are forbidden to become large or massive; they must take up as little space as possible” (Bartky, 1997, p. 141). In educational settings, students, especially girls, are confined to a classroom where they must follow rules relating to restriction of the body such as sitting still and staying in one’s chair. Social ideologies create the same type of restriction to women’s behaviors and activities in everyday life. In particular, the concept of docile bodies is visible in the fitness classroom where movement is restricted, controlled, and dictated by the dominant actor, the aerobics instructor. Without a critical lens, women may not recognize how behavioral and spacial restrictions in aerobic classrooms affect social expectations outside of the classrooms.

False Empowerment in Physical Activity

For women, physical activity such as aerobics is viewed as a way to gain control and self-mastery over the body. On the surface, encouraging women to take control promotes feminist ideals and empowerment. Unfortunately, fitness pursuits deemed as pro-woman and empowering are most often rooted in norms of femininity that value looking good over feeling good. Duncan (1994) explains:

The pursuit of bodily beauty encourages women to channel great quantities of energy and money into emulating a rigorous beauty standard. This frantic pursuit of bodily perfection depletes women of the resources that might otherwise be used to combat real political inequalities. (p. 49)

Research has focused on the women’s learning in fitness magazines. In Eskes et al. (1998), findings indicated that “Magazines undercut the importance of overall physical strength and fitness when they use empowerment ideology and portions of (post)

feminist ideology to motivate women to pursue practices that reproduce feminine ideals of beauty” (p. 340). In Markula (2001), the role of women’s fitness magazines in body image disorders is examined. Magazines reviewed for this article were *Self*, *Shape*, and *The New Weekly*. These magazines were found to promote a connection between body confidence and self-confidence. The solution, as promoted by fitness magazines, to issues of self-esteem, is to make physical changes. Women are learning when it comes to their bodies, constant self-modification, especially related to appearance, is essential to both mental and physical health.

The ideology of femininity and health are perpetuated by the media through television, movies, books, but most dominantly, in magazines supposedly about health. Due to the popularity of fitness magazines, many physically active women are obtaining information from such sources and may be internalizing mixed and often damaging messages about health and beauty. In addition, certification agencies and the fitness industry produce their own magazines for aerobics instructors with information about diet, exercise, technique, and instruction. This is especially important to women’s learning in fitness settings and classes, because both the aerobics instructors and female learners are subscribers to fitness magazines and receiving a majority of their information about health from these texts.

Issues related to false empowerment in fitness and self-improvement are illustrated by Bordo’s (1995) views regarding the etiology of eating disorders in women. She believes eating disorders stem from the hegemonization of masculine principles such as self-mastery and control. At first, it seems anorexia is tied to the pursuit of obtaining the ideal appearance for women. However, the function of the eating disorder changes,

“Through her anorexia...she has unexpectedly discovered an entry into the privileged male world, a way to become what is valued in our culture, a way to become sage, to rise above it all....”(Bordo, 1995, p. 173). Consequently, the eating disorder becomes a way to be powerful in a masculine world and displays how conflicting messages of femininity and empowerment affect women’s health.

Like eating disorders, women’s health is influenced by issues of self-esteem and body-image. A study by Krane, Waldron, Michalenok, and Stiles-Shipley (2001) shows how socially constructed norms of femininity influence and control women’s physicality and self-concept. Results showed the influence of the cultural expectations of female bodies on the body images of exercisers and women. Body satisfaction was based on comparison to socially defined ideal body. Participants attempted to gain the “near-perfect” body through balancing exercise and diet. Body satisfaction was not determined by how the participant felt, but focused on efforts to achieve an ideal body. Athletes had two body images: the athletic body and the culturally defined body image. While athletes wanted a strong body, they also desired to have a feminine body. This research displays how women’s physical activity is a site of social control that influences the lives and self-concepts of women.

A study by Kennedy and Reis (1995) explored differences in perceptions of body image in exercising and non-exercising college students. Results indicated that for the women surveyed participation in physical activity was not associated with positive body image. Rather, the women surveyed exhibited a preoccupation with weight through concerns about getting fat. This research shows how social norms of appearance affect women’s perceptions about their bodies.

Gender roles also influence the association between self-esteem and women's physical activity. Richman and Shaffer (2000) explored the role of girls' sport participation on self-esteem and found both positive and negative outcomes related to gender. There were benefits to self-esteem associated with physical activity. However, there were other negative effects as described: "The impact of sport participation on a female's self-worth could still be negligible (or even negative) were she concerned about the nontraditionality of her behavior or about others' negative reactions to it" (Richman & Shaffer, 2000, p. 197). This research shows how women's self-esteem is influenced and controlled by gendered expectations of women's behavior.

Women are greatly influenced by social norms. However, women exhibit agency through negotiation of interests regarding physical activity. Negotiation of interests is seen in women's athletics and other physical activity where women challenge gender roles within a patriarchal structure. The negotiation of interests is evident in aerobic classes where women access physical activity in a socially acceptable way. The possibility of agency, however, does not erase the damaging, reproductive effects of aerobic classes.

In summary, the concept of the panopticon describes invisible, structural control like femininity that create and support restrictions of women's behavior and freedom. Femininity can be viewed as a prison that is inescapable, because women are not conscious that they are "held captive" by social norms. The processes of control that support the structure of femininity include mechanisms of surveillance such as gaze and objectification. Processes of control lead to the social coercion of women's time, space, and movement creating docile bodies.

Aerobic classes are sites of the reproduction of femininity. Social processes of control such as gaze and objectification create aerobic classrooms where the primary focus is on appearance rather than health. As a result, women attending aerobic classes can be considered docile bodies whose time, space, and movement are influenced by social norms of femininity and beauty.

Aerobic Classrooms

Just like all aspects of society, aerobic classrooms are affected by ideologies of femininity. The fitness industry attempts to increase awareness about issues negatively affecting women by discussing issues such as body image, eating disorders, and depression. However, the messages are often contradictory as the association of fitness with aesthetic outcomes prevails over more beneficial health messages.

In the larger context of the fitness industry, fitness professionals including personal trainers and group fitness instructors who play an important role in educating people about health and exercise, often exhibit a preoccupation with leanness or aesthetic outcomes. Philips and Drummond (2001) explored the attitudes of six male fitness leaders and found the men were highly conscious of their outward appearance and overly concerned with low body fat for themselves and other people. The possible effects of fitness instructors' concerns with outward appearance is explained, "In an atmosphere where the perceived expert in weight control and fitness may have a preoccupation with low body fat and extreme exercise levels, unhealthy weight loss practices or excessive exercise patterns may be mishandled, or at worst, encouraged" (Philips & Drummond, 2001, p. 103).

As shown in research by Hare, Price, Flynn, and King (2000), 71 % of fitness professionals believed ideal body weight to be very important to health. However, less than a third of practitioners surveyed recognized the role of cultural, socioeconomic factors and hormones in obesity. In another survey of 377 group fitness instructors, 21% of instructors self-reported that they had an eating disorder in the past indicating that females with a history of eating disorders may be attracted to the fitness profession (Thompson, 2000).

Many clients seek physical activity as means to improve body image and self-esteem. Clients with already poor self-concept may be especially affected by fitness professionals' lack awareness, over concern with appearance, or issues with eating disorders as explained:

This raises serious concerns about the self-esteem, body satisfaction and consequent 'health' practices of fitness leaders themselves. The impact of these practices on their interactions with clients and the effect on consumers, who may already have accessed the services due to initial body dissatisfaction, is also, disturbing. (Philips & Drummond, 2001, p. 96)

As indicated by research, it seems fitness professionals falsely associate leanness with health resulting in a lack of awareness about factors involved in maintaining women's health. Since fitness professionals are primarily responsible for educating women about physical health, it is important to understand how instructional strategies can be used by fitness practitioners to promote health over aesthetic outcomes. This information is especially important to aerobic instructors, who work with large number of women each

day resulting in the opportunity to communicate positive health messages to female learners.

The focus on aesthetic outcomes in aerobic classes will be further explored in the following section. In order to better understand the practices of aerobic instructors, typical aerobic instruction techniques will be outlined. In addition, a literature review about research conducted in aerobic settings will be provided.

Aerobic Instruction

Standards established by accreditation agencies such as American Council of Exercise (ACE), American Council of Sports Medicine (ACSM), and Aerobic Fitness Association of America (AFAA) influence the practices of instructors. In order to teach aerobic classes, instructors need to be certified by a fitness agency. ACE provides a comprehensive manual for aerobic instruction.

ACE's guidelines for aerobic classes include the creation of exercise plans with attention to safety, injury prevention, and instructional/leadership techniques, and class flow. Safety and injury prevention include proper technique such as avoiding contraindicated exercises, and self-monitoring like heart rate assessment. In addition, exercise programs follow a basic class structure including a warm-up, main activity, and cool-down to prevent injuries (Clippinger-Robertson, 1993). Instructional/leadership techniques include verbal, and non-verbal cueing, choreography, and correction/modification. The final area is overall impression where program content, class flow, music, and variety are considered (Clippinger-Robertson, 1993).

In order to be certified as an aerobic instructor, most agencies give written and practicum exams where candidates must demonstrate knowledge of form and safety.

Topics covered in the American Council on Exercise (ACE) exam (1993) include exercise science, exercise programming, instructional techniques, and professional responsibility. The certification programs and tests are a method of making sure aerobic instructors are qualified to provide safe and effective workouts for class participants. However, aerobic classes often accomplish another objective: the reproduction of femininity in women learners.

Research about Aerobic Classes

Research on aerobic classrooms reflects the contradictory messages of the fitness industry where the aerobic classroom both reproduces and resists social ideologies. Consequently, the aerobic classroom reflects larger society where agency, empowerment, and inequality occur simultaneously.

Research about aerobic classes has shown contradictions of aesthetics and physicality. Maguire and Mansfield (1998) explored the “way in which social constraints and individual self-control interweave in the rationalized management of women’s bodies” (p. 109). In other words, the ways aerobics classes influence women’s perceptions and use of their bodies. While there were mental and physical benefits identified by participants, the research found exercise classes reinforced and reproduced established standards of beauty and femininity. The following is a summary the findings:

Women are active in interpreting and maintaining the figuration and their sense of self-identity. But the interdependent network of processes within the “exercise—body beautiful complex” is marked by sociocultural ideals of femininity. The women interviewed intended to empower themselves via

their exercise experiences but found themselves subject to unintended consequences of conforming to social norms. (p. 135)

The researchers explain that participation in fitness activities is not the issue, rather, the women in the study experienced distress as the result of shame and guilt about their bodies. Consequently, women may be prohibited from experiencing the full benefits of exercise, because of aesthetic ideologies.

McDermott (2000) examined the significance of body perception to women's physical activity through participant observation and in-depth interviews. This research compared women's experiences of body perception, agency, and self-perception in two settings: aerobics and wilderness canoe-tripping. Findings are summarized as:

body perception was found to be relevant to the women's physical activity involvement in two distinct ways: as a factor initiating activity involvement and as a perception emerging through the experience. In turn, these differing perceptions of the body were found to impact diversely upon their physicalities, either broadening them or contributing to alternative ways of understanding them. (p. 331)

Mc Dermott's (2000) research indicated that participation in aerobic classes does reproduce ideals of femininity, but for some, the experience provided confidence because it was a socially acceptable way to become physical. However, the canoeists exhibited a "much deeper feeling of oneself as embodied through feeling connected to one's body in ways not readily experienced in one's everyday life" (p. 351) than the women participating in aerobics classes. This research displays how contradictions of aesthetics

and physicality are affected by perceptions about exercise and the nature of physical activity.

The female body image in aerobic classes has been explored by Markula (1995) through ethnographic fieldwork, interviews, and media analysis. Findings indicated the ideal body depicted by popular culture and media is contradictory by socializing woman to be “firm but shapely, fit but sexy” (p. 424). Using Foucault’s theory to explore female body image, Markula (1995) found issues of power in a postmodern consumer society to be influential in women’s struggles to obtain the ideal body. While women are influenced by social standards of appearance, some women are skeptical of images presented in the media. Markula (1995) explains how women confirm to and question social ideologies at the same time:

They want to conform with the ideal, but they also find the whole process ridiculous. As a result, women’s relationship with the body ideal is contradictory. This awareness, nevertheless, demonstrates that women have not internalized the panoptic power arrangement entirely. Aerobicizers do not, however, visibly resist the patriarchal body ideal by actively aiming to build transgressive bodies like the women bodybuilders. (p. 451)

In fitness environments, contradicting messages from the media about women’s body image affect women’s perceptions of themselves, as well as their learning in aerobic classrooms.

Vogel (2000) explored how fitness instructors impact the body image of female learners. Some participants said “appearance of an instructor either discredited or legitimized the quality of his/her instruction” (p. 43). Not all participants were concerned

with the instructor's appearance, but in general participants thought the instructor's physique is the ideal of what can be accomplished in aerobics. Some participants compared their body to the instructor's body. This research suggests that instructors need to be aware of how their actions affect students and avoid image-conscious comments in their instruction.

In Loland (2000), somaesthetics is used to explore gender differences in aerobic class participation. Through interviews and participant observation, the research indicated that men and women have similar experiences with both positive and negative experiences of body concept in the aerobic setting. Women in particular felt empowered by aerobics, but none of the participants identified taking part in aerobics to alleviate stress or to have fun. The researchers believed that somaesthetics was helpful in understanding the experience of aerobics from the participant perspective. This research also disclosed contradictions between aesthetics and the physicality of women participating in aerobic classes.

Kern and Baker (1997) say aerobic instructors use of style of teaching that encourages excessive exercise, isolation of body parts, eating disorders, and the promotion of thinness. The purpose of this study was to assess the different types of aerobic instruction on psychological variables including self-esteem, physical self-esteem, state and trait anxiety. The study compared instruction in traditional aerobic classrooms to instruction with a mind/body approach called neuromuscular integrative action (NIA).

Pre/post tests indicated there were no significant differences regarding general and physical self-esteem or in state anxiety in the two types of aerobic classes. However,

there were significant differences in trait anxiety, an individual's overall level of anxiety. Results showed the participants from the conventional aerobic class increased their level of trait anxiety, while the NIA participants decreased. Focus group data showed that participants from the conventional aerobic class felt rushed, guilty about eating unhealthy food, and stressed to keep up with others. The NIA group felt less stress, relaxed and calm. Results indicate that instructional style affects psychological outcomes relating to anxiety. Therefore, it can be concluded that adjustments in instructional strategies can positively affect the experience of class participants in aerobic classes.

Most of the aforementioned studies discuss both positive and negative aspects of aerobic classes. In Haravon's (2002) work, the emphasis is on the potential of aerobic classrooms to be sites of empowerment for women. Using ethnographic interviews with 10 women aerobic participants self-identified as feminists, Haravon (2002) discusses how women can practice agency in an environment deemed oppressive to women.

Participants indicated that issues involving the sexualization of participants through instructor comments focusing on appearance and beauty, as well as issues of gaze, where participants were put on display decreased the enjoyment of the class. Other issues that negatively affected experiences for women were instructors who abuse authority and inflict gaze on participants.

Haravon (2002) outlines strategies for feminist participation in aerobic classrooms including distancing, rejecting critique, asserting agency, and "making do." Distancing means creating space between one's self and practice that is disturbing or contrary to a belief system. For example, sexist music used in aerobic classes is often tuned out by feminist participants. However, none of the participants ever confronted the instructors

about the music illustrating issues of silence. Rejecting critique included accepting aspects of aerobics deemed oppressive like following, repetition and limited space as positive. Participants discussed the mindlessness of the process gave them a break from their days. Asserting agency may be refusing to do certain things dictated by the instructor or not attending certain classes. Consequently, the women alter the aerobic class to work for them. The final area is “making do” by recognizing that contradictions in the aerobic classroom are reflective of imperfect and unequal society. Through personal awareness, they were able to negotiate the benefits and shortcomings of the aerobic class.

This review of the research on aerobic classes has shown the contradictions of aesthetics and the physicality of women in aerobic classes. However, the aforementioned studies minimally addressed the role of health in the aerobic classroom. By shifting from a contradictory environment to an environment focused on health, the existing mental and physical benefits of participation in aerobic classes may be enriched by applying instructional strategies appropriate for female learners.

Adult Education and Instruction

Instructional strategies from adult education can be applied to create more empowering aerobic classrooms for women. In order to better understand the context of the aerobic classroom, this section will review literature on learning environments, gender and instruction, and models of instruction.

Learning Environments

Many people may not think about aerobic classrooms as a learning environment, because they take place outside of formal learning context. However, learning

environments extend beyond the traditional educational classrooms. Merriam and Caffarella (1999) outline formal, non-formal, and informal environments as settings where adult learning occurs. Formal settings include independent learning organizations such as literacy groups, and educational institutions such as universities. Formal settings also include quasi-educational organizations such as libraries, or museums and non-educational organizations where education is conducted to fulfill missions of the organization such as employee training.

A non-formal setting includes learning activities conducted outside of a formal environment such as community-based programs and indigenous learning. Community-based learning occurs in churches or community centers covering an array of topics such health education or violence prevention programs. Indigenous learning may also occur in community settings, but refers to learning about one's culture. Finally, informal or self-directed contexts refer to an individual's pursuit of learning. Informal learning may take place in any environment, but is predominantly unplanned, self-directed, and experience-based (Merriam & Brockett, 1997).

Aerobic classes would most likely be categorized as a non-formal learning environment. An aerobic class has characteristics of informal learning, because it is in some ways self-directed based on the student's choice to attend classes based on her preferences or goals. However, aerobic classes are more akin to non-formal learning experiences, because classes are structured based on specific learning objectives.

In order to be effective in any learning environment, adult instruction must attend to social, political, and educational issues with in the classroom. Regarding instruction in aerobic classes, gender is a salient issue that must be addressed.

Gender and Instruction

The construction of gender is a complex interaction of social, cognitive and environmental factors occurring throughout the life of an individual, but especially in learning environments. The socialization of gender in adults is reinforced by gender roles learned as children. Weiler (1988) explains theories of feminist reproduction and schooling: “Women’s oppression in the paid workforce and in domestic work is reproduced through what happens in schools. Thus statistical analyses of women’s inferior position in the economy are tied to sexist texts and discriminatory practice in schools” (p. 31). An overview of the socialization of gender in education will provide a platform for the discussion of instruction in aerobic classrooms.

Formal schooling is a major component of the gender socialization of children and adults. Unfortunately, K-12 school environments create inequalities between females and males affecting the quality of education for girls and boys. Almost all aspects of school including textbooks, instructional materials, and teachers reinforce social inequalities of gender (Hayes, 2000). Studies have shown in most classrooms that male students are encouraged to be active and females are taught to be inactive. On the average, females receive less instruction and poorer quality of attention from teachers than males (Sadker & Sadker, 1994).

Beyond the K-12 learning environment, gender affects instruction in adult education. Adult education is a field with a social justice orientation, yet its classrooms are not immune to the reproduction of gender inequalities. Tisdell’s (1993) research about gender relations in adult education classrooms found “students contributed to reproducing structured power relations in their reification of patriarchal values. This was

manifested in many significant ways such as using sexist and diminutive language (e.g., calling an adult woman “a girl””) (p. 220). This study shows that classrooms where there is awareness of social issues do not exist in a vacuum. Rather, instructors and teachers have been socialized and lived the gendered experience. Weiler (1988) describes the existence of sexism in formal classrooms with feminist teachers:

Both students and teachers have experienced and participated in relationships of domination, submission, oppression, and privilege which have helped to shape who they are and how they interpret the world. This recognition of students and teachers as historically situated subjects with conflicting gender, race and class interests is vital to understanding the possibilities and limits of the classroom. (p. 125)

Still in classrooms where women’s cultural experiences and expectations are recognized, traditional instructional strategies are not tailored to meet the needs of women learners. Belenky, Clinchy, Goldberger, and Tarule (1997) explain “Even when the content of coursework include issues of concern to women, strategies of teaching and methods of evaluation are rarely examined by faculty to see if they are compatible with women’s preferred styles of learning” (p. 5). Therefore, it is necessary to explore how adult instructional strategies can be applied with attention to gender to create change in non-formal learning environments such as aerobic classrooms.

Traditional Models of Instruction

Since gender is a salient issue in adult instruction, this section will show the progression of traditional instructional strategies to the more critically oriented practices and how they affect the learning environment of the aerobic classroom.

Knowles (1984) outlines five assumptions of the pedagogical model. The first is that the learner's concept is one of dependence on the teacher. Thus, the teacher makes decisions about the what, when and how of learning in the classroom. Secondly, the learner has little experience to contribute resulting in the need to base learning on the teacher's experiences. Third, readiness to learn is based on expectations of knowledge for the age of the individual and not based on interest. Fourth, the student's orientation in learning is based on a subject-oriented sequential model. Finally, students are motivated to learn by external factors such as parents or teachers.

As discussed by Knowles students are dependent on the teacher to direct learning. In formal learning environments, educational experiences are primarily teacher-directed. As described by Merriam and Caffarella (1999) instructor-designed educational activities are planned, implemented, and evaluated by the teacher, facilitator, or instructor. Most traditional instructional strategies have been influenced by Tyler's (1949) concepts of education where learning experiences must accomplish an established objective usually related to developing thinking, acquiring information, developing social attitudes, and interests of students. While learning experiences are supposed to be based on the students' needs and interests, learning is still designed, implemented and evaluated by the teacher. This teacher-directed learning is typical of an aerobic classroom where activities are created by the instructor.

The following vignette will be used to illustrate how instructional strategies and design affect the context of the aerobic classroom:

The aerobic instructor begins class by asking "Is anyone new to step?" Shirley raises her hand, and the instructor responds, "Its ok, you won't get everything, but

just keep moving.” Even though Shirley has not exercised in a while, she remains optimistic about the experience. The music composed of fast paced pop music begins and Shirley notices the lyrics are sexist, but tries to ignore the words. The instructor tells a story about how much she ate over the holiday weekend and concludes, “We will all have to work harder to burn off those extra calories.” She continues by saying, “At the end of class, we are going to do exercises to isolate our behinds, because my butt is getting too big.” As the class continues, the instructor cues a very structured routine filled with complicated moves. Even though many people in the class are not keeping up, the instructor pushes through the routine so she covers all of her objectives for the class. The instructor continues to quicken the pace and says, “Look girls, we are being watched so put on a good show for the boys in the gym.” Shirley gets disgusted, leaves the class and never goes back. As a result of her experiences in an aerobic class, Shirley feels bad about herself and has developed a hatred for physical activity.

This story shows how the aerobic instructor’s teaching strategies are largely pedagogical practices. Instruction in aerobic classes, as seen in the story, shadows pedagogical practices where knowledge, thinking, social attitudes, and interests are led by the instructor. Francis (1993) outlines teaching strategies of aerobic instruction including selecting appropriate exercises based on skill and safety, providing modifications, and cueing. According to Francis (1993), designing instruction for aerobic classes includes goal-setting, lesson planning, teaching styles and evaluation. The instructor considers the student’s needs, but makes decisions about the class independently from learners.

In the instructor-led environment, the aerobic instructor has power and control in the classroom to work toward certain objectives. Because of the dominant ideologies in fitness that emphasize femininity and self-modification, instructors work toward objectives that reproduce social ideals such as alteration of appearance. The manifestation of ideological objectives is evident in the practice of aerobic instruction as explained by Kern and Baker (1997):

By emphasizing physical goals, fitness programs teach individuals to value discipline, self-restraint, denial, and external control. This value system has led to the development of countless diet programs and books that espouse restrained eating, self-discipline, and regimented eating style in order to achieve a desired physical state. (p. 31)

Most aerobic classes are teacher-directed learning activities that may contribute to the reproduction of structural inequalities for women by encouraging restriction, discipline and external control in physical activity.

Andragogy as a Model of Instruction

An alternative to teacher-directed educational activities are learner-directed environments where the student designs, implements and evaluates learning. In learner-directed activities, the students' knowledge and experiences create more self-directed, experiential learning characteristic of the practice of andragogy.

Andragogy has been widely accepted in the field of adult education as “a way of thinking about working with adult learners” (Merriam & Brockett, p. 135). Modern andragogy, as shaped by Malcolm Knowles, largely focuses on the individual learner as independently responsible for their motivation and actions regarding learning (Merriam

& Caffarella, 1999). Andragogy is based on the beliefs that knowledge is constructed by the learner, learning is based on experience, adults learn when they need to know something, and adults are motivated to learn not by external, but primarily internal factors (Knowles, 1984). The implications of his assumptions include the “design, implementation, and evaluation of learning activities of adults” (Merriam & Caffarella, 1999, p. 272).

Knowles (1984) recommendations for an andragogical model include creating a positive climate for learning where there is mutual respect, collaboration, trust, supportiveness, openness, and pleasure. Furthermore, adult learners need to be involved in assessing their own needs, mutual planning, formulating learning objectives, designing learning plans, implementing learning plans, and evaluating their learning. The aforementioned instructional strategies are applied in most adult education classrooms.

Some may argue that the pursuit of fitness encompasses andragogical principles by being self-directed. Women who attend aerobic classes have made the choice to attend aerobic classes to achieve desired objectives. Most aerobic centers offer a wide variety of classes at different times, for different levels of exercisers. As seen in the vignette, once the learner enters the aerobic classroom, the teacher-directed, structured routine incorporates much less self-direction.

Some instructors offer self-directed options in aerobic classes. In order to make the experience more self-directed, the aerobic instructor in the vignette could have provided exercise alternatives termed as “levels.” The first level of an exercise is the lowest impact, the second level involves more impact and level three refers to the highest impact alternative for the same exercise or move. The same idea is communicated by

aerobic instructors when they offer a low-impact alternative to a high-impact exercise. Another alternative offered by instructors is the option to incorporate arm movements into the routine. When attending classes, there are learners who are partly self-directed by adding their own moves within the structure of the routine. Consequently, some aerobic classes offer self-directed learning options similar to learning strategies characteristic of andragogy.

While andragogy promotes valuable principles for adult learning, andragogy has been criticized for neglecting the context of learning by viewing the learner independently from their environment. Without attention to important structural issues such as race, class and gender, the effectiveness of instruction is negated. By incorporating of concepts from andragogy with attention to social issues, educational strategies influenced by critical theory are applicable to instruction in aerobic classrooms.

Critical Models of Instruction

Traditional models of instruction have been criticized for teaching social ideology rather than practical information that is relevant to learners. As discussed earlier, gender construction and social ideologies are learned in educational environments. While models of adult education such as andragogy address the needs of adults, they fail to attend to social issues in education. Freire is often cited by critical theorists in discussions about implementing educational change. While Freire provides valuable contributions about formal education and classism, he completely neglects gender. With this in mind, Freire's concepts of narration and banking will be used to deconstruct the aerobic classroom where principles of feminist pedagogy will be applied to understand the effects of gender in this context.

