Integrated Wellness Training: Wellness Beyond the Physical

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Abstract

The purpose of this experimental design was to improve cognitive knowledge of total well-being in college aged students through a 14 week instructional program focusing on integrated wellness. Little research appears to exist which studies the effect of cognitive knowledge on understanding integrated wellness and its effect on physical health. The goal was to help students understand the difference between physical health and overall well-being. The design used quantitative methods with open ended questions to capture students' comments to better understand how to design and implement curriculum to create a better understanding of total well-being.

A significant difference was found with the interaction of time (pre, mid, final) X group (rec course, Pilates course) on Rickel objective Values Inventory scores $F(2, 61) = 9.2$, $p = .0001$, partial $eta^2 = .23$. The Pilates class was significantly lower at the pre 32.8 + 4.3 Rickel Objective score compared to the rec class 36.7 + 7.9. The Pilates class remained lower throughout the pre, mid, and final Rickel Inventory scores compared to the recreational course scores, thus showing the intervention to be effective.

A significant difference was found with the interaction of time (pre, mid, final) X group (recreational course, Pilates course) on Rickel subjective Values Inventory scores Wilks' Lambda $F(2, 61) = 6.3$, $p = .003$, partial $eta^2 = .17$. The Pilates class was significantly lower at the pre 32.8 $\pm$ 4.3 Rickel Objective score compared to the rec class 36.7 $\pm$ 7.9. The Pilates class remained lower throughout the pre, mid, and final Rickel Inventory scores compared to the recreational course scores. The Pilates class scored significantly lower at all times periods Pre 21.2 $\pm$ 4.9, mid 22.7 $\pm$ 4.9, and final 23.48 $\pm$ 5.2 compared to recreational class pre 26.3 $\pm$ 4.3 mid 25.8 $\pm$ 4.7 and final 26.3 $\pm$ 5.1 scores.

A significant difference was found by time (pre, mid, final) on the Hamlett Well-Being Inventory scores Wilk's Lambda $F(2,61) = 8.4$, $p = .01$, partial $eta^2 = .22$. A significant difference existed between pre 66.31 $\pm$ 6.3, mid 67.48$\pm$6.4, and final 69.12+6.4 Hamlett Well-Being Inventory scores. No significant difference was found with the interaction of time (pre, mid, final) X group (rec course, Pilates course) on Hamlett Well-Being Inventory scores Wilks' Lambda $F(2, 61) = 1.57$, $p = .22$.

These results indicate the intervention appeared to be effective in causing a change in student's perception of total well-being. The open-ended questions also reinforced those findings with student's responses. Future research should focus on an integrated wellness curriculum to help students become committed to exercise.

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Dedication

For Memo, you are the Fred to my Ginger.

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Chapter One: The Problem Of Understanding Health Is Beyond The Physical

What is Wellness?

Wellness is an active process of becoming aware of and making choices toward a healthy and fulfilling life, it is "a conscious, self-directed and evolving process of achieving full potential." - The National Wellness Institute (Hettler, 2014)

Wellness is more than being free from illness; it is a dynamic process of change and growth. Ryff (1989) states a more interesting observation,

> "As the aged population grows ever larger, there is increased awareness that Ponce de Leon may have missed the point (Ryff, 1989). Instead of searching for the fountain of youth, which would have arrested human experience in an incomplete, unfinished form, a greater quest would have been to discover the richness and rewards of life lived fully to the end."

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" (Grad, 1946). Perrin and McDermott (1997) reinforce WHO's definition, expressing that health is not a passive state of being, but a dynamic process in which higher levels of wellness can be achieved. In defining health, Miller and Thoresen (1999) write,

> …as wisdom is not merely the absence of ignorance, nor courage the absence of fear, so health is surely more than a lack of disease. A large component of health is subjective, which is what differentiates disease (a biomedical concept) from illness (subjective feeling states such as weakness, pain, or nausea). People may experience illness in the absence

> of detectable disease (a common problem in medical care) and can experience wellness despite terminal disease. Even a single continuum, ranging from perfect health to death, fails to capture the richness of experienced wellness (pg. 4).

The concept of wellness is not new with origins in the nineteenth-century (Miller, 2005). Though the first written record of the word was in a diary entry from 1654 by the Scot, Archibald Johnston, and Lord Wariston: "I ... blessed God ... for my daughter's wellness?" (Wellness, 1971). Lord Wariston meant his daughter was no longer ill with wellness as the antonym of illness continued to be the common meaning of the term until the middle of the twentieth century. Of importance in the nineteenth-century was the "mind-cure movement" known more commonly as New Thought and Christian Science (Miller, 2005). The New Thought originated with Phineas Quimby (1802-1866). After contracting tuberculosis, he became interested in non-traditional approaches to healing. He eventually came to the conclusion that disease was best treated, not by traditional medicine, but by alterations of attitude:

> The idea of curing disease without medicine is a new idea and requires quite a stretch of the imagination to believe it, and to me it was as strange as to any person; but having had twenty-five years of experience, I have found out that all our evils are the result of our education and that we imbibe ideas that contain the evils that we complain of. Ideas are like food, and every person knows that in almost everything we eat and drink, there is some idea attached. So ideas are food for the mind, and every idea

> has its effect on mankind. Now seeing how ideas affect the mind, I find that when I correct the ideas, I cure the sick (Quimby, 1864).

Quimby opened a healing practice in Portland, Maine, in 1859, with no formal medical training where he eventually was to "treat" over twelve thousand patients before his death in 1866 (Quimby 1888). One of Quimby's most famous patients was Mary Baker Eddy (1821-1910), the founder of Christian Science. In the first four decades of her life she suffered repeated bouts of illness until she met Quimby in 1862. Her health improved dramatically as a result of Quimby's auto-suggestive techniques (Miller, 2005). Baker, who influenced many people, made a later impact on Horace Fletcher who coined the term "Fletcherism" (Miller, 2005). Fletcher is known for consulting Mother Nature to lose weight and regain vitality. Fletcher's ideas influenced John Harvey Kellogg, who later spawned a cereal empire. During the late 1800's, Kellogg was a well-known doctor and Seventh Day Adventist and opened the Battle Creek Sanitarium where he advocated physical exercise, fresh air, avoiding excessive consumption of meat, alcohol, non-medicinal drugs and tobacco. The Sanitarium was very popular with the rich and famous including Will Mayo (founder of the Mayo Clinic), Theodore Roosevelt, William Jennings Bryan, J. C. Penney and Henry Ford (Robinson, 1965).

The wellness movement increased after the end of the Second World War largely due to society's changing health needs. Improvements in medicines and technology meant vaccines and antibiotics reduced wide-spread infectious diseases as the leading cause of death (Seaward, 2002). Instead chronic and lifestyle illnesses (e.g., heart disease, diabetes, cancer), associated with numerous stressors in life and the workplace, became the primary health concern. Dunn (1959) was considered the first author to provide a modern-day

definition of wellness, namely, maximization of health through an integrated method of functioning, keeping in consideration an individual's environment.

While this history shows the contributions of the concept of wellness, it was not until the 1950's that a definition emerged which focused on active health promotion through lifestyle. Halburt Dunn defined wellness as "an integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable. It requires that the individual maintain a continuum of balance and purposeful direction with the environment where he is functioning" (Dunn H. L., 1961). The social components of wellness were very important to Dunn. His holistic thinking is illustrated through three interlocking circles to represent the human body as organized energy, and the body and the mind/spirit as interrelated and interdependent. "Wellness" as a holistic concept of health combining physical, mental, spiritual and social well-being dates to the 1950s, but many of the ideas behind this positive definition of health go back much. Dunn postulated that wellness is not just a single condition but a complex state made up of overlapping levels of wellness (Dunn H. L., 1959). Thereafter, the term wellness has been used widely. One of Dunn's students, Donald B. Ardell, was one of the first to propose a model of holistic wellness and Bill Hettler was the first to develop the wellness wheel that we commonly use today (Hettler, 2014). Those include occupational, social, intellectual, spirtual, physical, and emotional well-being dimesions.

Another early pioneer includes Andrew T. Still, discoverer of the science of osteopathy,who in his writings concluded that: (a) the human body functions as a total biologic unit: (b) the body possesses self-healing and self-regulatory mechanisms; (c) structure and function are interrelated; and (d) abnormal pressure in one part of the body

produces abnormal pressures and strains upon other parts of the body (Still, 1899). If one part of the body is non-functioning properly, the whole body will not work as a unit.

Leading a physically fit life is not only healthy to a person, but also reduces the cost of medication for that person (Center for Disease Control and Prevention (CDC), 2004). Physical exercises build the health status of the body, hence, making the body able to protect itself adequately from diseases associated with lack of physical exercises. Much national attention has been given, and rightly so, to obesity and the lack of physical fitness, but the issue of overall well-being has been overlooked.

According to the CDC (2004) and the WHO, the prevalence of obesity in industrialized countries has increased steadily and the percentage of overweight youth has more than doubled over the past 20 years due to unhealthy behaviors and sedentary lifestyles. Obesity, typically the result of unhealthy behaviors and sedentary lifestyles, presents a myriad of health issues (WHO, 2003).

Additionally the CDC (2011), suggest regular physical activity presents several benefits to a person: (a) reduces risk of cardiovascular complications; (b) strengthens one's muscles and bones; (c) reduces risk of some strains of cancer; (d) controls body weight; (e) reduces the risk for Type 2 diabetes; (f) increases a person's mental health and mood; and (g) enhances the chances to live longer. Based on these benefits, the importance of physical activity cannot be over emphasized among human beings.

To achieve these benefits of physical activity, other factors also come into play. For instance, it may not be true that healthy eating while engaging in physical exercises will achieve the benefits mentioned. Many other components additionally factor in to a person's well-being. Besides healthy eating, a person's medical history, stress levels, meditation

(spiritual (non-religious) relaxation), and types and rigor of physical exercises will affect the benefits from physical exercise (Jackson, 2010). Thus, to develop a physically fit person, wellness requires the consideration of all these factors. This calls into place the integrated wellness training that the present study investigates. The dimensions of well-being go beyond physical fitness, illness, or disease and each individual needs to find balance if that person is to understand and reap the benefits of true health and well-being.

Six Dimensions of Wellness

The six dimensions of wellness, physical, emotional, intellectual, social, occupational, and spiritual, are the inception for this study. The term wellness has become overused, misconstrued, and has lost much of the original meaning. If one were to ask 10 wellness experts how to achieve wellness, one would receive 10 different answers. A dietitian may advise to eat more greens, cut down on saturated fats, while a yoga instructor may recommend breathing slower to release stress. Wellness centers are now located in hospitals, spas, weight loss clinics and gyms, but few actually utilize all six dimensions of wellness in advising their patients or clients. Over the past two decades the term ‘wellness’ has evolved and been diluted; even though it was originally credited to programs aimed at helping alleviate illness or health risks such as exercise programs to reduce weight gain (Pelletier & Rahm, 1988). Presently, wellness has become associated with improved sales of products and services and has been adopted by the corporate world in schools, businesses and other commercial industries (Fahlberg & Fahlberg, 1997; Seligman & Csikszentmihalyi, 2000).

Integrated Wellness

Integrated wellness is not just about the absence of a disease or disability; it is about looking at an individual in a holistic manner. We need to examine not only at the physical aspects but the emotional, spiritual, intellectual, occupational and social facets. In contrast to Wellness, integrated wellness training offers a complete plan whereby many of the factors that can affect physical fitness are put into consideration. The original concept and definition of wellness was a blending, or balancing of the dimensions. For the present research, the term "integrated wellness" will be used to re-establish that original intention. In researching the term, only one other use of the term appears to exist. It is used within the Nazarene Church, NAZcare (Howard, 2014). NAZcare's mission is aimed at adults with mental and substance issues. Other uses of the term are similar and primarily deal with mental or spiritual issues. For the present research, the term "integrated wellness" is applicable to all individuals. The concept of integrated wellness can be likened to a recipe that has the same ingredients for the general population, but to obtain balance for each individual, the portions change. An example would be a person who has strong spiritual beliefs but has no social skills. The balance that one person needs in their life may be vastly different than another person. One may be in peak physical shape, socially active, but perhaps lacking in intellectual curiosity. By creating a curriculum directed toward personal "integrated wellness," the goal is to allow individuals with help from instructors, to identify areas where balance is needed, to allow the individual to gain optimal wellness in their life. Different people have different issues. Each person needs to address their own issue on a daily basis, including, but not limited to mental issues like stress, health issues such as chronic disease or allergies, lack of spiritual connection or relaxation or even physical issues such as a

disability. Since every person has a right to access a form of physical exercise despite their unique conditions, it is important that all these issues be considered in the process of offering physical fitness training. However, the focus must not be narrowed only to physical training. Rather, consideration should also focus on personal and unique wellness issues that an individual might have that can affect physical wellness. This, therefore, requires an integrated form of wellness training that focuses on more than just the physical activity training itself. Integrated training is about looking beyond the objective measures of physical or mental health; it is about examining the whole person and how to create a better quality of life.

College Students and the Need for Integrated Wellness

College students are particularly vulnerable to risks associated with unhealthy behavior and a lack of knowledge about wellness and what it means to be well (Daubenmier, et al., 2007; Dieter, 2014; Cardinal & Spaziani, 2007; Cardinal & Kosma, 2004). Typically students make the following comments: If I am thin then I'm fit and healthy, right? No; I eat a terrible diet but I can exercise it all off and be healthy, right? No; I am under a lot of stress but I plan to eat okay and exercise so I will lose weight, right? No (Daubenmier, et al., 2007). Many of these myths about being healthy can lead to confusion, depression, and weight gain. To gain optimal health, we must examine beyond physical fitness and create well-being programs that address the whole person, not singular components of health.

Hopefully, educators would impact change and create wellness programs and curriculum that positively impact students' behaviors and attitudes. Even though many physical fitness and wellness programs now exist in colleges and universities, few if any address the notion of integrated wellness (Cardinal, Sorensen, & Cardinal, 2012; Dieter,

2014; Cardinal & Spaziani, 2007). Most programs that do exist often focus on the physical dimension of wellness without addressing total wellness of integrated wellness (Ferrara, 2009; Cardinal, Sorensen, & Cardinal, 2012).

If what is known about integrated wellness is correct, college students would be well served to be a part of an integrated wellness curriculum, thus this study aims to investigate how integrated wellness training could serve to improve the overall fitness and wellness of students.

Problem Statement

The purpose of this experimental design and hypothesis was to improve cognitive knowledge of total well-being in college aged students through a 14 week instructional program focusing on integrated wellness. The problem was to create an understanding by the participant of the difference in physical health and overall well-being. The design used quantitative methods with open ended questions for students to comment on the study.

Independent Variables

The independent variables are two different classes focused in two different curricula. The first is the control class, a traditional academic fitness class where participants are led by an American Council on Exercise (ACE) certified fitness instructor to tone and stretch using exercises developed by Joseph Pilates (Pilates, 1945). Within the Pilates classes there were three subgroups: two which meet for 9 weeks and one that met for 18 weeks. Each class met for 150 minutes each week, with the instructional method teacher-centered and teacher-lead with motivational and technical emphasis. Objectives of the class focused on developing and maintaining cardiovascular efficiency, strength and endurance,

and flexibility. The class also contained cognitive components of stress reduction but it was taught from a physical fitness point of reference.

The second class was the wellness integrated intervention class, a traditional academic Recreation Class 370 Leisure, Health and Human Development, which was led by the same instructor and who was additionally qualified to teach this course. Class met for 150 minutes each week, with the instruction method, teacher-centered and teacher-lead with motivational, technical, and narrative emphasis. Objectives of the class focused on understanding and experiencing physical, emotional, mental, spiritual, intellectual, and environmental health and well-being. The narrative portion of the class was implemented through a series of lectures and class discussions. The class also participated in a variety of activities and events promoting the concepts of integrated physical well-being.

Instruments

The measurement instruments for this study used the Rickel Values Inventory and the Hamlett Supplemental Questions. The Rickel measures values and commitment to exercise, the Hamlett measures attitudes regarding the whole person, including physical, emotional, social, spiritual, occupational and intellectual. The Rickel instrument involves value and commitment and the Hamlett examines attitude. A sub problem of this study was to explore the association between the two instruments.

Correlation

1. No relationship exists between the pre Hamlett Well-Being Inventory and the Rickel Pre-objective Values Inventory scores.
2. No relationship exists between the mid Hamlett Well-Being Inventory and Rickel mid objective Values Inventory scores.

3. No relationship exists between the final Hamlett Well-Being inventory and Rickel final objective Values Inventory scores.
4. No relationship exists between the pre Hamlett Well-Being Inventory and Rickel Pre subjective Values Inventory scores.
5. No relationship exist between the mid Hamlett Well-Being Inventory and Rickel mid subjective Values Inventory scores.
6. No relationship exists between the final Hamlett Well-Being Inventory and Rickel final subjective Values Inventory scores.