Freire (1995) describes education as narration where the teacher is the narrator of concepts detached from reality with no practical application or significance in learning for students. The process of “banking” in education is where teachers are depositing information into students. The problem with this is that it leads to, “the lack of creativity, transformation, and knowledge in this (at best) misguided system.” (Freire, 1998, p. 139)

While the instructor in the story may not have purposely promoted ideologies of femininity and beauty, she reinforced social expectations for women such as focusing on body modification. The aerobic instructor communicated social norms, but otherwise, the class seemed void of significant health messages displaying what Freire termed “banking.” The lack of transformation or knowledge gains as illustrated in the story shows how women exercisers “bank” information in the fitness classroom. They follow the instructor, but usually leave without retaining practical information relevant to their health. However, the learners may have internalized other messages about femininity and aesthetic ideals of beauty.

In fitness settings, as in any educational setting, formal, non-formal or informal, the interaction between teacher and students is important. As seen in the vignette, the teacher-student relationship in aerobic classes demonstrates power differentials where the learner demonstrates less power. Therefore, a model of instruction that recognizes social, political, and educational inequalities such as feminist pedagogy may provide teaching strategies and techniques appropriate for aerobic classrooms.

Feminist pedagogy is a “mode of teaching to enable ways of learning that foreground women” (Luke, 1997, p. 197). As compared to traditional pedagogical practices, fitness instruction, and adult education strategies, feminist pedagogy is

concerned with methods of teaching that are less technical, instructional and more attentive to gender related oppressions in learning environments (Gore, 1993).

Within feminist pedagogy, there are different histories and traditions. However, even in different strands of feminist pedagogy classroom interaction is based on similar principles (Gore, 1993). Feminist pedagogy approaches learning by serving the needs of learners through attention to gender, feminist theory, and position in the educational process (Maher & Tetreault, 2001). Most feminist pedagogy addresses issues of authority, voice, positionality, and construction of knowledge.

Feminist pedagogy attempts to create learning environments where the patriarchal models of authority are abandoned. While the educator is guiding the process, the learners are respected and contribute equally to the learning experience. Instead of the educator being the authority not to be questioned by students, the authority expressed by the teacher is used to assist students in consciousness-raising without the constraints of traditional educational practice (Gore, 1993).

Voice is described as self-expression of gendered identities as they develop through critical reflection in and outside of the classroom. The concept of voice stems from the assumption that women had been silenced in male dominated societies. Feminist pedagogy encourages students to make connections between their own voice, experiences and theory. Voice is verbal communication reflecting gendered patterns, and as identity determining how women develop and express their personal learning (Hayes, 2000).

Through communities of discourse and dialogues around gender, social and political issues, individual voices emerge. The merging of private and public voices is,

“a complex interplay between the individual, the group, the teacher, the academic discipline, and the institutional context” (Maher & Tetreault, 2001, p. 91). Feminist pedagogy uses the concept of voice in classrooms to create safe environments for people’s perspectives to be heard. The goal is to create an equal environment where people, both men and women are not silenced (Maher & Tetreault, 2001).

Positionality is described as shifting networks of relationships that continually change and are reevaluated through recognition of an individual’s position in society (Maher & Tetreault, 2001). Feminist pedagogy uses positionality to help students understand how varying perspectives are used to construct knowledge. The feminist teacher helps students understand how position in regard to race, class, gender, sexual orientation, religion and age affect knowledge construction. The concept of “others” is used to represent populations that experience institutionalized societal inequalities, because of their position in society (Maher & Tetreault, 2001).

Tisdell (2001) describes how shifting identities reflect our experiences and influence our perceptions of the world. In Flannery (2000), the differences in women’s identities as learners in formal and informal settings are greatly affected by the culture and context of learning. The instructor’s role is to provide guidance through the process to create an equal learning environment. In order to achieve equality, Tisdell explains the need to acknowledge and discuss positionality of the instructor as well as the learners. The concept of the ‘third eye’ explores the role of the educator in helping students to see how positionality affects knowledge construction (Tisdell, 1998).

Feminist consciousness-raising greatly influenced the field of feminist pedagogy regarding the recognition of the construction of knowledge as a means of creating social

change (Weiler, 1995). Collins (2000) discusses knowledge from a black feminist perspective as subjugated knowledge. She explains the difficulty of communicating black women's knowledge within the constraints of the established validation processes. Collins emphasizes experiences and ethics of caring that value individual experience as way to create knowledge. hooks (1989) discusses how the construction of knowledge occurs through the connection personal experiences with critical analysis and theoretical perspectives. In hooks' work, she encourages the inclusion of people's experiences in understandable ways that are appropriate for non-academic learners such as women in aerobic classes.

Feminist Pedagogy in Aerobic Classrooms

Issues of power, authority, voice, positionality, and construction of knowledge are components of feminist pedagogy relevant to women's instruction and learning in physical activity. Throughout the vignette, the instructor never mentions anything about health. Aerobic classrooms are supposed to be sites for promoting physical wellness. However, the vignette shows how aerobic class objectives have been influenced by societal expectations of appearance for women.

The effect of the overemphasis on appearance and reinforcement of gender roles in aerobic classrooms create uncomfortable and ineffective learning environments for women. The instructor's comments displayed how her ideals of fitness promote ideals of beauty and femininity. The use of sexist music and comments about "performing for the boys" displayed the instructor's lack of awareness regarding the reproduction of dominant gender ideologies. Shirley's positionality as a beginning exerciser and her

personal knowledge, shaped by an awareness of gender issues, made her feel uncomfortable and excluded from the aerobic class.

In an aerobics classroom, the instructor is regarded as the expert who is rarely questioned or challenged. In this story, the instructor uses her authority to dictate the activities in the aerobic class. The students were not given the opportunity to contribute to the learning experience. Thus, there was little opportunity for the voice of learners. Interaction between the instructor and learners was limited to body-conscious comments made by the instructor. Without interaction of learners and the group, the only voice being heard is that of the instructor. The creation of a community of learners within the fitness classroom is not a priority.

Haravon (1995) presents her perspective as both an aerobic and hatha yoga instructor who implements feminist pedagogical strategies of instruction, such as increasing comfort, creating interaction, and encouraging personal expression in the aerobic classroom. In order to increase comfort, instructors must be aware of the learner's needs especially those whom are overweight and concerned about non-participant spectators. Second, instructors should avoid commentary focusing on body modification. Haravon explains, "Certain populations may be inhibited or discouraged from exercising if weight loss is assumed to be the primary goal of an exercise class" (p. 35).

Interaction in the classroom can be improved by learning each other's names, giving learners the opportunity to lead class and choreograph their own routines, changing formations like creating a circle in the classroom, limiting the use of mirrors, and creating time for learners to interact with each other. Finally, Haravon discusses how

to incorporate personal expression in aerobic classrooms by having a check-in where learners briefly say how they are feeling that day and the use of journals.

Instructional principles informed by feminist pedagogy may be applied to aerobic classes to make learning experiences more appropriate for adults, learners of different levels, and learners with different goals. Since most aerobic classrooms have not been situated with attention to feminist pedagogical issues, the application of adult learning strategies informed by feminist pedagogy may improve instruction in aerobic classrooms.

In summary, principles of instruction from adult education can be applied to non-formal learning environments such as aerobic classrooms. Current aerobic instruction is similar to traditional, pedagogical practices that reproduce gender inequalities in the classroom. While aspects of aerobic classes are informed by adult learning strategies such as self-directed alternatives to exercises, most classes are teacher-directed with little input from students.

As discussed throughout this chapter, aerobic classrooms have been shown to reinforce societal emphasis on appearance with less attention to health. Critical perspectives of instruction such as feminist pedagogy may provide aerobic instructors with strategies to create a more effective, inclusive, and enjoyable learning environment that emphasizes health over aesthetic outcomes.

Chapter Summary

Physically active lifestyles are important to maintaining wellness and preventing disease. Sedentary lifestyles contribute to public health concerns for women who already face sociodemographic barriers to optimal health. Since the three leading causes of death

in women are related to negative health behaviors including sedentary lifestyles, there is a strong case for promoting physical activity among women.

Theoretical models of health behavior have been applied to understand the motivational factors involved in the physical activity. However, most theory regarding physical activity lacks a critical orientation that would increase understanding about how social ideologies of gender affect exercise behaviors in women. Since the correlates of women's physical activity include sociodemographic, biological, psychological, and environmental factors, it is important to understand how women's physical activity is affected by dominant social ideologies.

Resistance to women's physical activity is evident in the history of women's sport, the backlash against Title IX, and through media representations of women in sport. All of these factors contribute to the reproduction of gender roles and the preservation of sport as a reserve of masculinity in Western society.

The ideology of femininity refers to socially defined norms that promote passivity and dependence resulting in restricted behaviors and standards of appearance for women. The maintenance of femininity as social ideology is accomplished through processes of control such as gaze and objectification resulting in docile bodies, the restriction of women's time, space or movement. False empowerment in fitness is a social process of control disguised in messages of health. In reality, the fitness industry continues to perpetuate norms of femininity by marketing self-modification as the way to the ideal, feminine body. The ideology of femininity and the social processes and mechanisms that function to control women may discourage females from embracing empowering opportunities in their lives such as participation in physical activity.

Like many educational activities formal, informal, or non-formal, aerobic classrooms are sites of the reproduction of femininity. Social processes of control such as gaze and objectification create aerobic classrooms where the primary focus is on appearance rather than health. While there are negative aspects to women's participation in aerobic classes, physical activity is important to women's health. Therefore, it may be beneficial to explore how already existing mental and physical benefits of aerobic classes can be enriched by applying adult instructional strategies appropriate for female learners. The application of instructional strategies influenced by feminist pedagogy may provide more effective, inclusive, and enjoyable learning experiences for women that emphasize health over aesthetic outcomes.

In conclusion, the practical application of this study will be how instructors can change instructional strategies and practices perpetuating social ideologies of femininity and beauty by incorporating health messages in aerobic classes for women. This study will provide information that will contribute to filling the gap in adult education and health education research and literature about instruction in non-formal learning environments. This information will be important to the practical and theoretical development of the fields of health education and adult education by providing examples of how instructor's teaching strategies communicate information especially about health. Furthermore, this research explores how non-formal learning environments such as aerobic classrooms may be sites of social change. This information will be valuable to social activists, practitioners, and program planners in adult education and health education.

The benefits of physical activity for women are the prevention of disease, improved health, and quality of life. Since women's physical activity is influenced by social norms, it is necessary to create opportunities for women to be physically active that resist the controlling and damaging impact of ideologies of femininity. By changing the focus of aerobic classes from appearance to health, the aerobic classroom becomes a site of resistance where women become empowered to experience the social, mental, and physical benefits of exercise.

CHAPTER THREE

METHODOLOGY

The purpose of this study was to understand the content and delivery of health messages in aerobic classes for women. A qualitative design was selected to explore the health messages and instructional strategies used by aerobic instructors in nonprofit and wellness focused facilities. For the most part, this study followed the planned research methodology. The only substantial exception was the addition of another research site, because there was a need for more aerobic instructors to participate in the study. This chapter describes the design of the study, sample selection, data collection, data analysis, pilot study, validity and reliability, and the researcher's bias and assumptions.

Design of the Study

A qualitative design was selected to explore how aerobic instructors convey health messages in aerobic classes for women. The characteristics of qualitative research are described by Creswell (1998) as “an intricate fabric composed of minute threads, many colors, different textures, and various blends of material” (p. 13). Like fabric, the aerobic classroom is an environment where many factors including social norms and gender interface to create an educational experience that is both reproductive and resistant to social norms. The nature of qualitative research allows the researcher to describe how the aerobic instructor creates her own fabric in the aerobic classroom.

There are different types of qualitative research. Creswell (1998) provides a general description of qualitative research as:

an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex,

holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting. (p. 15)

Characteristics of qualitative research vary based on the theoretical orientation. However, most qualitative studies are characterized by the following: to understand constructed meanings, the researcher is the primary instrument for data collection and analysis, inclusion of fieldwork, an inductive research strategy, and rich description (Merriam, 1998).

Constructed Meanings

In qualitative research, it is assumed that meaning is socially constructed. Recognition that individuals or groups have constructed, unique meanings for social phenomena allows for the existence of multiple perspectives and realities. Qualitative research provides the opportunity to present data about each participant's constructed meaning regarding the phenomena being studied. This study examined the meaning aerobic instructors have constructed regarding health in aerobic classes.

Researcher as the Primary Instrument

Since the researcher must provide a complex, detailed description of the phenomena of interest, it is not sufficient to simply rely on measurement such as surveys or questionnaires (Merriam, 1998). Rather, the researcher's experiences, inquiries, and examinations serve as the primary investigative instrument (Wolcott, 1994). Because I conducted participant observation and interviews, this qualitative research employed the researcher as the primary instrument of data collection and analysis.

Fieldwork

Miles and Huberman (1994) describe the process of qualitative research as “attempts to capture data on the perceptions of local actors ‘from the inside’” (p. 6). In order to gain a systematic and encompassing understanding of the social phenomena in the context where it occurs from the participant’s perspective (Miles & Huberman, 1994), fieldwork is a common component of qualitative research. The researcher attended aerobic classes as a participant observer to better understand how health messages are conveyed by aerobic instructors.

Inductive Research Strategy

Qualitative research is not predictive, but rather descriptive (LeCompte & Preissle, 1993). Deductive research serves the purpose of prediction where a hypothesis is to be tested. Inductive research does not start with a hypothesis but rather incorporates the “examination of a phenomena and then, from successive examinations of similar and dissimilar phenomena, develops a theory to explain what was studied” (LeCompte & Preissle, 1993, p. 42). The primary inductive orientation of qualitative research provides flexibility for the researcher to adjust questions or research plans as the study progresses.

Rich Description

Qualitative research is associated with description, because words are used instead of numbers to communicate findings (Merriam, 1998). Describing social phenomena in detail provides researchers with the opportunity to “preserve chronological flow, see precisely which events led to which consequences, and derive fruitful explanations” (Miles & Huberman, 1994, p. 1). This report provides rich description of the process of data collection and data analysis.

Sample Selection

The population in this study was aerobic instructors. However, within this group, there needed to be a way to select research participants who would be rich sources of data. In order to select optimal participants, purposeful sampling was used to identify the specific population to be studied.

Purposive or purposeful sampling is done to “discover, understand and gain insight and therefore must select a sample from which the most can be learned” (Merriam, 1998, p. 61). Selection units, the primary source of data in the study, disclose the answers to the research question. While selection units are usually humans, they can also be artifacts, events, or context (LeCompte & Preissle, 1993). Marshall and Rossman (1995) add behaviors and processes as possible things to be sampled.

Purposive sampling involves establishing important criteria for selection units to assure information rich cases. The primary source of data in this study was aerobic instructors. The first criteria for selection was the context of the aerobic classes. Because the purpose of the study was to learn how aerobic instructors convey health messages in their classes, the context of a wellness center was preferred over a fitness center. For the most part, wellness centers and non-profit fitness centers emphasize issues of lifestyle, behaviors and nutrition as well as physical health. Most gyms or health clubs focus on physical fitness with little attention to wellness. Consequently, it seemed more likely that aerobic classes held in a wellness center would include more health messages providing a richer source of data. Originally, the wellness center was chosen as the only research site, but there was a need for additional aerobic instructors to participate. Therefore, a

hospital-based wellness center and a family fitness center were chosen as the sites for data collection.

The first facility was a hospital-based facility located off-site from the main hospital in a medical complex. The wellness center provides individual fitness services based on lifestyle, physical, and medical factors, work schedule and fitness potential. The facility attempts to “promote a lifetime of cardiovascular health and personal well-being” (Wellness Center Flyer). The employees at the wellness center have a minimum of a bachelor’s degree in exercise or health related fields. The facility was open Monday and Wednesday from 6:00 a.m. to 9:30 a.m., Tuesday, Thursday, and Friday from 6:00 a.m. to 8:30 p.m. and Saturday from 8:00 a.m. to 2:00 p.m. and closed on Sunday. The price of membership starts at \$45 per month, but varies based on the number of people joining and the membership type. Memberships include initial fitness evaluation, body composition analysis, individual exercise consultation, water aerobics, blood pressure screenings, aerobic classes, all equipment, and health fairs. Members pay additional fees for massage and personal training sessions.

The wellness center has cardio equipment including bikes, treadmills, stair climbers, and elliptical trainers; free weights; weight training machines; and a group exercise area. Aerobic classes are held in the group exercise area that is not self-contained but flows into the weight training area. There are three walls in the aerobic class area with mirrors on two walls.

The second site where data was collected was a family fitness center founded to provide physical activity opportunities for women and their families. There were a variety of classes that focused on aerobic, strength and stretching offered on various days

and times. There were many fitness opportunities besides aerobic classes for members including participation in sports, swimming, weight lifting and educational programs. The facility included a small weight room with nautilus and cardiovascular equipment, a swimming pool, basketball courts and sport fields.

The hours for the family fitness center were Monday through Friday 6:00 a.m. to 9:00 p.m. and Saturday 8:00 a.m. to 7:00p.m. and Sunday from 11:00 a.m. to 7:00 p.m. Aerobic classes were offered everyday except on Sunday. This facility ran on a quarter system that changed with the seasons. The fees ranged between \$136.00 to \$170.00 for individual adults per quarter. Classes changed each quarter and there was a week break between each session.

There are two aerobic classrooms at this facility. One aerobic classroom is large and one is small. Each room has mirrors lining the front. The smaller classroom has ballet bars in the back that were sometimes used by aerobic classes for stretching. In both cases, exercise equipment like step benches and weights were kept in closets at the end of the rooms. The larger aerobic room was a better learning environment and was used by aerobic classes that attracted the most participants.

In addition to the site of the research, another requirement for selection of aerobic classes to be studied was the orientation of the activity. Only classes with an aerobic endurance orientation were used. Therefore, classes focusing on strength or stretching were excluded. Examples of classes used in this study were low impact, step, circuit, interval classes or kickboxing. Class participants were mostly women between the ages of 19 and 60. Three of five instructors in this study taught at the Wellness Center and

were paid \$20 per class making them the highest paid instructors in the area. The other two aerobic instructors from the family fitness center were paid \$15 per class.

The criteria for the aerobic instructors to be included in this study included current certification in exercise instruction from one of the exercise agencies such as American Council of Exercise (ACE), American Council of Sports Medicine (ACSM), or the Aerobic Fitness Association of America (AFAA). Participants were also certified in CPR. Because both the wellness center and family fitness center required that aerobic instructors be certified in aerobic instruction and hold a current CPR certification, it was assumed that all of the five instructors chosen as research participants met sampling criteria.

Data were collected from the wellness center and family fitness center over three months. During this period, the researcher interviewed five instructors and conducted participant observations in three classes taught by each instructor. There was one exception where the researcher only conducted two observations, because the aerobic instructor cancelled class or had a substitute instructor. In addition to signing an IRB form from the University of Georgia, research participants were required by the wellness center to sign a research participation waiver.

Data Collection

The methods of data collection in this study were in-depth, open-ended interviews, participant observation, and documents. Interviews were conducted with aerobic instructors. Observation research with the participant as observer was used to observe aerobic classes. Documents were used to identify class schedules and descriptions.

Interviews

Qualitative interviews provide a vehicle to explore an occurrence or topic from start to finish including motivations, outcomes, and multiple participant perspectives (Weiss, 1994). Recognizing the importance of participants' views in "qualitative interviewing begins with the assumption that the perspectives of others is meaningful, knowable, and able to be made explicit" (Patton, 2002, p. 341). The detail gained from qualitative interviews help illustrate the experience clearly for the intended audience, because the description helps "readers to grasp a situation from the inside, as a participant might" (Weiss, 1994, p. 10).

In qualitative research, the type of interview utilized by researchers is related to the "amount of structure desired" (Merriam, 1998, p. 72). Merriam (1998) describes the structure of interviews as a continuum with informal, unstructured questions used to develop a general understanding of a topic to be explored to the highly structured interview with the objective of assessing pre-established ideas about the topic at hand.

Patton (2002) describes informal conversational interviews as generating information and questioning within the natural flow of the conversation. Standardized open-ended interviews are guided by carefully constructed sequential questioning with limited probing. Confirmation surveys are examples of highly structured interviews used to access similarity of beliefs, constructs, and behaviors among participants (LeCompte & Preissle, 1993). In the middle of the continuum are open-ended questions, with little structure, allowing the respondent to answer without constraints and enabling the interview to flow naturally. Patton (2002) describes open-ended questions as the

interview guide approach where issues to be discussed are predetermined, but not limited by the established topics.

This study used semi-structured, open-ended interview questions. An interview guide was used, but in some interviews additional questions were added (See Appendix A for Interview Guide). Prior to interviews, the researcher explained the project to interested participants and obtained written consent. Participants filled out a short questionnaire including general demographic data and contact information.

Interviews were conducted in a place and time that was convenient for participants. All of the interviews occurred on site at the facility where the aerobic instructors were teaching. In all cases, the interviews took place immediately after aerobic classes taught by the aerobic instructor. All interviews were recorded and transcribed verbatim. Participants were given the opportunity to ask questions without being recorded. After each interview, the researcher took notes regarding the interview. The researcher followed-up three months later with participants to ask if their aerobic instruction had changed since the research study observations were completed. Further descriptions about each interview are provided in Chapter Four in the section Aerobic Instructor Participants and Aerobic Class Descriptions.

Observation

Information gained through observations of aerobic classes was integrated with information from interview with aerobic instructors. Information from observations and interviews was combined and compared to provide a complete picture of the occurrences in aerobic classes for women. Observation is a way to collect data occurring in the natural setting (Merriam, 1998). In reference to this study, Markula (1995) discusses the

practicality of using fieldwork for exploring aerobics as, “aerobicizers gather regularly together in a public, yet well-defined place—the gymnasium” (p. 430). In this study, aerobic classes were accessible sites for observation-based research.

Merriam (1998) discusses the role of the researcher in observational data collection as four types of relationships including complete participant, participant as observer, observer as participant, and complete observer. A complete participant is usually a member of the group being observed whose researcher role is unknown to the groups. The participant as observer is known to the group, but is primarily involved as a participant (Merriam, 1998). An observer as participant involves primarily observation with minimal engagement in participant activities (Merriam, 1998). The complete observer also referred to by Lofland and Lofland (1984) as the unknown investigator and is not part of the group.

This study used the participant as observer perspective. The researcher was known to the group, but was primarily involved as a participant (Merriam, 1998). Using this type of observation, the researcher participated fully in the aerobics class while conducting research. This was the most appropriate type of observation to use in this study, because of the need to make participants more comfortable and less conscious that they were being observed.

The objectification of women’s physical activity is sometimes reinforced by the gaze of outside observers. Therefore, it was most desirable to create an environment where the instructor and class participants did not feel they are the object of someone’s gaze. If the researcher felt the quality of observation was affected by full participation in the aerobic class, the researcher would have observed by sitting on the sidelines. There

were a few times during the strengthening sections of classes that the researcher took notes. However for the most part, audio tapes and notes taken after the class were found to provide adequate data.

When conducting observational research, there are factors essential to performing a comprehensive observation. First, it is necessary to provide a physical description of the setting along with details about the context, behavior, and materials present at the site (Merriam, 1998; Patton, 2002). Secondly, it is necessary to provide detailed observation of the social environment centered around participants in the scene including who they are, their social roles, and characteristics (Merriam, 1998; Patton, 2002). Rich description of the environment, classes and people is provided in Chapter IV.

Auditory information is an important aspect of observation. Merriam (1998) discusses conversation as important to observation where it is necessary to “quote, paraphrase and summarize conversations” (p. 98). Patton (2002) says the observer must be cognizant of the unique language existing in the setting. Verbal communication used in aerobic classes is unique, because of the uniform language of choreography and instructional cues that has been established by aerobic instructors and the fitness industry. Therefore, it was necessary that the verbal communication observed be audio-taped to capture conversations, instructional cues, and music from classes.

Nonverbal communication may include gestures, fidgeting, cues about norms, appropriate dress or expression in a setting (Patton, 2002). Nonverbal cues included instructional techniques often used by aerobic instructors. Participant observation was used and jottings were taken immediately after observing the aerobic classes to be

expanded into field notes. The researcher used field notes to record direct quotes, social interaction, initial impressions, and incidents (Emerson, Fretz & Shaw, 1995).

The researcher had two sources of information from observations: audio tapes and field notes from participant observations. Both sources were used in the development of codes, themes and general categories. The researcher observed at least one class conducted by each aerobic instructor before interviews were conducted. By doing this, the researcher captured information about health messages currently communicated in classes. The researcher was aware that the aerobic instructors' strategies could be altered after the interviews, because the instructors' awareness about health messages was raised. However, the interviews did not seem to affect the number or type of health messages conveyed by aerobic instructors in the classes that followed. In fact at the three month follow-up, all of the aerobic instructors said they had not changed their instruction indicating they did not perceive themselves as including more health messages than before the research project.

Documents

In this research, documents such as aerobic schedules and class descriptions were used to determine what aerobic instructors and classes to observe. Documents, also referred to as artifacts, are another method of collecting qualitative data (Merriam, 1998). LeCompte and Preissle (1993) cite the importance of artifacts as "data indicating people's sensations, experiences, and knowledge and which connote opinions, values, and feelings" (p. 216).

There are many varieties of documents relevant to qualitative research including public records, personal documents, physical material, and researcher-generated

documents (Merriam, 1998). Taylor and Bogdon (1984) discuss the usefulness of personal documents in helping people to tell their stories, especially in interviews, while providing the researcher with a more complex understanding of the context of participant's story. Wellness center and family fitness center materials describing the facilities and services like brochures, aerobics class schedules and class descriptions were primarily used in the preparation for data collection.

Data Analysis

Data analysis is the process of interpreting information collected to create meaning and understanding of the subject at hand. The process of data analysis in this study occurred throughout the study as data were collected via participant observation, interviews, and documents. As LeCompte and Preissle (1993) state, "Qualitative researchers analyze data throughout the study rather than relegating analysis to a period following the data collection" (p. 239).

The researcher explored the instructional strategies of aerobic instructors regarding health messages in aerobic classrooms. The constant comparative method as described by Glaser and Strauss (1967) was used to code data by organizing themes into general categories. The process of coding is important because, "Coding forces the researcher to make judgments about the meaning of contiguous blocks of text" (Ryan & Bernard, 2000, p. 780).

The data analysis occurred throughout this research. Fieldnotes recorded initial impressions of the researcher that were integrated into transcriptions from both class observations and interviews. For example, from observations the researcher found that aerobic instructors were very careful to point out the importance of good form and safety.

As the research continued, transcriptions were coded from each interview and aerobic class separately. Data collected were coded line for line. Lists of codes for each aerobic instructor and their classes were formed. Then the researcher looked for themes in the data and found common links. For example, coding indicated messages about safety and injury were present in all of the aerobic classes observed and reinforced in interviews. Consequently, the theme of safety and injury prevention emerged and became a general category. Throughout the data collection, categories were revised as more information was collected and emerging concepts were sharpened. Contradictory or negative cases were also explored and categories were adjusted to accurately represent the data collected.

Pilot Study

During a qualitative research class in the summer session of 2002, I conducted a pilot study that informed my research plan. The purpose of the pilot study was to explore the appropriateness of fitness programming for women learners by asking “What are fitness practitioners' perceptions about appropriate fitness programming for female adult learners?” Data collection techniques included interviews, archival data, and participant observation. The research participant was an aerobic coordinator at a local nonprofit fitness facility who taught a wide variety of classes including strength, stretch, aerobic and Pilates. Two interviews and participant observations were conducted with the instructor. Preliminary results indicated this fitness instructor was focused on beauty-related outcomes and the needs of her participants. In addition, gender differences in the fitness setting are reflective of gender roles in larger society. The primary implication for

practice was the need to increase fitness instructors' awareness about instructional techniques that emphasize health benefits in women's exercise programming.

With the information I gained in the pilot study, I revised my plans for my dissertation research by adopting a more critical theoretical stance. Since I observed an absence of health messages, I decided to investigate how to enrich the effectiveness of and experiences in aerobic classes for women through the incorporation of health messages by instructors in aerobic classes.

Validity and Reliability

As long as we strive to base our claims and interpretation of social life on data of any kind, we must have a logic for assessing and communicating the interactive process through which the investigator acquired the research experience and information. (Altheide & Johnson, 1994, p. 485)

The aforementioned quote describes what the authors believe are requirements to achieve validity in qualitative research. Validity addresses the extent that the research is representing reality. Internal validity addresses whether or not the investigator is observing or measuring what they should be to understand the phenomena at hand (LeCompte & Preissle, 1994). The internal validity in this study was addressed by using triangulation of methods, peer examination, and researcher's subjectivity (Merriam, 1998). The researcher conducted member checks with four out of the five research participants. Only one aerobic instructor responded and she suggested an additional category for findings about the low carbohydrate diet trend. Triangulation of methods including participant observation, interviews, and document analysis were used to

address internal validity. Peer examination was used where the researcher consulted a research advisor and methodologist regarding the coding of data.

The term generalizable is associated with external validity of a study and addresses the applicability of findings across groups. In qualitative research, generalizability refers to how well the reader or user can apply research findings to their practice. Triangulation of data collection and rich description of findings in this study addressed issues of “reader generalizability.” The results of these findings seemed typical of other aerobic classes taken by the researcher in similar settings. However, a survey developed from findings will be used to further address the generalizability of the results in this study.

Spending a significant amount of time observing the phenomena increases external validity (LeCompte & Preissle, 1993; Merriam, 1998). An attempt to observe aerobic classes until saturation was made by attending three classes of four different instructors and two classes of one aerobic instructor. Aerobic classes were highly structured and similar in many ways due to certification regulations, thus the degree of external validity may have been increased.

The reliability or the repeatability of findings is addressed in this study in a number of ways. Merriam (1998) lists three strategies for improving reliability: investigator’s position, triangulation, and an audit trail. This chapter includes a summary of the researcher bias and assumptions to disclose the researcher's position and theoretical stance thus improving reliability. As mentioned previously, triangulation of methods to was used in this study with the intention of increasing reliability. Finally, an audit trail or

clear outline of the research process was provided in this methodology chapter to increase reliability.

LeCompte and Preissle (1994) discuss strategies for increasing internal reliability including mechanical recording, low inference descriptions, and peer examination. By audiotaping interviews and the aerobic classes, low inference description was obtained from transcripts. By transcribing data verbatim, exact words, phrases, pauses, and sounds were recorded to be included in data analysis.

Another strategy for increasing internal reliability is the incorporation of peer examination. Peer examination of data analysis was provided by the committee methodologist. Research committee members will review results and conclusions and make suggestions for revisions.

Researcher Bias and Assumptions

It is no more useful for researchers to acknowledge simply that subjectivity is an invariable component of their research than it is for them to assert that their ideal is to achieve objectivity. Acknowledgements and assertions are not sufficient.

(Peshkin, 1988, p. 17)

Rather, Peshkin (1988) suggests that researchers need to identify and be aware of their subjectivity and bias throughout the research. Therefore, it is not enough to identify your bias and assumptions in a written statement. This awareness must be present throughout the research conception, data collection, and analysis. The following statement outlines my subjectivity from the conception of the project until now.

My interest in women's fitness has been influenced by my professional and recreational participation in the exercise programming. As a child I played sports and took dance classes. As a teenager, I started taking aerobics classes and lifting weights. In my master's program, I developed an interest in becoming a fitness instructor and personal trainer. At one point, my primary employment was in the fitness industry. As my career path changed, I taught fitness classes on a part-time basis and over the past few years have taught classes intermittently and substituted. I have maintained my certifications in aerobic instructing and personal training.

At many points in my education and career, I felt conflicted about the fitness industry. The fitness industry sends the message that no matter how much women exercise or diet, it is never enough. Despite goals of education, career and family, as women, we are socialized to strive to meet the stereotypical ideal of attractiveness at all costs. As a result of societal pressures, women have attempted to maintain their appearance through control of exercise and eating. In some cases, obsessions with appearance result in excessive exercise or eating disorders.

We are bombarded with messages that we are a nation of couch potatoes who need to exercise. Therefore, it is assumed that exercise programming conducted by trained professionals is always a good thing. Very few people have critically examined the effects of aerobic classes beyond the cardiovascular outcomes. Consequently, applying a critical, feminist lens to exercise programming for women may disclose additional physical, and mental and even social, political and economic effects.

Since I am a woman who has provided and currently participates in exercise programming, I am demographically similar to my research population. Through training

and accreditation in fitness programming, I have professional knowledge about exercise programming for the general population. However, I would like to increase my awareness about mental and physical health and improve my facilitation skills in fitness instruction. By creating exercise programs that provide more appropriate learning experiences for women, fitness classes can be empowering rather than methods of reproducing gender stereotypes of women.

In summary, the purpose of this qualitative research study was to understand the content and delivery of health messages in aerobic classes for women. Interviews and participant observation were used to collect data. Documents were used in preparation for data collection. The constant comparative method of data analysis was used to analyze data. Issues of validity and reliability were addressed by using multiple strategies including triangulation, member checks, and peer evaluation. The researcher stated her bias and assumptions and maintained awareness of such issues throughout the research project.

CHAPTER FOUR

PARTICIPANT AND CLASS DESCRIPTIONS AND FINDINGS

The purpose of this study was to understand the content and delivery of messages in aerobic classes for women. This qualitative research explored the practices of five aerobic instructors working at nonprofit or wellness focused facilities. Each participant met established criteria for participation including being a woman, teaching aerobic orientated classes, and holding an aerobic certification. The five participants ranged in age from 23 to 53 years with various levels of experience ranging from two to 25 years of aerobic instructing. Pseudonyms were established for both the aerobic instructors and the facilities where they teach. Information gathered from interviews and participant observations were used to answer the following research questions:

1. What health related messages were conveyed by instructors in aerobic classes for women?
2. How did health messages shape the environment of aerobic classes?
3. What cultural and aesthetic messages were conveyed by instructors in aerobic classes for women?
4. What instructional techniques did aerobic instructors use to convey health messages in classrooms?

This chapter is divided into two sections. The first section provides descriptions of the aerobic instructor participants and the classes they teach. The second section focuses on the findings in this study by outlining the practices used by aerobic instructors to communicate health messages in aerobic classes for women.

Aerobic Instructor Participants and Aerobic Class Descriptions

This section describes the aerobic instructors' practices as well as their classes including lo-impact aerobics, high-lo aerobics, step, step interval, and kickboxing. The section also details the personal and professional stories of Meg, Dana, Jenny, Susan, and Anna focusing on the health messages conveyed and the instructional strategies used by each aerobic instructor.

Aerobic instructors who participated filled out a short demographic questionnaire. The information included questions about age, ethnicity, education, profession, fitness certifications, and years teaching aerobic classes. The researcher used demographic information to give a more complete description about the backgrounds of aerobic instructors in this study. Age, ethnicity and education provided information about the personal factors influencing the aerobic instructors' perspectives. Profession, fitness certifications, and years teaching provided information about the professional experiences of the aerobic instructors. Table 4.1 briefly describes the backgrounds of the research participants.

Table 4.1 Aerobic instructor demographics

Participant	Age	Ethnicity	Education	Profession	Fitness certifications	Years Teaching
Meg	30	White	Two years of college	Home schools children	IFTA, water aerobics, primary fitness, matflex, Pilates, powercut, and senior aerobics	3 1/2
Dana	34	White	BBA International Business	Credit Analyst	AFAA aerobic instructor and kickboxing	2
Susan	53	White	Biology and Chemistry; M.Ed. Secondary Science Education; MS Anatomy & Physiology with a minor in Biochemistry	Secondary Science Teacher	ACE; AFAA; Exercise-Safety; Chicago Health and Fitness	25
Jenny	23	White	BS in Chemistry Currently working on a PhD in Analytical Chemistry	Graduate Student, Weight Watcher Receptionist	University of FL group fitness certification	1 1/2
Anna	30	White	BA Wellness, Physical therapy assistant	Physical therapy assistant	AFAA	11

Meg

Meg was the first aerobic instructor I observed at the wellness center. Meg is a 30 year-old mother of three who is cheerful, energetic, outgoing, and a self-described people pleaser. The pursuit of wellness is a family endeavor as her husband is also involved in promoting health as a Chiropractor. Together they try to set a good example for their children and others. Meg told me she eats well, exercises, does not smoke or drink and rarely takes medicine.

After the third class I observed, our interview took place in the downstairs waiting room, where nobody was sitting, but as the interview continued people flowed through. She was conscious of the time, because her mother was watching her children. The interview lasted about 45 minutes. Meg shared information about her personal and professional practices regarding health and fitness. She asked me about school, because she was thinking about doing some type of health promotion degree.

Meg is tall and slim with dirty blond short hair and usually wore a fitness tank top with black stretch pants, and sneakers. She has been teaching aerobic classes for three years. Meg became motivated to be an aerobic instructor, because she was attending many aerobic classes where she saw things she did and did not like. She viewed becoming an aerobic instructor as an ideal opportunity to get exercise and access to fitness opportunities. During our interview, Meg described her interest:

I started taking a class and thought I can't afford daycare and paying to go to the gym... so I was like...I want to teach. I want to teach. Um, it wasn't until after my third child, because I've only been teaching three years. When we moved to Marietta, I said, you know what I'm interested, there's a group coming into town to certify group exercise, and very nervous, and did it, and I love it. I mean I started out not being able to afford to do as much as I really wanted to do. I've been teaching three years.

After making the decision to be an aerobic instructor, Meg was certified by the International Fitness Trainers of America.

Meg teaches aerobic classes in three facilities including one private and two non-profit sites in the area. She teaches strength training and aerobic classes. I observed her

lo-impact aerobic and step classes at the wellness center. At her lo-impact 8:15 am wellness center class, there was a group of four to five women in their 60's and 70's who attended morning classes regularly.

Meg's style of instruction was informal with little choreography. She used verbal and physical cues while often holding note cards listing the routines. If she tried new choreography and it did not work, she and the class would laugh. She used a similar format for each class including a warm-up, aerobic section, strengthening, and stretch. She took two to three water breaks per class and used minute intervals where the class jogged or walked around the room on their own.

During the first part of class, Meg faced the mirror with her back to the class. In stretching and strengthening sections, she faced the class, sometimes walked around the room or formed a circle. She also worked with people individually by correcting their form. Throughout the class, the students and Meg chatted a little, but during the strengthening and stretching sections, they mainly conversed about each other's lives and families. During the strengthening section, she encouraged the students to check their form in the mirror. Most of the time Meg did not include explanation about why the exercise was being done or how it would benefit the class participants' health. In the classes I attended, Meg never took a heart rate or perceived exertion, but did cue proper form and safety throughout the class.

The sense of community in her classes was extremely high. Meg knew all the participants' names and about their lives. The small class size and consistency of attendees created a social outlet for the students and the aerobic instructor. At the same facility, Meg taught a 5:30 pm step class on Mondays that attracted a younger clientele.

In our interview, Meg expressed the need for exercise to be fun, yet she took physical activity seriously. As illustrated in her comment, “To me, having that fun, but also correct form is the most important.” She created a fun atmosphere through joking with class participants throughout her classes and using upbeat oldies for music. She mentioned several times that she wanted to open a karaoke gym where class participants sing along to the music.

Much of our discussion focused on appearance related issues. Meg, like other aerobic instructors in this study, lost a significant amount of weight totaling about 50 lbs. Meg still questioned whether or not she was fat. She described her preoccupation with weight as “I always thought I’d be fat. I guess, I know, I feel good about myself, but yet I think if I could get to 140, now I’m at 135, ok let me see 130.”

Personal and professional experience played a big part in how Meg instructed her aerobic classes. As a fairly new instructor, she seemed to be fine-tuning her teaching skills. Consequently, she had not developed the skills or methods of communicating intentional health messages in her classes.

Dana

Dana was the second aerobic instructor observed and interviewed. Dana is cheerful, energetic, and dedicated to motivating others in the pursuit of fitness. Dana teaches step and stretch and toning classes at two wellness centers. Dana is in her 30’s and has been taking aerobic classes for 18-20 years. Dana has a full-time job in the banking industry and is married with two dogs that she runs with each night.

Dana has curly brown hair to her shoulders. She wears shorts and t-shirt or tank top to teach aerobic classes. After losing 30 lbs, Dana is about 5’5 with a slim

appearance. This weight loss was motivated by her unhealthy lifestyle and concern expressed by her doctor.

About two years ago, Dana became certified by the American Fitness Association of America, AFFA, in primary aerobics and kickboxing. In our interview, Dana described how she decided to become an aerobic instructor:

I was just bored, I'd go to classes every night and one of the instructors I've known probably for about ten years said "You should really think about teaching one day." I laughed and said no, "I'll never be a good teacher." Then my sister got certified and never taught, ever. She just did it to do it. Its kind of expensive to get certified and I thought if you are gonna spend the money and the time to do it why not use it. Well I thought I'll just see if I can pass it, and then after I passed it, I said let me see if I can go ahead and teach. By then, 18-20 years of experience under my belt, and I knew a lot of routines. That was basically the motivation.

The clientele for her step classes consisted of three to five women. In one class, a member of the class told me that she was motivated by the pictures Dana showed to her before and after her weight loss.

Dana taught structured combination style classes where she attempted to cover five or six combinations in each class. She used a typical aerobic class structure with a warm-up, aerobic section, cool-down and stretch. Like Meg, Dana held note cards in her hands while teaching. Dana always kept her moves high impact, but provided options for lo-impact. She cued safety and form throughout the workout. Sometimes she provided explanation about what muscles were being worked by certain exercises. Dana cued

water often and said 20 ounces of water should be consumed before, during and after class. Most of the time, Dana did not provide an explanation for why a specific exercise was being done.

Dana assessed heart rate in the middle and the end of the aerobic section. Dana always explained how to take heart rates and said there was a chart on the other end of the room to check the appropriate range for your age.

Dana faced forward in class and usually did not deviate from this position except to change music. Her music was always modern pop. Dana stayed in the very front of the room with a line of three class participants positioned in the very back. When other women came to class, they stood behind Dana, but never even with her.

Dana chatted with class members before and after class. During class, she addressed individuals when they are doing something wrong or when she had something to tell a person. At one class, she said she was blessed to be in the presence of three aerobic instructors including me and two other class participants. At the second class I observed, she mentioned the magazine *Cooking Light* and talked about the importance of nutrition and exercise. Dana discussed the need to eat before step class and shared a story about a client at a different facility that got light headed during class, because she had not eaten all day. Otherwise, there was little discussion of health in her class.

The interview took place after the step class she taught on Wednesday night at 5:30 pm in the wellness center office next to the weight room. In total, I observed three of her classes, two prior to the interview and one after. We sat on two chairs with the audio recorder on a desk. Since it was later in the day, the center was not very busy. This interview lasted about 45 minutes, but after the audiotape was shut off we continued

to talk for another 20 minutes about health and fitness issues. She spoke more of her personal experiences with exercising and health. Although she was very self-conscious of doing this, Dana she showed me pictures of herself before and after losing weight. She told me she had smoked two packs of cigarettes a day, had high blood pressure and high cholesterol. Her health was the motivation for her weight loss and change in lifestyle. Despite changes in her body, she was still not completely happy with her appearance.

She asked me about my experiences with teaching aerobics and my research on the topic. During the interview she did not express the need for health as a motivator in aerobic classes, but told the researcher after the tape was off that aerobic classes focusing on health would be a good motivator for women coming to the wellness center. We walked together to our cars and continued the discussion about fitness issues.

Like the other aerobic instructors in this study, Dana's personal experience with aerobic classes as well as her experiences with health issues, have shaped her practice as an aerobic instructor. She had been teaching for a short time and like Meg was still developing her skills. While she included some health messages in her classes, most attention was focused on cueing choreography and form.

Susan

Susan is the most experienced of the aerobic instructors in this study as she has been teaching for 25 years. Susan is a friendly, caring and community-oriented person who was learner-centered in her style of instruction. She teaches a variety of classes focusing on strength, aerobics and stretching at one private and two non-profit facilities in the area. I observed her hi-lo, step interval, and step classes at the family fitness center. Averaging about 25-30 attendees, Susan's classes were the largest I observed. There

were about four to five men who attended these classes regularly. The students ranged in age from mid 20's to 60's representing a variety of racial backgrounds and body types.

Susan is in her 50's, has dark medium length hair often pulled back with a headband, and wears self-described casual dress consisting of shorts, a t-shirt and good workout shoes. She dresses casually because she wants to create a non-intimidating environment where people feel comfortable. The creation of a non-intimidating environment is very important to Susan. Her negative experiences with intimidating exercise environments were part of the reason she became an aerobic instructor. In our interview, she described her situation as:

I started teaching because I didn't want to do classes where I felt intimidated.

And I felt stupid if I couldn't do the moves and there are some instructors who make you feel plenty stupid if you can't do what they are doing. So I had enough experiences with that that I know could do it. And if I could do it I could do my own thing and nobody would make me feel like I couldn't. And I guess it's just that background of wanting people to feel comfortable and feel like they can do it without being threatened or embarrassed.

Another reason Susan became involved in teaching aerobics was that after being very active in high school, Susan got married and stopped exercising. In our interview, Susan described her rediscovery of physical activity through her experience of becoming involved with aerobics:

And when I graduated the thing was you got married so girls really didn't go to college, that wasn't a primary thing. You found your husband so I'm from that generation. So I gained weight, I gained weight from not doing a whole lot. So I

started working out and I loved it! From the first time I did it. I couldn't walk the next day, literally could not walk the next day. Um, then I got into teaching. I've been teaching for 26 years.

Susan concentrated on creating a community learning experience tailored to adult learners. This facility worked on a quarter system where the class schedule changed with the seasons. Although I was not there to observe this, Susan said she uses the beginning of each quarter as an opportunity to build community and educate students about health issues. In the interview, Susan explained that at the first class of each quarter, she asks participants to introduce themselves and to tell the class something about themselves. At this time she also presents information about health including heart and lungs, breathing, bone health and calcium, posture, relaxation and stretching, dehydration, and perceived exertion. Through my observations, I say that Susan incorporated reminders throughout the quarter regarding community building and health messages, and reviewed this information when a new student joined the class.

In our interview, Susan explained that she uses every type of music from every decade and sometimes will start at the beginning of the quarter with 20's and move through each decade as the quarter progresses. She was the only instructor who prefaced certain music as possibly being offensive to some, but for variety and to please everyone she used all types of music including modern pop. In the interview, she described how she discontinued using certain music because a student found it offensive.

From observations, it was obvious that Susan's style of instruction reflected many learner-centered instructional techniques. Susan always gave options for exercisers and moved at the classes' pace of learning rather than her pace of instruction. Therefore, she

would spend more time teaching a combination or move on if the class did not like something or was not able to keep up. She incorporated the experiences of class participants into her instruction in many ways. Without identifying or putting people on the spot, she discussed health issues that a person in the class was experiencing like osteoporosis. This created an environment of learning and support for class participants.

During our interview, Susan explained that many of the class participants have young children so she shared research about health in children with the class. From observations, it was found that Susan also incorporated real world experiences by incorporating exercises that mimic everyday functional activities like putting towels away or shopping.

While Susan followed the typical aerobic class format of warm-up, aerobic section, cool-down, strength and stretch, her classes were different every time. In our interview, Susan said that the variety of music she used prevented boredom and that she could use the same basic moves for every class. From observations, it was apparent that Susan she used directional change and encouraged class participants to use the space in the classroom more than other aerobic instructors in this study. In the interview, she also used a technique called “scramble” where she asked students to change their location in the classroom creating variety and giving students a different learning perspective.

Students became a part of a learning community in Susan’s aerobic classes. Susan taught facing forward, but in class the first row of students were always even with her. This is not a class format that was seen often in aerobic classes. In our interview, Susan explained that some class participants are visual learners or do not see well and need to be in the very front. I have observed her teaching a new combination that she had

named after a student and said eventually all class members would have their own combination. At the end of each quarter, the class participants “call” the class meaning they lead the movements. Each student has the opportunity to select the exercise they want to lead as Susan described in our interview:

I stand up there and we’ll start the thing, and I will go over to someone and I call their name I’ll say “ok Linda, you change the feet.” And they’ll do something with the feet then I come around to someone else and say “Alright Kate, you change the arms” and so they actually do it. Or I go up to Dee and say “what do you want to do now?” And they’ll choose a move to do and it is a much more challenging class, because usually all they can remember is the hard stuff and we do that. But that’s fun and they really enjoy that. They get mad if I don’t do it. They’ll remind me “don’t forget today we are supposed to call.” So I include them in the class.

From observations, it was determined that Susan cued safety and proper form consistently in her aerobic classes. She used perceived exertion to assess the class participants’ heart rates describing how the body and participants should feel when working in an appropriate range. When she cued water, she explained symptoms of dehydration and brought in pamphlets about water consumption for the class. Susan and Anna were the only two instructors in the study that consistently provided explanation about why the exercises are being done and how they affect the body.

Susan holds several degrees relevant to health and was the most experienced aerobic instructor in this study. She developed a style of instruction that integrated her

personal and professional experiences while communicating health messages to class participants.

Jenny

Jenny teaches aerobics at the family fitness center. In the morning she teaches a stretch and circuit class and on Wednesday evening she teaches a kickboxing class. Jenny is in her 20's, married and working on a master's degree in Chemistry while working at Weight Watchers as a receptionist. Jenny was certified to teach aerobics through a mentoring program offered at the university where she earned her undergraduate degree. She became involved with teaching aerobics, because she was trying to lose weight and physical activity of choice was participation in aerobic classes. In total, she lost 55 pounds and had been teaching aerobics for a year and a half. In our interview, Jenny described her experiences with aerobics:

Being on the other side and knowing what I needed at different levels in my weight loss and fitness journey knowing at the beginning that I could barely do step-touches also coordination, or they won't be able to do anything, but also fitness level, and also if it was boring and I hated it. I knew I wouldn't come back and a couple times I thought if you would just do this it would be fine, but I wouldn't necessarily say anything if I wasn't asked. "What can I do to make this better?"

I only observed Jenny's kickboxing class twice, because she cancelled class on the third scheduled observation and then left town for a month. The two classes I observed were held in the small room at the community center. The interview took place after the second kickboxing class I observed.

The instructor wore black stretch pants, and t-shirts with her long hair pulled back in a ponytail. Jenny seemed a little nervous at the beginning of each class, but got more comfortable as the class progressed. There were between 2-5 participants in her class. At the first class I observed, there were four women and one man who was the instructor's husband. All the class participants stood in the back of the room in a straight line, except during segments where participants used stations. There was very little class interaction among students and the aerobic instructor. The students didn't show much expression. At the second class, there were two other women class participants who also stayed in a straight line in the back of the room.

In both classes observed, Jenny used the same format, moves, and stations. A typical format of class included a warm-up, aerobic and kickboxing section with station intervals, cool-down, and stretch. She often provided options for class participants. Stations consisted of two minute intervals of strength and aerobic activities class that participants do at their own pace. Jenny used this technique to allow class participants to work at their own pace, because she remembered from her personal experiences that when she first started she could not complete an entire aerobic class. Working with stations allowed class participants to catch their breath or take the pace higher if needed. For most of the class, the instructor used loud classic rock music. However during the final stretch, she used slower, softer music creating a relaxing atmosphere.

Jenny concentrated on communicating information about kickboxing technique. Jenny talked about the application of kickboxing in everyday life especially relating to self-defense. For example, in class she said "We are gonna learn a little self-defense.

Don't let them get behind you, but if they do, this is the kick you can use." Jenny cued proper form, mentioned function while stretching at the bar during the cool-down section.

At the end of the interview, Jenny told me about trends in aerobic instruction. She was taught to replace the term aerobic instructor with group fitness instructor, because "they are trying to get rid of the connotation of aerobics, because aerobics is all female, aerobics is dumb girls in tight clothes who bounce around, and it's not that any more."

Jenny, like Meg and Dana, was fairly new to aerobic instruction, and was still establishing her skills as an aerobic instructor. Her practice, like the other aerobic instructors in the study, drew from her personal and professional experiences. Since she had a black belt in karate, her approach to health focused on teaching self-defense techniques in her classes.

Anna

The first day of my observations I met Anna, but she was the last aerobic instructor that I observed. Upon meeting, she asked me about my research and I explained that I was looking at the health messages incorporated in aerobic classes for women by aerobic instructors. She told me I wouldn't find any health messages in the aerobic classes at the wellness center and she was for the most part correct in her assessment.

Anna is quiet and soft-spoken, with a calm, reserved, professional composure. Anna is tall and thin with long blond hair. She is in her early 30's and taught a variety of strength and aerobic oriented classes at a private and a non-profit facility in town. Since the conclusion of this research, she has stopped teaching aerobic at the Wellness Center.

Anna became involved in aerobic instruction in college. In our interview, she described her experience:

I wanted to be a nurse when I went to school, and I went the whole year and um, really I was very uncomfortable giving shots and I still wanted to go into a field where I was influencing people and helping people and the only other degree they offered at North Georgia was a wellness degree and that was when I started to get involved in aerobics and it changed my self-esteem it changed my outlook, appearance, it gave me more confidence.

I observed her classes at the wellness center. Her style of instruction was self-described as “structured” explaining that she was not an off-the-cuff instructor. In the 8:15 lo-impact class, she had the same group of students as Meg. Like Meg, Anna yielded to the conversations of the class participants before and after class, but did not converse with participants in class. In our interview, Anna described why she yielded to participant conversations:

I just let them talk here, because it is such a social thing here and that was very hard for me when I first started because I was used to teaching a more strict style. But that’s their social outlet, especially with that population, most of them do not work or they are retired, um, at the Women’s Gym they do not talk unless, there is a water break or after or before class. But during class no.