Dependent Variable

1. The dependent variables of the study were the student scores on the Rickel Exercise Value Inventory and the Hamlett Supplemental Questions. Pre and Post-test scores on the Rickel Exercise Value Inventory (RVI) are used to measure commitment to activity. (RVI Objective and Subjective Sub Problems)
2. Pre and Post test scores on The Hamlett Supplemental Questions (HWBI) are used to measure attitudes and beliefs regarding physical, mental, emotional, spiritual, occupational and social well-being.

Sub-Problems and Hypotheses

Statistical Hypotheses (Sub-Problems) are used to measure perceived wellness level.

1. No difference exists by group (REC 370 integrated lessons; Pilates no integrated lessons) on the RVI objective measures.
2. No difference exists by group (REC 370 integrated lessons; Pilates no integrated lessons) on the RVI subjective measures.

3. No difference exists by group (REC 370 integrated lessons; Pilates no integrated lessons) on the HWBI.
4. No difference exists by time (pre to post) on the RVI and objective measures.
5. No difference exists by time (pre to post) on the RVI and subjective measures.
6. No difference exists by time (pre to post) on the HWBI.
7. No difference exists by the interaction of group (REC 370 integrated lessons; Pilates; no integrated lessons) by time (pre to posttest) on the RVI subjective measures.
8. No difference exists by the interaction of group (REC 370 integrated lessons; Pilates; no integrated lessons) by time (pre to posttest) on the RVI objective measures.
9. No difference exists by the interaction of group (REC 370 integrated lessons; Pilates no integrated lessons) by time (pre to posttest) on the HWBI.

Assumptions

The following assumptions are offered about this study:

1. Offering healthy foods to people who are in physical training has a significant effect on improving people's physical fitness.
2. A student's stressful life significantly affects participation in physical activity thus physical fitness.
3. The health status of the body affects a person's participation in physical activity hence significantly affects physical fitness.
4. The spiritual relaxation of a person dictates their indulgence in physical activity hence significantly affects physical fitness.
5. Physical disabilities affect a student's participation in physical activity hence significantly affects physical fitness.

Limitations

The limitations of the study are:

1. As college students, the subjects may have more education than the average person.
2. Both courses were taught by the same instructor, and despite curriculum differences a teacher's individual bias' and teaching philosophy could impact study.
3. The subjects enrolled in these activity courses are a self-selected group of individuals potentially practicing more healthy behaviors than the general undergraduate population.
4. The subjects are seeking an education and may be more accepting of new knowledge than other persons.
5. The instructor is limited by her previous training and pedagogical styles.
6. A participant may be enrolled in both classes.

Need for Study

This study should improve student knowledge of integrated wellness by the inclusion of the six dimensions of well-being in their curriculum. The curriculum will address specific wellness concerns including: stress levels, social, emotional and intellectual issues. Additionally, the study should cause a student to become aware of his/her complete health beyond the physical. Students should maintain a perspective not only on physical health but what is necessary and desirable for optimum well-being.

By understanding and incorporating all the wellness dimensions into their daily lives, students who are versed in integrated wellness should, in the future, benefit from reduced injuries, fewer sick days, lower care health related costs, higher productivity, and improved morale. Both optimism and sense of coherence have been positively associated with

integrated wellness (Adams T. B., Bezner, Drabbs, Zambarano, & Steinhardt, 2000). Dunn states “Without knowledge of one’s inner self, understanding of the outer world cannot have breadth and depth. A mind tortured with prejudice, hate and fear projects itself in distorted human relationships” (1959). Integrated wellness should help students achieve the balance emotionally, mentally, and spiritually to reflect on a larger scale about their own thoughts and actions. Dunn also expressed the results of obtaining self-confidence and faith, and by doing so allows individuals to grow, be more creative, and less afraid of failure. All of these attributes are meaningful to all humans and are critical for students to learn life balance early in their school to help them excel.

If people experience habit, skills, stories, and values in physical activity, they may adopt physical activity as part of their life narrative (Kretchmar, 2000). Students who understand the benefits from addressing the whole body lead, more balanced and productive lives (Witmer & Sweeney, 1992). Cohen (1988) noted the potential connections between social support and health behaviors, positive and negative affect, self-esteem and personal control, neuroendocrine response, and the immune system. In the absences of friendships, illness, a shorter life expectancy, and less satisfaction in life are likely companions. Many schools offer an abundance of physical activity courses, along with a few yoga and Pilates classes and perhaps discussion within courses about the dimensions of wellness, but there appears little if any curriculum that integrates all the dimensions (Cardinal, Sorensen, & Cardinal, 2012). From the literature review, we can understand the great benefit in all of these areas, but if only one dimension is addressed at a time, we do not educate students on how the dimensions all work together to create balance and a healthier whole person throughout their lives.

Chapter Two: A Review Of Related Literature

This literature review examines the overall concept of wellness and each of the separate dimensions within wellness. The goal is to answer the problem of understanding the difference in physical health and overall well-being. Additionally within the literature, we should hope to understand the positive aspects of each dimension and how each can give insight into the potential of integrating all dimensions within one training protocol.

A wealth of positive health behaviors can come from understanding and implementing the knowledge through a literature review. The situation exists that the literature does not address integrating all six dimensions through a curriculum design. Much is said and reported from the benefits of diet along with exercise, but how much can we gain by adding more elements of wellness including stress reduction, social components, and insights into personal spirituality?

There appears to be a loss of the original intention of treating the individual as a whole person, according to Dunn's (1961) writings on high-level wellness. Students who are educated, trained, and assessed about all six dimensions of wellness will be optimally healthy and wellness balanced.

The Wellness Concept

High-level well-being encompasses the condition one perceives oneself to be in when opportunity and activity for self-actualization is reached (Dunn, 1959). According to Dunn, wellness is as much a mindset, an attitude, strength of focus, as it is anything else. When one manages stress, handles issues of personal accountability, builds meaningful relationships, takes personal responsibility in terms of diet, nutrition, exercise and spiritual development, wellness is maintained.

These perceptions of physical health include social, stress, and medical research (Adams, Bezner, & Steinhardt, 1997). The authors of this literature promote that physical health is greatly determined by other factors including a person's mental state; all of which has a real and powerful influence over the health of an individual Goleman's (1995) research indicates a correlation between wellness perception and real conditions.

Dunn (1961) defined the term of wellness as "an integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable". The definition of wellness is as multi-faceted as wellness itself, but common characteristics in all definitions "involves a lifestyle with an integrated pattern of living focused on six dimensions" (Sackney & Miller, 2000). These dimensions vary depending on the author but commonly include physical, spiritual, social, emotional, intellectual with the sixth element varying from environmental, psychological, cultural, to occupational. According to Powers (1994) a multidimensional approach to wellness is required to maintain a balance in people's lives,

Physical Wellness

Physical wellness is primarily concerned with cardiovascular fitness, flexibility, and strength. Activities to improve physical wellness include maintaining a healthy exercise regime and diet. This includes seeking medical care when appropriate and taking action to prevent and avoid harmful behaviors (e.g. tobacco and excess alcohol use) (Case & Paxson, 2006; Ryan & Deci, 2001). Crose, Nicholas, Gobble, & Frank (1992) included medical history and medications, body awareness, and image while Durlak (2000) and Anspaugh, Hamrick, & Rosato (2004) detailed physical wellness to include cholesterol level and blood pressure along with eating habits and exercise levels. The literature on physical wellness

focuses on physiological considerations of body type, genetic predisposition, and harm-avoidance behaviors with an emphasis on maintaining a healthy lifestyle of fitness, flexibility, and strength.

Regular physical exercises and activities are important to overall well-being (Center for Disease Control, 2004). However, statistics show that about 35% of all college students are overweight or obese while the majority of those who are not, are at a great risk of becoming obese before they leave college. Evidence shows that ages 18-29 years have the highest increase in obese cases (Ferrara, 2009). Additionally, Teixeira et al., (2012) argue that adults of modern societies do not engage strenuously enough or with necessary frequency and duration of activity in sports or physical exercises according to information from most public health organizations. Some of the causes of obese cases include poor nutrition, increased stress, and disturbed sleep patterns. Active involvement in rigorous physical activity can help but a program of integrated well-being could be more beneficial. When students transit from high school to college, several changes occur in their living environments and their way of life. Their feeding habits change, they are likely to start using alcohol, and are likely to engage in less physical activity (Ferrara, 2009) that can make them less physically fit. As such, significant consideration to their lifestyle is crucial towards helping them become healthy inside and out.

Whatever sports or physical exercises one engages in, good and adequate nutrition is the foundation for better performance (Brouns & Cargill, 2003). According to Hastings, Coleman and Bird (n.d.), all sports and exercise people must take a balanced diet that comprises adequate carbohydrates, proteins, vitamins, and fats (macronutrients). Generally, sports persons should have 55-70% of their diet as carbohydrates, 15% as proteins, and not

more than 30% as vitamins, fats, and other macronutrients. Though it is challenging for one to quantify the amount of each of these nutrients taken, a nutritionist's advice helps a sports person take the necessary and relevant meals that will enable the desired performance in physical exercise. A nutritionist is also useful towards advising on the right diet according to the exercises or sports in which one engages in (Brouns & Cargill, 2003).

Much as the nutritionist's advice on balanced diet is relevant to a sports person, Hastings, et al. (n.d.) argues that the advice is prone to several limitations. First, it is almost impossible for a nutritionist to exactly measure nutrients or calories coming from a given meal. Second, they argue that the percentage of nutrients or calories a sports person gets from a given feeding do not necessarily replace all the calories that the person burns during an exercise. Nevertheless, even though the science may be inexact, Hastings, et al., reiterate the importance of a balanced diet and the guidance of a nutritionist.

According to "*Information on fitness*" (US Health News, 2010), people of different ages cannot perform the same type of exercises to become fit. The types of physical activities in which one engages in depend on one's medical issues, overall health, life goals, and their age. For instance, "*Information on fitness*" presents those healthy adults below 65 years should engage in rigorous physical exercises to make their bodies stronger, flexible, and less prone to diseases-particularly cardiovascular diseases. Exercises like swimming, running/walking or biking; presses or heel lifts and intense movements or weight lifting should be the minimum for five days a week. Those beyond 65 years old should engage in moderate exercises, as their bodies are often not as resilient as those of younger adults.

Emotional Wellness

Emotional wellness is conceptualized as awareness and control of feelings, as well as, a realistic, positive, self-valuing, and developmental view of the self. It is the ability to deal with conflict and life circumstances, coping with stress and the maintenance of fulfilling relationships with others (Adams, et al., 1997)

A widely used tool has been added in recent years based on universal human needs and states of effective functioning. This tool is called the Psychological Well-Being assessment (PWB) (Seligman & Csikszentmihalyi, 2000; Ryan & Deci, 2001). Emotional wellness has been described as related to the level of depression, anxiety, well-being, self-control, and optimism a person has (Renger, et al., 2000). From another perspective, emotional wellness can mirror one's capacity to experience satisfaction and curiosity, along with enjoying life with an optimistic outlook. Ryan & Deci (2001) describe self-determination theory (SDT) as another viewpoint of the conception of self-realization aspect of wellness and that SDT states both what it means to actualize the self and how this can be accomplished.

Research has linked psychosocial stress to cardiovascular diseases, high blood pressure, and some cancers (Block, He, Zaslavsky, Ding, & Ayanian, 2009). Ferrara (2009) further considers it one of the causes of low physical activity among students. It is implied that stress affects participation in physical exercises directly and indirectly. Directly, a stressed person fails to get the motivation to participate in physical exercises (Teixeira et al., 2012). Indirectly, a stressed person adds on weight that leads them to engage in physical exercise to cut the weight. Stress plays a role in changing the dietary behaviors of a person hence leading to change in weight. Depending on the gender of a person, stress may

influence weight gain while in others stress may cause loss of weight. Considering stress when offering wellness training therefore becomes a significant factor towards becoming physically fit.

Diener (2000) writes that "With a few caveats….the happy individual is one who is extraverted optimistic, and worry-free." Hales (2005) includes trust, self-esteem, self-acceptance, self-confidence, self-control, and the ability to rebound from life's obstacles and setbacks. Continuing emotional wellness requires exploring thoughts and feelings, identifying barriers, and finding solutions to emotional problems. The ability to reflect on emotions and communicate with others in a productive manner is an important facet within the definition (Myers, Sweeney, & Witmer, 2005). Recent definitions of wellness emphasizes the importance of self-view and awareness of one's feelings, actions, relationships, and autonomy, self-actualization, and a sense that these aspects develop as we mature (Myers, et al., 2005).

Spiritual Wellness

Spiritual wellness is often confused with religious thought. Spirituality and religion are not synonymous. The two concepts, while overlapping, are entirely distinct from one another (Adams, et al., 2000; Westgate, 1996). The broader concepts of beliefs and values are expressed through one's own personal spirituality (Westgate, 1996; Hatch, Burg, Naberhaus, & Hellmich, 1998). McGee, Nagel and Moore (2003) affirm that the literature makes a strong case for the significance of spirituality in relation to the health of the individual. Specifically, scholars agree that in order to improve other dimensions of health, a person must enhance one's level of spiritual health.

Hettler (1980) and others (Adams et al., 1997; Renger et al., 2000) defined spiritual wellness as the process of seeking meaning and purpose in existence. Spiritual is an acceptance that the universe cannot be completely understood. Spirituality has also been defined as intrinsically based beliefs in which personal values are used for guidance in day-to-day living (Mackey & Sparling, 2000).

The benefits of meditation are crucial to the wellness in everyone's body. The right type of meditation offers several physical and psychological benefits that leave the person healthier than before (Oman, Shapiro, Thoresen, Plante, & Flinders, 2008). Physically, meditation lowers a person's heart rate, lowers the concentration of stress-causing hormones, normalizes blood pressure, enhances the performance of lungs, cushions against insomnia, and reduces bowel irritation and headaches. Psychologically, meditation is associated with reduced stress, eliminates anxiety and depression, and enhances emotional stability and chances of learning (Terrell, 2013). As such, meditation is a crucial factor towards a relaxed and fit body.

The main consensus is spiritual wellness is the creation of personal values and beliefs by individuals in regards to life's purpose, and in relation to others, the community, nature, the universe, and a higher power. Meditation can take on many shapes that vary from person to person. For one person meditation can be being out in nature, the calm they experience may give them the chance to reflect, while others may find chanting or yoga gives them the quietness and self-reflection they require.

Social Wellness

> People fail to get along because they fear each other; they fear each other because they don't know each other; they don't know each other because they have not communicated with each other. (King, 1958)

Social wellness pertains to the interactions with others, the community, and nature. Getting along with others is being comfortable and willing to express one's feelings, needs, and opinions. Supportive, fulfilling relationships (including sexual relations), and intimacy; plus interaction with the social environment and the contribution to one's community are included in the definition of social wellness (Renger, et al., 2000). Durlak (2000) include peer acceptance, attachments or bonds with others, and social skills (communication, assertiveness, conflict resolution) as fundamental components of social wellness. Anspaugh et al. (2004) includes the ability to maintain intimacy, accepting others who are different, and cultivating a support network of caring friends and/or family members. The social wellness literature indicates that perceived support rather than received support has the most powerful influence on health (Wethington & Kessler, 1986). The more students have a strong social network with family and friends the better their health.

Combining the concept of play with social ability grants us the opportunity to develop skills with a sense of abandonment and freedom. We begin to move for the joy of movement, the love of the game, dance, or activity and through this movement we enhance our wellness through multiple dimensions. Perhaps it is the social interaction or the emotional response, the physical effort, the intellectual stimulation or more likely the combination, without our conscious thought that we are integrating our well-being, we are simply having fun. The best player is the one who experiences pure enjoyment. "Play is an

archetype of goodness and joy, a cluster of energy mirroring the last memories of the perfect human state" (Saint Sing, 2004).

Intellectual Wellness

Intellectual wellness originally was defined as one who engages in creative and stimulating activities, as well as, the use of resources to expand knowledge and focus on the acquisition, development, application, and articulation of critical thinking (Hatfield & Hatfield, 1992). Hales, (2005) defined intellectual wellness as a commitment to life-long learning, an effort to share knowledge with others, and developing skills and abilities to achieve a more satisfying life.

The literature argues that functional literacy is also a meter of health. Those with low levels of literacy are more likely to experience smoking, inactivity, obesity, and poor diet (Public Health Agency of Canada, 2008). There is also some evidence that education has more of a positive impact in low income countries (Ferrer-i-Carbonell, 2005; Efklides, & Moraitou, 2013). An intellectually well person uses the resources available to expand one's knowledge in improved skills along with expanding potential for sharing with others.