The format of her classes was similar each time with a warm-up, five 32 combinations, a strengthening section, and stretch. Anna taught one routine each week where participants learned new moves interspersed with “no brainers” that Anna

described as simple movements that do not need to be learned. She used modern pop music for her classes.

Observations indicated that Anna most often explained what muscles or body part was being worked during movements. Rather than just modeling a movement, she taught students about the function of the body part. She also applied learner centered teaching strategies by asking if students wanted her to model a movement, or if they wanted go right into an exercise.

After the second class I observed, the interview took place in the wellness center office that was directly next to the weight room floor. Since morning was a busy time in the Wellness Center, there were many people walking around and the phone rang several times during the interview. In Anna's interview, she said she does not consciously strive to create a community in her class. However, Anna worked at this facility as a personal trainer and knew everyone who came to class. Anna just completed her physical therapy assistant degree and class participants congratulated her on her achievement. In the strengthening section of her class, she often concentrated on the core muscles including abdominal and back. She explained that her attention to the core muscles in her aerobic classes might reflect knowledge she gained in her training as a physical therapy assistant.

Anna was the second most experienced aerobic instructor in this study. Like Susan, she held a degree in a health-related field. She communicated health messages primarily by explaining the benefits of specific exercises to the body.

The personal and professional experiences shaped the practices of the aerobic instructors in this study. It seemed the instructors with more experience teaching aerobics and more knowledge about health and the body were more likely to include

health related information in their aerobic classes. Overall, beyond safety and injury prevention, health did not play a significant role in the aerobic classes observed. This information will be further discussed in the following section.

Findings

The findings section of this chapter provides description of the categories developed from data collected via interviews with aerobic instructors and participant observations of aerobic classes. As described in the methodology section, the process of coding was used to organize data from transcripts of both interviews and observations. The data categories reflect the constant comparison of data collected from interviews and observations throughout the data collection process.

This research disclosed health messages, cultural and aesthetic messages and instructional practices used by aerobic instructors in aerobic classes for women. Health messages focused on safety and injury prevention and general health information. Cultural and aesthetic messages focused on the interplay of health and aesthetics as perceived by the aerobic instructors. The instructional practices included verbal cues and physical demonstration, individualizing the aerobic class participation, and feminist pedagogical strategies. A summary of the practices used by and the messages conveyed by aerobic instructors in this study are provided in the Table 4.2.

Table 4.2 Messages and Instructional Practices

- I. Health Messages
 - A. Safety and injury prevention
 - i. The importance of good form and safety
 - ii. Breathing properly
 - iii. Drinking water
 - iv. Heart rate assessment
 - v. The importance of cooling down
 - B. General health information
- II. Cultural and Aesthetic Messages
 - A. The interplay of health and aesthetics
 - B. Focusing on appearance
- III. Instructional Practices
 - A. Using verbal cues and physical demonstration
 - B. Individualizing aerobic class participation
 - i. Creating a comfortable learning environment
 - ii. Personal experience
 - iii. Asking questions
 - iv. Providing options
 - v. Making practical applications
 - C. Applying feminist pedagogical strategies

Health Messages

The first research question asked “What health related messages are conveyed by instructors in aerobic classes for women?” The primary messages conveyed by aerobic instructors in this study were safety and injury prevention and general health information.

Safety and Injury Prevention

In this study, the most commonly discussed health issue was safety and injury prevention including good form, proper breathing, drinking water and heart rate assessment. All of the aerobic instructors in this study consistently included this information in their classes and discussed these topics in their interviews.

The importance of good form and safety. From observations, it was concluded that all of the aerobic instructors in this study stressed the importance of good form through verbal cueing and physical modeling. In our interview, Anna said the only message she consistently included in aerobic classes was “back strengthening and proper body mechanics...” The other instructors in the study also emphasized good form. During our interview, Meg explained the importance of correct form:

To me having fun, but also correct form is the most important. I’m a hands on person, if you are not doing it right I’m gonna tell you. I see people all the time, mostly with weights or stretching or something like that. Standing up straight, abdominals tight, keep your breathing, stuff like that, correct form, is the number one important thing, because they are not gonna get an effective workout and you are not going to be feeling it.

From observations, it was apparent that aerobic instructors most often talked about the need for good form or safety without an explanation. The information about form and safety was stated, but not always taught by the instructors. Susan and Anna were the only instructors who consistently provided explanation about the function of the exercise and the muscles involved. Anna often explained what muscles or body part was being worked during movements. Rather than just modeling a movement, she taught students about the function of the body part. However, in the interview, she said that she did not intend to educate, but rather, her instructional techniques were a reflection of her experience and knowledge. She explained:

I don't know if it is to try to be informative so they know what muscles are in each of their bodies or if just because I have that knowledge so I like to express it, I really never thought of it, but I think I've always done that.

Other instructors like Jenny did not explain why certain exercises were done. In the interview with Jenny, she said, "A lot of things I say have to deal with health, relax into the stretch, but I don't necessarily tell them why they are doing it." She added "I don't always tell. Once in a while I chime in and say you are doing this because, but most of the time I just don't necessarily inform them." From observations, it was found that the aerobic instructors did not always verbally explain why form and safety were important, but all of the instructors physically modeled the form and safety information they were intending to convey to class participants

Breathing properly. Observations showed that all of the aerobic instructors in the study included verbal cues for breathing and sometimes physically demonstrated breathing. Usually simply stated directions like "breathe in and out" or "breathe in and blow it out" were used. Explanation for why breathing was important in aerobic classes was not usually included. In our interview, Jenny joked about providing an explanation about breathing: "it is just a matter of some people really need for you to count so they know what's coming up next to be able to say don't hold your breath because you need to get oxygen to your muscles."

In our interview, Dana talked about class participants' tendency to hold their breath in class. She explained "don't hold your breathe, I've got a lot of people...I can tell who might be holding their breath. Don't hold your breath. In sculpting, breathing out at the top of exertion, breathing in at the bottom." The importance of breathing,

which is the delivery of oxygen to muscles, was not usually mentioned by the aerobic instructors in this study.

Drinking water. Observations showed that drinking water was an important health message conveyed by all of the aerobic instructors in this study. However, explanation about the need to rehydrate during exercise was only communicated by Dana and Susan. I observed that Dana explained how much water should be consumed before, during and after class by saying “Don’t forget water, 10 ounces every ten minutes. One before and one after, everybody needed to be filling up.” In our interview, Dana discussed the importance of water consumption:

Water, always a lot of water, they should drink one, what is this-16 ounces? They should have at least one before they come, one during, and one on the way home.

They may have to stop a few times like I do at the Huddle House or whatever, but it is well worth it because you know dehydration especially down here in the

South because it is so humid, it is a bad factor, take a break if you need to.

I observed that Susan talked about the signs of dehydration in her classes and provided a pamphlet for class participants on the subject. All of the aerobic instructors provided short water breaks during aerobic classes.

Heart rate assessment. Even though heart rate assessment is taught by aerobic certification programs as an essential part of aerobic classes, observations showed that heart rate assessment was not used by all of the instructors in this study. Observations indicated that there were two types of heart rate assessment used by three out of the five aerobic instructors in this study. Dana and Julie used traditional methods of assessing heart rate where the students count beats per minute. Dana also used perceived exertion

in one of her aerobic classes. For example, I observed Dana as she led the students through a heart rate assessment as she explained in an excerpt from one of her step aerobic classes:

Ok you guys lets go ahead and take a 10 second heart rate real quick so get your pulse. For me, preferably at your wrist, but if you need to do at your neck that's fine don't press too hard you don't want to cut off the blood supply. Keep moving. Start with one and go. And stop. Is anybody over 30? Ok the chart is on the other side of the room. I'm not quite sure why. I guess for the cardio people so if they need to get the chart. Between 20-30, should be good. Anything under 20, I'm going to have to put 5 risers under your bench. Ok, ok, anybody have any questions about what we have done so far?

Jenny also used traditional heart rate assessment. A quote from her kickboxing class provides an example of how heart rate is assessed:

We are gonna do a heart rate. Find it at your wrist or your forehead. If you use your neck don't press too hard. Ten second count, keep on walking, starting now. Stop, how are the numbers? Did we get up there?

In an excerpt from her interview, Dana described her reason for emphasizing heart rate assessment:

Because I want to make sure people aren't going to go down for the count. Because it's important! You need to know. I think if you are going to be committed to doing anything in life, you need to know the risks and rewards and one of the risks is your heart rate going up and for people who might not know

they have a problem measuring that heart rate could be a very good indication that there may be something going on in their systems that they need to know about. From our interview, Dana continued by explaining how she used heart rate assessment to assess the condition of people in her class:

Plus, it tells me if people are getting overheated. Are they working beyond their capacity? And I certainly don't want somebody whose taken aerobics three or four times to get their heart rate over 85% of where they are supposed to be because that's the danger zone, and I want people to be careful as much as for me as for them because of liability factors. They need to know. I think that week I mentioned how to figure out your target heart rate and we have the sign over there for them to look at, but a lot of people don't care, but I care. I want them to know if they are working too hard.

Observations showed that Susan used perceived exertion where she asked students to measure their level of exertion by the way they feel. The following was an excerpt from her step aerobic class:

this is the most important part of the whole workout, bringing everything back down, easy side step; you should feel like you just worked hard, on a scale of one-ten, six, seven or eight. Keep moving, that's 60, 70, 80 % of how hard you could work before you pass out and throw up, avoid 9-10 you might pass out.

The importance of heart rate assessment was stressed by aerobic certification programs. However, only three of the five aerobic instructors in this study mentioned heart rate assessment in class. Communicating information about heart rate assessment

may be especially important for instructors working in wellness and family health centers, because participants tend to be older or at-risk populations.

The importance of cooling-down. All aerobic classes should include a cool-down at the end of class. Recently, relaxation techniques have been incorporated into cool-down sections of aerobic classes. From observations, it was found that all of the aerobic instructors provided a cool-down and stretching section in their aerobic classes. Some instructors emphasized the need for relaxation. Susan and Jenny addressed relaxation more thoroughly in their classes. Susan addressed mental and physical wellness in her classes by creating an atmosphere of relaxation during the stretching section of her classes. During the classes I observed, Susan turned off the lights, used slower, softer music, spoke lower and more slowly and cued breathing and relaxation techniques. In our interview, Susan explained that at first it was difficult for the class participants to lie silently and relax, but the class learned to take the time for mental relaxation as described below:

One thing is during cool-down we turn the light off. And that is much more relaxing when you are lying on your back than when lights are glaring in your face. So I turn the lights off, I use a softer, calming music for the cool-down, I try to lower my voice and make it more mellow more even, don't change the pitch a lot, um and that's for just relaxing. And boy this was hard for them to get used to, we started, we are all laid out and I told them to take a deep breath in and relax, and then I don't say anything and they are just laying, not a sound but the music. You can tell, when we first started 10 seconds and people were getting

uncomfortable and we can hold it a minute now and nothing but breathing.

Totally quiet except for the music, getting them used to things like that.

Relaxation was also emphasized by Jenny in her kickboxing classes. In our interview, Jenny talked about providing a relaxing atmosphere for the cool-down and final stretch as she described:

I know people come in and they are high-strung from work, school or whatever and then the kickboxing gets all this aggression out and then finally the cool-down gets you back into the real world state of mind but hopefully a little calmer then you were when you first got here. That was my favorite part of some classes, that was a good workout but I'm like "AHHHH" you guys can relax and stretch out. Especially when classes are at night, finishing at 7 o'clock at night. To be that high strung is not necessarily a good thing.

The instructors' recognition of the need to relax after physically exerting the body showed attention to the physical as well as the emotional component of health and wellness. While only two of the aerobic instructors specifically discussed attempts to provide relaxation in the interviews, all of the aerobic instructors used a slower pace of music to create a more relaxing atmosphere.

General Health Information

In addition to the most common health topics regarding safety and injury prevention, there were general health messages conveyed by the aerobic instructors in this study. It was observed that Susan discussed preventive health messages regarding disease, lung and heart, hydration, relaxation and building strength and flexibility. Other aerobic instructors primarily communicated information about food and nutrition and

back health. There was a limited amount of information about preventive general health expressed by aerobic instructors. Thus, the reasons that aerobic instructors did not convey general health information in aerobic classes was explored.

Susan was the aerobic instructor in this study who paid the most attention to health related issues. For example, in her interview she talked about disease prevention:

We talk about bone health, because at their age that's why a lot of them are here.

We talk about bone health and we talk about joint health and stretching and how important stretching is.

When I asked her, "What other things do you talk about in classes that are health related?" She explained that I have not observed from the beginning of the quarter but she typically starts out with "rehydrating, you know, get that water back in and sweating and movement and stretching."

Most of the health information Susan communicated in class was brief and concise. For example, in her class I observed her talking about reasons to exercise regarding improved heart and lung capacity and stated: "the second reason is to improve your heart and lung." Susan was the only aerobic instructor in the study that mentioned the benefits of exercise to heart and lung capacity. In her class, Susan also talked about increasing strength through stretching by saying "We are gonna stretch. If you stretch after you've worked out with weights you can improve the strength by 20% over if you hadn't stretched." Susan made a conscious effort to make aerobic classes places where the communication of health information contributed to an effective learning environment.

In Dana and Meg classes, I observed the topics of food and nutrition being discussed in terms of health. During the strength section of Meg's classes, the class participants talked about health and nutrition. In Dana's class, which was much less social, the discussion of nutrition was a planned educational topic presented to the class. Prior to one class I observed, Dana discussed *Cooking Light* magazine, the importance of good nutrition, and the negative effects of not eating adequate amounts of food during the day:

It talks about the no carb diet thing, that everybody wants to do and how important it is to eat carbs for energy. If you start yawning through class that probably means you are hungry. So keep that in mind. I actually had a person in Commerce who took my class last week that got really overheated really quick and I said "When was the last time you ate lunch?" And there was no lunch.

There were no meals since 8 o'clock that morning. I was like we are gonna have a little meeting here to talk. We did a straight hour of step so you gotta eat a power bar. Make sure you do that at least an hour before you walk in the door and lots, and lots of water.

Discussion about food and nutrition occurred in Meg and Dana's classes. In both cases, the connection between health and nutrition were conveyed by the aerobic instructors.

The importance of back health was a message conveyed by aerobic instructors in this study. As taught in aerobic certification programs, most of the aerobic instructors in this study started class with some type of back stretch. However, Anna was the only instructor who emphasized core stabilization in her classes. Core stabilization is concentration on the abdominal and back muscles that are essential to good back health

and posture. From observations I found that Anna talked about the muscles involved in core stabilization. During class I observed her saying “stabilize yourself with your obliques and bring your arm to your side” or “get a little trunk rotation: oblique work.” In our interview, I asked “Do you ever provide explanation as to why back strengthening is important?” Anna replied:

When I do a toning class yes, usually when I do this type of class, I mainly do that low back is the opposing muscle group to the abs and they are both stabilizers for posture so that would be the extent of what I would say.

While Anna was the only instructor that specifically referred to core stabilization, the other instructors cued proper form regarding the back. Specifically, Susan cued posture at the end of each aerobic class. For example, Susan says “One more time, deep breath, stand tall, keeping your chest high, shoulder back, abs in until next time.” The rest of the aerobic instructors included stretching for the back, but did not intentionally communicate information about back health.

Unhealthy Messages

In addition to general health messages, there were also some messages communicated by aerobic instructors in this study that could be considered “unhealthy”. While it is important to be active in daily life, it is also important for aerobic instructors to convey healthy attitudes about exercise that are realistic for participants. Two aerobic instructors in this study displayed what seemed to be excessive attitudes toward exercise.

Excessive exercise. In aerobic classes, the aerobic instructors dictate the actions and behaviors of participants in the aerobic classroom. For the most part, aerobic instructors set positive health examples for participants regarding exercise. However, in

one case, Dana may have exhibited a dedication to exercise that set unsafe standards for class participants. Dana injured herself during a class she was teaching. I observed her class the next week. She had a sprained ankle and told a student before class that her doctor said she was not supposed to exercise for six weeks. She said she called the doctor three days later and asked him if she could exercise, because her ankle “did not hurt it was just sore.” While Dana did not exercise at as high a level as usual, Dana taught classes while she was injured. Rather than resting an injury, Dana chose to exercise. Her actions may exhibit a dedication to exercise that borders on excessive and supports a mind and body disconnect. This behavior downplayed the importance of health, while promoting excessive exercise behaviors.

A second example of excessive attitudes toward exercise was exhibited by Meg. In our interview, Meg talked about an excessive dedication to exercise. For example, in order to lose weight Meg encouraged students to achieve standards of exercise that may be unhealthy or obsessive:

I’ve been there, but I’ve done it, but people who are very overweight and want to lose weight, but don’t do anything about it. You can do what ever you want to. So I highly encourage them, they say well I’m here 3 days a week. I say ugh-nah, you need to be here everyday, take a walk on the weekends, but if you are dedicated, you need to be here everyday, at least 5 days a week.

Even though Meg taught in a wellness center, she seemed to have simplistic understanding of the population with which she was working. Because wellness centers tend to attract people with medical issues, older adults and beginning exercisers encouraging participants to be at the gym everyday is unrealistic and perhaps unhealthy.

Just as in other health behaviors, everything should be done in moderation and overexercion should be avoided.. For the population she was working with, exercise programming should be individualized and guided by a health professional.

Safety and injury prevention were the most prevalent health messages conveyed by aerobic instructors in this study. For health-focused facilities, there was a minimal amount of general preventative health information presented in aerobic classes and two aerobic instructors who expressed health messages that could be deemed “unhealthy”. In order to gain a better understanding about why general health messages were not included in the aerobic classes observed, I asked each aerobic instructor about health communication their classes.

The Role of Health in Shaping the Environment

The second research question asked “How do health messages shape the environments of the aerobic classrooms?” Based on my observations, I knew that there were a limited number of health messages being conveyed by the aerobic instructors. Consequently, it was important to explore what other influences were shaping the aerobic classroom. Thus, this discussion must present information in two areas. First, there must be an understanding to why health messages are not conveyed in environments that have goals of promoting wellness. Second, it is important to discuss what factors were shaping the aerobic classroom. Thus, I asked the aerobic instructors why health messages were not more prominent in aerobic classes. The answers provided by the aerobic instructors indicated that education and personal experiences were more important in shaping the aerobic classroom than health messages. In addition, the level of choreography indicative of today’s aerobic classes also influences the aerobic classrooms.

When I interviewed the aerobic instructors, there was often a puzzled look on their faces when I asked about incorporating health messages in their classrooms. The aerobic instructors provided a number of reasons for the absence of health messages. In Jenny's class, she did not mention health. Therefore, I asked "What role does health play in your class?" Jenny's response was "Personally, it is a lot for me but I don't include it all that much. Health, I'd say more safety than health." Meg provided another reason based on the assumption that people who come to aerobic classes already know about the health benefits of exercise. Meg said "we figure everybody knows it." Anna talked about why she did not include health information or messages in her aerobic classes:

If I did, I'd really have to spend some time on it, I mean I spend a lot of time working on my combinations, and there would be more time spent doing that. I don't put the time to do that.

Dana felt that class participants could get better health information from the Wellness Center where the class was held. Furthermore, she expressed that she did not know how to include health messages in classes. Dana explained why she did not include health information in her aerobic classes:

I don't know what the Wellness Center's liability issue is and what they feel about me bringing in outside sources, so I haven't done that. This is a wellness center dedicated to health. So I think a participant here would probably get more information from the wellness center itself than from me as far as written and visual.

Dana also expressed that she did not know where to get information about how to communicate health messages in aerobic classes for women.

Some of the aerobic instructors did not know where to get reliable health information. The two aerobic instructors with formal education and professional experiences in the health field conveyed the most health information in their classes. Anna who has a degree in wellness and physical therapy assistance and Susan who has a Master's degree in anatomy and physiology conveyed health messages in the aerobic classroom with the most ease. Anna's current position as a physical therapy assistant and Susan's work as a science teacher also give them additional experience and skill in communicating health information. Another advantage that Anna and Susan have was that they were more experienced as aerobic instructors. The other aerobic instructors in this study received most of their education about aerobic instruction and the communication of health information from aerobic certification programs.

The American Council of Exercise (ACE), American Council of Sports Medicine (ACSM), and Aerobic Fitness Association of America (AFAA) establish guidelines for aerobic instruction. This research supports that the basic messages taught in aerobic certification classes about injury prevention was conveyed by aerobic instructors in this study. The aerobic instructors said they did not learn how to incorporate health and wellness messages in their aerobic certification classes. Susan believed that topics currently covered in aerobic certification programs need to remain, but there needs to be a component added about teaching from a holistic perspective "They need to keep the physiology and anatomy. They teach the choreography, and anatomy and physiology. They teach that academic stuff, but they are not teaching the stuff that is not academic."

Susan explained why she keeps her certifications "...I only keep my certification up because I have it, it is easy to keep it up, but I don't do it for what I learn."

The participants in the study agreed that the aerobic certification programs did not include information about how to convey health messages in aerobic classes. In Anna's interview, we discussed how little attention was paid to wellness in aerobic classes and she said "That's because that is not stressed in the certification and that is what most people have when they teach aerobics is just a certification." I asked Anna what would influence whether or not she included health messages in her class and she said:

If it was a testimonial, if something had happened to me, if there was an experience that had happened to me and I knew that if you did such and such and such and such then your health would be improved, than I would be more apt to share that.

Anna's statement indicates that personal experience is a powerful influence in shaping the environment of the aerobic classroom.

Anna's statement about personal experience is supported by data from observations and interviews that connect the personal experience of the aerobic instructors with the health messages present in the aerobic classes. For example, Jenny focused on safety rather than health, because she was involved in marital arts and deemed that as important. Meg and Dana, two of the aerobic instructors who lost a significant amount of weight, talked about food and nutrition in their classes. Jenny, Meg, and Dana were the least experienced aerobic instructors in the study. Thus, their efforts were concentrated on the facilitation of the class rather than health messages.

The level of choreography used also affected the inclusion of health messages in aerobic classes. Through participant observation, it was apparent that the level of choreography used in today's aerobic classes requires constant instructor cueing and counting. Therefore, it was difficult to communicate health information during class. However, before and after, and during strengthening and stretching sections, there was more time to incorporate health messages.

Even though aerobic classes are supposed to be a type of health education, there were limited amounts of health information being intentionally communicated by aerobic instructors in this study. The education and personal experiences of the aerobic instructors influenced the types of health messages included in aerobic classes. In addition, current aerobic classes include high levels of choreography that require aerobic instructors constant cueing.

Cultural and Aesthetic Messages

The second research question asked "What cultural and aesthetic messages are conveyed by instructors in aerobic classes for women?" Cultural messages refer to those messages that communicate beliefs, values and behaviors. Aesthetic messages communicate standards of appearance for women. The interplay of health and appearance was the primary cultural and aesthetic message conveyed by the aerobic instructors. A few messages focusing on appearance were observed during this study.

The interplay of health and aesthetics. The relationship between health and appearance was a theme that appeared throughout the interviews. The interplay of health and appearance involved biological as well as social indicators. Physical health reflects the health of an individual. If a person is malnourished, there are physical indicators such

as hair loss or distended abdominals. When a person is physically active, features such as muscle definition may be noticeable. Despite other health indicators, such as blood pressure, body fat, cholesterol, strength, and endurance, thinness has become the standard measure of health.

Assessing health based on leanness is misleading and largely motivated by ideologies of appearance. In addition to social ideologies, the physical orientation of aerobics may contribute to an atmosphere where emphasis is put on physical appearance. The personal experiences of aerobic instructors and class participants in this study displayed the role of physical appearance in aerobic classes. However, for the most part, the aerobic instructors recognized the primary importance of health in aerobic classes for women.

The interplay of health and aesthetics was discussed through the personal experiences of the aerobic instructors. In our interview, Jenny talked about portraying a healthy image for class participants:

I remember when I was first training I was still in the process of losing or getting to the place I wanted to be and I was very conscious of, ok, I'm going to be standing in front of a group of as many as 30 people and I'm not necessarily going to look like I'm the most in shape, but I'd like to think that I portray a healthy image. The fact that just because I'm not you know, 5'6 and 102 lbs, that I still I can do this.

Jenny challenged the idea that being thin meant being healthy. In our interview, Jenny expressed feeling good that she provided a realistic image for people in her class:

Personally, it makes me feel good--I don't have to be a size 2 to be able to be fit. I like to think that me being up there would be also a more realistic image for people that would come in to think that I don't have to be itty-bitty to be in good shape.

Jenny's definition of health moved beyond emphasis on thinness. As an aerobic instructor, Jenny felt she provided healthy images for women who are not thin by social standards.

The relationship between health and aesthetics was further explored by Dana's thoughts about the need to be healthy, happy and comfortable with your body. In our interview, Dana talked about exercising for appearance reasons:

I think if you are happy in your own body that makes you a better person and there are going to be a lot of people that come to these classes that will never be supermodel thin, they will be in shape and they might be healthy, but they will always be the weight they are, they will tone and they will look like they want to look.

Dana further discussed health and appearance by emphasizing being comfortable with your appearance:

I think if you are comfortable in the way you look and you are comfortable with the clothes you wear and you are healthy and you are not under a doctor's care for anything. There are a lot of people out there that are bigger people and they are probably more healthy than I am.

Dana talked about appearance issues, but did not emphasize leanness as the standard of health. As long as people were content with their health, she promoted acceptance of their bodies and appearance.

Developing a healthy concept of health and appearance was a process that sometimes occurred during participation in aerobic classes. In Susan's classes, some class participants came to classes focused on health and others on appearance. Whatever their initial motivation, they ended up benefiting in numerous ways. In our interview, Susan explained:

Well I have several ladies who have started aerobics over the course of time because of osteoporosis and were told they had to work out. Some people have cholesterol, that kind of stuff. Problems and they come to work out. A lot of it is weight when they first start. They come in to lose weight. Once they are here, and it doesn't take them long, maybe a couple of weeks. They start to realize they are really here for fun. They are here for the enjoyment and because it makes them feel good and they other stuff comes with it. I have them all the time say "I had my physical and I don't have osteoporosis anymore, my bones are up to normal." I've had them tell me their cholesterol is down, I have lost weight, my blood pressure is normal now.

Participation in aerobic classes seemed to raise awareness of both the health and aesthetic benefits of exercise. In our interview, Susan talked about the experience of a woman in her class:

One of the women Monday told me she had just gone (to the doctor) and her blood pressure was now normal. She had gained some weight, but she didn't care

she figured it was muscle and that was good anyway. And so it just gives them a good feeling about themselves. Even though they may start with a specific goal, it ends up turning around. That they are here because it makes them feel good. And they feel good about a lot of things: the camaraderie, weight loss or weight gain. They'll tell me my clothes fit differently, but I weigh more and I go "that's great." Um, and they still eat and they are glad about that and they'll say and "I don't have to watch what I eat." So they don't realize some of the health benefits they've picked up, it might have been one thing they've came for, but they've gotten them all.

In this case, a healthy attitude about physical change showed that leanness was not the only indicator of health. The class participant recognized that her health improved despite a weight gain.

In our interview, Jenny provide another example of the importance of health in a personal testimonial:

About two weeks ago, I was in a car accident. My car was totaled and in the ER they told me I did not get hurt because I was so healthy. I mean, to be stretching all the time and I didn't have a broken anything is because I'm nice and healthy.

It's nice to hear; besides "you look good in a size five."

During the interviews, Jenny detailed the importance of valuing health over appearance and being thin. Yet in the next section it was apparent, like other aerobic instructors in the study, that she had issues with her own body. Some critical incidences occurred in the classes observed indicating that there was a limited amount of focus on aesthetic issues by the aerobic instructors in this study.

Focusing on aesthetics. When health was not juxtaposed to aesthetics, appearance related issues were discussed in depth. Most aerobic instructors in the study discussed appearance issues, but only Meg expressed a highly appearance-focused orientation.

From observations, it was found that Susan often mentioned the number one reason for exercising should be to have fun. The second reason was to improve your health, and the third reason she jokingly said was to look like Jane Fonda. While she joked about aesthetics, she downplayed the role of appearance in her class by dressing casually and emphasizing community, health, and fun. Rather than using the mirrors in the classroom to promote gaze or self-judgment, she encouraged the use of mirrors to check form especially during strength sections. However, another instructor, Meg communicated a very aesthetic orientation. In our interviews, Meg's focus on appearance was illustrated in statements like:

Don't get me wrong I like to look at myself in the mirror. I can remember when I was there and say AHH look at my shoulder definition. One of things that used to encourage me when I first started teaching at a ladies' gym, they wore big shirts. I can't stand wearing big shirts. "Ladies roll your shirts up, look at your self in the mirror. I want you to see your progression."

Meg's focus on appearance seemed to drive her participation in exercise. In our interview, Meg exemplified her physical orientation:

My husband has gotten the feedback 'Do you know how lucky you are?' I hate to say it. Your wife is there working out with you. I think it plays a big part, because women, I hate saying we should do it for ourselves. It isn't just for ourselves, if

we have a spouse, if you have children, my kids, they have been raised now, “Moms going to the gym” They are going to do their thing- they know how important it is to mom and dad. They are being raised in that kind of atmosphere, um, I look at other women, I’m sitting here looking at your legs, and think she runs.

Through observations, it was found that issues of appearance were the most salient in Meg’s classes. Interactions between Meg and her class participants displayed a focus on appearance related issues. Her class participants recognized Meg’s concern with her weight and comment on this in class. An example occurred in her 8:15 a.m. lo-impact class as follows:

Class Member: I like those pants. Are they new?

Meg: Yes mamm,

Class Member: Wow. It’s all black.

Class Member Two: She always wears black.

Meg: It’s deceiving.

Class Member: Who are you trying to deceive?

Meg: Myself

Class Member: She still thinks she’s fat.

Meg: I do. You got that didn’t you Michelle?

Through this conversation, Meg’s aesthetic orientation was apparent and recognized by participants. In fact, the class participants attempt to point out that Meg’s body image is inaccurate. Even though Meg is the instructor, the class seems to have more realistic expectations for women’s bodies.

Attention to aesthetics was communicated in other aerobic classes. Regarding appearance related issues, I asked Jenny in our interview “Do those discussions of images come up in your classes?” She responded:

Not really. Every once and a while, like you’ll probably hear it in the tape when I was telling her with the triceps to make sure you keep a nice flat back, and I picked up my shirt and said well its not that flat, but it should be flat. I’ll tease about that and then when I do boxers shuffle and you turn side ways to have less area, target area, then I tease well maybe not that little. I just use it as humor, because not everyone that comes in is a size 2.

I observed that Jenny used self-deprecating humor about her body in one class. While she was making a joke, she still communicated discontent with her body to the class. Therefore, she was undermining her effectiveness as a healthy role model for class participants.

In our interview, Anna provided another perspective about the role of aesthetics in aerobic classes. She explained that she did not dwell on the aesthetic focus of aerobics, but did care when the aesthetic focus affected the quality of the workout:

I’ve just kind of learned that that’s the way it is, and it doesn’t really upset me, the only time it really upsets me is when I go into a class, and they only do biceps and triceps because the only thing they are worried about is the definition in their arms and they do no back, chest, low back work. That’s the only time it really upsets me because then the class, that’s what they want just biceps and triceps, because that’s what they’ve learned; that’s what they’ve heard. Otherwise the comments

you know, you've gotta work off Thanksgiving or work off the chocolate cake you ate. I've just learning that's part of it.

Anna contradicted herself in this statement, because she says she has accepted the aesthetic focus of aerobic classes. However, she opposes aerobic instructors who focus on sculpting arms for appearance reasons. In our interview, Anna discussed problems that can occur when aerobic instructors convey messages focused on appearance. Anna outlined a situation at another facility where an aerobic instructor talked about being fat in class:

One time we had a big issue in aerobics where an instructor got up and said she was fat. She was feeling fat, well she is smaller than I am and that sent a message to the rest of the people, "well if she thinks she's fat, what does she think about us?" We got a big talking to at the gym, when that happened.

Although there was less emphasis on appearance issues in the classes I observed than in typical aerobic classes, aesthetics messages were still conveyed by aerobic instructors. As expressed by the aerobic instructors, health and aesthetics should not be viewed as dichotomous, because health may be reflected through appearance and vice versa. Although perspectives varied, all of the aerobic instructors expressed that aesthetic focus should not over power the health benefits of aerobic classes.

The last research question asked "What instructional techniques do aerobic instructors use to convey health messages in classrooms?" This research showed that aerobic instructors used a variety of instructional practices to teach aerobic classes. Verbal cueing and physical demonstration were the instructional techniques used to

convey information about health. Other instructional practices focused on personalizing the aerobic class experience for participants.

Instructional Practices

The last research question asked “What instructional techniques do aerobic instructors use to convey health messages in aerobic classes?” The instructional practices used by aerobic instructors in this study included verbal cueing and physical demonstration and methods of individualizing class participation. The first category of verbal cueing and physical demonstration was used by all of the aerobic instructors in this study.

Verbal Cueing and Physical Demonstration

Through observation, it was found that verbal cueing while physically demonstrating movements were the most salient instructional techniques used by aerobic instructors in this study. All of the aerobic instructors relied on verbal cueing and physical demonstration to instruct class participants about the physical activities to be completed in class. The same instructional techniques were used to communicate health messages that predominantly focused on safety and injury prevention.

The importance of verbal cueing was obvious during observations and reinforced during participant interviews. I asked Dana how she communicated information about health and she said:

Just by talking. I don't bring any visual aides, photocopies of anything. If they want it they can ask me, but I can't reproduce without permission so it is a little difficult. If they want to buy the magazine or get online, they can do it. Um, that is the only way.

Dana's comments displayed the necessity of verbal instruction for the communication of health information in her aerobic classes.

From observations, it was found that physical demonstration was used to lead the class through movements safely, efficiently and effectively. Demonstration was essential to teaching the class about good form and to lead the class through movements.

Sometimes the aerobic instructors used physical cues like pointing for directional changes or counting with their fingers. For the most part during classes, the aerobic instructors were demonstrating movements providing constant instruction for visual learners.

Observations showed that instructors would break down a sequence into parts through demonstrating movements several times. In many cases, the aerobic instructor verbally described what the class was going to do before showing the move. Sometimes the aerobic instructor would show the move first and then ask the class to join her when they were ready. As the class performed the movement correctly, they built the movements into a 32-count sequence. This method was used throughout the class until many 32-count combinations were sequenced together to create a routine. Repetition was used to help class participants perform the movements.

The aerobic instructors used a variety of instructional techniques that reflected a combination of teacher-centered, content-centered and learner-centered instructional strategies. Some instructional strategies such as asking questions and providing options in class are content-centered by promoting safety and injury prevention. However, they were also used to create a more learner-directed learning environment. While the instructional techniques reflect teacher, content and learner-centered orientations, the

common theme was that aerobic instructors were attempting to individualize the experience for each class participant.

Individualizing the Aerobic Class Experience

The aerobic instructors in this study attempted to create a comfortable learning environment. While the aerobic instructors' techniques established the climate of the classroom, the opportunities for the class participants to individualize their workouts created a comfortable learning environment.

Creating a comfortable learning environment. The aerobic instructors in this study talked about creating a comfortable learning environment where class participants were mentally and physically comfortable. I observed that Jenny emphasized being physically comfortable in aerobic classes by saying things like "Go as high as you're comfortable" or "Wherever you are comfortable." Although she did not provide modifications and options consistently in class, in our interview Meg discussed communicating to class participants that they should not do things that are uncomfortable to them. In our interview, Meg said:

And another thing I like to stress- you know I was in classes where they are telling me to do something that is uncomfortable to me, they were like you are doing it wrong, and I'm like no. It was uncomfortable to me, so I am gonna modify it. I tell all my classes that, because everybody is different.

From observations, it was found that aerobic instructors also created a comfortable learning environment was by verbally encouraging participants. Aerobic instructors, particularly Anna, addressed the group by saying "nice job" throughout the workouts. Other instructors individually addressed the class participants'

accomplishments in class. Words of encouragement were used by all of the aerobic instructors in this study providing a sense of instant gratification and motivation for class participants.

Aerobic instructors also promoted a comfortable environment by stressing the need to have fun during exercise. Meg and Susan mentioned throughout their aerobic classes that exercise should be fun. I observed Susan saying in classes: “Just remember the reason why you do this is to have fun.” In an excerpt from our interview, Susan talked about the need for fun to be a priority in aerobic classes:

I always say they should be here because they enjoy it and it is fun and if it is not fun they are not gonna come back and they won't. If it is not fun, they won't come back. They'll come back if they are having fun no matter how hard the class is. They come back. But if they never enjoy it, they'll never show back up.

Like Susan, Meg communicated the need for exercise to be fun to her students in her classes. In our interview she said “I'm gonna make t-shirts up ‘Fun is number one.’” Dana and Jenny talked about having fun in aerobic classes in their interviews, but did not mention it during their classes. The importance of having fun in aerobic classes indicated attention to mental and physical wellness.

In our interview, Susan talked about creating a comfortable learning environment by using community building activities in her classes such as having class participants introduce themselves. Susan expressed that many instructors do not attempt to create a non-intimidating environment. She talked about the lack of attention paid by aerobic certification programs to creating an effective learning environment:

They don't teach the holistic stuff, and they don't teach the non-intimidating environment, they just don't. They teach the choreography, but if you are gonna make people feel bad about themselves while your doing that fancy choreography, it doesn't matter. If you do all that stuff, they are not going to come back.

Not all of the aerobic instructors intentionally tried to create a comfortable environment. In our interview, Anna explained: "I'm not a real nurturing person, like Dana, is more into that, so, I think it just comes with time for them with me. Um, because I don't make you feel comfortable the minute you come in." However, Anna seemed to have established a comfortable learning environment for class participants even through she did not do so intentionally.

Personal experience. From personal experiences in aerobic classrooms, most of the instructors recognized the need to individualize exercise experiences for class participants. The instructors' personal experiences influenced the instructional styles and content of aerobic classes. For example, Meg talked about personal lifestyle and experiences throughout her interview and also shared personal information in class. Throughout her interview, she discussed how people approach her wanting to know how they can lose weight. She talked about having people model her behavior in the following excerpt from her interview:

it is so funny you know I would love to have someone who wanted to lose weight, someone who wanted to get in shape, to live with me, to follow me around. What I did, because I teach about two classes a day, sometimes more. The weekends I take off, but usually I hand mow my two acres. I'm very active I have a hard time sitting still.

If class members asked Dana about losing weight, she shared her weight loss experience. One of Dana's class members told me she was inspired and motivated by the pictures of Dana before and after her weight loss. Jenny also discussed her personal experience as a motivator.

Susan, Jenny, Dana, Anna and Meg discussed their personal experiences with aerobics as influencing their instructional techniques. Susan and Jenny in particular discussed wanting to create a comfortable, non-intimidating environment based on their experiences with aerobic classes. Dana knew many routines because of attending aerobic classes for 18-20 years that she applied to her practice. Anna's positive experience with fitness influenced her involvement in aerobics. Meg saw things she did and did not like in other aerobic classes. In all cases, personal experiences influenced the aerobic instructors' practices.

The aerobic instructors' recognition of their personal experiences with aerobic classes influenced their instructional techniques. Techniques such as asking questions, providing options and making applications to daily life reflect a balance between content-centered and learner-centered facilitation. Asking questions and providing options were instructional techniques promoted by certification agencies to prevent injury that could also be used to promote self-directed learning for class participants.

Asking questions. The aerobic instructors in this study recognized the benefits of asking class participants for feedback about their experiences in aerobic classes. In an excerpt from our interview, Jenny explained how she asked questions to determine the health risks or problems of the learners in the class:

A lot of times at the beginning of the semester I ask if anyone has any knee problems, back problems, and certain people will tell me, I had one lady last semester who couldn't do push ups because of one arm. So what we would do is I would show her something else to do instead of the push-ups, she would be on her back with free weights instead and still get the same effect but not have her full body weight. So most times at the beginning of the semester I find out if there is anything that needs to be done to compensate for any health risks or problems they have.

The questions asked by Jenny were focused on injury prevention, but also on providing an effective and positive experience for class participants. Another example of how asking questions was shown in a quote from Dana's step class regarding perceived exertion:

Is anybody over 30? Anybody under 21? Can you talk to me? Perceived exertion is a really good way to measure how hard you are working if you can't still hold a conversation with me, without feeling like you are gonna lay down and die, that would be a bad thing. Every body's doing ok? Ya'll feel ok? I gotta check.

The orientation of these questions was content-centered as they focused on safety and injury prevention. In our interview, Dana focused on safety and injury prevention as she talked about assessing the health of aerobic class participants:

Every person that walks in the door I have to look at. If it is their first time and I always ask have you done this before, and if you have how long have you been doing it, where you rate yourself on a scale of one-ten, what other facilities have you been in, and then medical questions. Do you have any medical conditions I

need to be aware of, whether they need to tell me in front of the class or take to the side and tell me after in private, because some people don't want to talk about themselves, it is gets a little bit intimating to them. Um, if they are under a doctor's care, what's wrong, have they signed a release form with the facility? Um, what other things? I don't ask age, but if by looking I can tell there is a reason I might need to be concerned, I might get a little more specific and for women I always ask if they are pregnant.

The importance of safety and liability was apparent in Dana's statements. However, she also recognized the individual's experience by mentioning that she attempted to avoid intimidating participants by asking questions in private.

In our interview, Meg recognized the potential benefit of asking question as "I need to become better about asking questions 'How's your health?'" Meg explained further:

I was reading an article to ask "How is your health, any medication, what did your doctor say" I don't do that because my mindset is you should know yourself well enough, your body well enough that you should know your limitations. I think that is one of the things I need to work on, because people don't. They are not like us or other people who know their bodies, their limitations.

By not asking questions in class about participants' health, Meg does not have the information she needs to tailor the aerobic class to the needs of the class participants.

Therefore, Meg comments reflect current practices that are not learner-centered, but also reflects an awareness that she needs to become more centered on class participants in her instruction.

Three of the five aerobic instructors in this study mentioned in the interviews that they frequently used questions as an instructional strategy to convey health messages in their aerobic classes. Observations indicated the other two instructors used questions in classes. Asking questions was a valuable instrument that was used to communicate both content and learner-centered information to class participants. However, aerobic instructors in this study could have used the instructional technique of asking questions more extensively to create a more learner-directed environment.

Providing options. Aerobic certification programs encourage aerobic instructors to provide options for class participants to prevent injury. From observations, it was found that four out of the five aerobic instructors in this study consistently provided options and modifications. In addition to injury prevention, the cueing of options and modifications indicated recognition of the different levels and types of learners in aerobic classes.

The aerobic instructors in this study talked about the multiple benefits of providing options in aerobic classes. In our interview, Susan described how she utilized the instructional technique of modifying exercises to prevent injury, boredom, intimidation and to promote good feelings about self:

And I harp on modification, and I see people on either side of me. I might be doing lo-impact, someone else is moderate and someone is high. I'll say if you want to do high, follow Kay she's in hi-impact. If you want moderate follow Lee, if you want lo-watch me. They just have their options. I think that is it. They have options, they don't have to do high kicks, they can if they want and I think that is real important because if you go to a class and there are no options you can get

injured, you can get bored, you can get intimidated, just giving them options makes them feel more confident. And if they can do it they take it up a notch. And it makes them feel good because they did it or they got it.

From observations, it was found that the other aerobic instructors included options by verbally cueing and physically modeling modifications. Jenny went a step further by providing timed intervals twice during class at exercise stations where participants could work at their own pace. While Jenny gave suggestions for exercises at each station, the class participants chose the pace and exercise they wanted to do. Anna displayed another way class participants were given options. Anna asked if the class wanted to go directly into an exercise or if they want it to be shown first. The class participants contributed to the learning experience by making choices for themselves.

Another instructional technique used by aerobic instructors that provided class participants with “learning options” was referring to sources of information. I observed that Susan and Dana helped class participants be self-directed learners by suggesting outside sources of information. Both instructors referred class participants to print media to get more information about health topics. Susan provided pamphlets on water consumption to the class participants. In our interview, Susan discussed another way she shared health information with her class:

And when I see research I’ll talk to them about it. We’ll talk about obesity in kids. Because a lot of them have kids in elementary and middle school age and we talk about obesity and how that is affecting health in teenagers with diabetes and gallbladder disease. We’ll talk about those things and anything else that people

bring up, because I do a lot of reading in the professional journals and stuff. I'll pass on things I've read.

Since Susan has an educational background in anatomy and physiology, she was familiar with professional journals on the topics of exercise and therefore referred her classes to these materials. On the other hand, Dana did not have a background in exercise science and referred class participants to sources of pop media like the *Cooking Light* magazine. During our interview, Dana said regarding outside sources of health information:

And you know when I'm not in class when, I'm talking to people, we'll exchange ideas or I'll talk to other aerobic instructors and get some good ideas. As far as, I don't send them to programs or anything, but if I recommend something like the *Cooking Light* magazine, get the *Cooking Light* magazine, pick up the paper today. That is as far as the extent that I can go.

I observed in Meg's class that she discussed fitness magazines, but did not refer class participants to the material. She talked about finding new exercises that she was sharing with the class. Consequently, some aerobic instructors in this study incorporated outside sources of information to convey health messages to their class participants. As reflected by Dana and Meg's reliance on popular media for health information, there may be a lack of knowledge about where to get reliable health information.

Susan offered "learning options" and information about health beyond what occurred in her classroom. In our interview, Susan talked about class participants who opted to leave to go to another exercise facility and how she encouraged people to listen to their bodies and be self-directed in their learning:

I say on our last day, “we start back in a week, if you chose not to come back to YWCO and chose to go some where else, please practice what you’ve learned and listen to your own body do what you are comfortable with.”

Aerobic instructors that provide options for activity and learning seemed to create an environment where class members learned about exercise and health rather than just modeling movements.

Making practical applications. Another way aerobic instructors attempted to personalize the aerobic class experience was by presenting exercise as a functional aspect of daily living. Instructors explained how exercise benefits quality of life and talked about the similarities between exercise and daily tasks. This helped learners personalize health information as practical knowledge. Susan and Jenny in particular discussed how exercise was functional. During our interview, Susan talked about the practicality of exercise:

I try to make it functional so they can identify with why they need to be doing...I mean we could have done that same move and pulled it back down and they would have done it, but if they can concentrate and get that vision in their head that “Oh I’m putting something heavy up on a shelf, now I have to take something heavy back down” they are gonna use their muscles like they would use them in that normal movement.

During our interview, Jenny talked about applying what was learned in kickboxing class to everyday life. Jenny explained why she presented kicks as being functional in her class:

Well two reasons, first of all, if I am a person; well this is again--what I went through personally. I would come to a class and barely be able to kick above my knee, sitting there and feeling like a big dummy. Why can everybody do this? And I am just not feeling like coming back... if it was every applied to real world application, being able to kick the guy or person or whoever, in the head is not necessarily going to do any good, because you are not going to get any power there. Doing the functional kick to see ok, I really can get power here and also then you can see over time it will progressively get better.

Jenny presented functional kicks as a method of self-defense and believed this knowledge may benefit participants in their daily lives. The promotion of exercise as functional helped class participants make connections between physical activity and everyday tasks.

All of the instructors tailored their classes based on the needs of the class. The inclusion of asking questions, providing options, and making practical applications gave class participants the opportunity to shape their aerobic class experience. These instructional techniques played a role in creating a comfortable learning environment that may improve effectiveness, experiences and retention in aerobic classes for women. Another way to improve learning environments is through strategies informed by feminist pedagogy.

Feminist Pedagogy Strategies

Some instructional strategies used by aerobic instructors in this study have feminist pedagogical orientations including teaching verses performing, encouraging empowerment and distribution of power that can be applied in aerobic classes for women.

Teaching aerobics verses performing. Aerobic instructors seemed to challenge social ideologies by focusing on the learner. Instead of reproducing standards of fitness as established by society, learner centered instruction focuses on the needs of class participants. By teaching rather than performing, Susan challenged typical instruction in aerobic classes. In our interview, Susan discussed her understanding of teaching aerobics:

I think it comes a lot from my age and understanding the real importance of aerobics- it is not for me to stand up there and look like a Barbie doll, it is not for me to stand up there and show off, it is for me to teach people what to do.

The concept of performing may promote aerobic instructors as objects of gaze. Susan has clearly refused to objectify herself as an object of gaze by downplaying the role of appearance in classes and focusing on the needs of learners.

Anna on the other hand felt like more of a performer than a teacher “I’m more of performer; I mean I can get up in front of a crowd and can do public speaking very well.” While Susan and Anna were the most experienced aerobic instructors and have established ways of conveying health information in their classes, their philosophies of instruction regarding teaching and performing were very different.

Encouraging empowerment. In this study, several aerobic instructors discussed issues related to empowerment like class participants’ feelings of power and control regarding exercise. In an excerpt from our interview, Dana talked about encouraging her class participants to feel good about enjoying exercise, getting stronger and making progress:

I like to think that I am giving them some type of benefit that they walk away and say “you know I really enjoyed that class, I feel stronger about myself, I feel better, I can do things today that I couldn’t do 6 weeks ago when I started this class.”

Another message of empowerment communicated by Jenny in our interview was issues of safety and self-defense:

It’s just general safety and a lot of times having my black belt and I’ve also taken a lot of self-defense classes, just I’m not legally allowed to call it a self-defense class so you can’t say if someone is attacking you do this, but you can finagle your way around that and say if someone is behind you this is always a thing you can do. So it’s more safety and then maybe real world applications.

Throughout the findings section, Susan’s statements encouraged empowerment in her classes. Another way aerobic instructors empowered classes was through distribution of power in the aerobic classroom.

Distribution of power and authority. In a typical aerobic classroom, aerobic instructors have the most power and authority over class activities and participants. In this study, aerobic instructors primarily distributed power through altering the physical formats of classes. Meg encouraged students to make a circle during strengthening and stretching exercise. Using this format, she held less authority and became part of the group. As discussed earlier, Susan gave the class the opportunity to call the class. They picked the exercises and format. In Susan’s class, participants took positions even with her in the classroom creating a distribution of power that was unique for most aerobic classrooms.

Although limited in number, the aerobic instructors did use some feminist pedagogical instructional strategies. Through the incorporation of these strategies, the aerobic instructors were challenging some social ideologies of femininity and appearance. For example, teaching rather than performing challenges the concept that women are objects to be sexualized. Rather, the aerobic instructor is establishing an environment of learning rather than reproduction of status quo. Encouraging empowerment is also resistant to standards of femininity by teaching participants to be stronger and protect themselves, rather than encouraging women to exercise to be thinner and weaker. Finally, distribution of power in the aerobic classroom challenges typical educational environments where the instructor holds all of the power in the classroom. Instead, class participants are encouraged to take charge of their experiences in aerobic classes. All of these strategies positively affect the aerobic class experience, and may be transferred in to other aspects of the class participants' lives.

In conclusion, descriptions of aerobic instructors and the classes they taught at the wellness and family fitness center were provided. Regarding the first research question, there were a limited number of health messages beyond safety and injury prevention being conveyed by aerobic instructors.

The second research question asked "How do health messages shape the environments of the aerobic classrooms?" Because there were a limited number of health messages being conveyed by the aerobic instructors, it was important to explore what other influences were shaping the aerobic classroom. It was found that personal and professional experience and education of aerobic instructors was more important in shaping the aerobic classroom than health messages. The aerobic instructors in this study

said the reasons health messages did not have a prominent place in aerobic classes included concentrating on safety rather than health, not knowing where to get information on how to communicate health messages in aerobic classes, not wanting to spend time on planning, assuming people already know and the lack of emphasis on health information in aerobic certification programs.

The third research question assessed what cultural and aesthetic messages were conveyed by aerobic instructors in aerobic classes for women. The primary cultural and aesthetic messages conveyed by aerobic instructors were the interplay between health and aesthetics and focusing on aesthetics.

The last research question addressed instructional techniques used by aerobic instructors to convey health messages. Results showed that verbal cueing and physical demonstration were the primary methods of instructor. In addition, many of the strategies used by the aerobic instructors focused on individualizing aerobic classes to make the experience comfortable for the class participants.

In order for aerobic classrooms to be true sites of health education, health messages need to have a more prominent role in aerobic classes. The promotion of health is especially important for facilities that focus on health and wellness. The following chapter will provide conclusions based on the findings discussed in this chapter.

CHAPTER FIVE

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

This qualitative study was designed to understand the content and delivery of health messages in aerobic classes for women. Four research questions guided this study. First, what health related messages are conveyed by instructors in aerobic classes for women? Second, how do health messages shape the environment of aerobic classes? Next, what cultural and aesthetic messages are conveyed by instructors in aerobic classes for women? Finally, what instructional techniques do aerobic instructors use to convey health messages in classrooms? After conducting participant observations and interviews, data were analyzed using the constant comparative method (Glaser & Strauss, 1967). There were three major conclusions in this study. First, health messages conveyed by aerobic instructors were limited in number and most focused on the physical component of health. The second conclusion was contradictory messages of health, aesthetics and women's physicality were present in aerobic classes observed. The last conclusion was that aerobic instructors used a variety of instructional techniques including teacher, content, and learner-centered methods.

The following section explores the three major conclusions in this study. A discussion for each conclusion will integrate the findings from this study with relevant literature. In conclusion, recommendations state implications for practice and suggestions for future research.