Age-related cognitive performance shows an increasing decline in different aspects of cognitive functioning, such as perception, memory, and thinking (Churchill, et al., 2002). The reasons for this decline in cognitive performance during aging are not only biological change, but also the extent of cognitive activity. On the other hand, it is assumed that deterioration in cognitive performance can be reduced through physical activity. "Physical tasks should be given that require not only motor abilities, but also make the participants solve tasks and respond to problematic situations such as anticipation of events, cognitive

situation analyses, thinking up possible solutions, or specific memory functioning" (Etnier et al. 1997).

A quote from Mahatma Gandhi is a good example of self-efficacy strength. "If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning" (Gandhi & Desai, 1987). McAuley (2003) examined the willingness of people to take on a task if they believe they can succeed. People generally avoid tasks where their self-efficacy is low, but will engage in tasks where their self-efficacy is high. People with a self-efficacy significantly beyond their actual ability often overestimate their ability to complete tasks which can lead to difficulties. On the other hand, people with a self-efficacy significantly lower than their ability are unlikely to grow and expand their skills. Research shows that the "optimum" level of self-efficacy is a little above ability which encourages people to tackle challenging tasks and gain valuable experience (McAuley et al., 2003).

The power of a positive mind is seeing what can be achieved and taking the necessary steps (such as goal setting) in order to get it (Kolcaba, 1992). When an individual with a negative mindset focuses on the barriers, he/she will only see the reasons why the goals will not be actual.

Occupational Wellness

Hettler (1980) and Anspaugh, Hamrick, & Rosato (2004) defined occupational wellness as the level of satisfaction and enrichment gained by one's work and the extent one's occupation allows for the expression of one's values. Finding a balance between occupational responsibilities and other commitments is suggestive of the level occupational wellness. Leafgren (1990) stated that occupational wellness is one's attitude about work and

the amount of personal satisfaction and enrichment one gains from one's work. Crose et al. (1992) included one's work history, patterns and balance between vocational and leisure activities, and vocational goals. Occupational wellness should contribute to one's personal unique skills and talents to create a meaningful and rewarding life; and contribute through paid and non-paid labor and activities that also benefit the good of the community.

Many studies examine the relationship between organized sports and positive psychosocial developments but few studies examine how life skills are developed (Adams, et al,.1997). Looking at the role of dispositional factors (e.g. hard work and self-awareness) and experiential (opportunities) learning as key elements in the development of life skills. Life skills enable children and adolescents to cope effectively with everyday challenges and developmental tasks and training in such general intra and interpersonal skills combined with specific skills and knowledge will enhance their development.

University Wellness

In a study examining the relationship between college students' perceived psychological well-being and the quality of their lives on five variables related to the Wellness Wheel, Hermon and Hazler (2011) found a significant relationship between adherence to a holistic wellness model and psychological well-being. The data suggested there is a strong relationship between adherences to Wellness principles that can affect a student's ability to manage stress, to have a sense of worth, to seek intellectual challenge, and feel more positive about the way life is going.

In 1989, Ball State University implemented a Wellness/Fitness program which took a two-fold approach, first using a series of lectures and then combined with specific aerobic activities in order to increased self-confidence (Robbins, Powers, & Rushton, 1992). This

was a required course for students to create positive lifestyle choices, with topics on self-responsibility, heart health, stress, nutrition and self-management. As part of the course requirements, students completed a test of 50 multiple choice question, an attitude assessment, and a 25 item lifestyle questionnaire. The outcome was the Ball State students learned exercise can be enjoyable when combined with other wellness habits; it can help them reach their optimal healthy potential (Robbins, et al., 1992).

In 2005, a study was done at the University of Idaho to compare selected fitness levels and commitment to a narrative based fitness class. Rickel found both classes increased participants' objective and subjective exercise values. One of the most significant differences found was in the student perception of exercise and the importance of not objectifying the body/self (Rickel K. , 2005). In 2006, another study was conducted at the University of Idaho by Crystal Hasey, which expanded on Rickel's earlier research comparing commitment to activity. The Hasey study strengthened the Rickel study and found subjectivity in exercise can be learned which results in an increased objective and subjective value in exercise (Hasey, 2006).

Summary

Burgeoning health costs are driving the need to find effective ways to promote and measure wellness as a means to prevent illness and support target populations in staying healthy or improving their level of wellness.

With the increased interest in holistic interventions that target responses in the context of human experience (i.e., physical, psycho-spiritual, social, and environmental), holistic measures that are multidimensional and entail many interrelated parts are essential for understanding effects on an indivisible whole (Kolcaba, 1992). These benefits might

include: increased client relaxation, positive thinking, well-being, and contentment. Such integrated benefits may be temporary but are consistent with the complexity of human experience. Comfort is a holistic state that captures many of the simultaneous and interrelated aspects of positive human experience (Kolcaba, 1992).

From this review, it is clear that well-being goes beyond physical activity and must include other dimensions to influence one's best over-all health and well-being. The main benefit is developing and educating healthy people. Other benefits include reduced cost of medication, a prolonged life, enhanced productivity, and increased morale.

The issue of overall wellness has been overlooked in favor of segmented fields of health and fitness by society. A wealth of literature supports the concept that physical health and wellness are valid measures of future health outcomes (Adams, et al., 1997; Idler, 1995; Kane, 1996).

As early as 460 B.C., great thinkers realized the importance and necessity of exercise. Hippocrates said, "Eating alone will not keep a man well; he must also exercise" (Hippocrates, as cited in Rickel, Exercise Adherence, 2005), so we try to exercise, until we tire of the task. Though by the same token exercise along will not keep a man well.

If students can understand the benefits of integrated wellness, they will better balance their lives which, in turn helps students achieve better grades, self-esteem, self-efficacy, higher levels of creativity and growth, more social connection, and deeper friendships. This is the goal of an integrated wellness curriculum for the intervention group.

The integrated wellness curriculum consists of lectures, discussion, activities, demonstrations, and student service projects. The goal of the curriculum is to teach the concepts followed by an activity which incorporates the concept.

With a fairly comprehensive wellness curriculum, activities, discussion, and service learning, the goal is give students the tools to identify where they need to work on balance in their lives. As a part of the curriculum, the students will be given lists of resources to help them in each of the six areas, from the campus dietitian to the counseling center, and activities at the Student Recreation Center plus through, Movement Sciences, local alternative health resources, and many more. Through the understanding that health is beyond the physical, they will better understand how they can achieve optimal health and greater life satisfaction.

Chapter Three: Methodology

Research Methods and Design

The purpose of this experimental design and hypothesis was to improve cognitive knowledge of total well-being in college aged students through a 14 week instructional program focusing on integrated wellness. The problem was to create an understanding by the participants of the difference in physical health and overall well-being. The design used quantitative methods with open ended questions for students to comment on the study.

Quantitative Design

This research approach took the form of an experimental design where the researcher attempted to test hypotheses using all possible statistics such as correlational, regression and among other statistical tests. The rationale behind using this research design is because it creates an integrated framework for examining the link between Hamlett Well-Being Inventory (HWBI) and Rickel Objective Values Inventory Scores and would best answer the problem statement, research questions, sub-problems, and hypotheses. Open ended questions at the end of the HWBI helped "flesh out" the statistical findings of the study.

The Research Plan

This research was designed to compare and improve cognitive knowledge of total well-being in college aged students. In order to do so, the following had to be developed:

1. The HWBI is a measurement tool to analyze student's current knowledge and beliefs about their own state of well-being, see Appendix C.
2. A curriculum to complement the fitness class in order to improve exercise and fitness adherence, see Appendix D and Appendix E.

3. A curriculum to expand the knowledge of the six dimensions of wellness to the recreational students and enhance their total well-being, see Appendix D.

Procedures

Control Group

The activity based fitness class was supported by a curriculum which consisted of Pilates for at least 50 minutes 3 days a week, taught by a certified Pilates instructor, with over 15 years teaching experience. A pretest, mid and posttest was given of the RVI and HWBI allowing 15 to 20 minutes for completion. The subjects were instructed how to fill out the inventories and were monitored by the instructor. The forms were collected and the data was entered by the researcher. Subjects participated in either a 9 week class or an 18 week class, and then were given a posttest on the last day of class for 15 to 20 minutes.

Intervention Group

Another group was taught by the same instructor and participated in an academic recreation class during the same semester. The instructor was a Ph.D. candidate and held a M.S. in Interdisciplinary Studies; Recreation, Nutrition and Exercise Science. The intervention group received in-class instruction in integrated well-being. The intervention group was also given the RVI and the HWBI at the beginning of the semester on the first day class, allowing 15 to 20 minutes for completion. The subjects were instructed in how to fill out the instruments and were monitored by the instructor. The intervention group also completed the RVI and the HWBI at 9 weeks into the semester and at the end of 18 weeks. The forms were collected and the data was entered by the researcher. Data collection and entry was done in the same manner as the control group.

Pretest Study

The instructor (the same for both classes) for each class introduced the research and explained the background of the study and asked for student participation. The explanation of the study was also made available to students to read themselves. The RVI and HWBI surveys were distributed. Subjects were instructed to find a survey pre-printed with their student and user identification numbers on it. Subjects were given approximately 15 minutes to complete the survey.

Intervention

Subjects who were enrolled in the intervention group were automatically given access to the complete curriculum. The class was a hybrid of online assignments and readings along with live, face to face participation. Each lesson was given in class using lecture,

PowerPoints, and hands on learning, demonstration and guest speaker. Class was additionally given homework to reinforce the curriculum and additional reading material. The class PowerPoints were made available to all students through the University of Idaho BbLearn. See appendix F.

Subjects

All subjects were college students voluntarily enrolled in a Pilate's activity class (control) or the Recreation 370 class (experimental group). The experimental group consisted of 40 subjects, and the control group consisted of 60 subjects. The students were male and female and predominately between 19 to 25 years of age.

Protecting Subjects

All subjects were given a verbal and written explanation of the study and the option to participate. Institutional Review Board at the university approved the study protocol and gave consent (see Appendix A, IRB #14-002). Individual permission was given by subjects completing the Rickel Exercise Value Inventory and the Hamlett Well-Being Inventory.

Instrumentation

Rickel Exercise Value Inventory

The validity of the RVI was established in a 2004 study of fitness levels and commitment to activity between a traditional activity class and a narrative based fitness class (Rickel K. , 2005; Rickel K. , Stoll, Beller, & Hamlett, 2004)). The objective section of the RVI received a Cronbach's Alpha reliability pre-test rating of .89 and a post-test rating of .78. The subjective section of the survey revealed a pretest Cronbach Alpha of .87 and a post-test of .81. The RVI and HWBI are self-report questionnaires consisting of Likert questions and the Rickel and Hamlett have open ended questions. The questionnaires assess a subject's perceived level of well-being.

Intervention: Curriculum

When designing the curriculum for the intervention group, it was based on the traditional Wellness Wheel as envisioned through the work of Halbert Dunn (Dunn H. L., 1959). This work speaks to the importance incorporating all components of wellness (physical, emotional, spiritual, intellectual, occupational and social) into a plan for optimal well-being. It is termed a Wellness Wheel as it is similar to the idea of a car wheel; if the wheel on your car is off-balance your car will not drive properly, or the tire on the wheel needs air it will slow your progress as you drive and be inefficient. The person, who works

to balance their lives through looking at each component of the Wellness Wheel, will be more complete. If in your life you are in peak physical shape but you are lacking in spirituality this imbalance may not allow you the reflection needed to truly enjoy your physicality.

Using an illustration of the body, the body has six chakras to represent the six components of wellness, with the top representing the intellectual, i.e., what we think, how we perceive the world. The throat chakra is representing social component, i.e., how we communicate our thoughts to others. The third represents the heart and our spiritual state, i.e., how we hold our love and beliefs and how they reside in our heart. The solar plexus is for the emotional state, i.e., "butterflies in the stomach" which is a term most of us can relate to. When stressed, we often become nauseous. The lower abdomen represents the occupational; as the long intestines turn and travel and take out needed nutrients our occupational lives often take a similar track. Our career paths can be long and windy; we often have jobs just to sustain ourselves, but sometimes we find the perfect fit and the road becomes far more enjoyable. And last, the "root" chakra below the sacrum represents physicality, i.e., our base our bodies, how we see ourselves and how we show ourselves, to the world.

Figure 3. 1

Note: *Graphic created using Adobe Photoshop by Peg Hamlett, utilizing the Da Vinci Vitruvian man overlaid with energy chakras and the lotus spectrum.*

In eastern philosophy, chakras control life energy (prana or chi) (Saradananda, 2008). This energy flows through the body with the left side carrying feminine energy and the right masculine energy. There is a belief that each chakra controls certain glands and nerves and imbalance results in physical and mental illness (Saradananda, 2008). While the

present illustration or study does discuss the energy flow, eastern philosophy believes that in a healthy body all parts are harmonious and all the chakras (or components) are in equilibrium. A person will then be at optimal well-being. If a chakra is blocked, (similar to a blocked artery), the energy does not flow harmoniously, this can result in imbalance in life.

Additionally color is used in the illustration to denote each component, i.e., the head violet, throat blue, heart green, solar plexus yellow, lower abdomen orange, and the sacrum red. These represent a color spectrum, and put together, create black, the embodiment of all colors. The concept is that if we are lacking in one of the areas we are not complete; we do not embody all of our components.

The intervention curriculum, explored with the control group, visited each of these areas. Additionally the curriculum also incorporated various modes of learning to create various interactive components, including self-learning and exploration plus traditional class lectures and readings. A typical subject was approached with a reading done by the student, which was then supplemented by a lecture and then an interactive session or independent activity.

Teaching Philosophy

"To me, teaching is about sharing my passion for learning. It is about igniting a spark inside a student to make them want to discover more. My goal is to create active learners, students who do not simply recite verbatim learned information but students who integrate what they have learned throughout their lives and expand their knowledge base. Teaching core concepts is important, but creating students who are critical thinkers is my goal. I believe there is more than one way to solve most problems and my way is not the

only way, I like to give students tools to solve problems but more importantly tools to come up with new ways to solve problems.

The integration of active assignments is important to allow students to become leaders. Giving them the opportunity to take their learning and apply it within their assignments. Allowing students to share their passions in class presentations or service learning projects will help enhance their confidence.

Few things in life bring me greater joy than seeing my student's succeed. I want them to do more than I have done or even dreamed of. Making sure they are ready when they leave the University to move forward in their field is a responsibility I take seriously. Being a teacher is more than teaching a particular course, it is listening to the student's need, being a mentor, advisor, coach, sometimes mom, a task master and a respected professional. We open the doors to their future, we can help them pave their pathway, and we give them the tools to reach beyond what we already know. Each student has different needs, interests, desires and abilities and my goal as a teacher is to find how best to light the fire within them" (Hamlett, 2015).

Below find an outline of the course.

Table 3.1. Outline of the Course Timeline.

Week 1, session 1 Introduce the course and the course requirements. Lecture Wellness Throughout Life	**Week 1, session 2** Complete Leisure, Recreation and Health Promotion. Begin the Fitness as Leisure Activity chapter. Tour the campus fitness facilities. Perform fitness tests and measurements.
Week 2, session 1 Complete assessments and testing and Fitness as a Leisure Activity.	**Week 2, session 2** Begin the Nutrition Throughout the Lifespan.

Week 3, session 1 Cooking demonstration	**Week 3, session 2** Guest speaker Marissa Rudley Campus Dietitian Interactive cooking class.
Week 4, session 1 Sexuality and Intimacy	**Week 4, session 2** Mental Health
Week 5, session 1 Mental Health issues throughout life, temporary, lifelong, signs and symptoms.	**Week 5, session 2** Stress Management Yoga and meditation class
Week 6, session 1 Guest Speaker Sharon Fritz Counseling and Testing Center	**Week 6, session 2** Stress Management, group assignment.
Week 7, session 1 Midterm review	**Week 7, session 2** Mid-term exam
Week 8, session 1 Yoga stress relief, Raven's program	**Week 8, session 2** Conception, Pregnancy, and Childbirth guest speaker: Kristine Petterson, doula. Interaction with children
Week 9, session 1 Leisure, Travel and Infectious Diseases, how to safeguard yourself and others.	**Week 9, session 2** Financial and Life Stressors. Set yourself up to avoid pitfalls.
Week 10, session 1 Chronic Diseases throughout your Life Span. Ways to keep leisure in your life with chronic diseases and conditions. Guest Speaker Dr. Son	**Week 10, session 2** What is Health Care Consumerism? How does it impact you?
Week 11, session 1 Environmental Health and Sustainability.	**Week 11, session 2** Guest speaker Sustainability Director
Week 12, session Substance Use, Abuse and Dependency. Recreational, prescribed and social drug and substance use impacts on your life.	**Week 13, session 2** Substance Abuse and Dependency. Class debate on current laws, OTC medications and recreational use of drugs and alcohol.