Conclusions and Discussion

Three major conclusions were reached in this study involving the health messages in classes and the instructional practices of aerobic instructors. First, there was a limited

amount of general, preventative health information that was predominately focused on physical health with little attention to intellectual, emotional, social, spiritual and environmental health. The second conclusion was that contradictory messages of health, aesthetics, and women's physicality were conveyed by aerobic instructors. The third conclusion was that instructional techniques used by the aerobic instructors in this study included teacher, content, and learner centered methods.

Conclusion I: The limited number of health messages conveyed by aerobic instructors in aerobic classes for women were predominately focused on physical health.

Aerobic classes, like schools, workplaces, and health care facilities, are often untapped sites of health education. Beyond safety and injury prevention, little information about the preventative health benefits of exercise was communicated by aerobic instructors in this study. Only one instructor mentioned the effects of physical activity in the prevention of disease in class. General health information conveyed by other aerobic instructors mostly focused on nutrition and back health. Despite the health oriented missions of both facilities, the aerobic classes observed were not sites of health education where information about health and wellness was communicated. In order to be considered sites of health education, aerobic classes need to teach class participants content relating to health.

There was a limited amount of general, preventative health information conveyed in aerobic classes. General, preventative health information refers to basic health education messages like the role of exercise in the prevention of disease or physical activity as a stress reduction technique. The three leading causes of death for women in the United States are heart disease, cancer, and stroke (Madlon-Kay, 2001). These

diseases are threats to public health that can be prevented through behavior modification. National health education initiatives like Healthy People 2010 aim to increase quality and years of healthy life and to eliminate health disparities in the general public through prevention (U.S. Department of Health and Human Services, 2002). In order to reach the maximum number of women, health education could be provided in many settings like schools, workplaces, health care facilities and aerobic classes.

Most of the health messages present in this study focused on physical health with minimal attention to other components of wellness including intellectual, emotional, social, spiritual and environmental health. Concentration on physical health created a disconnection between the mind and body in the aerobic classes observed.

Wellness

Health includes more than the physical appearance and function of the body. Definitions of health provided by the field of health education are usually multidimensional (Hawks, 2004). Multidimensional concepts of health are similar to the idea of wellness that outlines the six of dimensions of wellness including: social, spiritual, physical, intellectual, emotional, and environmental. A high-level of wellness is achieved when components of wellness are balanced. When one aspect of wellness is neglected or one is dominant, the balance is lost (Greenberg, 1995).

The concept of wellness is more popular than ever. The term wellness is now being applied to institutions including health care organizations, university, corporate, and public health settings (National Wellness Institute, 2003). For example, the word “healthy” is often used as a descriptor for schools or corporations that address multidimensional wellness in their organization.

While health is defined as multidimensional, the practice of health education still remains largely focused on the physical aspect of wellness. There are very few health interventions that address outcomes besides physical health (Hawks, 2004). In comparison to other dimensions of wellness, physical health is tangible and measurable and therefore used by health education initiatives most often as objectives. Hawks (2004) explains the physical preoccupation of health education “As a stepchild of the medical and public health professions, we have inherited a preoccupation with physical health as the most worthy outcome measure for most of our programs” (p. 11). While the field of health education recognizes that optimal health is determined by more than physical health, it is not applying this philosophy in practice. As Hawks (2004) states, “As it now stands our practice is inconsistent with our philosophy, and our effectiveness may be limited as a result” (p. 13).

Hawks (2004) provides recommendations for the promotion of wellness in health education. First, the field of health education must provide clearly defined concepts of the dimensions of health and wellness. Next, dimensions of wellness outside of the physical realm must be incorporated into health objectives. Finally, researchers and practitioners need to address all aspects of wellness in the planning, implementation and evaluation of health education programs.

In this study, health messages communicated by aerobic instructors largely focused on physical health. Consequently, the other elements of wellness including social, intellectual, spiritual, emotional and environmental health are for the most part neglected. These findings support Hawks’ (2004) identification of inconsistencies in theory and practice in health education.

Physical. The physical components of wellness involve cardiovascular endurance, strength and flexibility (National Wellness Institute, 2003). The findings in these study showed that most of the health messages communicated by the aerobic instructors focused on safety and injury prevention all of which are physical health oriented. For example, the health messages conveyed by the aerobic instructors in this study included the importance of good form and safety, breathing properly, drinking water, heart rate assessment, and the importance of cooling-down. The aforementioned health messages are all related to the physiological functioning of the body. Many of these factors are emphasized in aerobic classes because of liability issues. The instructors are protecting the wellness of class participants as well as protecting themselves from being held legally responsible for injuries incurred in aerobic classes.

Physical wellness also includes self-care pertaining to appearance. Concentration on the physical aspect of aerobic classes has been shown in research about aerobic classes (Maguire & Mansfield, 1998; Markula, 1995). Shusterman (2000) describes focus on the external experience of the body as representational in his theory of somaesthetics. Examples of representational practices are using cosmetics, grooming hair, and bodybuilding. People oriented in a representational domain of physical health concentrate on the outward appearance of the body. Messages conveyed by aerobic instructors in this study that focused on aesthetic outcomes fall into this category. Most of the physical health messages in this study were centered on safety and injury prevention and appearance.

Social. The social component of wellness represents one's contribution to and interaction with their environment and community (National Wellness Institute, 2003).

The social benefits of exercise for women include empowerment, self-sufficiency, and increasing social networks (Jaffe, 2001).

The importance of the social component of exercise is supported by research. Research in a community based sample of middle-aged adults by Mc Nicholas (2002) found a positive relationship between social support and positive health practices. Salmon, Crawford, Owen, Bauman and Sallis (2003) investigated physical activity and sedentary behavior regarding barriers, enjoyment and preference. Results showed that respondents reporting a preference for physical activity were more active. Less active individuals reported cost, weather and personal barriers as preventing physical activity. When individuals enjoy exercise, they are more likely to be physically active. This supports the need to make exercise environments enjoyable where social wellness is recognized.

In McDermott (2000), aerobic classes for women led to confidence because aerobics was a socially acceptable way for women to become physical. In this study, aerobic classes were social outlets for class participants where participants seemed comfortable being physically active. This was especially true in classes where aerobic instructors emphasized the need to have fun while exercising.

Intellectual. Intellectual wellness addresses learning, knowledge, creativity and mental activities (National Wellness Institute, 2003). The intellectual component of wellness is represented in aerobic classrooms when aerobic instructors provide explanation about why an exercise is being done. The general, preventative health information communicated by instructors was limited. However, intellectual wellness was represented in the instructional techniques that helped class participants to

individualize participation and by instruction that included explanation about exercise and the body.

Instructional strategies that encouraged individualization of aerobic classes help class participants move toward self-directed learning. Approaches used in holistic health promotion assume that people are capable of self-assessment, wellness action and self-evaluation (Clark, 2002). Strategies that foster personal growth through self-direction help to facilitate wellness in class participants. When aerobic instructors do not help to individualize the aerobic class experience, they are neglecting the potential intellectual development of class participants.

Secondly, instruction needs to teach class participants about what they are doing. Physical demonstration without explanation leads to “banking” information (Freire, 1995) rather than learning. When aerobic instructors cued with explanation about breathing, water, or form, they were addressing the intellectual component of health by educating class participants about health. The intellectual component of wellness is important to create a mind and body connection for women in aerobic classes.

Emotional. The emotional component of wellness includes attention to awareness of one’s mental state and capacity for developing autonomy and managing stress (National Wellness Institute, 2003). Research has shown that physical activity improves symptoms associated with depression, reduces stress and anxiety, and enhances moods (Jaffe, 2001). Research has shown factors including depression, lack of intimate and supportive personal relationships, job strain, hostility and anger, and low socioeconomic status put people at risk for premature death from cardiac conditions (Williams, Kiecolt-Glaser, Legato, Ornish, Powell, Syme, & Williams, 1999).

In this research, there was a limited amount of attention to the emotional component of health. This finding supports research by Loland (2000) that found aerobic class participants did not identify taking part in aerobics to alleviate stress. If class participants, aerobic instructors, and class environments are intimidating or uncomfortable, participation in aerobic classes can be a stressful experience for women.

Research has explored the role of emotional issues including body image (Kennedy & Reis, 1995) and self-esteem in women's physical activity (Krane et al, 2001; Richman & Shaffer, 2000). Depending on the environment and facilitation used by aerobic instructors, self-esteem and body image may be positively or negatively affected by participation in physical activity. The fitness industry recognizes self-esteem and body image are important factors involved in women's experiences in fitness settings, but mistakenly lump the concepts together. While there is a relationship between self-esteem and body image, it must be established that self-esteem is not directly a result of positive body image and issues of self-esteem should not be remedied by body modification.

Research by Vogel (2000) explored the fitness instructor's impact on the body image of female learners and found some participants compared their bodies to the instructor's body. Therefore, aerobic instructors must be careful not to promote the association of improved self-esteem purely through outward modification of the body such as weight loss. Three instructors discussed their struggles with weight and appearance issues. The message needs to be sent that the function of the body, as well as, the connection between mind and body is as important as outward appearance.

Spiritual. The spiritual component of wellness refers to the belief that some force unites human beings and the importance of morals, values and ethics (Ansbaugh & Ezell,

2004). Hawkes (2004) says “good spiritual health fulfills foundational needs and provides the impetus for achieving positive emotional and social health.” (p. 14) Graber and Johnson (2001) discuss the possibilities of incorporating spirituality into health care organizations as:

In recent years, the place of spirituality in organizations has become increasingly discussed and advocated. On a personal level, this may involve achieving personal fulfillment or spiritual growth in the workplace. In the broader sense, spirituality is considered to be essential in an organization’s interactions with employees, customers, and the community. (p. 39)

Like in health care organizations, spirituality is a concept that can be applied to experiences and interactions in aerobic classes. In this study, spiritual health was the least addressed component of wellness. However, relaxation times at the end of classes could provide class participants with time to reflect and therefore be considered spiritual wellness. In addition, messages of empowerment could be considered spiritual health messages.

Environmental. Environmental health refers to a safe emotional and physical environment (Anspaugh & Ezell, 2004). The environment of the aerobic classroom may support or discourage the inclusion of health messages. The environment has the potential to affect the experience of the aerobic class for participants as well as the aerobic instructors (Kern & Baker, 1997). In health promotion, the environment is also referred to as the setting. According to the World Health Organization (2003), settings contribute to the health status of people and each setting has a set of authorities and members, involves social interactions, is organized for more deeply socially and binding

purposes beyond health promotion, and are characterized by formal and informal membership.

The aerobic classroom is an example of a setting that includes authority (the aerobic instructor) and members (class participants), involves social interactions as displayed in the data, functions to maintain societal definitions of health and gender and is characterized by formal membership (belonging to the health facility) and informal memberships (the “regular” aerobic class participants). Therefore, the environment or setting is an important component of the promotion of health and wellness for women who attend aerobic classes.

The research sites were chosen because they are non-profit organizations that promote healthy lifestyles. The institutional culture of both the wellness center and the family fitness centers seemed to encourage physical activity in comfortable learning environments. Classes tended to be smaller than private facilities giving participants the opportunity to get to know one another. However, in these facilities, emphasis on creating a comfortable learning environment was more salient than conveying health messages to class participants.

There is a need to make the aerobic classroom more balanced where overall wellness including the mind and body connection is represented and encouraged. Creating wellness focused aerobic classes may improve the environment for beginning exercisers by being less threatening and more inclusive. For experienced class participants, wellness focused aerobic classes may break the monotony of typical aerobic classes by providing an alternative class experience. Currently, the potential overall

health benefits of aerobic classes are being over shadowed by a preoccupation and concentration on the physical components of health and wellness.

Mind and Body Wellness

When the physical component of exercise is most prevalent, the primary focus of the aerobic class is the body. Consequently, the elements of wellness that represent the mind including social, intellectual, emotional, spiritual, and environmental are for the most part neglected. This creates disconnect between the mind, body and learning.

The separation of mind and body. There is a connection between wellness, mind and body. Beaudoin (1999) explains that “People who take courses or workshops in body-centered approaches in somatic education often seek “wellness” or relief from discomfort” (p. 76). When the mind and body connection is ignored, the balance of wellness is lost. Dewey (1928) discusses the problem with mind and body dualism “The very problem of mind and body suggests division; I do not know of anything so disastrously affected by the habit of division as this particular theme”(¶ 1). Mind and body dualism prevents wholeness of operation by preventing unity of learning, experience and action.

The separation of mind and body has social implications that feminist and critical theorists have examined. The mind and body split reproduces cultural ideologies of gender where men are associated with mind and women with body. Brodsky and Fine (1999) explain how cultural ideologies of gender affect women’s accounts of harassment. Women did not recount their own emotions about the situation, but did evaluate their harasser’s situation and experience. Consequently, the women created a mind and body split of the experience as described below:

The narrative positions women assign themselves suggest that they understand their own survival to depend on the ability to cleave their minds from their bodies. This mind/body split reproduces in each of them the very cultural ideology that has historically been used to distinguish men from women and justify gender oppression. (Brodsky & Fine, 1993, p. 81)

The mind and body split supports gender ideologies that have historically dictated social roles of women. Bordo (1993) details the historical underpinnings of the mind and body split for women:

...the body is the negative term, and if women is the body, then women are that negativity, whatever it may be: distraction from knowledge, seduction away from God, capitulation to sexual desire, violence or aggression, failure of will, even death. (p. 5)

This quote demonstrates the historical association of women with the body and how it gained a negative connotation relating to gender.

The mind and body disconnect may seem highly theoretical to many. Most people may not realize how the mind and body split affects their daily lives. However, Bordo (1993) argues that:

Clearly, then, mind/body dualism is no mere philosophical position, to be defended or dispensed with by clever argument. Rather, it is a *practical* metaphysics that has been deployed and socially embodied in medicine, law, literary and artistic representations, the psychological construction of self, interpersonal relationships, popular culture, and advertisements... (p. 13)

Another social implication of the mind and body split is illustrated in work where the body is viewed as a machine separate from the mind. Bartky (1997) explains that viewing the body as a mechanical tool separate from the mind creates docile vessels susceptible to social coercion (Bartky, 1997). The concept of docile bodies was originally presented by Foucault, but has been adapted by feminists to describe the effects of social ideology on women's bodies, space and movement.

Rather than focusing on physical outcomes, this study suggests that applying a wellness based approach to aerobic class instruction may improve experiences for women. The physical concentration of aerobic classes leads to the neglect of the other components of wellness that address issues relating to the mind such as the social, emotional, spiritual, intellectual, and environmental health.

Mind and body practices. Components of wellness associated with the mind include social, emotional, spiritual, intellectual and environmental. Aerobic instructors in this study minimally addressed the mind components of wellness through instructional strategies including communicating personal experience, cool-down and relaxation, and exercise as self-defense.

Crowdes (2002) outlines how learners can become more aware of themselves by linking knowledge and experiences about social structures, minds, emotions and bodies. Somatic learning and knowing address similar ideas described as “experiential knowing that involves sense, precept, and mind/body action and reaction...” (Matthews, 1998, p. 236). Somaesthetics combines somatic knowing with aesthetic theory to address concerns with the external appearance of the body in relation to the lived experience

(Shusterman, 2000). When somatic awareness is not present in aerobic classrooms, the separation of the mind and body may lead to over emphasis on the physical

Personal experience is the basis of experiential learning. Elias and Merriam (1995) discuss how Dewey “defined education as the reconstruction and reorganization of experience which increased our ability to direct the course of subsequent experience” (p. 56). The aerobic instructors’ use of personal experiences to communicate health messages showed they have constructed and organized their experiences in order to educate others.

The mind and body connection may be fostered by promoting connected learning for class participants. hooks (1989) outlines how to connect personal experiences with critical analysis and theoretical perspectives by encouraging the inclusion of people’s experiences in understandable ways that are appropriate for non-academic learners. Belenky, Clinchy, Goldberger and Tarule (1997) discuss the need for connected teaching where “object of knowledge is not the private property of the teacher” (p. 219). The concepts of connected learning and teaching are relevant to aerobic classes where the class participants are modeling the movements of and receiving the knowledge of aerobic instructors. Connected learning occurs when the students are able to personalize experiences and knowledge. In fitness settings, presenting exercises as functional and explaining how they will benefit the class participants in daily life contributes to connected learning.

The second way mind related wellness was promoted by aerobic instructors was through cool-down and relaxation. These instructional strategies were used by aerobic instructors in this study to provide class participants with the opportunity to connect and

reflect about their experiences in aerobic class. Past research about aerobic classes has examined components of emotional health. Kern and Baker (1997) found that classes with a mind and body approach to aerobic exercise like NIA resulted in participants being less stressed, more relaxed and calm.

The third way mind related wellness was promoted by aerobic instructors was through instructional strategies that taught self-defense. Some (Veldez, 1995; Johnson, 2002) have questioned the possibility of aerobic classes to be empowering for women. However, literature on women and adult learning identifies ways women learn in environments of oppression and manage to have self-affirming and growth-enhancing experiences (Hayes, 2000). The incorporation of self-defense for women may be emotionally empowering in an environment that has been viewed as oppressive to women.

The mind and body disconnect results from the overemphasis on the physical in aerobic classes. However, some aerobic instructors were using mind and body strategies that included communicating personal experience, cool-down and relaxation, and exercise as self-defense. The practices of aerobic instructors in this study regarding the type and number of health messages, whether or not they promoted the mind and body connection and how they conveyed this information was affected by their personal, professional, and educational experiences.

Influences of Health Messages

The personal, professional and educational experiences of aerobic instructors influenced health messages that were included in their aerobic classes. The training provided by aerobic certification agencies also seemed to influence the inclusion of

health messages in aerobic classes. In research about the training of health education teachers, it was concluded that pre-service training and staff development led to increased teaching of health education topics in schools (Jones, Brener & McManus, 2004). Research on health education teachers shows the importance of training that can be applied to programs that prepare aerobic instructors.

The American Council of Exercise (ACE), American Council of Sports Medicine (ACSM), and Aerobic Fitness Association of America (AFAA) establish guidelines for aerobic instruction. This research supports that the basic messages taught in aerobic certification classes about injury prevention was conveyed by aerobic instructors in this study. The aerobic instructors said they did not learn how to incorporate health and wellness messages in their aerobic certification classes. Susan believed that topics currently covered in aerobic certification programs need to remain, but there needs to be a component added about teaching from a holistic perspective “They need to keep the physiology and anatomy. They teach the choreography, and anatomy and physiology. They teach that academic stuff, but they are not teaching the stuff that is not academic.” Susan explained why she keeps her certifications “...I only keep my certification up because I have it, it is easy to keep it up, but I don’t do it for what I learn.”

The wellness center and family fitness center did not seem to have guidelines about including health messages in aerobic classes. Dana discussed that she did not receive guidance from her supervisor at the wellness center about incorporating health messages in aerobic classes. According to Caffarella (1994) a barrier to the learning transfer at the organizational level is a lack of concrete support from peers, superiors or managers.

The learning transfer between instructors and class participants could be enhanced if aerobic certification programs taught aerobic instructors how to incorporate health messages in their classes and provided informational resources on health for aerobic instructors. Therefore, aerobic certification programs and continuing education programs need to simplify the process of communicating health messages and teach aerobic instructors how to apply these principles in their classes. Facilities that focus on wellness need to establish guidelines and support for aerobic instructors about the inclusion of health information in aerobic classes.

The effective transfer of health information from health professionals to the public is a difficult task. Lawson (1992) discusses how the dissemination of research about health remains isolated from the ecological context. In other words, current research is not benefiting the people who need it because it is not effectively communicated to the general public including women. The process of communicating health information includes planning and strategy development, developing concepts, messages and materials, implementing the program, and assessing effectiveness (National Cancer Institute, 2003). More specifically, health communication strategies need to identify the health problem, intended audience, create strategies and objectives, and draft plans for action (National Cancer Institute, 2003).

Health models or methods of communicating health messages could be applied by aerobic instructors in aerobic classes for women. However, if the aerobic instructors are not experienced in facilitation or knowledgeable about health education theory, they may have a difficult time incorporating health messages into aerobic classes. Therefore, aerobic instructors with little training about how to teach and communicate health

information may have difficulty conveying health messages to class participants.

Familiarizing aerobic instructors with models about the communication of health messages may help aerobic instructors convey health messages in aerobic classes.

In summary, few general, preventative health messages were conveyed by aerobic instructors in this study. The health messages were predominately physical health-related creating an imbalance in aerobic classrooms by neglecting the mind through limited attention to social, intellectual, emotional, spiritual and environmental components of wellness. The health messages included by aerobic instructors were influenced by personal, professional and educational experiences including aerobic certification programs and organizational settings. In order to effectively communicate health information, aerobic certification programs and wellness organizations need to familiarize aerobic instructors with models and methods of communicating health information.

Conclusion II: Contradictory messages of health, aesthetics, and women's physicality were conveyed by aerobic instructors.

This research showed that the aerobic instructors and aerobic classes observed were reflective of society where there are conflicting messages of health, aesthetics, and women's physicality. Research has shown the contradictions between the aesthetic focus and women's physicality in aerobic classes (Loland, 2000; Maguire & Mansfield, 1998; Markula, 1995; McDermott, 2000; Haravon, 2002). This study reflects the findings of previous studies on aerobic classes where there were empowering messages encouraging women's physicality along with aesthetic messages reproducing ideologies of appearance for women. Unlike previous research on aerobic classes, this research also considered

health. Findings indicated the presence of contradictory health messages and how they interfaced with messages of aesthetics and physicality for women.

I have had personal experience as an aerobic instructor, class participant and researcher in both non-profit and private exercise settings. Although no private gyms were selected as research sites for this study, I can comfortably conclude that the environments observed were much less active in the reproduction of social ideologies for women than private facilities. Overall, there were much fewer aesthetically focused comments and significant focus on the learner's needs in the non-profit facilities observed. The aerobic classes at non-profit facilities were less actively reproducing social standards of femininity and appearance than private facilities. However, there were still contradictory messages of health, aesthetics and women's physicality present in the facilities observed.

Health Messages

Health campaigns generally use two types of strategies to send health messages to target populations: fear appeals and the presentation of facts (Monahan, 1995). Fear appeals convey the harmful effects associated with certain behaviors (Hale & Dillard, 1995). The fitness industry may use fear appeals that encourage women to partake in exercise to avoid unwanted cellulite or to counteract the effects of aging. The presentation of health facts is the second type of health message commonly used in health campaigns. In this study, there was little factual health information besides safety and injury prevention presented by aerobic instructors.

In interviews, aerobic instructors described the interplay between aesthetics and health. In some cases, the messages were positive. For example, Susan talked about

students who initially came to class for aesthetic purposes and ended up recognizing the health benefits of exercise like lowering cholesterol. However, some aerobic instructors demonstrated contradictory behaviors that may have weakened their effectiveness as healthy role models for class participants. Jenny presented herself as a positive role model for women because she showed that you do not have to be a size two to be fit. However in one class, comments she made about her appearance that were self-depreciating counteracted her efforts to be a positive role model. Megan discussed wanting to be a healthy role model for others, but exhibited unhealthy body image in her classes and in our interview. Dana discussed not measuring health by leanness and being healthy, happy and comfortable with your body. However, she also exhibited attitudes and actions that seemed to convey excessive exercise habits as acceptable. There were a range of contradictory health messages that included attitudes and behaviors related to health and appearance.

Aesthetic Focus

In this study, the contradictions between health and aesthetics were apparent in incidences where aerobic instructors focused on aesthetic issues. Observations and interviews with aerobic instructors disclosed aesthetic orientations that included focusing on appearance, inflicting gaze on self and participants, and encouraging body modification.

In the interviews, aerobic instructors talked extensively about the interplay between health and the body. Some of the aerobic instructors discussed promoting healthy images for women that challenged social ideologies of appearance. For the most

part, their actions reflected their statements. However, in some cases the aerobic instructors focused on aesthetic issues.

Focusing on appearance. In research by Maguire and Mansfield (1998) and Markula (1995), the physical focus of aerobic classes on beauty and femininity led to the reproduction of gender ideologies for women. A study by Kennedy and Reis (1995) found that some women who participated in exercise exhibited a preoccupation with weight through concerns about getting fat. Krane, Waldron, Michalenok, and Stiles-Shipley (2001) showed how socially constructed norms of femininity influence and control women's physicality and self-concept through the influence of the cultural expectations of female bodies on the body images of exercisers. Therefore, it is important to recognize and explore the role of aesthetic focus in aerobic classrooms.

Despite the wellness facility setting of the aerobic classes, this research found some aesthetic focused comments and incidences that occurred primarily in Meg's classes. However, there were also minimal aesthetic focused comments observed in Jenny and Susan's aerobic classes. Focus on appearance was also evident during interviews where the aerobic instructors discussed health in terms of appearance related issues. In addition, some comments from interviews made by aerobic instructors reflected personal body image issues and preoccupation with appearance. Aerobic instructors' preoccupation appearance is shown in research by Philips and Drummond (2001) where male fitness instructors had high levels of concern with personal outward appearance and that of their clients.

Research has explored the health behaviors, beliefs and backgrounds of aerobic instructors. Research by Thompson (2000) reported that 21% of aerobic instructors had

an eating disorder in the past. Research by Hare, Price, Flynn and King (2000) showed that aerobic instructors ranked body weight as very important to health, but less than a third recognized culture, socioeconomics and hormones as contributing to health. While none of the aerobic instructors reported having an eating disorder, three did share that they had lost a significant amount of weight. The other two aerobic instructors also reported physical changes that they liked resulting from exercise. Although the weight loss and physical changes of the aerobic instructors may have improved their health, instructors need to be careful about overemphasizing appearance related accomplishments. For the most part, the aerobic instructors did not focus on appearance in their aerobic classes.

Inflicting gaze on self and class participants. In our interview, Meg talked about encouraging women to examine their appearances during aerobic classes to look for changes in their bodies. Research by Fredrickson and Roberts (1997) used objectification theory to explain how females are socialized to develop images of their bodies based on other people's views. Haravon (2002) found that instructor comments focusing on appearance and beauty led class participants to feel sexualized and decreased their enjoyment in aerobic classes. Issues of gaze and objectification occurred primarily in Meg's classes and may have negatively affected the experience of some class participants.

Like in research by Vogel (2000), the appearance of the aerobic instructors legitimized both Meg and Dana as fitness role models. Meg discussed being approached by class members wanting to know how she lost weight. Duncan (1994) discusses how fitness success stories from fitness magazines illustrated by before and after pictures

function to create gaze by the subject of the story and the readers. One of Dana's class participants told me she was inspired by the before and after pictures of Dana's weight loss.