Week 13, session 1 Aging Healthy, how creating leisure time in our life effects aging.	**Week 13, session 2** Discuss leisure activities based on age, and intergenerational appropriate activities
Week 14, session 1 Leisure and Wellness from 0 to 99+. Discussion. Final exam review	**Week 14, session 2** Final exam

Beginning lesson plan

Below find an example of a beginning lesson plan for the Recreation 370 class. The objective of the course was to have students better understand their own beliefs and attitudes regarding well-being and the importance of health beyond just physical components. Pre, mid, and post, testing assessments were made to document the students attitudes. Instruction was multi-faceted, reading, lecture, demonstration and practical interactive classes were used to instruct students.

Wellness throughout Life

Chapter Objectives

At the conclusion of the class students will be able to:

1. Understand the difference between health and wellness.
2. Identify 10 significant public health achievements of the 20th century.
3. Discuss challenges to wellness in the 21st century.
4. Explain the six dimensions of wellness.
5. Identify factors that influence your wellness.
6. Understand behavior change models and why they work in creating wellness.
7. Know how to set realistic goals.

Chapter at a Glance

Changes in Health and Wellness over Time

- Significant Public Health Achievements
- Challenges to Wellness
    - Obesity and Overweight
    - Infectious Diseases
    - Access to Health Insurance
- Healthy People 2010

Six Dimensions of Wellness

- Physical Wellness
- Intellectual Wellness

Emotional Wellness

- Social Wellness
- Spiritual Wellness
- Occupational Wellness

Factors That Influence Wellness

- Gender
- Race and Ethnicity
- Income and Education
- Genetics
- Location
- Health Habits
- Environment
- Access to Health Care and Resources

Reaching and Maintaining Wellness

- Determining Your Current Health Status
- Behavior Change Models
    - Trans theoretical Model
    - Self-Efficacy and Social Cognitive Theory

  - Health Belief Model
  - Locus of Control
- Setting SMART Goals

Outline

The outline (Appendix D and Appendix E) gives a brief plan of what the students covered during the training exercise period for the Recreation class and the Pilates class. There are class plan examples in Appendix D. And is there an example of the Pilates Class of what was covered in the Appendix E.

Data Analysis

After approval for the study was granted from the Institutional Review Board (see Appendix A, IRB project number 14-002.) college students in their respective classes (Recreation 370 class and PEB 106 Pilates class) answered a series of questions on the RVI and HWBI, which was imputed into Excel and then a correlational analysis was run to examine the relationship between Rickel Objective, Rickel Subjective, and Hamlett Inventory scores. Additionally, a 2 (recreation, pilates) by Time (3) split plot repeated measures ANOVA was run between group and Rickel Objective scores, group and Rickel subjective scores, and group and Hamlett scores. Alpha was set at the $p<.05$ level. The independent variable was the intervention program. The dependent variables were the Rickel subjective, objective, and Hamlett scores.

Chapter Four: Results

The purpose of this study was to improve cognitive knowledge of total well-being in college aged students through a 14 week instructional program focused on integrated wellness. A general set of questions were asked of the participants of this study including: gender, years of participating in movement, class standing, age category, and general beliefs about health and wellness. According to the reviewed literature, no evidence appears to exist of an integrated well-being program or study focusing on college students particularly by measuring their objective and subjective commitment to their over-all well-being. Therefore, the purpose of this study was to explore meaning and commitment to a healthy lifestyle. The final study results are based on 100 participants who completed the inventories in two different university classes

Demographics

The two inventories, the Hamlett and Rickel, were distributed to 126 students in two different classes, Rec 370 Leisure, Health and Human Development and PEB 106 Pilates. Rec 370 consisted of 39 students 9 week PEB Pilates had 58 students enrolled and the 18 week Pilates had 29 students enrolled for a total of 126 students. After collection of the inventories, 26 were excluded due to incomplete data. The 100 complete inventories consisted of Rec 370: 36 students; 9 week Pilates 36 students and 18 week Pilates 28 students. Out of 100 students 25 were male, 72 female and three undeclared.

Four more specific demographic questions were asked on the Rickel inventory.

Question B. What is your current class standing? The majority of students' 43 were seniors, 27 juniors, 16 sophomores and 9 freshman, one grad student and four unidentified.

Question C. Do you eat prior to movement or exercise?

Thirteen t said they did, 87 said they did not.

Question D. asked participants age.

Eighty-five were between the ages of 8-24; nine were between the ages of 25-30; two were 31-37 and two were 38-44, and the remaining did not declare.

The participants then answered questions from two different evaluative instruments which focused on their commitment to exercise, physical play, and human movement activity. The Rickel Exercise Value Inventory (RVI) consists of 18 Likert questions and is a valid and reliable tool for measuring objective (e.g. body appearance, social) and subjective (moving for movement sake) values towards exercise from a philosophic perspective. The Hamlett instrument includes 18 Likert questions and four open-ended questions. The Hamlett Supplemental Well-Being Questionnaire is a whole-person wellness assessment focusing on six dimensions of personal wellbeing

The participants were to read the instruments carefully, comment, and respond in one of five ways on a Likert scale of great, much, some, little, or no. They were told to circle only one answer. At the end, the participants were to rank the four most important and four least important items to their exercise, play, or movement experience. The Hamlett has opened ended questions which asked students to be more reflective in thinking about what areas in their lives needed work, where they felt they excelled, and where they found the most benefit from the course.

Relationship That Exists Between the Hamlett Well-Being Inventory and Rickel Objective Values Inventory Scores

A Pearson product was run to examine the relationship between the Rickel Hamlett Well-Being Inventory.

Correlations

1) No relationship exists between the pre Hamlett Well-Being Inventory and Rickel Pre objective Values Inventory scores.
    a) No significant relationship was found between the pre Hamlett Well-Being Inventory and Rickel Pre objective Values Inventory scores r = 03, p = .76.
2) No relationship exists between the mid Hamlett Well-Being Inventory and Rickel mid objective Values Inventory scores.
    a) A significant relationship was found between the pre Hamlett Well-Being Inventory and Rickel Pre objective Values Inventory scores r = .23, p = .02, r^2 = .05. Rickel objective scores account for about 5% of the variability in Hamlett Scores.
3) No relationship exists between the final Hamlett Well-Being Inventory and Rickel final objective Values Inventory scores.
    a) No significant relationship was found between the pre Hamlett Well-Being Inventory and Rickel Pre objective Values Inventory scores r = -.12, .35.
4) No relationship exists between the pre Hamlett Well-Being Inventory and Rickel Pre subjective Values Inventory scores.
    a) A significant relationship was found between the pre Hamlett Well-Being Inventory and Rickel Pre subjective Values Inventory scores r = .27, p = .008, r^2 = .07. Rickel pre subjective scores account for approximately 7% of the Hamlett scores.
5) No relationship exists between the mid Hamlett Well-Being Inventory and Rickel mid subjective Values Inventory scores.

a) A significant relationship was found between the mid Hamlett Well-Being Inventory and Rickel mid subjective Values Inventory scores $r = .28$, $p = .005$, $r^2 = .08$. Rickel mid subjective scores account for approximately 8% of the Hamlett mid scores.

6) No relationship exists between the final Hamlett Well-Being Inventory and Rickel final subjective Values Inventory scores.

a) A significant relationship was found between the final Hamlett Well-Being Inventory and Rickel final subjective Values Inventory scores $r = .34$, $p = .007$, $r^2 = .12$. The Rickel Final subjective scores account for approximately 12% of the Hamlett final scores.

Table 4.1 Correlations of the Final Hamlett Well-Being and Rickel final Objectives

		HScfinal_total	Rickelfinal_ objective	Rickelfinal_ subjective
HScfinal_total	Pearson Correlation	1	-.118	.337**
	Sig. (2-tailed)		.354	.007
	N	64	64	63
Rickelfinal_objective	Pearson Correlation	-.118	1	.207
	Sig. (2-tailed)	.354		.103
	N	64	64	63
Rickelfinal_subjective	Pearson Correlation	.337**	.207	1
	Sig. (2-tailed)	.007	.103	
	N	63	63	63

** *Correlation is significant at the 0.01 level (2-tailed).*

Repeated Measures ANOVA Hypotheses

1. No difference exists by time (pre, mid, final) on Hamlett Well-Being Inventory scores.

A significant difference was found by time (pre, mid, final) on the Hamlett Well-Being Inventory scores Wilk's Lambda $F(2,61) = 8.4$, $p = .01$, partial $eta^2 = .22$. A significant difference existed between pre 66.31 $\pm$ 6.3, mid 67.48$\pm$6.4, and final 69.12+6.4 Hamlett Well-Being Inventory scores

2. No difference exists with the interaction of time (pre, mid, final) X group (Recreational course, Pilates course) on Hamlett Well-Being Inventory scores.

No significant difference was found with the interaction of time (pre, mid, final) X group (rec course, Pilates course) on Hamlett Well-Being Inventory scores Wilks' Lambda F (2, 61) = 1.57, p = .22.

3. No difference exists by time (pre, mid, final) on Rickel objective Values Inventory scores.

A significant difference was found by time (pre, mid, final) on Rickel objective Values Inventory scores F (2, 61) = 8.5, p = .001, partial eta ^{2} = .22. A significant difference was found between pre 35.01 $\pm$ 6.8 and final 36.12 $\pm$ 6.4 Rickel Objective scores.

4. No difference exists with the interaction of time (pre, mid, final) X group (recreational course, Pilate's course) on Rickel objective Values Inventory scores.

A significant difference was found with the interaction of time (pre, mid, final) X group (rec course, Pilates course) on Rickel objective Values Inventory scores F (2, 61) = 9.2, p = .0001, partial eta ^{2} = .23. The Pilates class was significantly lower at the pre 32.8 + 4.3 Rickel Objective score compared to the rec class 36.7 + 7.9. The Pilates class remained lower throughout the pre, mid, and final Rickel Inventory scores compared to the recreational course scores as indicated below in table A.

5. *No difference exists by time (pre, mid, final) on Rickel subjective Values Inventory scores.*

A significant difference was found by time (pre, mid, final) on Rickel subjective Values Inventory scores F (2, 61) = 6.5, p = .003, partial eta ^{2} = .18. A significant difference was found between pre 24.1 $\pm$ 5.22 and final 25.1 $\pm$ 4.8 Rickel Objective scores.

6. No difference exists with the interaction of time (pre, mdi, final) X group (recreational course, Pilates course) on Rickel subjective Values Inventory scores.

A significant difference was found with the interaction of time (pre, mid, final) X group (recreational course, Pilates course) on Rickel subjective Values Inventory scores Wilks' Lambda F (2, 61) = 6.3, p = .003, partial eta ^{2} = .17. The Pilates class was significantly lower at the pre 32.8 $\pm$ 4.3 Rickel Objective score compared to the rec class 36.7 $\pm$ 7.9. The Pilates class remained lower throughout the pre, mid, and final Rickel Inventory scores compared to the recreational course scores as indicated below in table B. The Pilates class scored significantly lower at all times periods Pre 21.2 $\pm$ 4.9, mid 22.7 $\pm$ 4.9, and final 23.48 $\pm$ 5.2 compared to recreational class pre 26.3 $\pm$ 4.3 mid 25.8 $\pm$ 4.7 and final 26.3 $\pm$ 5.1 scores.

Table 4.2 Rickel Objective Scores

	Group	Mean	Std. Deviation	N
Rickelpre_objective	Rec class	36.69	7.98	36
	Pilates class	32.85	4.34	28
	Total	35.01	6.87	64
Rickelmid_objective	Rec class	35.00	4.81	36
	Pilates class	34.82	3.38	28
	Total	34.92	4.21	64
Rickelfinal objective	Rec class	36.69	7.98	36
	Pilates class	35.39	3.83	28
	Total	36.12	6.49	64

Table 4.3 Rickel Subjective Scores

	Group	Mean	Std. Deviation	N
Rickelpre_subjective	Rec class	26.27	4.30	36
	Pilates class	21.18	4.93	27
	Total	24.09	5.22	63
Rickelmid_subjective	Rec class	25.83	4.65	36
	Pilates class	22.70	4.95	27
	Total	24.49	4.99	63
Rickelfinal subjective	Rec class	26.27	4.34	36
	Pilates class	23.48	5.16	27
	Total	25.07	4.88	63

Chapter Five: Discussion

The purpose of this study and hypothesis was to improve cognitive knowledge of total well-being in college aged students through a 14 week instructional program focusing on integrated wellness.

Below find a discussion of the correlations and hypothesis.

Correlation Hypotheses:

1. No relationship exists between the pre Hamlett Well-Being Inventory and Rickel Pre objective Values Inventory scores.
    a. No significant relationship was found between the pre Hamlett Well-Being Inventory and Rickel Pre-objective Values Inventory scores r = 03, p = .76.
        i. In analyzing the three correlations (pre, mid, and final collection of data) concerning the objective side of the Hamlett and Rickel, we must consider the life-style of the college student age 18-24. During the first week of the semester, students living in the residential campuses have very active social lives that unfortunately include behaviors that do not always include the most healthful practices. The Hamlett asks specific questions regarding diet, health, sleep, and beneficial activity whereas the Rickel asks objective questions about long-term exercise and social practices. During the first of the semester it would be likely not to have a correlation between the two instruments, as the Rickel asks students to assess their overall health, diet and exercise; whereas the Hamlett asks more detailed questions that a student would answer only after a reflection towards their

current behavior (i.e. drinking, eating poorly and lack of sleep). The transition into adulthood occurs at different points in time for students and this greatly changes their reflective behavior and attitudes of health behavior (Arnett, 1994). The first week in a semester seldom is a reflective time for students. Understanding this concept can help us realize that unless students are either taught to reflect on healthy behaviors or have transitioned into adult thought process, we should not expect a relationship from the two instruments at this time.

2. No relationship exists between the mid Hamlett Well-Being Inventory and Rickel mid objective Values Inventory scores.
    a. A significant relationship was found between the pre Hamlett Well-Being Inventory and Rickel mid objective Values Inventory scores $r = .23$, $p = .02$, $r^2 = .05$.
        i. A correlation was found to exist at mid-point between the Hamlett and the Rickel though no relationship existed for the pre and final assessment. Considering the lifestyle of many students and the type of questions the inventories asked, this is not a surprise to find a correlation only at mid-term when student are more engaged in their studies and more engaged in their curriculum to improve cognitive knowledge. Reflection takes time – and with time for reflection students would have a more expressive ability to examine the meaningfulness of the Rickel and Hamlett questions. Certain levels of stress can adversely affect physical and mental health, at mid-term

students generally have settled into their studies and their college lives and the stress level present at the beginning of term and end of term is generally not at the same level as midterm (Oman, et al., 2008).

3. No relationship exists between the final (post) Hamlett Well-Being Inventory and Rickel final objective Values Inventory scores.
    a. No significant relationship was found between the post Hamlett Well-Being Inventory and Rickel Post objective Values Inventory scores r = -.12, .35.
        i. When the post-assessment of the Hamlett and Rickel were given, the students were in their highest level of stress and their diet is generally poorer, additionally at the end of the term and in this case end of calendar year, student's finances suffer and their stress levels increase. In general a correlation should exist between the two if the subjects are in an optimally positive state of well-being. Knowing the stress state of the students and the content of what the instruments measure, a relationship would be difficult to capture since students are in a stressed state. The Rickel instrument was answered by students relating to their health and activity in a long term view while the Hamlett asks specific questions regarding their current behavior.
4. No relationship exists between the pre Hamlett Well-Being Inventory and Rickel pre subjective Values Inventory scores.

   a. A significant relationship was found between the pre Hamlett Well-Being Inventory and Rickel pre subjective Values Inventory scores $r = .27$, $p = .008$, $r^2 = .07$.
      i. The subjective questions on both the Hamlett and the Rickel address self-perspective and students tend to view themselves as healthy and active in the long term when not addressing specifics so a relationship is to be expected. Additionally both instruments subjectively asked about enjoyment and used terminology that the participants use freely to describe themselves and their activities, “exercise,” “play,” and “workout.”

5. No relationship exists between the mid Hamlett Well-Being Inventory and Rickel mid subjective Values Inventory scores.
   a. A significant relationship was found between the mid Hamlett Well-Being Inventory and Rickel mid subjective Values Inventory scores $r = .28$, $p = .005$, $r^2 = .08$
      i. The subjective questions on both the Hamlett and the Rickel address self-perspective and students tend to view themselves and healthy and active in the long term when not addressing specifics so a relationship is to be expected. Other research agrees and supports the positive self-perspective over a long view when not looking at specifics (Ryan & Deci, 2001; Perrin & McDermott, 1997; Miller & Thoresen, 1999).
6. No relationship exists between the post Hamlett Well-Being Inventory and Rickel final subjective Values Inventory scores.

a. A significant relationship was found between the post Hamlett Well-Being Inventory and Rickel final (post) subjective Values Inventory scores $r = .34$, $p = .007$, $r^2 = .12$

    i. The subjective questions on both the Hamlett and the Rickel address self-perspective and students tend to view themselves as healthy and active in the long term when not addressing specifics so a relationship is to be expected. The subjective questions induce reflection and reflection on an activity enhances the enjoyment. Theoreticians have long argued that this is important (Kretchmar, 2000; Lambert, 1998; Metheny, 1968). This is also in agreement with what Carolyn Thomas (1983) suggests and other philosophers would agree "…mere involvement…does not guarantee that meaning will occur…or that the experience will be meaningful." Reflection on enjoyment leads to more commitment (Thomas, 1983.) Dieter in his 2014 study also noted the power of reflection in both cognition and actual exercise behaviors in a fitness setting (2014). Rickel and Hasey also found that reflection is a powerful means to improve exercise perspective and exercise adherence (Rickel K. , 2005; Hasey, 2006). Interestingly, when we examine the total amount of variability accounted for by the Rickel subjective and objective scores to the Hamlett Well-Being Inventory scores, approximately 20% is accounted for in the model. In other words, in the integrative wellness wheel the aspects of the objective and subjective account for 20% of what we are trying to

explain in the wheel. A goal in the future is to see to what extent we can examine and explain more of the integrative wellness wheel through perhaps a broader set of questions within the Hamlett.

Repeated Measures ANOVA Hypotheses

1. No difference exists by time (pre, mid, final) on Hamlett Well-Being Inventory scores.
    a. A significant difference was found by time (pre, mid, final) on Hamlett Well-Being Inventory scores Wilk's Lambda $\underline{F}(2, 61) = 8.4$, $\underline{p} = .01$, partial eta $^2 = .22$. A significant difference existed between pre 66.31 $\pm$ 6.3, mid 67.48 $\pm$ 6.4, and final 69.12 $\pm$ 6.4 Hamlett Well-Being Inventory scores.
        i. Perhaps this occurred because the same instructor taught all classes and even though the instructor attempted to teach three different courses, the very nature of being the same instructor could influence content offered to students. As Merleau-Ponty said, "We drag our existence with us; (Merleau-Ponty, 1964) the researcher attempts not to be biased, but alas the teacher is responsible to teach knowingly and without exception. Research shows that having the same instructor teach both the control and intervention group is not necessarily a short-coming but it obviously could affect the outcome of intervention programs (Marsh & Roche, 1977; Merleau-Ponty, 1964)
2. No difference exists with the interaction of time (pre, mid, final) X group (rec course, Pilate's course) on Hamlett Well-Being Inventory scores.

a. No significant difference was found with the interaction of time (pre, mid, final) X group (rec course, Pilates course) on Hamlett Well-Being Inventory scores Wilk's Lambda F (2, 61) = 1.57, p = .22.

    i. All students in all groups showed improvement no matter in which group they were a part. This is also reflected in the original Rickel study to show there was no significant difference in relation to the interaction of time (Rickel, Stoll, & Beller, 2006; Rickel K. , 2005). The results of both fitness groups were statistically significant when evaluated by time with groups combined, although not statistically significant when examined at by group by time, which could be attributed to a small sample size. However, one of the goals of both classes was fitness and hopefully education in both would improve one's cognitive knowledge of fitness and wellness.

3. No difference exists by time (pre, mid, final) on Rickel objective Values Inventory scores.

    a. A significant difference was found by time (pre, mid, final) on Rickel objective Values Inventory scores F (2, 61) = 8.5, p = .001, partial eta ^{2} = .22. A significant difference was found between pre 35.01 $\pm$ 6.8 and final 36.12 $\pm$ 6.4 Rickel Objective scores.

        i. By examining the Rickel, the questions are an objective measurement and one would not expect a difference over time. Students understand they should be committed to a healthy lifestyle but do not actively participate without scientific and logical reasons for healthy lifestyle.

So over time the more education a student receives on the benefits of a healthy life the more likely they are to participate. The prudential approach appeals to the rational nature of humans by suggesting individuals should participate in physical activity because it is the smart or right thing to do; science has shown that exercise is simply good for you ((Kretchmar, 2000; Dieter, 2014; Rickel K. , 2005; Hasey, 2006) . Hopefully education would improve a student's knowledge of the objective purpose of education.

4. No difference exists with the interaction of time (pre, mid, final) X group (rec course, Pilate's course) on Rickel objective Values Inventory scores.
    a. A significant difference was found with the interaction of time (pre, mid, final) X group (rec course, Pilates course) on Rickel objective Values Inventory scores Wilk's lambda $\underline{F}$ (2, 61) = 9.2, $\underline{p}$ = .0001, partial eta ^{2} = .23. The Pilates class was significantly lower at the pre 32.8 $\pm$ 4.3 Rickel Objective scores compared to the rec class 36.7 $\pm$ 7.9. The Pilates class remained lower throughout the pre, mid, and final Rickel Inventory scores compared to the rec course scores.
        i. The objective Rickel questions deal with common reasons for exercise such as fitness, delaying aging, socialization, and/or planned activities. The Rec class had a format which focused on a lecture class followed by an interactive activity it had a high cognitive focus to it, and the high cognitive focus would achieve the goals in the education program and would improve knowledge but probably

would not in the Pilates class. The Pilates class does not have as high of a cognitive knowledge focus rather it is an activity class. In both the Rickel and Hasey studies, they found similar results. In the Hasey study, it was found through narrative learning the students were inspired and challenged to find meaning beyond typical objective measures such as "exercise will control my weight" (Hasey, 2006). In the Rickel study both the control and the intervention group accomplished objective results, but the intervention group had a greater increase which could be attributed to the increase in the cognitive learning objectives (Rickel, Stoll, & Beller, 2006).

5. No difference exists by time (pre, mid, final) on Rickel subjective Values Inventory scores.
    a. A significant difference was found by time (pre, mid, final) on Rickel subjective Values Inventory scores $F(2, 61) = 6.5$, $p = .003$, partial eta $^2 = .18$. A significant difference was found between pre 24.1 ± 5.22 and final 25.1 ± 4.8 Rickel subjective scores.
        i. The Rickel subjective scores and objective scores are qualitatively and quantitatively different. The subjective scores, which are about attitude, perspective, dreaming, creating, and losing oneself in exercise in general, are not typically discussed in exercise curriculum programs. Typically the objective questions of the Rickel focus on the purpose of exercise, controlling weight, aging, and socialization. This difference was also found in the original study. In the 2005

Rickel study, the subjective post-test scores were also significantly higher than pre-test scores. These findings additionally are supported by several other writers (Kretchmar, 2000; Dunn 1961). It appears that a focus on the subjective nature of exercise would be beneficial in exercise adherence. Additionally having the same instructor for both courses would account for improvement with both groups. The Pilates class contains components of stress reduction through exercise and relaxation while the Rec class contained a more in-depth overall education of well-being.

6. No difference exists with the interaction of time (pre, mid, final) X group (rec course, Pilate's course) on Rickel subjective Values Inventory scores.
    a. A significant difference was found with the interaction of time (pre, mid, final) X group (rec course, Pilates course) on Rickel subjective Values Inventory scores Wilk's lambda $\underline{F}$ (2, 61) = 6.3, $\underline{p}$ = .003, partial eta ^{2} = .17. The Pilates class was significantly lower at the pre 32.8 $\pm$ 4.3 Rickel subjective score compared to the rec class 36.7 $\pm$ 7.9.
        i. The Pilates class remained lower throughout the pre, mid, and final Rickel Inventory subjective scores compared to the rec course scores. The Pilates class scored significantly lower at all times periods Pre 21.2 $\pm$ 4.9, mid 22.7 $\pm$ 4.9, and final 23.48 $\pm$ 5.2 compared to Rec class pre 26.3 $\pm$ 4.3 mid 25.8 $\pm$ 4.7 and final 26.3 $\pm$ 5.1 scores. Rec students are outdoor enthusiasts; they are more into sustainability and healthy eating and have previous knowledge of the wellness

components of health and nutrition. All of this would account for their higher scores in discussing the relationship of the Hamlett Well-Being Inventory and the Rickel side related to subjective values. The subjective side of the Rickel is focused on one's perception of self in relationship to exercise and play, movement, and dance. Individuals who see themselves dreaming or losing themselves in movement or define themselves in exercise are positively related to exercise. The subjective side of the Hamlett is about caring, giving, expressing, loving, promoting, and working with others. If one has a positive subjective relationship with exercise and movement, it would appear that one would also have a positive objective relationship with exercise. It appears that this difference existed before class began in all groups and the intervention program did not change the positive objective relationship during the study, however, the relationship got stronger for those participating in the intervention. In all groups, improvement may be a result of learning how to manage stress better. Both exercise groups should have learned how to reduce stress. Pilates would have learned through the practice of mindfulness exercise and the Rec class through a variety of activities, including; breathing techniques, yoga and visualization. From previous studies, we find that stress management is associated with improved metabolic function, weight loss, and improved attitude of which exercise affects all three (Daubenmier, et al, 2007: Oman, et al 2008; Kitamura 2013).

Supporting information from open ended questions

Requiring students to take a course in nutrition and physical activity, plus increasing accessibility to recreational facilities and increasing the opportunities for physical activity on campus, is important in promoting physical activity in the campus community. These changes may result in increased physical activity by students during the college years and after graduation. In addition, offering health and wellness services, such as health and fitness appraisal, nutrition counseling, individualized exercise prescription, and electronic newsletters, may also be important to health promotion on campus (Ferrara, 2009).

Improving well-being in college aged students through a 14 week instructional program was the focus of this study. The intervention program of the Recreation class was focused on the wellness wheel and finding balance. The class did numerous activities and lectures which gave them a multi-faced learning experience. The effect of this intervention appeared to directly affect how the students perceived the experience. They expressed their views about improving cognitive knowledge of total well-being and better facilitated their understanding of the differences between physical health and overall well-being. For example, some students expressed their belief that physical exercise would promote well-being. They believed in being able to achieve greater efficiency in exercise training program. Note their comments below on the open ended questions in the Hamlett instrument.

The question: How have your beliefs about well-being changed over the course of the semester? Were there any particular activities you felt improved your knowledge of wellness more than others?

Student 2: “Yes, at first I believed well-being was only physical and mental but after this course I can see how well-being consists of emotional, social, spiritual, occupational and intellectual. I believe those were actually part of mental well-being but they are in fact their own parts, which are still connected to mental well-being. The social part of the well-being was the concept I learned the most about and enjoyed.”

Student 3: “I feel more confident in my well-being and know that I should never stop doing what I love. I feel like I improved more in everything.”

Student 6: “I realized that a change in diet is a lot more impactful than just food. There is a lot of underlying values that I never noticed before that started coming up once I changed my diet for good.”

Student 7: “Personally, I think physical and emotional well-being are crucial to overall well-being. If you are physically healthy and are emotionally stable, I feel like you have a good shot at having a satisfying life.”

Student 12: “Over the course of the semester I became aware of how important each aspect of the wellness wheel are to my well-being especially the spiritual aspect. Going over the wellness wheel and seeing how they all interlink, as well as, how important to my well-being, this has helped me realize that I had to work on my own spiritual aspect.”

Student 22: “I feel my goal to be an accomplished climber in the future has made me aware of new ways to eat healthier and exercise in different ways. It also helped me pay closer attention to my lifestyle habits to live a healthier life.”

Student 25: “My beliefs about well-being changed by realizing all facets of wellness affect each other.”

Student 26: “Learning more about spirituality, I will remember this for the rest of my life.”

Student 27: “I’ve gained confidence. My time here has been valuable. About to graduate and I feel that I’m prepared.”

Student 28: “Physical and social play are a big part in my life, I love being active, and I love being with friends and family. I have come to realize that some certain habits are not helping me, and I need to slow down on some things.”

Student 29: “I think that emotional aspect is very important to me, because, it can be easy to feel down and worry about everything. If I can maintain a positive attitude, I know I’ll have a good day.”

Student 33: “I believe I have gotten more involved with my classmates by playing games and socializing with them.”

Student 34: “The incorporation of relaxation techniques and positive self-talk really brightens my day? I’ve tried to use this, especially positive self-talk, to push through busy and cluttered days!”

Student 36: “My volunteer experience really helped with how I view others. It was the first time I had volunteered and I don’t know but it just made me feel good. It is something I will for sure do again in the future.”

From the above responses, besides the fact that there was a statistical significant improvement in cognitive knowledge of total well-being in college aged students, student open ended responses were positive. Despite some limitations indicated in chapter one, the students clearly indicate that the information learned achieved the intended goals of this study. The results of this study argue that participants improved in their overall healthy

attitudes. What is of particular note is in the student comments, when they stated that they could understand what they were lacking in a healthy balanced life, and many then chose to work on particular areas. Often only statistical results are examined but in this study through student response, we can see that students' overall well-being is different with each individual. Some students are over stressed while others are inactive, some do not eat healthy, and others may be lacking in a sense of spirituality. The open comments of the students help us have a better understanding of their needs, such as, "I have gotten more involved with other students through game playing and socialization, which improves their social and self-esteem".

This study demonstrates the interconnectedness and importance of well-being in improving all dimensions of a healthy individual "The characteristics of the healthy person over the lifespan are described under five life tasks, which are likened to a wheel of wholeness (Myers, et al,. 2005). Self-esteem was significantly related to physical and mental health in a survey conducted by the California Department of Mental Health (Mecca, Smelser, & Vasconcellos, 1989). Those with higher self-esteem were more likely to be healthy, mentally and physically and felt they had more control over their lives. Increased longevity has been shown in individuals with more social contacts and involved in volunteer work (House, Robbins, & Metzner, 1982).

In responses from students in the present study, the aspect of spirituality greatly impacted them. In a seminal study of the spiritual effects of inward reflection and gratitude, results showed participants increased happiness by 25 percent, boosted their energy levels, and improved their relationships (Emmons & McCullough, 2004). The students' reflections

noted in the open-ended questions of the present study underscore the value of integrated well-being.

The current literature review also supported a holistic approach to integrated well-being. The importance of being accountable for one's overall well-being should extend beyond the mere physical (Dunn H. L., 1961). The old concept from Covert Bailey's 1984 book *Fit or Fat* is a flawed assumption; we are not one or the other and many strong, physically fit people are not healthy. Our universal obsession with chiseled abs and lean muscle mass should not be our focus but rather we, as health professionals, should have a multi-faceted view of health (Powers, 1994; Sackney & Miller, 2000). We professionals also have a misconception that being active in sports is a sign of good health. While sports can be beneficial to physical health, if played wisely, we see an abundance of overtraining, and sports injuries in young children, which often result in major surgeries due to overuse (Widmaier, 1999).

Stress factors can significantly impact our lives, from physical afflictions to intellectual disabilities, which can result in students: lower grades, depression, and isolation (Block, et al, 2009; Ferrara, 2009). Student responses such as "I think that [sic] emotional aspect is very important to me, because, it can be easy to feel down and worry about everything. If I can maintain a positive attitude, I know I'll have a good day". The importance of self-talk and reduction of stress is important to a healthy life.

Within most universities, the discussion of spirituality is often avoided as there are many misconceptions that spirituality and religion are synonymous and at a public institution we avoid discussions about religion. By avoiding spiritualty, we thus avoid an important conversation about reflection and beliefs which go beyond religion. Our personal

belief system is not necessarily tied to organized religion. These personal values should be promoted to help guide students in their daily lives. Studies show that including spirituality in one's life can help give meaning and purpose (Hettler, 1980; Adams, et al, 1997; Mackey & Sparling, 2000). One student in the present study wrote, "Learning more about spirituality, I will remember this for the rest of my life."

Chapter Six: Implications, Recommendations, Conclusions

The purpose of this study and hypothesis was to improve cognitive knowledge of total well-being in college aged students through a 14 week instructional program focusing on integrated wellness. Below find a discussion of findings, with implications, conclusions, and recommendation.

Research Implications

It appears that an integrated wellness curriculum using cognitive knowledge of total well-being in college aged students through a 14 week instruction program improves integrated wellness. While both groups showed improvement it is meaningful to note the intervention group showed a continually growth throughout the class, while the control group showed started lower and had a growth during the beginning of the study and never reached the level of the intervention group. A number of researchers have attempted to focus on the integrated wellness training to improve total well-being, though not in college age students (Helliwell, & Wang, 2011; Anspaugh, et al., 2004). According to Helliwell and Wang (2011), understanding the significance of integrated wellness is imperative in life. Boarini, Comola, Smith, Manchin and de Femke (2012) in their paper "*What Makes for a Better Life*?" argue that personal transformations are the effective means to create meaning in constructing or reconstructing healthful life styles. These authors argue that when such transformations takes place, then the maturation of the research discipline on wellness becomes easy (Boarini, et al., 2012). The present study focused on the integrated wellness training to improve total well-being in college aged students, in order to help students expand their cognitive skills on wellbeing beyond the physical; thus, creating meaningful experience in personal wellbeing. These are crucial areas of overlap between ideas generated

from the research, which may benefit students who enroll in an integrative wellness approach.