Brace-Govan (2002) found in order to avoid feeling like an object women need to exercise for reasons other than appearance. Another study by Martin Ginis, Jung and Gauvin (2003), assessed the effects of mirrored exercise environments on body image concerns in sedentary women. Results showed that women who exercised in mirrored environments felt worse after physical activity than participants who exercised in a non-mirrored environment. Consequently, in order to encourage women who are not exercising to exercise, it would make sense to deemphasize the focus on physical appearance. Thus, activities that promote gaze like staring in the mirror while exercising should be eliminated from aerobic classes. When aerobic instructors are conscious of critical issues, they may facilitate learning experiences that avoid gaze and objectification of women's physicality.

Body modification. Women are socially motivated to partake in efforts of self-modification (Bordo, 1995). Exercise is often viewed as a method of modifying the body. Morgan (1991) details how social control through the medical colonization of women's bodies has normalized the practice of body modification through plastic surgery. Morgan (1991) applies the concept of docile bodies to the colonization of women's bodies through cosmetic surgery:

What is important about this notion in relation to cosmetic surgery is the extent to which it makes it possible to speak about the diffusion of power throughout Western industrialized cultures that are increasingly committed to a technological

beauty imperative. It also makes it possible to refer to a set of experts—cosmetic surgeons—whose explicit power mandate is to explore, break down, and rearrange women’s bodies. (p. 35)

Like plastic surgeons, aerobic instructors may be deemed experts who are skilled in helping women modify their bodies.

Body modification is also evident in fitness through the fragmentation of the body described by Shusterman, (2000) as the “preoccupation with body measurements and with specialized “fitness” classes devoted to “abs,” thighs, butts...” (p. 274). In Kern and Baker (1997), research found that the instructor’s style of teaching encouraged, isolation of body parts, excessive exercise, eating disorders, and the promotion of thinness. All of these issues reflect women’s efforts to modify their bodies. In this research, the isolation of women’s body parts was discussed by Anna who said she would get mad when aerobic instructors only did tricep and bicep exercises for aesthetic purposes and therefore neglected other muscles groups. Meg seemed to encourage class participants to partake in body modification for aesthetic purposes. While all of aerobic instructors mentioned personal experiences with changes in their bodies that resulted from participation in aerobic classes, other instructors were not as aesthetically focused as Meg. In fact, Susan encouraged students to recognize improvements in health in addition to aesthetic changes in their bodies.

Contradictory attitudes and actions of aerobic instructors about health and aesthetics were displayed in observations and interviews. The relative silence regarding health in wellness centers also seems to be contradictory. Consequently, the question must be asked about what the agenda is of these aerobic classes. From observations and

interviews, the salience of health is preceded by another agenda which is the creation of a safe, comfortable environment for women to participate in physical activity.

Encouraging Women's Physicality

Throughout time, women's physical activity has faced resistance. Greendorfer (1998) discusses the backlash against Title IX and how it is a site of political and ideological struggle against women's physical activity. Research has documented how the physical activity of women is discounted by society through unequal amount and quality of coverage of women's sports (Birell & Theberge, 1994; Duncan, Messner, Williams, & Jensen, 1990; Eastman & Billings, 2000; Messner, Duncan & Cooky, 2003). Mac Neil (1994) showed how aerobic exercise shows sexualize women through body language, camera angles, and commentary. Consequently, it is significant that women's physical activity is supported by the aerobic instructors in this research. The aerobic instructors are challenging social ideologies of physicality that are often associated with masculinity by providing women with a safe and comfortable environment for physical activity.

For the most part, physical activity is viewed as positively influencing the health of women. However, the environment of exercise can positively or negatively affect the experiences of women. Kern and Baker (1997) found that instructional styles influenced psychological outcomes relating to anxiety. Consequently, providing a safe, comfortable environment for women to physical active is important.

Throughout interviews and participant observations, it was evident that aerobic instructors promoted the physical activity of women. The instructional techniques used by aerobic instructors encouraged women to individualize their participation in aerobic

classes and created a collaborative interaction between instructors and class participants. Such collaborative interaction is typical of feminist pedagogy where “A collaborative course structure includes the mutual planning, conducting, and evaluating of learning activities and outcomes” (Hayes, 1989, p. 59). The opportunity to be self-directed in aerobic classes empowered class participants by giving them more voice, power and authority in a typically teacher-centered environment. Through concentration on creating a comfortable learning environment, the importance of aesthetics and appearance based competition was downplayed. The emphasis was on creating an environment where women felt comfortable and empowered to participate in physical activity.

Haravon (1995) provides three ways to make aerobic classes empowering including increasing comfort, encouraging interaction, and encouraging personal expression. Haravon (1995) suggested methods to increase comfort of participants including being aware of needs of participants, avoiding assumptions about weight loss as the motivator of exercise, and asking observers to leave. A significant finding of this research was the extensive efforts aerobic instructors put into creating a safe, comfortable learning environment. This was accomplished by recognizing the individual needs of class participants through recognizing personal experiences, asking questions about the experience and making practical applications to everyday life. By creating a comfortable environment, aerobic instructors were supporting women’s efforts to participate in physical activity and creating a learning environment that encourages wellness and enjoyment for class participants.

Second, interaction among class participants was encouraged by the aerobic instructors in this study. Haravon (1995) suggested learning student’s names, using a

circle format for exercise, and providing learners opportunities to choreograph routines. Opportunities to socialize through class formatting encouraged interaction among class participants and the aerobic instructors. Susan created interaction by giving students the opportunity to introduce themselves and learn about each other. Susan reinforced learning each other's names through addressing people by their names.

Meg and Susan used class formatting to create interaction. Meg created a circle during strength and stretching sessions so she and the class participants could interact. Each semester, Susan gave students the opportunity to teach classes by calling the exercises they wanted to do. Susan used a technique called scramble where class participants changed positions with other people in the class. This gave class participants a different perspective by positioning them next to different class participants and in a different spot in the room.

Haravon (1995) encouraged personal expression through the use of journals and check-ins where class participants expressed feelings about experiences with exercise. In this study, personal expression was encouraged in classes through efforts by aerobic instructors to help class participants individualize their participation in aerobic classes. Most of the aerobic instructors in this study encouraged individual expression by providing options and modifications throughout classes. Class participants were also given voice as a means of expression through opportunities to talk before, during and after classes. Through increasing comfort, promoting social interaction, and promoting individual expression, the aerobic instructors were providing class participants with physical activity that focused on the experience of exercise rather than the outcomes.

Shusterman (2000) describes the experiential component of the theory of somaesthetics as focusing on the inner experience of the body. Shusterman (2000) explains that experiential physical activity focuses on the experience of the self without attending to external measurements of good health or aesthetic standards for women. The efforts of aerobic instructors in this study encouraged class members to value the experience of physical activity.

In conclusion, it is apparent that factors of health, aesthetics and women's physicality affect women's lives in contradictory ways. As a society, we are bombarded by contradictory messages of health, aesthetics and women's physicality. For example, Duncan (1994) discusses the links society makes between health and looking good means feeling good. There were undertones of aesthetic messages that may suggest that some aerobic instructors were promoting exercise as a means to achieving aesthetic outcomes. Brace-Govan (1995) says exercise for self-modification of appearance prevents women from experiencing the empowerment that men enjoy from physical activity. However, in this research, it seemed that both aesthetic and health messages were subordinate to messages of empowerment through the promotion of women's physicality.

Another way that aerobic instructors supported women's physicality was through a variety of instructional techniques. These instructional techniques included teacher, content, and learner centered methods. In some cases, the use of multiple instructional techniques supports self-direction in learning.

Conclusion III: Aerobic instructors used a variety of instructional techniques including teacher, content and learner centered methods.

The instructional techniques of aerobic instructors in this study were a mix of teacher, content and learner centered methods. Corder (2002) explains teaching methods are often divided into two categories: teacher centered and learner centered. In this study, the category of content was added because of the concentration on communicating subject matter and completing tasks in aerobic classes.

Teacher centered methods are primarily directed by the instructor. Teacher centered methods of instruction include lectures, explanation, talks and presentation, and demonstration. When using teacher centered techniques, Corder (2002) suggests preparing thoroughly, emphasizing key points, knowing your audience, and making sure learners are comfortable.

Learner centered methods give the student more influence over their learning. In health education, learner centered techniques may be referred to as audience centered. Some learner centered methods include stimulation, role-play, games, discovery learning, experiential learning and facilitation (Corder, 2002). Knowles (1984) emphasized the need to create an educational environment that is learner-directed based on personal experience where there is mutual respect, collaboration, trust and pleasure.

In addition to teacher and learner centered methods, this study observed content-centered methods in aerobic classes. Robinson (1996) describes highly content centered teaching method as set, demanding, concerned with subject matter and completing tasks. In content centered learning environments, the teacher establishes a formal, distant

relationship with learners by using formal and impersonal methods. Content centered classrooms use established materials and agenda to present facts.

Instructional styles used in aerobic classes. Participation in aerobic class may be considered self-directed education. For example, class participants select classes they want to attend through their own motivation. However, when learners enter the aerobic classroom instructional strategies may be more teacher, content or learner centered. Aerobic instructors may promote self-direction or create an aversive learning environment that does not recognize adult learning principles.

Many aerobic classes are teacher and content centered, because the aerobic instructors direct students' actions through verbal cues and demonstrations and follow certification guidelines. Standard aerobic practices include attention to safety, injury prevention, and instructional leadership techniques, and class flow (Clippinger-Robertson, 1993). ACE guidelines emphasize the importance of safety and injury prevention including proper technique such as avoiding contraindicated exercises, and self-monitoring like heart rate assessment. In addition, exercise programs follow a basic class structure including a warm-up, main activity, and cool-down to prevent injuries. Instructional leadership techniques include verbal and non-verbal cueing, choreography, and correction and modification. The final area is overall impression where program content, class flow, music, and variety are considered (Clippinger-Robertson, 1993). For the most part, the aerobic instructors in this study followed the aforementioned guidelines that were teacher and content centered.

Learner centered instruction. To create learner centered aerobic classes, the class participants must gain more control in the learning process. Cranton (1996) explains that

when learner control over the educational interaction is the goal, it is important to foster personal autonomy and self-management through inquiring about participants' present control in learning and encouraging participant decision making. In order to achieve the goal of learner control, facilitation must foster learner control by exploring learner needs and interests. Goals, sequence, pace and learning strategies should be set by the group. Learner control is also facilitated by providing access to learning resources, and opportunities to reflect on, discuss and evaluate learning and quality of sessions.

Learner control in the aerobic environment is important for personalizing learning experiences. While the aerobic instructors in this study are providing opportunities for class participants to individualize class participation, they did not encourage personal autonomy. This was reflected in the emphasis on managing the classroom through structured class plans and emphasis on performing activities in the correct way. However, the aerobic instructors are applying methods that give more learner control through the process. By asking questions, the learners' needs and interests are explored by the aerobic instructors. In Susan's classes, participants were involved in choices about sequence and pace. Susan and Dana referred class participants to learning resources. Reflection, discussion and evaluation were the least used techniques, but were minimally present by the use of relaxation at the end of classes.

Learner direction or individualization of class experiences is important for adult learners. Adults have diverse levels of education, experience, and expectations that lead them to desire control over their own learning. Anxiety may result when adults do not take ownership over their learning (Sisco & Hiemstra, 1991). Mager in Robinson (1993) lists conditions that negate learning including student fear and anxiety, frustration,

humiliation and embarrassment, and boredom. Through personal experiences with aerobic classes, many of the aerobic instructors in this study were conscious of learning environments that negated their personal learning. As a result, aerobic instructors were conscious of creating a positive learner focused environment for class participants.

The aerobic instructors in this study worked with diverse learners who were different ages, levels of fitness, and ethnicity. It seemed that aerobic instructors recognized that class participants were competent learners who knew what was appropriate for their participation in aerobic classes. This was displayed through efforts to individualize class experiences for learners. The instructors in this study used some strategies that put the class participants in charge of personal learning.

The aerobic instructors' practices in this study reflected Sisco and Hiemstra's (1991) steps involved in this process of individualizing the learning environment including preplanning activities, creating a positive learning environment, developing an instructional plan, learning activity identification, putting learning into action and evaluating individual learner outcomes. The informal learning environment of aerobic classes is different from formal learning experiences, because the participants may change each week. In this study, many class participants were present at each class creating the opportunity for a consistent learning experience. Based on awareness of class participants achieved through getting to know the learners and asking questions, the aerobic instructors in this study were able to plan activities that were appropriate for learners. They also made efforts to create a positive learning environment by using techniques that emphasized safety and comfort. They developed instructional plans and learning activities for each session and put them into action. Evaluation of the individual

learner outcomes was immediate in that the aerobic instructor provided a safe workout for participants.

Adults can learn more effectively when instructors apply self-directed methods in classes. The most effective learning environment includes teaching and learning excellence reflecting subject matter expertise, careful planning, patience and flexibility and commitment (Sisco & Hiemstra, 1991). This reflects the need for the balance between teacher, content and learner centered instructional techniques.

While most of aerobic instructors used a blend of teacher, content and learner centered instructional techniques, many of the strategies used in facilitation reflected classic learning theories that focused on reinforcement and cueing to shape individual learning. Such traditional educational strategies may reproduce social agendas and status quo. For example, Kern and Baker (1997) found instructor centered environments taught class participants to value discipline, self-restraint, denial and external control. Typical aerobic classes have been found to reproduce social ideologies of femininity and appearance (Maguire & Mansfield, 1998; Markula, 1995). Therefore, it is important that aerobic instructors incorporate critical instructional strategies like reflection to foster participants' awareness of how aerobic classes can affect women's wellness.

In summary, this study found three primary conclusions. The first conclusion was the limited number of health messages conveyed by aerobic instructors in aerobic classes for women were predominately focused on physical health. The second conclusion was that contradictory messages of health, aesthetics, and women's physicality were conveyed by aerobic instructors. The final conclusion was that aerobic instructors used a variety of instructional techniques including teacher, content and learner centered

methods. The conclusions from this study can be applied through recommendations for practice.

Recommendations for Practice

The recommendations for practice in this section may be applicable to informal and non-formal education environments in both adult education and health education. Practical applications in this section include guidelines for aerobic certification programs that teach aerobic instructors how to create a learning environment conducive to adult learning and how to incorporate all aspects of wellness in aerobic classes. Recommendations for practice also include suggestions for creating an environment conducive to adult learning, incorporating feminist pedagogy, incorporating wellness and somatic learning in aerobic classrooms.

Creating an Environment Conducive to Adult Learning

Aerobic certification programs need to teach aerobic instructors how to address the needs of adult learners. Just as aerobic instructors were helping class participants to individualize the learning process in aerobic classes, certification agencies must help aerobic instructors become more self-directed in their instruction by providing resources about issues besides safety and injury prevention. Overall, certification programs would benefit by teaching aerobic instructors how to incorporate adult education techniques in their practices.

The following guidelines could easily be incorporated in training programs for aerobic instructors. First, aerobic instructors need to learn how to create a non-intimidating learning environment. This can be done by addressing the needs of participants and down-playing the role of appearance in classes. Addressing the needs of

participants involves moving at the pace of the class rather than the pace of the instructor and giving participants some influence over classes. Aerobic instructors could use check ins and check outs to assess the needs and experiences of participants. Down-playing the role of appearance is done through casual dress and avoiding image conscious comments. When concentration on the physical is decreased, competition is discouraged among aerobic instructors and participants.

The second way to encourage adult learning is to emphasize the social aspect of exercise. This can be accomplished by giving class participants the opportunity to get to know each other and socialize. Periodically, aerobic instructors could give participants the chance to introduce themselves to other class members. Activities that allow participants to work in groups like relay races provide opportunities for social interaction.

The third suggestion for incorporating adult learning is creating opportunities for class participants to individualize their experiences in aerobic classes. This is accomplished by including personal experiences, asking questions, providing options and making practical applications. The inclusion of personal experiences can be accomplished by giving class participants the opportunity to talk about their experiences. Aerobic instructors can also incorporate issues relevant to class participants in their instruction. Again, asking questions is a technique that can be used before, during and after class and can be done individually or in a group environment.

Another way to help class members individualize their participation is to provide options in aerobic classes. This gives class participants opportunities to modify their participation based on their individual needs and goals. Finally, making practical applications in aerobic classes includes explaining how exercises are relevant to everyday

living. This can be accomplished by comparing exercises like squats to picking up groceries and putting them on a shelf. The aforementioned issues were also reviewed in the findings section of this research.

Incorporating Feminist Pedagogy

Principles of feminist pedagogy can be applied in aerobic classes to make the experience more empowering for women. First, like methods used to improve adult learning, a comfortable learning environment must be established for women. In an aerobic classroom, aerobic instructors must create inclusive environments where all types of learners are comfortable being physically active. Methods used in feminist pedagogy to increase comfort in aerobic classes could include being aware of learner's needs, avoiding aesthetic orientated comments, and discouraging gaze of self and others in aerobic classes. Music used in aerobic classes can also be a source of discomfort for some class participants. Therefore, aerobic instructors should avoid using music that is demeaning to women and their bodies.

Another way to promote feminist principles in aerobic classes is to distribute authority and power. This can be accomplished by altering class formats to include more interaction among instructors and class participants. For the most part, aerobic instructors face forward with their backs to class participants. This positioning maintains the aerobic instructor as the authority in the aerobic class. Aerobic instructors could face class members in stretching and strengthening sessions in class. By turning toward the class members, the aerobic instructor is encouraging a community learning experience where learners have more control and influence. The idea of distributing power can also be implemented by using a circle format in aerobic classes.

Authority and power can also be distributed by giving class participants the opportunity to co-instruct classes or to “call” the exercises they want to do. For example, aerobic instructors can use an activity like follow the leader in class where each learner gets the opportunity to select an exercise that the rest of the class mimics. Another way to increase authority and power is to give class participants the opportunity to do free form activities like exercise stations where class members go at their own pace and intensity level. Methods that give class participants influence over their class experience encourage empowerment in classes that may carry over into women’s lives outside of the aerobic classroom.

Incorporating Wellness

Through this research, it is evident that aerobic instructors did not learn about wellness in aerobic certification programs. Furthermore, some did not know where to get reliable information about health that they could apply in their aerobic classes. The learning environment of the aerobic classroom has the potential to be enriched by adapting a more wellness-focused orientation. Guidelines for certification programs include teaching health as wellness, providing a model for communicating health messages to participants, and providing resources for aerobic instructors.

Teaching health as wellness includes addressing social, spiritual, physical, emotional, intellectual and environmental health of women. The concept of wellness needs to be emphasized in certification programs. Aerobic instructors need to learn how to incorporate social, intellectual, spiritual, and emotional wellness into aerobic classes. Ideas for incorporating social wellness were previously discussed. The intellectual component of wellness could be addressed by aerobic instructors explaining what

muscles are being worked and how exercises are benefiting the body. Spiritual and emotional wellness can be incorporated by giving participants opportunities to relax. Reflection is also a technique that could be implemented to encourage spiritual and emotional wellness in classes.

The next suggestion for improving the training of aerobic instructors is providing a model for the incorporation of health messages into aerobic classes. Aerobic certification programs could simplify current health models like the transtheoretical model or health belief model in order to be practically applied by aerobic instructors. A simplified model for aerobic instruction might include the needs of the learner, the agenda of the facility, adult education techniques and attention to wellness.

Finally, aerobic instructors need access to accurate health information. Networks and resources exist for choreography in aerobic instruction. For example, turnstep.com is a website where aerobic instructors post exercise routines. This service has made the process of choreographing classes much easier for aerobic instructors. The same service does not seem to exist for incorporating health and wellness messages. In fact, like many American women, two of the instructors in this study obtained their health information from fitness related magazines. Research has shown that fitness magazines reproduce ideals of femininity and beauty for women (Eskes et al, 1998), and promote constant physical self-modification for women (Markula, 2001). Further analysis by Duncan (1994) discusses how fitness magazines confuse looking good with feeling good, promote false empowerment, and promote feelings of guilt and shame for women.

In order for aerobic instructors to communicate socially responsible health messages, they should not rely on fitness magazines or fitness shows for information

about health and wellness to share with aerobic class participants. Rather, health and wellness information should be obtained from reputable education and health journals. If information is used from popular magazines, aerobic instructors should teach class participants to be critical consumers of popular health information. Aerobic certification programs or facilities where aerobic instructors work should provide some type of health information network for aerobic instructors.

The reliance on fitness magazines for health information may indicate that aerobic instructors are not thinking critically enough about aerobic instruction. In order to challenge social ideologies that limit women's physical activities, aerobic instructors could incorporate feminist pedagogy into their instruction.

While most of the aerobic instructors practiced teacher, content and learner centered instruction, Susan taught with critical instructional techniques. Some research on aerobic classes (Maguire & Mansfield, 1998; Markula, 1995) indicates that social ideologies of femininity and appearance are reproduced in aerobic classes for women. However, other research like Haravon (2002) suggests that aerobic classes can be empowering for women by changing instructional strategies. Feminist pedagogical strategies that can be applied in aerobic classrooms include increasing comfort, creating interaction, and encouraging personal expression (Haravon, 1995).

Incorporate Somatic Learning

Another practical application of this research is the need to incorporate somatic instruction and learning into classes. Weiss (2001) explains that minds and bodies work together to help people pay attention and solve problems through physiological states supporting mental efforts. Learning states can be optimized through movement and

exercise. In order to achieve optimal mental aging, activities need to include mental and physical activity. In fact, brain research has shown that physical movement affects thought processes. Consequently, participation in dance, yoga and aerobics helps to generate a greater amount of connections between neurons. Strategies for enhancing the brain and body connections include moving, breathing, and laughing. These strategies were evident in aerobic classes observed, but they were minimally applied by aerobic instructors in the pursuit of establishing a mind and body connection for class participants.

Examples of exercise experiences promoting the mind and body connection are yoga, Pilates or those activities that “clearly refuse to exteriorize the body as an alienated thing distinct from the active spirit of the human experience” (Shusterman, 2000, p. 274). Other methods of promoting the mind and body connection include conscious embodiment where mind, body and action are blended through experiential learning.

When designing a class, an effective instructor uses a variety of methods to reach different types of learners. In order to create balance in learning, teachers use methods that address affective, psycho motor and cognitive domains of learning. By applying similar principles, health messages and instructional strategies used by aerobic instructors can create balance by implementing a mind and body learning experience for class participants.

In summary, this study has provided implications for instruction in non-formal settings in health education and adult education. This research highlights the importance of providing facilitation that addresses mind and body in the promotion of wellness. In order to prepare aerobic instructors to teach from this perspective, it is important for

aerobic certification programs to revise their curriculums and provide resources of information beyond safety and injury prevention for aerobic instructors.

In general, the fitness industry has begun to make changes through the resurgence of mind and body focused classes such as yoga and Pilates. These classes illustrate that a more holistic approach to fitness is on the rise. However, even mind and body classes are marketed as ways to alter the physical appearance of the body and therefore negate the purpose of the classes. If the fitness industry continues to promote physical health with limited attention to the mind and body connection, fitness and aerobic classes as a whole will be less effective and function to reproduce ideologies of femininity and appearance for women.

Future Research

This research has concluded that the aerobic instructors in this study primarily conveyed physical health messages. However, there was one aerobic instructor who was incorporating a variety of health messages through adult educational strategies. Future research could select other superlative aerobic instructors whom are experienced and knowledgeable to serve as case studies. Research could be expanded to include how class participants are affected by exercise environments where health and wellness are emphasized. This may involve interviewing and observing class participants who workout with superlative aerobic instructors. By observing more experienced aerobic instructors and including the class participant perspective, information could be obtained that would help new aerobic instructors to improve their practice.

The aerobic instructors in this study used a variety of instructional strategies including teaching, content and learner centered methods. Based on these results, three

survey instruments could be developed. The first survey could explore how aerobic instructors incorporate health and wellness messages in aerobic classes. A second survey could examine how the instructional strategies used by the aerobic instructors help class participants individualize their participation in aerobic classes. A third survey could be a wellness inventory that assesses whether aerobic instructors are incorporating all components of wellness. All of these surveys could be used to sample a larger audience of aerobic instructors and would provide the opportunity to make comparisons by facility orientation, demographic information, personal and professional experience.

Finally, the concept of how health messages are conveyed by instructors may be applied to other settings such as K-12 teaching. Due to cutbacks, school districts may be employing fewer health teachers. In many cases, K-12 teachers are responsible for incorporating health information into their curriculum. A methodology similar to this study could be used to explore how teachers convey health messages in their classrooms. A survey could also be developed to sample a larger population of teachers. This information would provide guidance to many teachers who are not sure how to incorporate health information into an already overflowing curriculum.

Conclusion

In conclusion, the leading causes of death in American women can be prevented through behavior modification that includes participation in physical activity. Many women are not getting an adequate amount of exercise. Some women are driven to over exercise as a form of self-modification. In both cases, the health and wellness of women is negatively affected.

Research on physical activity indicates that sociodemographic, biological, psychological, and environmental factors affect exercise adherence for women (Eyler, 2002). This research has shown that participation in aerobic classrooms involves much more than just physical activity. Participation in aerobic classes changed the lives of all of aerobic instructors in this study. Throughout this research, women have approached me with personal stories about participation in aerobic classes. When I presented a pilot of this study to peers, it sparked an emotional discussion about the negative experiences women had with aerobic classes. A student in one of my classes discussed her attempts to take aerobic classes unsuccessfully and said with teary eyes “I just want to be fit enough to go hiking with my husband.”

While many women enjoy aerobic classes, many other women are deterred from participation because they are intimidated by or feel uncomfortable in aerobic environments. In this study, aerobic instructors used a variety of instructional strategies to create comfortable and inclusive learning environments by helping class participants to individualize their class experiences. Consequently, it seems wellness centers or family fitness centers may be good environments for women who are uncomfortable with health club environments. However, if people attend these facilities to be educated about health and wellness, they would for the most part, not receive that information in aerobic classes.

Despite the non-profit and wellness based environment of the exercise facilities in this research, there was still an over emphasis on the physical aspect of aerobic classes. Therefore, the potential wellness related benefits of aerobic classes for women especially in environments that identified themselves as wellness facilities were diminished. In

order to create a “healthy aerobic classroom,” information and recommendations about adult education techniques and wellness focused orientations discussed in this research must be applied to aerobic classes for women. With appropriate modifications, aerobic classes could be sites of health education where health and wellness messages promote mind and body connections for participants. Furthermore, through the application of adult education instructional techniques, aerobic classes could become exercise environments where women of all backgrounds are empowered to participate in physical activity.