Based on the research results, it appears that the use of an exercise training program has some effect on improving cognitive knowledge of total well-being in college aged students. However, there is a limitation to this finding in that there were two different classes studied and the experimental design approach employed influences the findings of the study in such classes. A researcher, no matter how hard she tries, still biases what occurs in the classroom. Moreover, students enrolled in the integrated class (the recreation students) may have more and better knowledge on wellness beyond the physical than the Pilates class which was enrolled in a physical directed curriculum, i.e., the Pilates (Frey, & Stutzer, 2008; Eurostat, 2005). Obviously, students cannot achieve effective skills on integrated wellness without significant knowledge about wellness. If we want to teach a total fitness/wellness continuum, this present study supports the notion that an appropriate teaching approach would be an integrated wellness design.

Limitations of the Study

There are some limitations resulting from this study, some of which arise from both the Recreational class and Pilate's class taught by the same instructor. Also, the recreational class may have more upper class division (i.e. juniors, seniors) students than the Pilates class. This exercise training program was bounded by a single semester. Subjects were college aged students in quest of their academic aims. Many students become so focused on finishing school they do not take time to absorb the experience or take in life lessons along the way. Therefore, wellness as a lifelong endeavor could be impacted by this training program experience and the overall learning experiences. Another limitation of this study is

its reliance on self-reported measures of healthy behaviors. Students generally want to please instructors and when called on to complete self-reporting can skew results by reporting what they believe an instructor would want them to put down rather than report the actuality of an event.

No two teachers are alike and the single variable in the study is the person teaching the material of which we have no control. We cannot replicate the teacher or the teaching style. This single factor directs how the curriculum would be presented and how it is understood.

It is difficult to generalize information from this research study because the subjects enrolled in these activity programs were a self-reflected group of participants possibly practicing healthy behaviors. The subjects are seeking to study the aspect of improved well-being; thus, they may be more accepting of new knowledge than other people.

Recommendations for Future Research

Further investigation on integrated wellness training should focus on what motivates people to improve total well-being by using qualitative and quantitative research data collection techniques. Arguments made from the present study demonstrate need of integrated wellness into the university's curriculum and into a student's life. Further research is needed to determine the long-term effects of the curriculum.

Conclusions

Integrated wellness education is an evolving research field in which there are fertile grounds for theoretical and practical research construct. The purpose of the study and hypothesis was to help students improve their knowledge of integrated wellness by including the six dimensions of well-being. By doing so, individual awareness of complete

wellbeing was increased beyond the physical. This study attempted to examine the overall concept of wellness and include understanding of each of the separate dimensions within wellness. The aim was to scrutinize the overall concept of wellness and each of the separate dimensions within wellness. The study also attempted to create a personal understanding of the difference between physical health and overall well-being. It is important how we view ourselves. Kretchmar (2000) argues that we have a body/self, which is built upon Merleau-Ponty's (1964), and Polanyi & Prosch's, (1975) perception that we are not dualistic, that we experience our world through our bodily self, thus we are our body selves.

Colleges and universities are potentially important settings for the promotion of well-being strategies. Possible strategies include development of a curriculum to educate students on healthy lifestyle choices but additionally the curriculum could include encouraging alternative healthy modes of transportation on campus, more bicycle trails, dining halls with more healthy options, stress reduction classes, enhanced nutrition counseling, and electronic newsletters to promote health on campus. Previous studies have examined whether participation in a health related courses during college results in adoption and maintenance of regular activity after graduation from college (Slava, Laurie, & Corbin, 1984; Brynteson & Adams, 1993). These studies suggest that students will continue to learn about the benefits of health and exercise after graduation. Knowledge will help students make better decisions regarding well-being in the future (Corbin & Laurie, 1978); Cardinal & Spaziani, 2007). The other studies suggest that participation in a college level conceptually based physical education class improved alumni's exercise attitudes and increased the frequency and types of physical activity that they participated in after graduation (Slava, et al 1984; Brynteson & Adams, 1993).

We need to view our ultimate well-being by working on creating a healthy whole body; a body in balance physically, emotionally, socially, spiritually, intellectually and occupationally. Realizing as life evolves so does our state of balance and it will be an ongoing task to remain in balance. “It is likely that a long-lasting sense of happiness comes at least in part from achieving our values and goals. Thus, the concept of subjective well-being reflects more than simply having fun—it also recognizes what people believe is important in life Diener, Saptya, & Suh, 1998).

Based on the present study it is important to enhance the student life experience to institute a core course based on this study for students to take their first or second semester of school. By doing so, students will be over-all healthier, know where to look for help when their lives are not in balance, understand the benefits of volunteerism and lead more involved healthy lives not only while on campus but in their lives after the university. We know students have an awareness of the importance of diet, health, and exercise but do not consistently practice these behaviors (Ferrara, 2009). Unfortunately, most courses use a lecture format. The argument this study makes is to allow for a curriculum that is interactive. We have known for years that students learn in a variety of ways: visual, aural, verbal, physical, solitary, social and logical (Gardner, 1983), but we tend to teach students primarily through aural and verbal, thus excluding success for many students. The present research curriculum is a good start towards that goal and hopefully more improvements will continue with the curriculum and future research.

As universities move towards web-based learning, educators need to find more creative ways to reach all students, no matter what their learning style may be. This present

study is a beginning to help students create a better balance in their lives and learn in a way that suits their intelligence.

References

Adams, T. B., Bezner, J. R., Drabbs, M. E., Zambarano, R. J., & Steinhardt, M. A. (2000). Conceptualization and measurement of the spirituality and psychological dimensions of wellness in a college population. *Journal of American College Health, 48,* 165-173.

Adams, T., Bezner, J., & Steinhardt, M. (1997). The conceptualization and measurement of perceived wellness: Integrating balance across and within dimensions. *American Journal of Health Promotion, 11,* 208-218.

Anspaugh, D., Hamrick, M., & Rosato, F. (2004). *Wellness and fitness for life* (6th ed.). Boston, MA: McGraw Hill.

Arnett, J. J. (1994). Are college students adults? Their conceptions of the transition to adulthood. *Journal of Adult Develoment, 1*(4), 213-224.

Block, J. P., He, Y., Zaslavsky, A. M., Ding, L., & Ayanian, J. Z. (2009). Psychosocial stress and change in weight amoung US adults. *Journal of Epidemiology, 170*(2), 181-192.

Boarini, R., Comola, M., Smith, C., Manchin, R., & de Femke, K. (2012). What makes for a better life?: The determinants of subjective well-being in OECD countries - Evidence from the Gallup World Poll. *OECD Statistics Working papers*. OECD. Retrieved from http://dx.doi.org/10.1787/5k9b9ltjm937-en

Brouns, F., & Cargill, C. (2003). *Essentials of sports nutrition.* Hoboken: John Wiley & Sons.

Brynteson, P., & Adams, T. M. (1993). The effects of conceptually based physical education programs on attitudes and exercise habits of college alumni after 2 to 11 years of follow-up. *Research Quarterly, 64*(2), 208-212.

Cardinal, B. J., & Spaziani, M. D. (2007). Effects of classroom and virtual lifetime fitness for health instruction on college students' exercise behavior. *The Physical Educator, 64*(4).

Cardinal, B. J., Sorensen, S. D., & Cardinal, M. K. (2012). Historical perspective and current status of the physical education graduation requirement at American 4-year colleges and universities. *Research Quarterly for Exercise and Sport, 83*(4), 503-12.

Cardinal, B., & Kosma, M. (2004). Self-efficacy and the stages and processes of change associated with adopting and maintaining muscular fitness-promoting behaviors. *Research Quarterly for Exercise and Sport, 75*(2), 186-196.

Case, A., & Paxson, C. (2006). Children's health and social mobility. *The Future of Children, 16*(2), 151-173.

Center for Disease Control. (2004, May 15). *Center for Disease Control's role in promoting healthy lifestyles: Testimony of Julie L. Gerberding before the Committee on Appropriations.* Retrieved from Center for Disease Control: http://www.cdc.gov/washington/testimony/ob011703.htm

Center for Disease Control. (2011). *Lower direct medical costs associated with physical activity.* Retrieved from Center for Disease Control: http://www.cdc.gov/needphp/dnpa/press/archive/lower_cost.htm

Center for Disease Control. (2011). *Physical activity and health: The benefits of physical activity.* Retrieved from Center for Disease Control: http://www.cdc.gov/physicalactivity/everyone/health

Churchill, J. D., Galvez, R., Colcombe, S., Swain, R. A., Cramer, A. F., & Greenough, W. T. (2002). Exercise, experience and the aging brain. *Neurobiology Aging, 23*(5), 941-955.

Cohen, S. (1988). Psychosocial models of the role of social support in the etiology of physical disease. *Health Psychology, 7*, 269-297.

Corbin, C., & Laurie, D. (1978). Exercise for a lifetime: An educational effort. *The Physician and Sportsmedicine, 7*(1), 51-55.

Crose, R., Nicholas, D. R., Gobble, D. C., & Frank, B. (1992). Gender and wellness: A multidimensional systems model for counseling. *Journal of Counseling and Development*, 149-157.

Daubenmier, J., Weidner, G., Sumner, M. D., Mendell, N., Merritt-Worden, T., Studley, J., & Ornish, D. (2007). The contribution of changes in diet, exercise, and stress management to changes in coronary risk in women and men in the multisite cardiac lifestyle intervention program. *Annals of Behavioral Medicine,* 57-68.

Diener, E. (2000). Subjective well-being: The science of happiness, and a proposal for national index. *American Psychologist, 55*, 34-43.

Diener, E., Sapyta, J. J., & Suh, E. (1998). Subjective well-being is essential to well-being. *Psychological Inquiry, 9*, 33-37.

Dieter, B. (2014). Man and machine: A pedagogical and physiological approach to treating Type II Diabetes. *Ph.D. Dissertation*. Moscow, ID: University of Idaho.

Dunn, H. L. (1959). High-level wellness for man and society. *American Journal of Public Health, 49*(6), 786-792.

Dunn, H. L. (1961). *High level wellness.* Washington DC: Mt Vernon.

Durlak, J. (2000). Health promotion as a strategy in primary prevention. In D. Cicchetti, J. Rappaport, I. Sandler, & R. Weissberg, *The promotion of wellness in children and adolescents* (pp. 221-241). Washington, DC: Child Welfare League Association Press.

Efklides, A., & Moraitou, D. (2013). *A positive psychology perspective on quality of life.* New York: Springer Books.

Emmons, R. A., & McCullough, M. E. (2004). *The psychology of gratitude.* New York, NY: Oxford University Press.

Etnier, J. L., Salazar, W., Landers, D. M., Petruzzello, S. J., Han, M., & Nowell, P. (1997). The influence of physical fitness and exercise upon cognitive functioning: A meta-analysis. *Journal of Sport and Exercise Psychology, 19,* 249-277.

Eurostat Commission. (2005). *Eurostat your key to European statistics*. Retrieved 2014, from Eurostat: http://www.ec.europe.eu

Fahlberg, L. L., & Fahlberg, L. A. (1997). Wellness re-examined; A cross-cultural perspective. *American Journal of Health Studies, 13*(1), 8-9.

Ferrara, C. M. (2009). The college experience: Physical activity, nutrition, and implications for intervention and future research. *Journal of Exercise Physiology Online, 12*(1), 23-35.

Ferrer-i-Carbonell, A. (2005). Income and well-being: An empirical analysis of the comparison income effect. *Journal of Public Economics, 89,* 997-1019.

Frey, B. S., & Stuzer, A. (2000). Happiness, economy and institutions. *The Economic Journal*, *110*(466), 918-938.

Gandhi, M. K., & Desai, M. K. (1987). *Gandhi an autobiography: The story of my experiments with truth.* London: Penguin Books.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Goleman, D. (1995). *Emotional intelligence.* New York: Bantam Books.

Grad, F. (1946). *Preamble to the Constitution of the World Health Organization.* Retrieved from NCBI National Center for Biotechnology Information: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2567708/pdf/12571728.pdf

Greenberg, J. S., Dintiman, G. B., & Oakes, B. M. (2004). *Physical fitness and wellness.* Champaign, IL: Human Kinetics.

Hales, D. (2005). *An invitation to health* (11th ed.). Belmont, CA: Thomson & Wadsworth.

Hamlett, P. L. (2015). Teaching Philosophy. Moscow, Idah0: University of Idaho.

Hasey, C. (2006). *Facilitating a personal connection to exercise.* Moscow: Master's Thesis University of Idaho.

Hastings, K. S., Coleman, A. D., & Bird, R. S. (nd). *Nutrition for sports people.* Retrieved from Sportsheet-Sport, Leisure & Olympics Service Kent County Council: http://www.kentsport.org/pdfs/nutrition_sportsheet.pdf

Hatch, R. L., Burg, M. A., Naberhaus, D. S., & Hellmich, L. K. (1998). The spiritual involvement and beliefs scale: Development and testing of a new instrument. *The Journal of Family Practice, 46*(6), 476-484.

Hatfield, T., & Hatfield, S. R. (1992). As if your life depended on it: Promoting cognitive development to promote wellness. *Journal of Counseling and Development, 71*, 164-167.

Helliwell, J. F., & Wang, S. (2011). Weekends and subjective well-being. *Social Indicator Research, Springer, 116*(2), 389-407.

Hermon, D. A., & Hazler, R. J. (2011, Dec 23). Adherence to a wellness model and perceptions of psychological well-being. *Journal of Counseling & Development, 77*(3), 91-95.

Hettler, B. (1977). *About wellness.* Retrieved from National Wellness Institute: http://www.nationalwellness.org/?page=AboutWellness&hhSearchTerms=%22conscious%2c+and+self-directed%22

Hettler, B. (1980). Wellness promotion on a university campus. *Family and Community Health: Journal of Health Promotion and Maintenance, 3*, 77-95.

Hettler, B. (2014). *NWI history*. Retrieved from National Wellness Institute: http://www.nationalwellness.org

House, J. S., Robbins, C., & Metzner, H. L. (1982). The association of social relationships and activities with mortality. *American Journal of Epidemiology, 116*, 123-140.

Howard, R. L. (2014). *NAZcare integrated wellness*. Retrieved 03 20, 2014, from NAZcare: http://www.nazcare.org/

Idler, E. I. (1995). Self-rating of health: Do they also predict change in functional ability? *the Journals of Gerontology, 50*(6), 344-353.

Jackson, A. W. (2010). *Physical activity for health and fitness: Lab manual.* Champaign, IL: Human Kinetics.

Kane, R. L. (1996). Health perceptions: Real and imagined. *American Behavioral Scientist, 39*(6), 707-716.

King, M. L. (1958, May). Advice for living. *Ebony*, p. 112.

Kitamura, M. (2013, November 21). *Harvard yoga science of meditation benefits.* Retrieved from Bloomberg News: www.bloomberg.com

Kolcaba, K. (1992). Holistic comfort: Operationalizing the construct as a nurse-sensitive outcome. *Advances in Nursing, 15*(1), 1-10.

Kretchmar, R. S. (2000). Moving and being moved: Implications for practice. *Quest, 52*(3), 260-272.

Lambert, C. (1998). *Mind over water: Lessons on life from the art of rowing.* Boston: Houghton Mifflin.

Leafgren, F. (1990). Being a man can be hazardous to your health: Life-styles issues. In D. M. Leafgren, *Problem Solving Strategies and Interventions for Men in Conflict* (pp. 265-311). Alexandria, VA: American Assoication for Counseling and Development.

Mackey, K. M., & Sparling, J. W. (2000). Experiences of older women with cancer receiving hospice care: Significance for physical therapy. *Physical Therapy, 80*(5), 459-468.

Marsh, H. W., & Roche, L. A. (1997). Making students' evaluations of teaching effectiveness effective: The critical issues of validity, bias, and utility. *American Psychologist, 52*(11), 1189-1197.

McAuley, E., Jerome, G. J., Elavsky, S., Marquez, D. X., & Ramsey, S. N. (2003). Predicting long-term maintenance of physical activity in older adults. *Preventive Medicine, 37*(2), pp. 110-118.

McGee, M., Nagel, L., & Moore, M. K. (2003). A study of university classroom strategies aimed at increasing spiritual health. *College Student Journal, 37*(4), 583-590.

Mecca, A. M., Smelser, N. J., & Vasconcellos, J. (1989). *The Importance of self-esteem.* Berkely: University of California Press.

Merleau-Ponty, M. (1964). *The primacy of perception; And other essays on phenomenological psychology, the philosophy of art, history and politics.* (J. M. Edie, Ed.) Evanston: Northwestern University Press.

Metheny, E. (1968). *Movement and meaning.* New York: McGraw-Hill.

Miller, J. W. (2005). Wellness: The history and development of a concept. *Spektrum, 1*, 84-160.

Miller, W. R., & Thoresen, C. E. (1999). Integrating spirituality into treatment. In W. R. Miller, *Spirituality and Health* (pp. 3-18). Washington, DC: American Psychological Association.

Myers, J. E., Sweeney, T. J., & Witmer, M. (2005). *A holistic model of wellness.* Retrieved from Mindgarden: http://www.mindgarden.com/products/wells.htm

Oman, D., Shapiro, S. L., Thoresen, C. E., Plante, T. G., & Flinders, T. (2008). Meditation lowers stress and supports forgiveness among college students: A randomized controlled trial. *Journal of American College Health, 56*(5), 569-578.

Pelletier, D. L., & Rahm, M. (1988). Trends in body mass index in developing countries. *Food and Nutrition Bulletin*, pp. 223-239.

Perrin, K. M., & McDermott, R. J. (1997). The spiritual dimension of health: A review. *American Journal of Health Studies, 13*(2), 899-908.

Pilates, J. (1945). *Return to life through contrology.* New York: J. J. Augustin.

Polanyi, M., & Prosch, H. (1975). *Meaning.* Chicago: University of Chicago Press.

Powers, D. (1994). Understanding and working with an emphasis on wellness. *Thresholds in Education, 20*(1), 4-7.

Public Health Agency of Canada (PHAC). (2008). *Canada's response to WHO Commission on social determinants of health.* Retrieved from Public Health Agency of Canada: http://www.phac-aspc.gc.ca/sdhdss/indes-eng.php

Quimby, G. (1888). Phineas Parkhust Quimby. *The New England Magazine, 6*(33), pp. 267-276.

Quimby, P. (1864). *Curing without medicine.* Retrieved March 5, 2014, from Phineas Parkhurst Quimby Resource Center: http://ppquimby.com/articles/curing_withou_medicine.htm

Renger, R. F., Midyett, S. J., Mas, F. G., Erin, T. E., McDermott, H. H., Papenfuss, R. L., . . . Hewitt, M. J. (2000). Optimal living profile: An inventory to assess health and wellness. *American Journal of Health Promotion, 24*(6), 403-412.

Rickel, K. (2005, April). Exercise adherence:. *Exercise adherence: A philosophical shift promoting a life narrative based curriculum and technology to augment commitment to exercise.* Moscow, ID: Ph.D. dissertation University of Idaho.

Rickel, K. S., Stoll, S. K., & Beller, J. (2006). A life narrative-based exercise philosophy and curriculum for exercise adherence. *Research Quarterly for Exercise and Sport, 77*(1), A31-32.

Rickel, K., Stoll, S. K., Beller, J. M., & Hamlett, P. (2004). Rickel Value Inventory. Retrieved from file:///C:/Users/pegh/AppData/Local/Microsoft/Windows/Temporary%20Internet%2

0Files/Content.Outlook/IHMMPRXW/Rickel%20Value%20Inventory%201_6_04.htm

Robbins, G., Powers, D., & Rushton, J. (1992). A required fitness/wellness course that works. *Journal of Physical Education, Recreation & Dance*, 17-21.

Robinson, D. E. (1965). *The story of our health message: The origin, character, and development of health education in the Seventh-day Adventist Church* (3rd ed.). Nashville, TN: Southern Publishing Association.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 2001*, 141-166.

Ryff, C. D. (1989). Beyond Ponce d Leon and life satisfaction: New directions in quest of successful ageing. *International Journal of Behavioral Development, 12*(1), 35-55.

Sackney, L., Noonan, B., & Miller, C. M. (2000). Leadership for educator wellness: An exploratory study. *International Journal of Leadership in Education, 3*(1), 41-56.

Saint Sing, S. (2004). *Spirituality of sport: Balancing body and soul.* Cincinnati, OH: Anthony Messenger Press.

Saradananda, S. (2008). *Chakra meditation: Discover energy, creativity, focus, love, commincation, wisdom, and spirit.* New York: Sterling Publishing.

Seaward, B. L. (2002). *Managing stress: Principles and strategies for health and well-being* (3rd ed.). Boston`, MA: Bartlett and Jones.

Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5-14.

Slava, S., Laurie, D. R., & Corbin, C. B. (1984). Long-term effects of a conceptual physical education program. *Research Quarterly Exercise Sport, 22*(2), 161-168.

Still, A. T. (1899). *Philosophy of osteopathy.* Kirksville, MO: A.T. Still.

Teixeira, P. J., Carraca, E. V., Markland, D., Silva, M. N., & Ryan, R. M. (2012). Exercise, physical activity, and self-determinatin theory: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 78-108.

Terrell, J. (2013). *A guide to meditation benefits.* Retrieved from Awakenment: http://www.awakenment-wellness.com/meditation-benefits.html

Thomas, C. (1983). *Sport in a philosophic context.* Buffalo: Lea & Febiger.

US Health News. (2010). *Information on fitness.* Retrieved from US Health News: http://health/usnews.com/health-conditions/heart-health/information-on-fitness

Wellness. (1971). *The compact edition of the Oxford English Dictionary* (Vol. 2). Oxford: Oxford University Press.

Westgate, C. E. (1996). Spiritual wellness and depression. *Journal of Counseling and Development, 75*, 26-35.

Wethington, E., & Kessler, R. C. (1986). Perceived support, received support, and adjustment to stressful life event. *Journal of Health and Social Behavior, 27,* 78-89.

Widmaier, E. P. (1999). *Why geese don't get obese: How evolution's strategies for survival affect our everyday lives.* New York: W. H. Freeman.

Witmer, J. M., & Sweeney, T. J. (1992). A holistic model for wellness and prevention over the life span. *Journal of Counseling and Development, 71*(2), 140-148.

World Health Organization. (2003). *Physical activity direct and indirect health benefits*. Retrieved from World Health Organization: http://www.who.int/hpr/physactiv/health.benefits.shtml

Appendix A: IRB Approval

University of Idaho

January 6, 2014

Office of Research Assurances
Institutional Review Board
875 Perimeter Drive, MS 3010
Moscow ID 83844-3010

Phone: 208-885-6162
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To: Sharon Stoll
Cc: Peg Hamlett

From: Traci Craig, PhD
Chair, University of Idaho Institutional Review Board
University Research Office
Moscow, ID 83844-3010

Title: 'Integrated Wellness Training to Improve Physical Fitness'

Project: 14-002

Approved: 01/06/14
Expires: 01/05/15

On behalf of the Institutional Review Board at the University of Idaho, I am pleased to inform you that the protocol for the above-named research project is approved as offering no significant risk to human subjects.

This approval is valid for one year from the date of this memo. Should there be significant changes in the protocol for this project, it will be necessary for you to resubmit the protocol for review by the Committee.

Traci Craig

Appendix B: Rickel Value Inventory

STUDENT ID #

The following statements involve your values and commitment to exercise, physical play and human movement activity. Carefully read the comment and respond in one of five ways: **Great, Much, Some, Little, or No. CIRCLE ONLY ONE ANSWER**. At the end of the 18 items, you will be asked to rank the 4 most important and 4 least important to you.

1. I exercise, physically play, or move for physical fitness and/or health.	Great	Much	Some	Little	No
2. I exercise, physically play, or move to control my weight.	Great	Much	Some	Little	No
3. I exercise, physically play, or move to delay aging.	Great	Much	Some	Little	No
4. I exercise, physically play, or move to maintain or improve my figure.	Great	Much	Some	Little	No
5. I exercise, physically play, or move to meet new people or socialize with others.	Great	Much	Some	Little	No
6. Socialization is important in my play or exercise/movement program.	Great	Much	Some	Little	No
7. I incorporate exercise, physical play, or movement into my day.	Great	Much	Some	Little	No
8. I have a planned daily time for exercise, physically play, or movement activity.	Great	Much	Some	Little	No
9. If work, school, or other activities interfere, I cancel my exercise, physical play, or movement activity.	Great	Much	Some	Little	No
10. I need music or a video to help me get through my exercise, physical play, or movement activity.	Great	Much	Some	Little	No

11. I need an instructor or another person to motivate me to me stay on task in exercise, physical play, or movement activity.	Great Much Some Little No
12. I define who I am by my exercise, physical play, or movement activity.	Great Much Some Little No
13. I look forward to exercise, physical play, or movement activity.	Great Much Some Little No
14. I define my day by my exercise, physical play, or movement activities.	Great Much Some Little No
15. I dream about exercise, physical play, or movement activity.	Great Much Some Little No
16. I intentionally create rhythmic patterns during exercise, physical play, or movement activities	Great Much Some Little No
17. I lose myself in exercise, physical play, or movement activities, not knowing time and space.	Great Much Some Little No
18. When I watch movement, dance, or physical play on television, I am inspired to try the activity.	Great Much Some Little No
Rank the most important items to you from above to your exercise/play/movement experience.	Great Much Some Little No
Most Important Item _____	Least Important Item _____
2nd Most Important Item _____	2nd Least Important Item _____
3rd Most Important Item _____	3rd Least Important Item _____
4th Most Important Item _____	4th Least Important Item _____
Open ended questions 19. Describe what motivates you to exercise, play, or be in movement activities.	
20. Do you plan to keep exercise, play, and or movement in your future? If so, why.	

Please complete the following information:

Male___ Female___

Age: 18-24___ 25-30_____31- 37_____38-44____45-50_____ 51-57_____58-64___

Enrolled College Student: Yes___ No ____ What

Year: Fr____So___Jr___Sr___Major:_____Faculty or Staff: Faculty_____ Staff_____

What discipline/or field._____

Number of years participating in movement or planned exercise programs:

_____ _____

Days per week you typically exercise or move____

Do you participate in classes ___sports ___or dance? ___

Describe._____

Do you participate in indoor ___ or outdoor activities___? Describe: _____

Do you typically eat prior to participating in movement or planned exercise

programs? yes____ no____

Describe:

_____

Appendix C: Hamlett Supplemental Well – Being Questions: (HSQ)

Please circle the answer that is your first instinct.

1. My diet is optimal. Great Much Some Little No
2. My intake consists mainly of whole and natural foods.

   Great Much Some Little No
3. I receive optimal sleep and rest daily. Great Much Some Little No
4. I engage in beneficial movement and exercise daily.

   Great Much Some Little No
5. I know how to my breathing patterns to promote well-being.

   Great Much Some Little No
6. I have a problem-solving orientation toward life.

   Great Much Some Little No
7. I usually have a positive attitude and positive thoughts toward school and work.

   Great Much Some Little No
8. I have a sense of humor. Great Much Some Little No
9. I possess self-awareness – I am objective about my strengths, limitations, and possibilities. Great Much Some Little No
10. I am able to perceive reality with clarity. Great Much Some Little No
11. I love and accept myself and others. Great Much Some Little No
12. I am able to give and receive love from myself and others.

    Great Much Some Little No
13. I am able to express my own truth. Great Much Some Little No

14. I am able to have deep feelings of identification, sympathy, and affection for others.

    Great Much Some Little No

15. I engage in relationships that are wholesome and loving.

    Great Much Some Little No

16. I engage in relationships that promotes growth in myself and others.

    Great Much Some Little No

17. I am able to set healthy boundaries with others.

    Great Much Some Little No

18. I engage in work that is meaningful. Great Much Some Little No

Open-ended Questions

1. Of the areas of the Wellness Wheel (physical, emotional, social, spiritual, occupational or intellectual) which in your life do you believe is more important to your overall well-being?

2. Which areas of the Wellness Wheel do you feel you are more competent in and which ones do you feel less competent in?

3. How have your beliefs about well-being changed over the course of the semester? Were there any particular activities you felt improved your knowledge of wellness more than others? In not please explain.

4. Comments?

Appendix D: Integrated Wellness Lesson Plan Example

Objective: To enable participants to better understand and develop a sense of overall well-being by focusing on physical, social and emotional dimensions of wellness. By the end of the data collection participants will be better able to: define wellness and identity dimensions of well-being -know the importance of taking care of their wellness -identify the areas within the dimensions of wellness that are vital to college success -identify and make healthy choices to maintain and/or improve their wellness -utilize campus wellness resources

Topics to include:

Coping with Stressors
Eating for Health
Emotional Barriers
Physical Fitness
Relationships
Wellness Resources

Class outline: Group Discussion, small group work and completing exercises.

Example of Activities:

1. Brainstorm: Discuss information from "Being Well Taking Care of Yourself" Does anyone have any comments and/or questions about the nine dimensions of wellness listed in your textbook? Refer to handout & definitions in textbook.

2. Lecture – Define Wellness -Wellness is so much more than feeling good and not being sick. It is a lifestyle of balanced, healthy attitudes and choices designed to improve your personal performance on a variety of levels and enhance the overall quality of your life. As students, being well is a key for academic and personal success. Wellness is achieved by

reflecting on our circumstances, habits and choices through a number of dimensions: physical, emotional, spiritual, social, intellectual, environmental, occupational, and cultural.

3. Group Work: Break off into groups and come up with a list of healthy and unhealthy behaviors; you can refer to your handout. We will ask you to share results with class.

Discussion: It is important to be aware of all the dimensions of wellness but as college student there a few areas within these dimensions that you should focus more attention on.

Physical Wellness: You Are What You Eat, Dietary habits play a key role in both how long we live and how well we feel. A healthy diet is one that features a proper variety and balance of foods to supply our body with nutrients; essential dietary factors required for growth, energy, and repair. Exercise is a primary key to establishing a healthy lifestyle. Keep in mind that what may fit one person exercise-wise may not fit another, but do something! ASK: What is the best exercise? The one you will do. And recognize that for most of us Sleep is the first thing to go when we get busy. For many there just aren't enough hours for classes, studying, partying, visiting with friends, and all the other interesting activities available. However, an essential self-management skill for doing well in college is to get at least 8 hours of good, regular sleep every night. Binging and purging with sleep getting too few hours during the week and trying to catch up on the weekend will hurt the body.

Emotional Wellness is another important wellness dimension to spend some time discussing. Becoming self-aware and exercising self-control are fundamental elements of emotional wellness. Learning to adjust to change, reaching out to others, discovering your passions and expressing emotions appropriately are all part of emotional wellness. Learning to live with and manage a certain level of stress in your life is also central to overall emotional

wellbeing. Stress is the area of emotional wellness that affects college students the most. We will spend a whole class on stress and stress management.

Social Wellness: Relationships can create stress if they aren't going well, but they can also help you deal with your stress. We will spend a whole class on healthy relationships

Summary, Questions -Review "Wellness Resources" handout. -Overall well-being is essential to academic success and personal satisfaction during your college years. Healthy habits formed now will continue to serve you well for the rest of your life. Your health, in all its manifestations, is something to be cherished. Believing in your ability to perform healthy behaviors will influence your actual choices, your degree of effort to make the change, your persistence, and your emotional reactions to the new lifestyle.

Outline

I. Changes in Health and Wellness Over Time

A. Significant public health achievements

1. From 1900 to 1999, changes in public health added at least 25 years to the life span of the average American.
2. Review the CDC list of the top 10 significant public health achievements in the 20th century (this list is provided in the student text).

Online Student Resource: Are Life Spans Lengthening or Shortening?

B. Challenges to wellness

1. Obesity and overweight

a. In 2004, approximately 34 percent of U.S. adults over age 20 had a BMI of 30 or higher.

b. Obesity and overweight are significant problems because they increase the risk of developing chronic diseases.

2. Infectious diseases

a. A reemergence of infectious diseases is occurring.

b. Bacteria are developing resistance to antibiotics because of misuse and overprescribing.

c. Global travel is helping to spread disease-causing pathogens.

d. Crowded living conditions also contribute to the reemergence of infectious diseases.

Online Student Resource: Superbugs: News From the Bacteria Warfront

3. Access to health insurance

a. Review the statistics in the student text from the Henry J. Kaiser Family Foundation.

b. Health insurance ultimately affects the type of health care received.

C. Healthy People 2010

1. The Healthy People initiative was started by the U.S. government.

2. The goal is to prevent disease and to improve quality of life.

3. Reports are published every 10 years.

4. The report guides plans and goals for state health departments, communities, professional organizations, and others.

5. This national framework helps groups create comprehensive plans to improve and evaluate the health of communities.

II. Six Dimensions of Wellness

A. Refer to figure 1 in the student text for a graphic representation.

B. All six types must be present for the overall wellness of a person.

C. Physical wellness refers to the wellness of the physical body.

1. Physical wellness is important for the proper functioning of the body.

2. Exercise and proper diet help ensure physical wellness.

3. See the student text for a bulleted list of nutrition tips.

4. Not using tobacco or illicit drugs is also important.

Online Student Resource: Where Are You on the Stages of Physical Activity Scale?

D. Intellectual wellness addresses creative and mental activities and your openness to new ideas and schools of thought.

1. Engage in lifelong learning—formally and informally.

2. Read.

3. Watch or listen to educational programs.

E. Emotional wellness is the ability to get through the rigors of life.

1. Emotional wellness includes self-confidence, self-acceptance, self-control, and trust.

2. It also involves the ability to deal with stress and to be flexible.

3. A good social support network is important.

4. A person needs to maintain a balance between school (work) and personal life.

F. Social wellness involves being a contributing member of the community and society.

1. Volunteering is a good step toward social wellness.
2. Another good step is joining a club or organization.
3. A person's social support group could be made up of people from work, school, professional organizations, and clubs.

G. Spiritual wellness focuses on meaning and purpose in life.

1. Aspects include the ability to forgive, to show compassion, and to love.
2. Spiritual wellness includes not only religious beliefs and practices but also the broader range of relationships with other living things.
3. Developing spiritual wellness takes time and an individual approach.
4. Discuss the bulleted list of suggestions in the student text—ask the class if they have other suggestions.

H. Occupational wellness applies to the personal satisfaction you get from your career.

1. Choose a career path that is compatible with your interests, talents, and personality.
2. Build strong relationships with coworkers.
3. Work toward career goals and dreams.
4. Explore a variety of options.

III. Factors That Influence Wellness

A. Gender

1. Women are diagnosed and treated differently than men.
2. Most medical studies have been focused on men.

3. Men and women are similar, but unique.

4. The NIH funded a study referred to as the Women's Health Initiative.

Discuss the Gender Issues element called "Heart Disease: Not Just a Man's Battle" in the student text.

B. Race and ethnicity

1. Each ethnic group has its health concerns.

2. African Americans tend to have higher rates of obesity, diabetes, high blood pressure, and stroke.

3. Hispanics generally have lower rates of cancer, but they have higher rates of obesity and diabetes.

4. Asians have longer life expectancies but higher rates of osteoporosis.

C. Income and education

1. Socioeconomic status is one of the main reasons for health disparities.

2. Low socioeconomic status is likely to lead to chronic disease and premature death.

3. People with low socioeconomic status may also have a poorer diet, engage in less exercise, and use more tobacco products.

4. These people may not receive adequate and timely health care (especially preventive).

5. This group may be uninsured or underinsured.

D. Genetics

1. A person's genetics are determined by his or her parents.

2. Genes can mutate and create susceptibility to a variety of illnesses.

3. People should be aware of their family history.

What Do You Do? ("Your family's health history is important to your own health"): Review this special element with the students. Stress the importance of controlling what they can in order to minimize genetic weaknesses.

E. Location

1. Rural inhabitants are less likely to engage in physical activity or to have access to health care.
2. Rural residents are also less likely to receive preventative services.
3. Inner city inhabitants are more likely to engage in illicit drug use, unsafe sexual practices, and alcohol abuse.
4. City dwellers also receive less physical education in schools.
5. People in inner cities may also have poorer diets because of a lack of access to nutritious foods.

F. Health habits

1. Health habits affect people now as well as in later years.
2. Developing good habits is important to having a long, healthy life.

G. Environment

1. Air and water quality are important.
2. An unclean environment may cause stress and anxiety.
3. Unclean environments could also lure unwanted guests (rats and roaches).
4. Unsafe neighborhoods are also a cause of stress and anxiety.

H. Access to health care and resources

1. Access to health care and other resources is a vital part of wellness.
2. Adequate and timely access allows for effective and efficient treatment.
3. People need to have a primary care physician who will help them make health decisions.
4. Preventive care is the first step to staying healthy - see the list of recommendations in the student text.

IV. Reaching and Maintaining Wellness

A. Determining your current health status

1. Create a list of positive and negative health habits.
2. Make changes one at a time—this provides a greater chance of success.
3. Research the pros and cons of adopting or eliminating a health behavior.
4. Figure out how to make changes—this is an individual process.
5. Consult outside resources for help and support when necessary.

B. Behavior change models

1. Trans-theoretical model
    a. This model was developed in 1979 to help people who were trying to quit smoking.
    b. It can be used for a variety of health behaviors.
    c. The core of the model is the stages of change.

   d. The five stages are pre-contemplation, contemplation, preparation, action, and maintenance.
   e. People should move at their own pace through the stages.

2. Self-efficacy and social cognitive theory
   a. Self-efficacy refers to people's belief in their ability to succeed.
   b. Self-efficacy is a vital part of changing health behaviors.
   c. The social cognitive theory offers five principles (refer to the principles in the student text).
   d. The social cognitive theory is important because it provides an explanation of how people develop and maintain behavioral patterns.
   e. This theory also helps with interventions.

3. Health belief model
   a. The health belief model was developed in the 1950s as a method for explaining the extensive lack of preventive practices and health screenings.
   b. This model incorporates four basic beliefs - see the list in the student text.

4. Locus of control
   a. This concept was developed in the 1950s by Julian Rotter.
   b. There are two loci of control: internal and external.

c. Your locus of control depends on your view of the main causes and events in your life.

Review the students' responses to the Steps for Behavioral Change exercise called "What Health Education Theory Are You?"

C. Setting SMART goals

1. S—Specific
2. M—Measurable
3. A—Achievable
4. R—Realistic
5. T—Timely

Appendix E: Pilates Syllabus

PEB 106: Pilates

Course Syllabus – Spring 13

Instructor Peg Hamlett, PhD Candidate
Certified PT/GFI/Health Coach Stott Pilates
pegh@uidaho.edu 208 885-9355 (WELL)

Office SRC 2nd floor
Class Tue/Thur 8:00-9:15 SRC

GENERAL COURSE OBJECTIVES

- How to apply biomechanic principles of core stability, mobility, breathing and alignment to relevant exercises
- Breakdown of essential, intermediate, and advanced level exercises
- Exercise principles, initiation of muscular movement, and sequencing
- Variations to increase or decrease exercise intensity
- Modifications for specific body types, postural issues, and conditions
- Effective communication, visual skills, verbal cueing and imagery for performance enhancement
- A working knowledge of functional anatomy

CLASS PARTICIPATION (80% Course Grade)

- This is an activity course and attendance and participation are essential to understand the objectives of the course and to pass the class. Please talk to me if you have any physical issues that might be contraindicated for your participation in class or health issues that may require modifications.
- There are a total of 16 classes; missing more than 3 classes will result in failing the course. Arriving late or leaving early can result in a counted absence. If you have an appointment or special event which requires you to leave or arrive only a few minutes late please talk with me to have this approved in advance.

COURSE WORK

- The majority of course work will be completed during class time. There will be a mid-term one page essay done outside of class on what you have learned in class and

what your expectations are for the second half of class. This is worth 10% of your grade

- The Final Examination will be held the week of class. This will be worth 10% of your grade.

Participation/Attendance 80% Assignments 10% Final Exam 10% Total= 100%

Please talk to me to help set your goals for this course and add optional components:

- Weight Loss:
  - We can add a food diary and modify strength exercise to increase cardiovascular endurance through sets and repetitions.
- Strength
  - We can talk about how to use more body weight and fewer repetitions to increase weight load.
- Endurance
  - Exercises which would consist of higher repetitions and lighter weight loads.

I believe activity classes should not only instruct you in proper form and challenge your fitness levels but they should be fun. I am available to answer questions in my office at the SRC or by email. This class will hopefully fulfill not only a credit but more importantly fulfill your expectations.—Peg

University of Idaho Classroom Learning Civility Clause

In any environment in which people gather to learn, it is essential that all members feel as free and safe as possible in their participation. To this end, it is expected that everyone in this course will be treated with mutual respect and civility, with an understanding that all of us (students, instructors, professors, guests, and teaching assistants) will be respectful and civil to one another in discussion, in action, in teaching, and in learning.

Should you feel our classroom interactions do not reflect an environment of civility and respect, you are encouraged to meet with your instructor during office hours to discuss your concern. Additional resources for expression of concern or requesting support include the Dean of Students office and staff (5-6757), the UI Counseling & Testing Center's confidential services (5-6716), or the UI Office of Human Rights, Access, & Inclusion (5-4285).

University of Idaho (UI) Nondiscrimination Policy

It is UI policy to prohibit and eliminate discrimination on the basis of race, color, national origin, religion, sex, sexual orientation and gender identity/expression, age, disability, or status as a Vietnam-era veteran. This policy applies to all programs, services, and facilities, and includes, but is not limited to, applications, admissions, access to programs and services, and employment. Such discrimination is prohibited by titles VI and VII of the Civil Rights Act of 1964, title IX of the Educational Amendments of 1972, sections 503 and 504 of the Rehabilitation Act of 1973, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, the Age Discrimination Act of 1975, the Age Discrimination in Employment Act Amendments of 1978, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, other federal and state statutes and regulations, and university commitments (see Faculty Staff Handbook (FSH) 3060). Sexual harassment violates state and federal law and policies of the Board of Regents, and is expressly prohibited, as stated in FSH 3220. The University of Idaho also prohibits discrimination on the basis of sexual orientation, as stated in FSH 3215. The entire FSH can be accessed online at http://www.webs.uidaho.edu/fsh. Questions or concerns about the content and application of these laws, regulations or University policy may be directed to: the Office of

Human Rights, Access & Inclusion (208-885-4285); Regional Office for Civil Rights, U.S. Department of Education in Seattle (206-220-7900); Equal Employment Opportunity Commission, Seattle District Office (206-220-6883); or Pacific Regional Office of Federal Contract Compliance Programs, U.S. Department of Labor in San Francisco (415-848-6969). Complaints about discrimination or harassment should be brought to the attention of the Office of Human Rights, Access & Inclusion (885-4285). Retaliation for bringing forward a complaint is prohibited by FSH 3810.

Appendix F: Rec 370 Curriculum

Leisure, Health and Human Development
REC 370

Instructor: Peg Hamlett
Office: SRC Room 201
Office hours: 7:30-9:30 12:30-2:00 Tue/Thur or by appointment
Class hours and location: **SRC Classroom MW 2:00 pm to 3:15 pm**
Contact: 208 885-9355 Email: pegh@uidaho.edu

Main Textbook: *Health and Wellness for Life,* Human Kinetics (Champaign, IL: Human Kinetics, 2009)

Readings: *Leisure, Health and Wellness,* Venture Publishing (State College, PA. 2010)

Description: Leisure and health across the lifespan (early childhood to late life) based on health and human development concepts and theories. Emphasis on psychological, sociological, and cultural influences. This class will be designed to give you additional information on Leisure, Recreation and Human Development and additionally use your acquired knowledge in practical application.

Course Objectives

1. To develop an understanding of life span and developmental theories and learn how they apply to the field of recreation, sport, and wellness.

2. To demonstrate an understanding of the physical, cognitive, emotional, and social components of human development

3. To develop an understanding of the relationship between human development and leisure behavior and identify ways in which they influence each other.

4. To increase understanding of how leisure behavior is shaped by the timing of developmental factors.

5. To demonstrate the ability to apply concepts of human development to the design and implementation of recreation and leisure programs for individuals across the lifespan.

There may be some deviation from the schedule but this is intended as a guideline for the course

1/15 Week 1: Syllabus overview, introduction to course and BBLearn course components.	
1/ 22 Week 2, session 1 Introduce the course and the course requirements. Leisure, Recreation and Health Promotion overview and class discussion of goals for the semester.	**1/27 Week 3, session 1**Complete Leisure, Recreation and Health Promotion. Begin the Fitness as Leisure Activity chapter. Tour the campus fitness facilities. Perform fitness tests and measurements.
1/29 Week 3, session 2 Complete assessments and testing and Fitness as a Leisure Activity.	**2/3 Week 4, session 1** Begin the Nutrition throughout the lifespan.
2/5 Week 4, session 2 Cooking demonstration	**2/10 Week 5, session 1** Guest speaker Marissa Rudley Campus Dietitian Interactive cooking class.
2/12 Week 5, session Sexuality and Intimacy	**2/19 Week 6, session 1** Mental Health
2/24 Week 7, session 1 Mental Health issues throughout life, temporary, lifelong, signs and symptoms.	**2/26 Week 7, session 2** Stress Management
3/3 Week 8, session Guest Speaker Sharon Fritz Counseling and Testing Center	**3/5 Week 8, session 2** Stress Management, group assignment.
3/10 Week 9, session 1 Midterm review	**3/12 Week 9, session 2** Mid-term exam
3/24 Week 10, session 1 Yoga stress relief, Raven's program	**3/26 Week 10, session 2** Conception, Pregnancy, and Childbirth guest speaker: Kristine Petterson, doula.
3/31 Week 11, session 1 Leisure, Travel and Infectious Diseases safeguard yourself.	**4/2 Week 11, session 2** Financial and Life Stressors. Set yourself up to avoid pitfalls.
4/7 Week 12, session 1 Chronic Diseases throughout your Life Span. Ways to keep leisure in your life with chronic diseases and conditions. Guest Speaker Dr. Son	**4/9 Week 12, session 2** What is Health Care Consumerism? How does it impact you?
4/14 Week 13, session 1 1 Environmental Health and Sustainability.	**4/16 Week 13, session 2** Guest speaker Sustainability Director
4/21 Week 14, session Substance Use, Abuse and Dependency. Recreational, prescribed and social drug and substance use impacts on your life.	**4/23 Week 14, session 2** Substance Abuse and Dependency. Class debate on current laws, OTC medications and recreational use of drugs and alcohol. PH gone
4/28 Week 15, session 1 Aging Healthy, how creating leisure time in our life effects aging.	**4/30 Week 15, session** Discuss leisure activities based on age, and intergenerational appropriate activities

5/5 Week 16, session 1 Leisure and Wellness from 0 to 99+. discussion. Final exam review	**5/7 Week 16, session 2** Final exam

Assignments

Introduction: Write a few short paragraphs aoubt yourself and your goals to share witn class.

Target Heart Rate Calculation Take your resting heart rate three days in a row when you are at your most relaxed. Go to the bbLearn online page and complete the Target Heart Rate.

Diet Diary: Create a three day diet diear of everthing you eat and drink and bring to class for discussion.

Wiersma, Perry; Pathways to Health article under Readings. Write a one page double spaced paper on **one** of the following questions:

1: How do people from various marginalized groups experience leisure and why?

2: How do economic and social conditions constrain or enable people's leisure opportunities?

3: How can leisure be used to transcend social and/or personal barriers?

4: How can leisure professionals advance a social justice agenda?

Service Project: This project is about volunteering. Most of you have already signed up for a service project (see attached) if you have not please let me know which project you would like to help with. If you have something else you are volunteering for, talk to me and we can see if it will work. After the volunteering write a one page paper. The paper should be about your experience and what you gained from the experience.

Readings

All articles are posted on bbLearn. Be prepared to discuss in class, and possibility of pop quizzes on readings

Articles:

Wiersma, Perry: Pathways to health.

Godbey: What is Good Leisure from the Perspective of Health?

Heintzman & Coleman: Leisure and Spiritual Health

Kleiber and Hutchinson: making the best of bad situations: The value of Leisure in coping with negative life events

Wolin and Godbey: Socioeconomic status, health and leisure

Penhollow, Jackson and Hartzel: Healthy Sexual Expression

Health and Wellness for Life Book

Health Promotion Chapter Week 1session 2

Fitness Basics Week 2 session 1

Nutrition Week 2 session2

Sex and Intimacy Week 4 session 1

Mental Health Week 4 session 1

Stress Management Week 5 session 2

Conception and Childbirth and Reproductive Choices Week 8 session 2

Infectious Diseases Week 9 session 1

Chronic Diseases Week 10 session 1

Watch

Straw Bale House https://www.youtube.com/watch?v=diSx00V6I6M

Gansta' Gardening in Sourth Central LA TED Talk

http://www.ted.com/talks/ron_finley_a_guerilla_gardener_in_south_central_la#t-165299

19th century public health https://www.youtube.com/watch?v=Lb09iRQgFdk

PowerPoints

PowerPoints for each lecture will be available on bbLearn. Please keep in mind these cover bullet points but you will not be able to answer all questions on the mid or final exam if you only view the PowerPoints rather than attend class.

Class Participation

This class has many interactive activities and attendance and participation is a large part of your grade and learning expereince.

Grades Log on to bbLearn to see all points possible and to track you assignments due and your current grade.