REFERENCES

- Altheide, D. L., & Johnson, J. M. (1994). Criteria for assessing interpretive validity in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 485-599). Thousand Oaks, CA: Sage.
- Bartky, S. L. (1997). Foucault, femininity, and the modernization of patriarchal power. In K. Conboy, N. Medina, & S. Stanbury (Eds.) *Writing on the body: Female embodiment and feminist theory* (129-154). New York: Columbia Press.
- Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1997). *Women's ways of knowing: The development of self, voice, and mind*. New York, NY: Basic Books.
- Beaudoin, C. (1999). Integrating Somatic Learning into Everyday Life. *Canadian Journal of Education*, 24(1), 76-80.
- Birrell, S. & Theberge, N. (1994). Ideological control of women in sport. In D. M. Costa, & S. Guthrie (Eds.), *Women and sport: Interdisciplinary perspectives* (pp. 431-357). Champaign, IL: Human Kinetics.
- Birrell, S. & Theberge, N. (1994). Feminist resistance and transformation in sport. In D. M. Costa, & S. Guthrie (Eds.), *Women and sport: Interdisciplinary perspectives* (pp. 361-374). Champaign, IL: Human Kinetics.
- Bordo, S. (1995). The body and the reproduction of femininity. In S. Bordo (Ed.), *Unbearable weight: Feminism, western culture and the body* (pp. 165-184). Berkeley: University of California Press.
- Brace-Govan, J. (2002). Looking at bodywork: Women and three physical activities. *Journal of sport and social issues*, 2(4), 403-420.
- Brodkey, L. & Fine, M. (1999). Presence of mind in the absence of body. In M. Fine, *Disruptive voices: The possibilities of feminist research* (pp. 77-95). Ann Arbor, MI: The University of Michigan Press.
- Brooks, A. K. (2000). Transformation. In E. Hayes and D. D. Flannery (Eds.), *Women as learners: The significance of gender in adult learning* (pp. 139-154). San Francisco, CA: Jossey-Bass Publishers.
- Bryson, L. (1994). Sport and the maintenance of masculine hegemony. In S. Birrell & C. L. Cole (Eds.), *Women, sport, and culture* (pp. 47-64). Champaign, IL: Human Kinetics.
- Caffarella, R. S. (1994). *Planning programs for adult learners: A practical guide for education, trainers, and staff developers*. San Francisco, CA: Jossey-Bass.

- Cervero, R. M. & Wilson, A. L. (1994). *Planning responsibly for adult education: A guide to negotiating power and interests*. San Francisco, CA: Jossey-Bass.
- CDC Fact Book 2000/2001. (2000). Department of Health and Human Services. Retrieved May 7, 2003 from <http://www.cdc.gov/maso/factbook/Fact%20Book.pdf>
- Clippinger-Robertson, K. (1993). Components of an aerobics class. In R. T. Cotton & R. L. Goldstein (Eds.), *Aerobics instructor manual: The Resource for fitness professionals* (pp. 197-242). San Diego, CA: American Council on Exercise.
- Cole, C. L. (1994). Resisting the cannon: Feminist cultural studies, sport and technologies of the body. In S. Birrell and C. L. Cole (Eds.), *Women, sport, and culture* (pp. 5-30). Champaign, IL: Human Kinetics.
- Collins, P. H. (2000). *Black feminist thought: Knowledge, consciousness and the politics of empowerment* (2nd ed.). New York, NY: Routledge.
- Corder, N. (2002). *Learning to teach adults: An introduction*. New York. Routledge Farmer.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Crowdes, M. S. (2000). Embodying sociological imagination: Pedagogical support for linking bodies to minds. *Teaching Sociology*, 28(1), 24-40.
- Daines, J., Daines, C. & Graham, B. (1993). *Adult learning adult teaching*. England: Continuing Education Press.
- Dewey, J. (1928). Preoccupation with the disconnected. Paper presented at the 1928 New York Academy of Medicine. Retrieved January 11, 2003 from <http://www.alexandercenter.com/jd/johndeweydisconnect.html>
- Duncan, M. C. (1994). The politics of women's body images and practices: Foucault, the panopticon and shape magazine. *Journal of sport and social issues*, 18(1), 48-65.
- Duncan, M. C., Messner, M. A., Williams, L. & Jensen, K. (1994). Gender stereotyping in televised sports. In D. M. Costa, & S. Guthrie (Eds.), *Women and sport: Interdisciplinary perspectives* (pp. 249-272). Champaign, IL: Human Kinetics.
- Eastman, S. T. & Billings, A. C. Sportscasting and sports reporting: The power of gender bias. *Journal of Sport and Social Issues*, 24(2), 192-213.
- Emerson, R.M., Fretz, R. I. & Shaw, L. L. (1995). *Writing ethnographic fieldnotes*.

- Chicago, IL: The University of Chicago Press.
- Eskes, T. B., Duncan, M. C. & Miller, E. M. (1998) The discourse of empowerment: Foucault, Marcuse, and women's fitness texts. *Journal of Sport & Social Issues*, 22(3), 317-345.
- Eyler, A. E., Wilcox, S., Matson-Koffman, D., Evenson, K. R., Sanderson, B., Thompson, J., Wilbur, J., & Tohm-Young, D. (2002). Correlates of physical activity among women from diverse racial/ethnic groups. *Journal of Women's Health and Gender-Based Medicine*, 11(3), 239-253.
- Flannery, D. D. (2000). Identity and self-esteem. In E. Hayes and D. D. Flannery (Eds.) *Women as learners: The significance of gender in adult learning* (pp. 53-78). San Francisco, CA: Jossey-Bass Publishers.
- Flick, U. (1998). *An introduction to qualitative research*. Thousand Oaks, CA: Sage Publications.
- Flintoff, A. & Scranton, S. (2001). Stepping into active leisure? Young women's perception of active lifestyles and their experience of school physical education. *Sport, Education and Society*, 6(1), 5-21.
- Francis, L. L. (1993). Teaching an aerobics class. In R. T. Cotton & R. L. Goldstein (Eds.), *Aerobics instructor manual: The Resource for fitness professionals* (pp. 242-265). San Diego: American Council on Exercise.
- Fredrickson, B. L. & Roberts, T. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21, 173-206.
- Fredrickson, B. L., Roberts, T., Noll, S. M., Quinn, D. M. & Twenge, J. M. (1998). That swimsuit becomes you: Sex differences in self-objectification, restrained eating, and math performance. *Journal of Personality and Social Psychology*, 75(1), 269-284.
- Freire, P. (1995). Pedagogy of the oppressed. In S. B. Merriam (Ed.), *Selected writings on philosophy and adult education* (pp. 137-146). Malabar, FL: Krieger Publishing Company.
- Foucault, M. (1978). *The history of sexuality: Volume I: An introduction*. New York, NY: Vintage Books.
- Garner, D. M. & Kearney-Cooke, A. (1996, March/April). Body image 1996. *Psychology Today*, 55-63.

- Gilligan, C. (1993). *In a different voice: Psychological theory and women's development*. Cambridge: Harvard University Press.
- Glanz, K., Lewis, F. M. & Rimer, B. K. (1990). *Health behavior and health education: Theory, research, and practice*. San Francisco, CA: Jossey-Bass Publishing.
- Glaser, B. G. & Strauss, A. I. (1967). *The constant comparative method of qualitative analysis*. Hawthorne, NY: Aldine Publishing Company.
- Godin, G. (1994). Social-cognitive models. In R. Dishman (Ed.), *Advances in exercise adherence* (pp. 113-136). Champaign, IL: Human Kinetics.
- Gore, J. M. (1993). *The struggle for pedagogies: Critical and feminist discourses as regimes of truth*. New York: Routledge.
- Graber, D. R. & Johnson, J. A. (2001). Spirituality and healthcare organizations. *Journal of Healthcare Management*, 46(1), 39-50.
- Grace, A.P. & Gouthro, P.A. (2000). Using models of feminist pedagogies to think about issues and directions in graduate education for women students. *Studies in continuing education*, 22(1), 5-27.
- Grace, A. P. (2001). Using queer cultural studies to transgress adult educational space. In V. Sheared & P.A. Sissel (Eds.), *Making Space: Merging theory and practice in adult education* (pp. 257-270). Westport: Bergin & Garvey.
- Greenberg, J. S. (1995). *Health education: Learner-centered instructional strategies*. Dubuque, IA: Brown and Benchmark.
- Greendorfer, S. L. (1998). Title IX: Gender equity, backlash and ideology. *Women's Sport and Physical Activity Journal*, 7(1), 69-93.
- Guthrie, S & Castelnovo, S. (1994). The significance of body image in psychosocial development and in embodying feminist perspectives. In Costa, D.M. & Guthrie, S. (Eds.) *Women and sport: Interdisciplinary perspectives* (pp. 307-321). Champaign, IL: Human Kinetics.
- Hale, J. L. & Dillard, J. P. (1995). Fear appeals in health promotion campaigns: Too much, too little, or just right? In E. Maibach & R.L. Parrott (Eds.), *Designing health messages: Approaches from communication theory and public health practice* (pp. 65-80). Thousand Oaks, CA: Sage.

- Hall, M. A. (1995). Feminist activism in sport: A comparative study women's sport advocacy organizations. In A. Tomlinson (Ed.), *Gender, sport and leisure: Continuities and challenges* (pp. 217-250). Germany: Meyer & Meyer Verlag.
- Haravon, L. D. (1995). Exercises in empowerment: Toward a feminist aerobic pedagogy. *Women's Sport and Physical Activity Journal*, 4(2), 23-44.
- Haravon Collins, L. D. (2002). Working out the contradictions: Feminism and aerobics. *Journal of Sport and Social Issues*, 25(1), 85-109.
- Hare, S. W., Price, J. H., Flynn, M. G., & King, K. A. (2000). Attitudes and perceptions of fitness professionals regarding obesity. *Journal of Community Health*, 25(1), 5-21.
- Hart, M. U. (1990). Liberation through consciousness-raising. In Mezirow & Associates, *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning* (pp. 47-73). San Francisco: Jossey-Bass Publishers.
- Hawks, S. (2004). Spiritual wellness, holistic health, and the practice of health education. *American Journal of Health Education*, 35(1), 11-16.
- Hayes, E. (2000). Social contexts. In E. Hayes and D. D. Flannery (Eds.) *Women as learners: The significance of gender in adult learning* (pp. 53-78). San Francisco: Jossey-Bass Publishers.
- Hayes, E. (2000). Voice. In E. Hayes and D. D. Flannery (Eds.) *Women as learners: The significance of gender in adult learning* (pp. 79-110). San Francisco, CA: Jossey-Bass Publishers.
- Hoeger, W. W. K. & Hoeger, S. A. (2002). *Fitness and wellness* (5th ed.). Belmont, CA: Wadsworth.
- hooks, b. (1989). *Talking back: Thinking feminist, thinking black*. Boston, MA: South End Press.
- Institute for International Medical Education (2004). Definition of health promotion. Retrieved February 24, 2004 from <http://www.iime.org/glossary.htm#H>
- International Health, Racquet & Sportsclub Association. (2002). *Industry statistics*. Retrieved October 23, 2002 from <http://www.ihrsa.org/industrystats/gender.html>
- Jaffe, R. (2001). Exercise. In J. A. Rosenfeld, (Ed.), *Handbook of women's health: An evidence-based approach* (pp. 93-106). New York, NY: Cambridge University Press.

- Johnson, J. E. (2002). Beyond the burn: Toward a feminist fitness. *Bitch: Feminist Response to Pop Culture*, 16(3), 48-53.
- Jones, S. E. & Brener, N. D. & McManus, T. (2004). The relationship between staff development and health instruction in schools in the United States. *American Journal of Health Education*, 35(1), 2-10.
- Kennard, J. & Carter, J. M. (1994). In the beginning: The ancient and medieval worlds. In S. Birrell and C. L. Cole (Eds.), *Women, sport, and culture* (pp. 15-26). Champaign, IL: Human Kinetics
- Kennedy, C. & Reis, J. (1995). A comparison of body image perceptions of exercising and non exercising college students. *Wellness Perspectives*, 3(11), 3-26.
- Kern, D. & Baker, J. (1997). A comparison of a mind/body approach versus a conventional approach to aerobic dance. *Women's Health Issues*, 7(1), 30-37.
- Knowles, M. (1984). *Andragogy in Action*. San Francisco, CA: Jossey Bass.
- Koivula, N. (2001). Perceived characteristics of sports categorized as gender-neutral, feminine and masculine. *Journal of Sport Behavior*, 24(4), 377-393.
- Krane, V. (2001). We can be athletic and feminine, but do we want to? Challenging the hegemonic femininity in women's sports. *Quest*, 53(1), 115-134.
- Krane, V., Waldron, J., Michalenok, J. & Stiles-Shipley, J. (2003). Body image concerns in female exercises and athletes: A feminist cultural studied perspective. *Women in Sport and Physical Activity Journal*, 10(1), 17-27.
- Lawson, H. A. (1992). Toward a sociological conception of health. *Quest*, 44(1), 105-121.
- Lenskyj, H. (1986). *Out of Bounds: Women, sport and sexuality*. Toronto: Women's Press.
- LeCompte, M. D. & Preissle, J. (1993). *Ethnography and qualitative design in education research*. New York: Academic Press.
- Lofland, J. & Lofland, L. H. (1984). *Analyzing social settings: A guide to qualitative observation and analysis*. Belmont, CA: Wadsworth Publishing Company.
- Loland, N. W. (2000). The art concealment in a culture of display: Aerobicizing women's and men's experience and use of their own bodies. *Sociology of Sport Journal*, 17, 11-129.

- MacNeil, M.(1994). Active women, media representations, and ideology. In Birrell, S. and C. L. Cole (Eds.), *Women, sport, and culture* (pp. 273-288). Champaign, IL, Human Kinetics.
- Madlon-Kay, D. (2001). Preventative care of adults (19 to 65 years). In J.A Rosenfeld, (Ed.), *Handbook of women's health: An evidence-based approach* (pp. 25-41). New York, NY: Cambridge University Press.
- Maguire, J. & Mansfield, L. (1998). "No-body's perfect": Women, aerobics, and body beautiful. *Sociology of Sport Journal*, 15, 109-137.
- Maher, F. A. & Tetreault, M. K. T. (2001). *The feminist classroom. Dynamics of gender, race, and privilege*. New York: Rowman & Littlefield Publishers, Inc.
- Maiese, D. R. (2002). Healthy people 2010- Leading health indicators for women. *Women's Health*, 12(4), 155-164.
- Markula, P. (1995). Firm but shapely, fit but, strong but thin: The postmodern aerobicizing female bodies. *Sociology of Sport Journal*, 12, 424-453.
- Markula, P. (2001). Beyond the perfect body: Women's body image distortion in fitness magazine discourse. *Journal of Sport & Social Issues*, 25(2),158-179.
- Marshall, C. & Rossman, G. B. (1995). *Designing qualitative research* (2nd ed.). Thousand Oaks: Sage Publications.
- Martin Ginis, K. A. & Jung, M. E. (2003). To see or not to see: Effects of exercising in mirrored environments on sedentary women's feeling states and self-efficacy. *Health Psychology*, 22(4), 354-361.
- Matthews, J. C. (1998). Somatic knowing and education. *Educational Forum*, 62(3), 236-242.
- McDermott, L. (2000). A qualitative assessment of the significance of body perception to women's physical activity experiences: Revisiting discussions of physicalities. *Sociology of Sport Journal*, 17, 331-363.
- McDonald, M. G. (2000). The marketing of the women's national basketball association and the making of postfeminism. *International Review for the Sociology of Sport*, 35(1), 35-47.
- McNicholas, S. L. (2002). Social support and positive health practices. *Western Journal of Nursing Research*, 24, 772-787.
- Merriam, S. B. (1998). *Qualitative research and case study applications in Education*. San Francisco: Jossey-Bass Publishers.

- Merriam, S. B. & Brockett, R. G. (1997). *The profession and practice of adult education: An introduction*. New York: NY: John Wiley & Sons.
- Merriam, S.B., & Caffarella, R.S. (1999). *Learning in adulthood*. San Francisco: Jossey-Bass Publishers.
- Messner, M. A., Duncan, M. C., & Cooky, C. (2003). Silence, sports bras, and wrestling porn: Women in televised sports news and highlights shows. *Journal of Sport and Social Issues*, 27(1), 38-51.
- Messner, M. A. (1994). Sports and male domination: The female athlete as contested ideological terrain. In S. Birrell & C. L. Cole (Eds.), *Women, sport, and culture* (pp. 65-80). Champaign, IL: Human Kinetics.
- Miles, M. B. & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis*. Thousand Oaks, CA: Sage.
- Monahan, J. L. (1995). Thinking positively: Using positive affect when designing health messages. In E. Maibach & R.L. Parrott (Eds.), *Designing health messages: Approaches from communication theory and public health practice* (pp. 81-98). Thousand Oaks, CA: Sage.
- Morgan, K. P. (1991). Women and the knife: Cosmetic surgery and the colonization of women's bodies. *Hypatia*, 6(3), 25-53.
- Mutrie, N. & Choi, P. Y. L. (2000). Is fit a feminist issue? Dilemmas for exercise psychology. *Feminism & Psychology*, 10(4), 544-551.
- National Center for Health Statistics. (2002). *Obesity still on the rise: New data show*. Retrieved October 23, 2002 from <http://www.cdc.gov/nchs/releases/02news/obesityonrise.htm>
- National Institute for Occupational Safety and Health. (2000). *Working women face high risks from work stress, musculoskeletal injuries, other disorders, NIOSH finds*. Retrieved on March 30, 2003 from <http://www.cdc.gov/niosh/womrisk.html>.
- National Institute of Health. (1997). *Office of research on women's health strategic plan to address health disparities among diverse populations of women*. Retrieved on March 25, 2003 from <http://www4.od.nih.gov/orwh/disparities.pdf>
- National Sporting Goods Association. (2002). *Women's Participation - Ranked by Total Female Participation*. Retrieved on May 7, 2003 from <http://www.nsga.org/public/pages/index.cfm?pageid=706>

- Office of Women's Health. (2001). *Women's health issues: An overview*. U.S. Department of Health and Human Services. Retrieved February 13, 2003 from <http://www.4woman.gov/owh/pub/womhealth%20issues/index.htm>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks: Sage Publications.
- Peshkin, A. (1988). In search of subjectivity—One's own. *Educational Researcher*, 17 (7), 17-22.
- Phillips, J. M. & Drummond, M. J. N. (2001). An investigation into the body image perception, body satisfaction and exercise expectations of male fitness leaders: implications for professional practice. *Leisure Studies*, 20, 95-105.
- Prochaska, J. O. & Marcus, B. H. (1994). The transtheoretical model: Applications to exercise. In R. Dishman (Ed.), *Advances in exercise adherence* (pp. 161-180). Champlain, IL: Human Kinetics.
- Richman, E. L. & Shaffer, D. R. (2000). If you let me play sports: How might sport participation influence the self-esteem of adolescent females? *Psychology of Women Quarterly*, 24, 189-199.
- Robinson, R. D. (1993). *An introduction to helping adults learn and change*. Westbend, WI: Omnibook Co.
- Rosenfeld, J. A. (2001). Singular health care of women. In J.A Rosenfeld, (Ed.), *Handbook of women's health: An evidence-based approach* (pp. 2-12). New York, NY: Cambridge University Press.
- Ryan, G. W. & Bernard, H. R. (2000). Data management and analysis methods. In N. K. Denzin & Lincoln, Y. S. (Eds.), *Handbook of qualitative researcher* (pp. 769-802), Thousand Oaks, CA: Sage.
- Salmon, J., Crawford, D., Owen, N., Bauman, A. & Sallis, J. F. (2003). Physical activity -and sedentary behavior: A population-based study of barriers, enjoyment, and preferences. *Health Psychology*, 22 (2), 178-188.
- Schillenger, D. (2002). Boost your students' self-esteem. *American Fitness*, 20(1), 40-42.
- Sisco, B. & Hiemstra, R. (1991). Individualizing the teaching and learning process. In Galbraith, M.W. (Ed.), *Facilitating adult learning: A transactional process* (pp. 57-73). Malabar, FL: Krieger.
- Shusterman, R. (2000). Somaesthetics: A disciplinary proposal. In *Pragmaticaesthetics* (pp. 262-283). New York: Rowman & Littlefield Publishers, Inc.

- Taylor, S. J. & Bogdan, R. (1984). *Introduction to qualitative research methods: The search for meanings* (2nd ed.). New York: John Wiley & Sons.
- Teeters, J. (2001). *Teach with style: A comprehensive system for teaching adults*. St. Paul, MN: Redleaf Press.
- The National Association of Anorexia Nervosa and Associated Disorders. (2002). *Who suffers from Anorexia Nervosa?* Retrieved October 23, 2002 from <http://www.anad.org/who.htm>.
- The National Wellness Institute. (2003). *Definition of wellness*. Retrieved on May 7, 2003 from <http://www.nationalwellness.org/home/definitionofwellness.asp>.
- Thompson, S. H. (2000). Facing eating disorders in the fitness community. *IDEA Health and Fitness Source*. Retrieved October 7, 2002 from http://www.findarticles.com/cf_0/m0
- Tisdell, E. J. (1993). Interlocking systems of power, privilege, and oppression in adult education classes. *Adult Education Quarterly*, 43(4), 203-226.
- Tisdell, E. J. (1998). Poststructural feminist pedagogies: The possibilities and limitation of feminist emancipatory adult learning theory and practice. *Adult Education Quarterly*, 48(3), 139-156.
- Tisdell, E. J. (2001). The politics of positionality: Teaching for social change in higher education. In R. M. Cervero & A. L. Wilson (Eds.), *Power in practice: Adult education and the struggle for knowledge and power in society* (pp. 145-163). San Francisco: Jossey-Bass.
- Tisdell, E. J. (2001). Feminist perspective on adult education: Constantly shifting identities in constantly changing times. In V. Sheared & P. A. Sissel (Eds.), *Making space: Merging theory and practice in adult education* (pp. 271-285). Westport: Bergin & Garvey.
- Tyler, R. W. (1949). *Basic principles of curriculum and instruction*. Chicago, IL: The University of Chicago Press.
- U.S. Census Bureau. (2002). *Women and men in the United States*. Washington, D.C.: U.S. Department of Commerce. Retrieved on March 22, 2004 from www.census.gov/prod/2003pubs/p20-544.pdf
- U.S. Department of Health and Human Services. (1996). *Physical Activity and Health: A report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services.

- U.S. Department of Health and Human Services. (2002). *Healthy People 2010*. Washington, D.C. Retrieved on March 26, 2004 from <http://www.healthypeople.gov/About/hpfact.htm>
- Valdes, A. L. (1995). Ruminations of a feminist aerobics instructor. In *Listen up: Voices from the next feminist generation* (pp. 12-20). Seattle: Seal Press.
- Vogel, A. (2000). Body image and exercise: What's the instructor's role? *American Fitness*, 18(3), 42-44.
- Weiss, P. R. (2001, September). The mind-body connection in learning. *Training & Development*, 9, 61-67.
- Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies*. New York: Free Press.
- Weiler, K. (1988). *Women teaching for change: Gender, class, and power*. Westport, CT, Bergin & Garvey.
- Weiler, K. (1995). Freire and a feminist pedagogy of difference. In J. Holland & M. Blair, (Eds.), *Debates and issues in feminist research and pedagogy*. (pp. 23-44). Philadelphia, PA: Multilingual Matters LTD.
- Williams, R., Kiecolt-Glaser, J., Legato, M. J., Ornish, D., Powell, L. H., Syme, S. L., Williams, V. (1999). The impact of emotions on cardiovascular health. *Journal of Gender Specific Medicine*, 2(5), 52-58.
- Willis, P. (1994). Women in sport in ideology. In S. Birrell, and C. L. Cole (Eds.), *Women, sport, and culture* (pp. 31-46). Champaign, IL: Human Kinetics.
- Wolcott, H. F. (1992). Posturing in qualitative inquiry. In M. D. LeCompte, Millroy, W. L. & Preissle, J. *The Handbook of Qualitative Research in Education*. San Diego, CA: Academic Press.
- World Health Organization. (2003). *WHO definition of health*. Retrieved May 6, 2003 from <http://www.who.int/about/definition/en/>
- World Health Organization. (2003). *Health promotion actions and outcomes*. Retrieved March 2, 2004 from http://www.who.int/hpr/docs/rf_section3.pdf
- Women's Sports Foundation. (2002, January 15). *Women's sports and fitness facts and statistics*. Retrieved September 19, 2002, from <http://www.womenssportsfoundation.org>

APPENDICES

APPENDIX A

INTERVIEW GUIDE

Introduction

1. Tell me about your background in teaching aerobics.

Probes: Experience, Education, and Certifications

2. Walk me through the format of a typical class.
3. Tell me about the instructional techniques you use in classes?
4. What influences the type of instruction used in each class?
5. What type of information do you include in every class you teach?
6. What role does health play in your classes?
7. How do you communicate information about health to class participants?
8. What influences whether or not you incorporate health messages into your aerobic class?
9. Talk about how exercising for health reasons affects women's experiences in aerobic classes.

APPENDIX B

CONSENT FORM

I, _____ agree to participate in research entitled “How aerobic instructors convey health messages in aerobic classes for women” conducted by Michelle D'Abundo, Department of Adult Education, University of Georgia, (706-549-8977) under the direction of Dr. Laura Bierema, Department of Adult Education, University of Georgia, (706-542-6174). I understand that my participation is completely voluntary and that I may, at any time, decide to withdraw from participation in the study without penalty or reservation. I can also choose to have the results of my participation, to the extent that it can be identified as mine, be removed from the research record and destroyed.

The purpose of this study is to understand how aerobics instructors convey health messages in aerobic classes for women.

While I will not be compensated for participating in this project, I understand that my participation may result in a deeper understanding of instructional strategies in aerobic classes for women.

I understand that if I choose to participate in this project, I will be interviewed by Michelle D'Abundo for 1-2 sessions one hour each. I understand that the interview will be audio-taped and transcribed at a later date. In addition, I understand that the researcher will observe and audio-tape instructional strategies in three-five aerobic classes I conduct. I understand that all audio-tapes will be transcribed verbatim and that audio-tapes will be destroyed two years after completion of this research.

I understand that any discomfort or stress that I may experience while being interviewed or observed will not exceed that which I experience in everyday life. No risks are anticipated from participating in this study.

All information obtained during this interview will be confidential. I further understand that my identity will be kept strictly confidential and that no one else, other than the researcher and research advisor will have access to data. I also understand that I will select a pseudonym to represent my participation in this study.

If I have any questions or concerns, Michelle D'Abundo can be reached at 706-549-8977. I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Signature of investigator

Date

Signature of participant

Date

Questions or problems regarding your rights as participants should be addressed to: Chris A. Joseph, Ph.D.
Human Subjects Office, University of Georgia, 606A Graduate Studies Research Center, Athens, GA
30602-7411 Telephone: 706-542-6514 or email IRB@uga.edu.

APPENDIX C
PARTICIPANT INFORMATION

Name:

Address:

E-mail:

Phone number:

Age:

Ethnicity:

Education/Degrees:

Profession:

Marital status:

Number of children:

Fitness certifications:

Number of years teaching aerobics: