

**A NARRATIVE INVESTIGATION OF ADULT LATINA'S LIFE EXPERIENCE  
OF PHYSICAL ACTIVITY ADHERENCE**

A Dissertation

by

SUSAN ALLISON WAGNER

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2008

Major Subject: Curriculum and Instruction

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May 2008

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**ABSTRACT**

A Narrative Investigation of Adult Latina's Life Experience of Physical Activity

Adherence. (May 2008)

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The purpose of this study was to explore the lifelong physical activity (PA) stories of Latinas to determine motives that contribute to exercise adherence behaviors. Using an interview process, life histories were collected from six self-identified PA adherents of Hispanic descent. Three narrative analysis techniques were used to analyze the interviews and the transcript of a follow-up focus group meeting.

In the first technique, the Holistic-Content perspective and Labovian transcription were used to identify major themes common in the interviews. Adherence themes that emerged were: 1) culture and family, 2) being pushed, 3) health, 4) role models, and 5) competence. A review of these themes resulted in several suggestions for teaching practitioners: 1) including enjoyment as a criteria for planning activities, 2) focusing on positive reinforcement from teachers and families, 3) providing early opportunities for success, and 4) interacting with strong female role models.

A second analysis technique, Lakoff and Johnson's linguistic studies using metaphor to understand one idea in terms of another, yielded the concept of love as health. Study participants frequently used the terms love and addiction in connection

with PA. Participants suggested the following as characteristics of healthy love relationships: loyalty, community, positive results, and variety. The term addiction, while not specifically a metaphor, emerged during this process as a powerful exercise adherence motivator. Euphoria and "not feeling right unless I exercise" were cited as primary reasons for adherence behavior.

The third technique used was Borman's Symbolic Convergence Theory in which a rhetorical community is formed around a fantasy theme. The theme "perfect body" was identified in the stories as common to four of the participants. Via the media and pop culture, the rhetorical community communicates that a "perfect body" can be achieved with PA and diet. The oppressive gendered message here is that a woman's worth is largely determined by the look of her body, and having the perfect body is the way to success. Facilitating the shift from solely external motivators to a more balanced internal/external set of motivators and from solely negative motivators to positive reasons for exercise adherence is the recommended goal for teaching practitioners.

## DEDICATION

I dedicate this dissertation to my family and friends who have supported me in this endeavor by encouraging me throughout the process and helping me to believe in myself when I had doubts.

- To my parents Jean and Harold Wagner who showed me unconditional love throughout my life so that I developed confidence.
- To my children Zach, Dutch and Marshall Lowy who supported my decision to return to school as a senior citizen while they were also college students. We were in it together and I felt uplifted and close to them through this shared experience.
- To my wonderful husband Charles Rhea who held my hand, listened endlessly to my ideas while I worked out what I thought, and helped me edit this paper.
- To my friends, Denise, Kim, Melanie, Patricia, and Karen who were willing to take a backseat so often to this project; they helped me by being there when I needed them.

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## CHAPTER I

### INTRODUCTION

In the United States, where more people are overweight or obese than are not (National Center for Health Statistics, 2005), researchers must focus on ways to discourage behaviors that lead to obesity, since overweight and obesity are risk factors for a variety of degenerative diseases like hypertension, Type II diabetes, heart disease, stroke, and some cancers. Musculoskeletal problems like arthritis though not necessarily life threatening are also more prevalent in obese individuals. Healthy eating and physical activity (PA) are the cornerstone of programs designed to prevent obesity (Gittlesohn, Evans, Helitzer, Anliker, Story, Metcalf, & Iron Cloud, 1998; Hardeman, Griffin, Johnston, Kinmonth & Wareham, 2000). Levels of regular PA vary among different populations, but in general once children leave elementary school there is a decline in the amount of time spent participating in regular health enhancing PA (U.S. Department of Health and Human Services, 1996).

In The Youth Risk Behavior Survey conducted in 2003, based on self-reporting the percentage of male students participating in regular PA was 73%, whereas female participation was only 60% (National Center for Health Statistics, 2005).

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The style and format of this dissertation follow *Women in Sport and Physical Activity Journal*.

Given that regular PA is such an important mediating factor in the control of obesity, understanding why some people exhibit adherence behaviors and some do not is important to determine particularly when half of people joining exercise programs tend to drop out in the first 3-6 months (Prochaska & Marcus, 1994).

Differences between males and females regarding PA are reported in the literature on exercise adherence. Women were shown to be less active overall than men (Bryson, 1987; Deem, 1987; Dewar, 1987; Flintoff & Scraton, 2001; Henderson, 2003; Henderson & Bialescheki, 1993; Kilpatrick, Hebert, & Bartholomew, 2005; National Center for Health Statistics, 2005; Pratt, Macera, & Blanton, 1999; Sallis, Prochaska, & Taylor, 2000; Scraton, 1992; White, Ransdell, Vener, & Flohr, 2005). School Physical Education impacted girls differently than boys (Kunesh, Hasbrook, & Lewthwaite, 1992; Shephard & Trudeau, 2000). Boys were shown to have fewer constraints to PA (Roberts, 1999; Taylor, Baranowski, & Sallis, 1994), while girls were more prone to inactivity as adolescents (Bouchard, Shephard, & Stephens, 1993; Sallis, 1993; Sallis, Prochaska, & Taylor, 2000; Sallis, Prochaska, Taylor, & Hill, 1999).

Although children are typically physically active, African Americans and Latinos were found to be less active than Anglos even in childhood and adolescence (McKenzie, Sallis, Broyles, Zive, Nader, Berry, et.al. 2002; McKenzie, Sallis, Nader, Broyles, & Nelson, 1992), which may help explain the higher occurrence of obesity in these populations. When a cross section of data from a national survey is viewed, the highest rates of inactivity among ethnic minority adults were reported in Mexican-American women (Crespo, Smit, Anderson, Carter-Pokras, & Ainsworth, 2000). Behavior

intervention programs designed to increase PA have varying results. One behavior intervention program targeting multiethnic low-income women (primarily Latinas) increased levels of PA, and resulted in a ten-month adherence to PA when the program was delivered using culturally appropriate and community-based methods (Albright, Pruitt, Castro, Gonzalez, Woo, & King, 2005). Intervention studies, however, do not explain why some individuals choose to be active and adhere to regular patterns of PA and some do not, independent of behavior intervention programs. Since girls and women display such marked differences from boys and men in PA behavior and Latinas in particular have high rates of inactivity, research focused on the adherence stories of Latinas will fill a gap in the exercise adherence research by prominently displaying PA life stories in this population. Life history research can uncover motives for PA and potentially provide teachers with tools for impacting the life-long participation of Latinas.

#### Statement of the Problem

Employing a Chicana feminist epistemology can enhance the understanding of the intersection of gender, class and race (Delgado-Bernal, 1998) related to PA and can provide a method for studying the perplexing nature of adherence difficulties for Latinas. Oppression in PA settings has been shown to be a problem for girls and women despite Title IX advances (Azzarito & Solomon, 2005). Physical Education has been a place where girls feel excluded and incompetent when compared to their male counterparts. Boys display more aggression and often make fun of the girls in PE classes (Kunesh, Hasbrook, & Lewthwaite, 1992; Shephard & Trudeau, 2000). Women tend to have less

body satisfaction than men (Kilpatrick, Hebert, & Bartholomew, 2005). Therefore, understanding body perceptions or physicality based in women's experiences is critical to confronting the oppression women face in sport and PA contexts (McDermott, 1996). Physical education in schools is a place where girls are socialized into PA gender roles early in life (Scraton, 1992). A deeper understanding of what happens to Latinas regarding PA as they progress through life can inform practices in school physical education programs ultimately helping physical educators create environments more conducive to promoting lifelong PA for all women.

#### Statement of the Purpose

The purpose of this study was to explore the lifelong PA stories of Latinas, listening to their voices to discern motives for adherence. Life story or narrative research allows a foregrounding of the Latina's voice related to PA, a voice that has been clearly missing in PE research (Oliver, 1998). Through storytelling the narrator will be able to create a current story that has "unfolded" in the context of past events providing them a direction for their future (Gergen & Gergen, 1988). Stories told and lessons learned about one's body reveal how the individual perceives embodied experiences and interprets events and actions in their lives (Sparkes, 1999). Sparkes posits that reading narratives can evoke emotional responses enhancing deep understanding of issues from different perspectives (p. 24). Considering the entire story the researcher can more clearly understand the impact of various events shaping the individual's present behavioral paradigm and develop more effective ideas for planning future curricula. For Physical Education teachers developing lesson plans for their students, reading these life

stories and the accompanying analysis can help them understand the Latina student more deeply, thereby assisting them with creating experiences that will be more likely to result in adherence behaviors.

### Research Questions

To determine why the Latinas in this study remained physically active Cognitive Evaluation Theory (CET) was used as the theoretical lens through which motivation was viewed. Deci, Koestner, and Ryan (2001) suggested that intrinsic motivation derived from autonomy, competency and relatedness was a stronger motivator than extrinsic motivation. However, when an extrinsic motivator became integrated with one's values then it could have the same results as an intrinsic motivator. The research questions were developed to identify the role of intrinsic and extrinsic motivators in PA adherence for this population. Through the analysis of personal PA life stories of Latinas answers to the following questions were sought:

1. What factors contribute to PA adherence for Latinas?
2. To what extent is intrinsic motivation a valid construct for Latina's adherence behaviors?
3. To what extent do extrinsic motivators result in PA adherence in Latinas?
4. How do Latinas perceive their own physicality related to PA adherence behaviors?

### Research Design

A life history approach was selected to study the life stories of Latina adherents because this methodology enabled the women in the study to draw upon their cultural

knowledge to create personal stories of self in the context of PA. The voices of Latinas were in the foreground to accentuate the strong feminist and cultural components of the research. Since Latinas lead lives with significantly different opportunities and challenges than men or White women (Delgado-Bernal, 1998), foregrounding their experiences provided a perspective missing in research with a male normative focus. Epistemological racism must be avoided in a study of Latinas. The life story or narrative approach adhered to the four characteristics of a race-based epistemology espoused by Patricia Hill Collins in *Black Feminist Thought* described by Scheurich and Young (1997). The four characteristics included the use of 1) concrete experiences to determine meaning, 2) dialog to assess knowledge claims, 3) an ethic of care, and 4) an ethic of personal accountability (Scheurich & Young, 1997). As the women told their stories they were constructing and reconstructing their own realities, providing feminine and Latina perspectives and ideas. The researcher provided an empathic ear and voice in the analysis of the stories.

### Methodology

Participants for the study were Latinas who have experienced at least three major life transitions, and identified themselves as exercise adherents expressing a strong enduring commitment to PA. Self-identification is supported by Estabrooks and Courneya (1997) who concluded that self-categorization as an exerciser schematic predicted the objective measure of PA frequency. Post high school life transitions were important participant selection criteria because the changes since high school needed to be sufficient to prevent high school athletics from being the sole reason for their self

definition of adherence. It is important to track participants so that significant milestones such as child bearing, school entry, varying levels of work are included in the stories (Sallis et al., 2001).

Six in depth life histories were collected for this study via an interview process. The number selected was small to allow for in-depth interviews which enabled me to tease out salient features of each life history for analysis.

Interviews were conducted using a process suggested by Lieblich, Tuval-Masiach & Zilber (1998), where the participant is asked to outline stages of life. For example, early childhood, late childhood, and adolescence are discussed, then experiences in those stages regarding the topic of study are relayed. Using their own organization, participants provided a temporal order for events. This allowed for coherence in the narrative text while also maintaining the important selfness feature of the story (Linde, 1993, p. 12). The participants were asked to provide the interviewer with some history about their lives and how PA was a part of it. The following sample prompts were used to encourage the participants to tell life stories:

1. Please tell me about times in your life when you were physically active.  
You may use the stages you outlined to help you identify different times in your life.
2. Talk about what was happening in your life and what contributed to your attitude and behavior regarding physical activity.

## Data Analysis

The first of three narrative analysis techniques used to examine the recorded and transcribed data was the Holistic-Content Perspective as described by Lieblich, Tuval-Masiach & Zilber (1988). The interview transcripts were parsed out into sections representing key functions in separate core narratives or stories (Labov, 1982). The second technique applied was a synthesis of two linguistic analysis methods researched by Gee (1985) and Lakoff and Johnson's (1980). Using Gee's approach, sections of the interviews were arranged by lines and stanzas to illuminate the particular use of language. Lakoff and Johnson's (1980) approach involved examining the language in terms of metaphorical framework where one idea is explained in terms of another. The third approach used was Borman's Symbolic Convergence Theory (Borman, 1982; Borman, 1985; Borman, Cragan, & Shields 1996). Several of the histories shared a common theme which emerged in the application of the Symbolic Convergence Theory.

Each participant verified the accuracy of the initial transcript of their interview, confirming that their perception of my transcription was valid. Each participant had the opportunity to alter the language they used at this stage (prior to analysis) to lessen the likelihood of misrepresentation of the spoken word. A formal member check was omitted from this study in the interest of time and because the interpretation of the data was subjective on my part. However, three of the six participants attended a focus group meeting in which the conclusions of the study were discussed in essence providing an informal member check.



### Definition of Terms

For the purposes of this study a person who is *physically active* has a self-proclaimed view that exercise is an attribute considered important to his or her self-image (Estabrooks & Courneya, 1997). A rigid definition of adherence was not used; rather *adherence* was self-defined by the participants in order to avoid resistance to reporting lifestyle PA as part of the picture (McGannon & Mauws, 2002). The term *Latina* is used to identify females from Spanish speaking countries in Latin America, or their descendents (Loue, 1999). *Physicality* is the interaction between body image, agency, and self-perception (McDermott, 2000). A *life history* is a retrospective look at an entire life, or parts of it, produced through interaction in either oral or written form (Tierney, 2002, p. 539). A *narrative* is a prose form of text that has a “thematic thread” or plot that draws together events or actions creating relationships among them (Polkinghorne, 1995). A *story* is a narrative that creates a unified episode by bringing together a sequence of events with human action and coherence as critical elements (Linde, 1993).

The following terms are specific to the Symbolic Convergence Theory (Borman, 1982; Borman, 1985; Borman, Cragan, & Shields, 1996) used in this research. A *fantasy* emerges when individuals share stories (dramatizations) from their lives containing plots, scenes and characters which fulfill a psychological or rhetorical need. A *fantasy type* is observed when groups of people repeatedly share similar plots, characters and scenes. A *rhetorical vision* is a construct that is recognizable to groups of individuals because it explains some part of their social reality. For example in this study "perfect

body" fantasy types serve this purpose. A *rhetorical community* is formed when fantasy types result in a union of meanings held in common by a collection of individuals.

## CHAPTER II

### REVIEW OF THE LITERATURE

Regular physical activity (PA), a health behavior, prevents chronic diseases such as diabetes, hypertension, and cardiovascular disease (U.S. Department of Health and Human Services, 1996). In addition, PA and healthy eating are the two factors with the most likelihood of preventing overweight and obesity, risk factors for many chronic diseases (Hardeman, Griffin, Johnston, Kinmonth, & Wareham, 2000). In the United States where the twin epidemics of obesity and Type II diabetes are a significant public health challenge, improvement in regular patterns of PA is a compelling concern for health and physical educators (National Center for Health Statistics, 2005). Minorities e.g., African American and Mexican Americans (MA) are less physically active than Anglos even in childhood and adolescence (McKenzie et al., 2002; McKenzie, Sallis, Nader, Broyles, & Nelson, 1992). Specifically, Mexican-American women have been shown in cross sectional data from a national survey to have the highest rates of inactivity among ethnic minority adults (Crespo, Smit, Anderson, Carter-Pokras, & Ainsworth, 2000).

According to both National Health and Nutrition Examination Surveys and Hispanic Health and Nutrition Examination Surveys (NHANES III and 1999-2002 and HHANES 1982-84), Hispanics are experiencing the same trend of increasing overweight and obesity observed in other groups in the United States (Flegal, Ogden, & Carroll, 2004). It is difficult to say what has caused the trend but physical inactivity and poor eating habits are certainly contributors (Crespo & Arbesman, 2003). Acculturation has an

impact on attitudes and actions of immigrants. Since minimally nutritional and calorie dense foods are readily available and inexpensive in the United States, and the automobile is the preferred mode of transportation even for short distances, it is not difficult to predict the trend of increasing overweight and obesity in this immigrant population (Berrigan, Dodd, Troiano, Reeve, & Ballard-Barbesh, 2005; Evenson, Sarmiento, & Ayala, 2004). Since the health of a rapidly growing immigrant population is of national concern, the population selected for this study was Hispanic women, more specifically, Latinas (women from Spanish-speaking countries in Latin America, or their descendents).

Considering the population selected for this study, and the proposed research method, the purpose of this literature review was to identify; 1) theories of motivation and behavior change impacting PA adherence, 2) the role of gender and culture in PA adherence, 3) the importance of feminist theory to the study of adherence in the population, and 4) the reasons for using narrative research techniques to answer the research questions.

### Theories of Motivation and Behavior Change

Exercise adherence requires motivation that will sustain the behavior over time despite perceived barriers. According to Ryan and Deci (2000), motivation can be achieved in a variety of ways when intention and action are based in energy, direction, and persistence (p. 69). Intrinsic and extrinsic factors regulate behavior and can influence perseverance. Of the two types, intrinsic motivation is recognized as the more powerful behavior sustainer. However, some forms of extrinsic motivation can masquerade as intrinsic motivation and provide strong incentive to persevere in PA (Deci, Ryan, &

Williams, 1996). Intrinsic motivation is at work when action is taken because the act itself is satisfying. In the area of PA and exercise, one is considered intrinsically motivated when participation in the activity occurs because the person enjoys moving, or in a competition takes satisfaction in striving to win. Extrinsic motivation on the other hand is when one acts to receive an outcome that is separate from the activity itself. There must be a payoff from the activity. For exercisers the payoff might be weight loss, or improved health (Deci & Ryan, 1985; Deci, Ryan, & Williams, 1996; Ryan & Deci, 2000). According to Ryan and Deci (2000) intrinsic motivation is a normal tendency and humans are endowed with it. The difficulty is in sustaining this natural propensity in the face of conditions that would undermine it.

Cognitive evaluation theory (CET) was developed to explain the factors that enhance or suppress intrinsic motivation. According to CET, meeting the human needs for competence and autonomy enhances intrinsic motivation. Competence and autonomy together are two needs specifically connected to intrinsic motivation. Achieving competency, whether due to empirical measurements associated with optimally designed challenges or having feelings of competence induced by positive feedback and rewards can enhance intrinsic motivation. However, feelings of competence alone will not affect intrinsic motivation except when the feelings are accompanied by a sense of autonomy. According to CET, choice is a fundamental requirement for intrinsic motivation. A third factor that impacts intrinsic motivation is a sense of security and relatedness (Ryan & Deci, 2000). Taken together, competence, autonomy, and relatedness facilitate intrinsic motivation but are not the sole requirements for sustaining a given behavior. That the

activity is challenging, novel, or aesthetically pleasing is also important to holding one's attention.

Tangible external rewards, such as trophies, undue recognition, or candy have been shown to be detrimental to intrinsic motivation. (Deci, Koestner, & Ryan, 2001; Vansteenkiste & Deci, 2003). Removing the need to regulate their own behavior and motivation undermines the development of intrinsic motivation for younger children in particular. Self-reported interest in PA decreased with the use of engagement-contingent, or completion-contingent rewards (Deci, Koestner, & Ryan, 2001).

Extrinsic motivation can masquerade as intrinsic when the reason for acting has been internalized to the extent that the person begins to act autonomously and perceives the motivation as emanating from within themselves. Internalization and integration of the motive can be categorized in four different ways resulting in regulation of behavior. The first type is external regulation of the behavior occurring when the behavior is performed to receive an external reward. In the case of PA and exercise, external regulation would appear as participation to lose weight or to respond to a directive from an authority figure such as a teacher. The second type, introjected regulation, occurs when participation in the activity would happen to avoid guilt or enhance the ego. In the case of PA, one would exercise so that they can eat more without feeling guilty or so that they look good. Moving closer to autonomy, the third type, identified regulation of the behavior occurs. In this type of regulation the individual understands the importance of the activity. One might exercise because of the understanding that it is good for one's health. The fourth and most autonomous type of regulation is integrated, where one has assessed the activity or behavior and found it to be in line with their values and needs. PA

would be taken up because it is important to the individual to be physically active for a variety of needs-fulfilling reasons (Deci, et al., 1996).

It seems logical that communicating the importance of adhering to regular PA for future tangible results like improved health would provide motivation for participation perseverance. In fact that hypothesis was not borne out by Vansteenkiste, et al. (2004). They found that providing people with a "future content-free goal" did not result in genuine engagement in exercise. It was noted that when PE teachers point out the importance of activity for future health in a vague and broad way, the motivation to participate is driven by feelings of guilt, shame, and anxiety - clearly not intrinsic motivation (Vansteenkiste, Simons, Soenens, & Lens, 2004). Use of future goals established externally can be seen as counter to self-determination theory (SDT). In this situation motivations driven by guilt, shame, and anxiety are ego-involved feelings which undermine intrinsic motivation (Deci & Ryan, 1995). To be truly agentic one must act autonomously from an integrated self not as a result of ego involvement and contingent self-esteem. Additionally, competency alone is not sufficient for agency (p. 37). Developing an integrated sense of self is enhanced when one acts agentially in a context that allows needs for autonomy, competence and relatedness to be satisfied. Although extrinsic motivation is less desirable in the long run it can be a powerful short-term motivator. Consequently, it is very tempting to use it for immediate motivational needs; however, if the goal is to promote lifelong PA adherence behavior then intrinsic motivation has to be the target. The difficulty with any simple answer is that no two individuals are exactly alike in their reasoning and it is difficult to find a pure intrinsic motive.

The Transtheoretical Model (TTM) has been used to explain behavior change related to the adoption and maintenance of PA patterns. Although the model initially was used for smoking cessation, it has been adopted by health and physical education professionals for changing many negative (risk) behaviors. Encouraging the adoption of positive behaviors like condom use and regular PA is a more recent application of the model (Nigg, 2003; O'Connor, 1994; Prochaska & Velicer, 1997; Schumann, Nigg, Rossi, Jordan, Norman, Garber, et.al. 2002; Zizzi, Keeler, & Watson Ii, 2006). In the model there are six stages of change that people experience when modifying a behavior. Precontemplation is the first stage, during which a person does not express a desire to change for at least the next six months. They may have tried to change in the past but have generally given up. In the second stage, called contemplation, interest to change the behavior in the next six months arises and the person weighs the pros and cons of such change. Entering the third stage, called preparation, the person intends to take action in the next month and has a plan to do so. The fourth or action stage occurs when there are specific observable changes in behavior, and the modification is sufficient to meet the criteria set by professionals and scientists for reducing the risk of disease. When the fifth stage or maintenance stage is entered, a person is working to prevent relapse but does not need to apply the change strategies as often as someone in the action stage. The duration of the maintenance stage is generally between six months and five years. Relapse is possible at any stage and would manifest as a regression to an earlier stage. Finally, in the sixth stage, or termination, change strategies may be ended because the behavior has been sustained for sufficient duration (generally five years), the person has no temptation to relapse and experiences full self-efficacy. Fallon and Hausenblas (2005) determined



that defining the termination stage so rigorously netted few individuals who actually qualified for this stage. They also noted that terminators actually did report more "barrier efficacy" and less temptation to relapse than maintainers, which supports the idea that this is a separate stage for exercise adherence (p. 36). A trend in the progression from one stage to the next across several studies was observed, providing support for the theory.

In order to progress from the precontemplation stage to the contemplation stage one must find the pros for change more compelling than the cons, and to progress from contemplation to action the cons for change must diminish. The point at which the number of pros surpassed the cons for women occurred in the preparation stage, but that same intersection for men occurred in the action stage (Wallace & Buckworth, 2001). In general, to go from precontemplation to action the pros must increase twice as much as the cons decrease (Prochaska & Velicer, 1997). Based on the TTM model some promising interventions and connections to physical education at all levels have been made.

The model has ten processes of change that when connected with the specific stages result in stronger adherence (Prochaska & Velicer). The processes include: 1) Consciousness raising, becoming aware of a need for change, 2) Dramatic relief, increasing the emotional experience, 3) Self-reevaluation, looking at self with healthy behaviors and without, 4) Environmental reevaluation, assessing cognitively and affectively how behaviors affect others, 5) Self-liberation, a choice-driven belief that behavior can change, 6) Social liberation, improved or increased social opportunities, 7) Counter conditioning, developing healthy behaviors to substitute for problem behaviors, 8) Stimulus control, removing cues for unhealthy behavior, 9) Contingency management,

relying on rewards or punishments, and 10) Helping relationships, developing social support for the healthy behavior. According to Wallace and Buckworth (2001) there were significant differences in the use of behavior and cognitive strategies across the stages. Frequency of consciousness raising, dramatic relief, and self-reevaluation strategies increased as the individual moved from precontemplation to maintenance stages (p. 45). Contingency management and helping relationships were more important in action and maintenance stages (p. 46). Consciousness raising was the best discriminator across all stages of change. Gender differences emerged in a study conducted by Fallon, Hausenblas and Nigg (2005) when barriers efficacy, temptation not to exercise, decisional balance, and processes of change were investigated. Women had significantly less barrier efficacy, more pros for exercising and greater use of cognitive and behavioral processes of change. Additionally they used environmental reevaluation and social liberation in action/ maintenance stages. Barriers efficacy was the only process of change aligned with the maintenance/termination stages.

In a study to determine whether motivation for vigorous or moderate activity differed for women in the maintenance stage of change, Dacey, Baltzell and Zaichkowsky (2003) found that both vigorous and moderate intensity exercisers used the same processes to maintain motivation. Both the vigorous and the moderate exercise groups selected counter conditioning, self-liberation, self-reevaluation, and reinforcement management. Counter conditioning was found to be the most important process in this group of women, suggesting the importance of mood benefits as a motivator for the adherents. Differences emerged between vigorous and moderate exercisers cited in the study. The vigorous exercisers had more confidence that they could overcome barriers,

enjoyed the physical experience, and appreciated the social support. The moderate exercisers generally sustained exercise behaviors because they view themselves as role models. In developing exercise behaviors the moderate exercisers reported a life-long experience with exercise, having been involved with PA since childhood. Conclusions drawn from this work indicated that exercise promotion efforts should focus on building positive experiences and relate PA to psychological benefits. The intrinsic enjoyment of exercise should be the motivator rather than the extrinsic health benefits (Dacey, et al., 2003).

Whether the PA was exercise- or sport-focused made a difference in the application of the stages. According to Nigg (2003) the TTM explains exercise behavior for adolescents better than it explains sports involvement because adolescents who exercise are not necessarily engaged in sports and vice versa. The conclusion that sport is not necessarily a sub-domain of exercise but rather a domain of its own is important to consider in future research related to TTM (p. 221). Using the exercise motivation inventory Kilpatrick, Hebert, & Bartholomew (2005) also found that the motive for sport differs from the motive for exercise. An exercise motive was more extrinsic, and generally focused on health and appearance (p. 92).

Combining stages of change and goal orientations, Zizzi, Keeler and Watson (2006) discovered that among "fairly active college students" task-oriented students were more likely to persist in maintenance of PA behaviors (p. 106). Task orientation means that a person desires to learn or master a task whereas a person with ego orientation has comparative goals like being competitively better than others, improving body shape or losing weight. Task orientations were more important in later stages of change whereas

ego orientations were highest in the contemplation stage of change. Gender differences were observed such that more men reported high ego and high task orientations than women. A task orientation correlated with intrinsic motivation (Duda, Chi, Newton, Walling, & Catley, 1995). Intrinsic motivation can be likened to task orientation in that it is volitional and comes from an integrated self. People tend to be interested in the task and perform when they are free of external demands. Extrinsic motivation like ego orientation exists when the performance is for a particular consequence like looking better or winning. The ego oriented might require prompting at the outset unlike participants with task orientations who are more volitional in nature (Deci & Ryan, 1995).

The Self-regulatory Theory of Functional Matching (STFM) applied to PA by Bailis, Flemming, and Seagall (2005) was designed to align motivational techniques with individual levels of self-concordance (SC). More extrinsically motivated individuals with low SC were negatively influenced by a high frequency of challenging comments about their participation, reducing their time in PA. Challenging communications from others were described as either complaint about the amount of time the participant spent in PA or ridiculing the participant. Intrinsically motivated individuals with high SC were not negatively influenced or were even slightly encouraged by challenging comments. Social support-oriented communications were found to have a more favorable effect on individuals low in SC (Bailis, et al., 2005).

The Schema Theory of motivation describes how an organizing set of rules within an individual are used to interpret past behavior and determine future actions. The self-image of an exercise schematic is that of a PA adherent. A non-exercise schematic

describes himself or herself as a non-PA adherent, and an exercise aschematic self-describes as mildly PA adherent (Estabrooks & Courneya, 1997; Kendzierski, 1994; Whaley & Schrider, 2005). Estabrooks and Courneya (1997) reported that exercise self-schema among college-aged students predicts objectively measured exercise such as attendance at a recreation center, as well as self-reported exercise behavior. Aschematics are more prone to cease exercise behaviors when barriers arise. Kendzierski (1994) noted that since exercise schematics are more likely to think about exercising, their intention to do so is more pronounced than either non-schematics or aschematics. However, there was only a mild correlation between intention and actual behavior. Developing exercise self-schema requires experience with exercise, but the experience alone is not sufficient to result in self-schema. That is, not all individuals who exercise have the self-image of an exerciser. Whaley and Schrider (2005) found that what was meaningful to one participant in an exercise program was not necessarily meaningful for others. In programs for adults the idea of a possible self (similar to self schema) was evolving over time (Whaley & Schrider, 2005).

PA behaviors are influenced by additional social constructs around which other theories have been developed. Some of the social cognitive theories that have been proposed and tested since the 1980s, and been applied to exercise behavior include: the Self-efficacy Theory (SET), the Theory of Reasoned Action (TRA), the Theory of Planned Behavior (TPB), and the Theory of Interpersonal Behavior (TIB) (Godin, 1994). The social cognitive theories only account for approximately 35% of the variance in exercise behavior (Dishman, 1988); however, they are still important analysis tools for PA adherence behaviors.

Bandura (1998) posited that when a person believes that he or she can execute the important behavior, then a cognitive perception of self-efficacy is generated which forms the basis of the Self-efficacy Theory. A belief in self-efficacy can be learned by either experience or through observing others (modeling). In the PA domain, a perception of self-efficacy may be the deciding factor in 1) whether a person attempts a particular activity, 2) the level of persistence exhibited when difficulties are encountered and 3) the ensuing success (Bandura, 1998, 2004). When the activity is accompanied by the expectation of self-efficacy then the behavior is reinforced more than when the activity is accompanied by an expectation of an outcome (weight loss for example) (Godin, 1994). Expectation of self-efficacy is a construct very much like intrinsic motivation while expectation of outcome is much like extrinsic motivation. When adults are confident that they have the ability to exercise in a program or on their own, they more often adhere to the activity (Godin, 1994). In a review of behavior change methods for prevention of weight gain, Hardeman et al. (2000) noted that only two studies mentioned the use of a theoretical model and in each of those the Self-Efficacy Theory was cited.

The Theory of Reasoned Action (TRA) is used to explain that specific volitional behavior occurs as a result of intention. The attitude of the person performing the action develops as a result of his or her beliefs regarding the consequences of the action (Godin, 1994). In the case of PA, the consequences might include reduced risk of heart attack, lower blood pressure and time away from family. Real or perceived barriers have a large influence on predicting the exercise behavior. The intention to exercise is promoted by perceptions of support from, parents, friends, spouses or teachers, the person's normative beliefs, and his or her motivation to comply with the behavior (Ajzen & Fishbein, 1980).

In the Theory of Planned Behavior (TPB), perceived behavioral control is added to the TRA. Intention is considered to be the closest determinant short of the actual behavior, although the connection is not always strong (Ajzen & Driver, 1991; Bandura, 1998). Rhodes, Blanchard, Matheson, and Coble (2006) attempted to integrate planning and implementation intentions into a theoretical structure and discovered that motivation and planning items on the TPB questionnaire had discriminant validity but that intention items could not be discriminated from motivation or planning. They concluded that the motivation-PA relations were not enhanced by planning (p. 25).

The level of novelty of the action is the main predictor of behavior in the Theory of Interpersonal Behavior (TIB). Past behavior is also a good predictor of current behavior. In this theory further support for attitude is found as Godin (1994) noted that fun and enjoyment (attitudes) were more important than cognitive dimensions like knowing that PA is good for your health.

Enjoyment is a motivator that has proven to contribute to adherence in several studies. Many health education campaigns focus on helping people learn about why PA is important but often fall short of adherence goals when they ignore the fun aspect of PA (Heck & Kimiecik, 1993; Wankel, 1985; Wankel, 1988). Heck and Kimiecik (1993) discovered that adults who had a history of participation in sport as youth were more likely to report enjoyment in the activity whereas adults that did not participate in youth sports were more likely to report enjoyment in the outcomes of activity, like weight loss. They also found that regular exercisers worked out in contexts that attracted others with similar definitions of enjoyment. Enjoyment was defined in six different ways: 1) social support, affiliation and encouragement, 2) environment, being outside in the fresh air, 3)

flow, a balance between challenge of activity and one's ability to meet the challenge, 4) competition, 5) emotional and physical outcomes, positive feelings and physical benefits, and 6) outlet and distraction. In discriminating between adherents and non adherents, Wankel (1985) noticed that variables like competition, curiosity, friendship and perceived social support (variables related to the quality of the experience itself) were more important than the initial health-related reasons for joining exercise programs. Teachers often cite fun as a main motivator for children to participate in PA.

Several researchers have attempted to determine the connection between childhood PA and adult adherence (Green, 2002; Kunesh, Hasbrook, & Lewthwaite, 1992; Taylor, Baranowski, & Sallis, 1994). Sport is a very important part of current youth culture. Youth have the highest participation rates for outside-of-the-home leisure but they also have one of the highest drop-out rates because they are experimenting with a wide variety of activities. Children can be easily socialized away from activity (Green, 2002). Roberts (1999) posited that the key to adherence as youth progress into adulthood was the number of different sports learned, and the level of proficiency attained in those sports. Low rates of involvement in adulthood correlated with low participation in childhood sports, lack of socialization into the sporting culture, and limited post-high school sport opportunities (p. 139). Green (2002) reported that, since adults tend to be more selective about the number of pastimes pursued, two factors impacted people's activity level: 1) the number of different sports learned and 2) the maintenance of sport behavior through the transition from youth to adulthood. Middle class parents tend to value activity, consequently their children tended to persevere through the transition



years. Adults will seek to repeat satisfying past experiences and tend to be involved in social situations where sport activity is normal.

Peer influences on PA behaviors in a physical education program affected girls more strongly because boys in a PE class are a major source of negative peer treatment (Kunesh, Hasbrook, & Lewthwaite, 1992). Girls tended to be less participative during co-educational PE classes. Roberts (1999) also noted that girls are impacted by the surrounding masculine culture which conflicts with their preferred feminine identities.

Adult activity was positively impacted by a high quality school physical education program as reported in the Trois Rivieres study. Shephard and Trudeau (2000) described a high quality program as one with a frequency of 1 hour per day of PA taught by a physical education specialist until the sixth grade. As adults, the percentage of women participating in strenuous activity three times a week was higher in the experimental group receiving high quality PE. Men in the same experimental group had no significant differences from the control group. The intentions to exercise did not significantly differ in the groups (Shephard & Trudeau, 2000).

The influence of the family on PA involvement was studied by Taylor, et al. (1994). Parental behaviors can include modeling PA, supporting with resources, and social encouragement, either positive encouragement or nagging behavior. Since most parents did not model PA, parental encouragement was more important (p.139). Additionally they noted that there seemed to be critical periods in a child's life when particular events might discourage active lifestyles later. For example the use of a playpen to limit activity might discourage a child from a movement-oriented lifestyle. The family can socialize children into active lifestyles by being active together, but

family barriers in the form of obligations also exist (p.335). In terms of normative expectations, boys tend to have fewer constraints particularly in the African-American culture where socialization into sport is more pronounced for boys than for girls.

Other influences on PA include demographic variables (education level, family status and ethnicity), personal variables (biological, psychological, age, and gender), body variables (body mass index, body satisfaction), logistical variables (time barriers, and transportation), social and peer variables (family and friends), and environmental variables (where to be active) (Bouchard, Shephard, & Stephens, 1993; Sallis, 1993; Sallis, Prochaska, & Taylor, 2000; Sallis, Prochaska, Taylor, & Hill, 1999). Girls, older adolescents, and minority ethnic groups were found to be more prone to inactivity as adolescents. The variables most associated with PA for adolescents included: 1) perceived competence, 2) intention, 3) barriers, 4) parental support, 5) support from significant others, 6) program/facility access, 7) opportunities to be active and 8) time outdoors (Sallis, et al., 2000). People who were well-educated and affluent had more leisure time and higher levels of PA. Supportive environments for adults like convenient attractive spaces (outdoors or in) and access to facilities and programs near home correlated with PA (Sallis, 1993).

Applying generalized theories of motivation developed in western cultures to individual women of Hispanic descent may not be appropriate because the theories likely will not account for the life perceptions, motivations and cultural influences on women in that culture. (Mannell., 2005; Walker, Deng, & Dieser, 2005). Using motivational theories which account for cross-cultural differences in intrinsic motivation is important for clarifying why exercise adherence is such a problem for Latinas.

## The Role of Gender and Culture

In many of the studies previously cited the differences between males and females were highlighted. Women were shown to be less active overall than men (Bryson, 1987; Deem, 1987; Dewar, 1987; Flintoff & Scraton, 2001; Henderson, 2003; Henderson & Bialescheki, 1993; Kilpatrick, et al., 2005; National Center for Health Statistics, 2005; Pratt, et al., 1999; J. F. Sallis, et al., 2000; Scraton, 1992; White, Ransdell, Vener, & Flohr, 2005). In the application of the TTM, sex differences were noted explaining how women and men progressed through the stages of change (Fallonet al., 2005; Wallace & Buckworth, 2001; Zizzi, et al., 2006). Physical Education impacted girls differently than boys (Kunesh, et al., 1992; Shephard & Trudeau, 2000). Boys were shown to have fewer constraints to PA (Roberts, 1999; Taylor, et al., 1994), while girls were more inclined toward inactivity as adolescents (Bouchard, et al., 1993; J. F. Sallis, 1993; Sallis, et al., 2000; Sallis, et al. 1999). In a college sample, weight management for women was more closely associated with exercise than sport because females have less body satisfaction due to societal standards of body (Kilpatrick, et al., 2005).

When culture is considered using the CET lens (Ryan & Deci, 2000) definitions of intrinsic and extrinsic motivation must be altered. Research centering on this theory has been used to design and test interventions to increase PA adherence. Competence, autonomy and relatedness are suitable factors in developing PA adherence for many people in the United States and other western nations. However, considering the multicultural nature of the United States, self-determination theory fails to encompass other factors related to culture that impact intrinsic motivation. For example, considering autonomy as a condition for intrinsic motivation in an interdependent culture where

conformity to an associated group is valued might be inappropriate. Iyengar and Lepper (1999) determined that the value of individual choice as a factor in determining intrinsic motivation was dependent on a child's cultural background. In two separate studies children were either given an independent choice or a choice was made for them by either a significant person such as their mother, a valued group, or their classmates. European American children showed more intrinsic motivation when given independent choice, whereas Asian American children showed more intrinsic motivation when a significant person or group made a choice for them. While the construct of autonomy was called into question here the idea of relatedness was supported. Asian American children preferred that their choices be made by related others which provided them with the opportunity to belong to a group and supported harmonious relations - both important cultural values (Iyengar & DeVoe, 1997; Iyengar & Lepper, 1999). For interdependent cultures the primary factor mediating intrinsic motivation is relatedness (Walker, Deng, & Dieser, 2005). The impact of culture on motivation must be considered in any model that would attempt to explain why people act as they do.

Markus and Kitayama (1991) explained that people hold at least two different types of self-construal and that all cultures have aspects of each, although some cultures emphasize one over the other. Individuals may hold an independent or interdependent self-construal. Independent self-construal is characterized by valuing uniqueness, assertiveness, individual goals and expression. Interdependent self-construal involves belonging, fitting in, harmony, other's goals, and restraining oneself. Furthermore, while being the best as an individual mark of competence is an acceptable goal for independent cultures, the process of improving is more important for interdependent cultures (Walker,

Deng, & Dieser, 2005). According to Walker, Deng & Dieser's (2005) research, the idea of self-construal is evolving.

There may be more than independent and interdependent dimensions to self-construal, but it is most important that we avoid oversimplification of others in our theories (p. 95). In fact Triandis and Gelfand (1998) posit that individualism and collectivism are not dichotomous and may be defined by four attributes falling along a continuum. The attributes they suggest are: 1) how one defines the self as being personal or collective, independent or interdependent, 2) how one establishes personal goals, assuming personal priority over group goals or the opposite, 3) how one views relatedness and rationality, whether there is an emphasis on exchange over communal relationships, and 4) how one determines social behavior, whether personal attitude is more important than collective norms. In this model, individualism and collectivism are further divided by a horizontal plane which emphasizes equality and a vertical plane which emphasizes hierarchy (Triandis & Gelfand, 1998). For example:

Self-serving biases may be much more prevalent in vertical individualist cultures (e.g. France, the United States) than in horizontal individualist cultures (e.g. Norway, Sweden) because the former focus on being distinguished and gaining status through competition. Moreover, the vertical-horizontal distinction also may be relevant to conformity. Conformity may be higher in vertical collectivist cultures than in horizontal collectivist cultures because the former focus on sacrificing one's needs for the group. (p. 125)

Of course no single category represented a better way of being, but each represented different ways of functioning in specific situations. When considering the

impact of culture on exercise adherence these ideas must be factored into theory development. In the current study I will investigate the factors influencing exercise adherence for Latinas in the United States. Motivation is one factor that is highly dependent on culture. Exercise adherence, a culturally influenced behavior, is mediated by the amount of time and level of involvement one has in the new culture. Acculturation or change that occurs as a result of living in a different culture has an impact on attitudes and actions of immigrants.

Hispanic adults reported having less leisure time as compared to non Hispanic whites but spent more time walking and biking. Self-reported adherence to PA increased as level of acculturation increased (Berrigan, Dodd, Troiano, Reeve, & Ballard-Barbesh, 2005). More acculturated Latinas with higher levels of English language proficiency who emigrated when they were younger than 25 reported more PA than older émigrés (Evenson, Sarmiento, & Ayala, 2004). Evenson et al. (2004), measured intrapersonal and contextual factors in their study of Latinas using five specific questions designed to represent the idea of fatalism as a cultural construct. In general Latinas see health as holistic, connecting, mind, body and spirit and view their health as being in the control of a higher being. The result of this study was that two-thirds of the women in the study (all Latinas) believed that prayer could help them stay healthy (p. 2520). Normative beliefs impact attitudes and motivation. Latinos felt it would be very difficult to change eating and weight gain behaviors, reflecting an attitude of fatalism (Marquez, McAuley, & Overman, 2004). One who has a fatalistic life view might not respond to motivational strategies designed on the self-determination theoretical model.

Although relatedness has been shown to be important for collectivist cultures, competency and autonomy may have less of an impact. In fact, Eyster Brownson, Donatelle, King, Brown, and Sallis (1999) in their study of PA social support in older aged minority women found that the women were more likely to be sedentary when social support for PA was low. However, once an exercise routine was established PA social support became less critical, suggesting that support in initial stages of establishing a routine was most important. They also noted that support from friends may be more important than support from family for vigorous activity. Further support for the importance of relatedness for Hispanics was found in recreation studies. Hispanics were found to prefer gathering type activities as compared to organized activities typically found in recreational programs (McChesney, Gerken, & McDonald, 2005). A support system based in friends and family (relatedness) for Latinas could facilitate exercise adherence. If competence and autonomy are to be used to motivate Latinas then a broader definition of these terms may be warranted.

The need for competence or feelings of competence is impacted by self-perceptions. One's idea of possible selves (self-schema) can be either what is hoped for or what is feared. In the area of health, a hoped for self might be one who is physically healthy, and a feared self might be one who is physically disabled (Estabrooks & Courneya, 1997; Kilpatrick, Hebert, & Bartholomew, 2005). Whaley and Schrider (2005) found that perceived positive health benefits and encouragement of knowledgeable staff at an exercise facility motivated exercise adherence. If possible selves were developed around body image; however, individuals who had unrealistic expectations for weight loss were more likely to drop out of exercise programs. When a cultural variable was

incorporated in self-perception, Waid & Frazier (2003) found that hoped-for selves and feared selves in Hispanic elders revolved around family domains, and that these elders were likely to have more collectivistic sub elements in both hoped for and feared selves. Although collectivistic elements are evidence of relatedness, a primary need in Hispanics, the presence of these elements are also evidence that competence might be defined in the Hispanic culture as competence in interpersonal relationship. It is possible that developing relationship through PA would be beneficial to this group and that the activity itself would be less important than the participants.

In a study of adolescent African American and Latino females, Taylor et al. (1999) found that motivation for participation included: 1) fun and activity choice (autonomy), 2) social support (relatedness), and 3) improved body image and health (competence). Intrinsic motivational needs for autonomy, competence, and relatedness are supported by these findings with middle school females. Since these findings are closer to the United States norms for intrinsic motivational needs it may be that the level of acculturation for school students is greater than for their adult parents.

Intrinsic motivation and integrated regulation of extrinsic motivation are important to PA perseverance. The factors of autonomy, competence and relatedness contribute to sustaining intrinsic motivation but not necessarily in the same way for all cultures in the United States. Individual perceptions determine what factors are at work and impact intrinsic motivation or lead to integrated regulation (Deci & Ryan, 1995).



## Feminist Theory and the Study of PA Adherence

Employing a feminist lens has enhanced the understanding of the gendered nature of the culture surrounding PA and can provide a method for studying the perplexing nature of adherence difficulties for women. Feminist social science is focused on both understanding and change. Understanding the nature of how social relations and social structures impact women's lives and how those realities can be reconstructed is the heart of feminist approaches. Epistemologically, feminism places women's perspectives at the center of inquiry (Costa & Guthrie, 1994; Duquin, 1994). Of particular relevance to this inquiry is feminist standpoint research which focuses on the idea of a situated woman who is part of structures and systems that make her knowledge specific to her circumstances (Olesen, 2005). Traditionally, male normative perspectives have held the central spot in research, with the female being seen as "the other" or different (de Beauvoir, 1989; Dewar, 1987). The next section of this review will include feminist literature that meets the criteria of centrally locating female perspectives.

An understanding of physicality based in women's experiences is critical to confronting the oppression women face in sport and PA contexts (McDermott, 1996). Physical education in schools is a place where girls are socialized into PA gender roles early in life. Scraton (1992) posits that the message conveyed in physical education classes is "women's bodies are physically developed in order to look good and presentable (particularly to men), yet they must be protected from over development and physical contact in order to avoid 'unnatural' or 'unhealthy' touch and damage to 'delicate' parts." The body is how sexuality is defined for women so that society can control women by emphasizing looks. (p. 58) Girls' experiences of their bodies are socially

constructed and will be the basis for how girls interpret physical education. Media images provide girls with narrow and oppressive body narratives which impact their participation in physical education as adolescents and later as adults (Oliver, 2001). A constant focus on appearance for girls is common in mixed settings. Although boys use their bodies for achievement particularly in sports, girls typically view their bodies as objects (Scraton, 1992, p. 92). Activity selection in physical education for girls tends to focus on features not related to skill and the actual movement requirements of the activity. For example, physical education teachers viewed badminton as a popular activity for girls because in their perspective girls don't want to work too hard, concentrate, or be very active (p. 82). Physical education is often focused on maintaining the status quo and social conventions despite the advent of Title IX in the United States. Co-education in physical education is currently the norm and has served to further disadvantage girls since boys tend to control mixed settings (Kunesh, Hasbrook, & Lewthwaite, 1992; Scraton, 1992). The foundation provided in physical education should help girls develop skills for future participation in PA, when in fact it tends to discourage the participation that gets translated to PA adherence in adulthood. When girls do not discover the joy of movement for its own intrinsic sake and view activity as a means to the extrinsic gender stereotyped end of "looking good," exercise adherence as an adult will be a constant challenge (Roberts, 1999).

Women's pursuit of leisure activity in adulthood is further challenged by many constraints. Deem (1987) described the complex nature of the constraints women experience in the pursuit of leisure as;

...fragmented work schedules, household and childcare responsibilities, lack of transport and money, vulnerability to male sexual harassment and attack as well as male control strategies and by their socialization into dominant ideologies about femininity and female sexuality as well as by societies whose entire structure is male-dominated. (p. 430)

Deem concluded that the availability and use of leisure time was a feminist issue. While writing about women's leisure lives Deem, also noted that women do not think they have a right to leisure the way men do (Henderson & Bialescheki, 1991). Women's PA has been overshadowed by the demands of family and work obligations so that many women select activities that include their children (walking, swimming), or can be done at home (treadmill, stationary biking etc.), rarely participating in sport outside the home.

However, women's "ethic of care" (Noddings, 1998) can also provide a mechanism for adherence behaviors in the form of social support and empowerment via social networks (Henderson, 2003). Women are a diverse group with a variety of needs, characteristics, and life circumstances, therefore, future research must account for these and other variables (Henderson & Bialescheki, 1993).

#### Life History and Narrative Research Techniques

So far much of the literature on exercise adherence has focused on attitudes and beliefs within an individual. However, understanding the complexities of the exercise adherence problem was facilitated by a more praxeological approach whereby structural determination contributed to change through personal action. A poststructuralist approach which focuses on discourse was recommended by McGannon & Mauws (2002). Use of language recognizing the ambiguities that occur as people speak their stories and

construct identities allows for deeper understanding of the structures that underlie exercise behavior. One of the problematic structures is the definition of exercise adherence itself. For example, rigorously defined adherence may cause women to eschew PA goals altogether as too stringent (McGannon & Mauws, 2002), or not to report daily activities as part of the PA picture. Studying women's life stories related to PA can yield insights into progressions and take into account the nuances of different types of activities they choose to include.

Women participating in narrative research become participants rather than objects of study and through the process have the potential to change their own lives. Understanding lifelong PA requires a life story approach because there are so many changes that occur in one's life that impact activity levels and stories are one way to make sense of those progressions. In telling a story the narrator will create a present that has "unfolded" in the context of past events providing a direction for their future (Gergen & Gergen, 1988). Sparkes (1999) suggested that:

the stories we are told, and the stories we learn to tell about ourselves and our bodies, are important in terms of how we come to impose order on our embodied experiences and make sense of events and actions in our lives. (p. 18)

Storytelling can foreground the voices of participants in a caring relationship rather than providing a background for "*a priori* theories" (Sparkes, 1999). Feminist theory building requires feminist narratives and world views that are different from masculine discourses (Duquin, 1994). Women's self-narrated PA stories can provide a tool for making sense of their lives.

The stories people tell about their lives reveal their inner understandings to the outside world, helping them to construct a coherent personal reality - in a sense their identity (Lieblich, Tuval-Mashiach, & Zilber, 1998; Linde, 1993). The narrative researcher uses a variety of dimensions such as contents, structures, styles of speech, motives, and attitudes to analyze the story. Special attention is given to the interaction of the interviewer and interviewee as well as contextual factors (Lieblich, et al., 1998). The limitations of narrative research revolve around the fact that the stories people tell are "limited portraits." The stories as told in language replace the primary experience and by nature are ambiguous. In keeping with Foucault's idea of genealogy, history cannot be too reasonable because it is often fabricated and born of passions (Scheurich & McKenzie, 2005). Therefore, the interaction of the teller, recorder, listener, analyst, and reader is where meaning is created. "Meaning is contextual, not fixed and universal." (Riessman, 1993)

The researcher conducting the analysis seeks the plot by finding relationships between events and thus begins to provide an explanation. Oliver (1998) suggests that the researchers "give meaning to some experience, or offer insight into the motivation and purpose behind a chain of events." Analysis techniques for narrative research are varied. Researchers use different tools to provide the reader with multiple ways of looking at the story.

Labov (1982) developed a technique of transcribing the text into parsed numbered lines so that key parts of the stories could be identified. Each line or section within the story has a function either to orient the listener, relay the action, or resolve the action (Riessman, 1993). A focus on the core narrative within a story requires elimination of

extraneous information like descriptions, interactions between the interviewer and participant and the storyteller's evaluation of events (Bell, 1988). Using this technique it is possible to see how different stories within a life history are linked, and how boundaries of the story are developed. The core narratives of different participants can then be compared (Riessman, 1993). Labov's technique can provide a way to uncover motivations for adherence. Language defines themes in the core narrative which can be analyzed using linguistic techniques.

Lakoff and Johnson (1980) proposed in *Metaphors We Live By*, that metaphors (understanding one kind of idea in terms of another) define our conceptual systems. The choice of language in narration is significant because the expressions we use provide the parameters for our reality. Social reality is defined by culture and as such impacts physical reality. According to Lakoff and Johnson,

What is real for an individual as a member of a culture is a product both of his social reality and of the way in which that shapes his experience of the physical world. Since much of our social reality is understood in metaphorical terms and since our conception of the physical world is partly metaphorical, metaphor plays a very significant role in determining what is real for us. (p. 146)

Metaphors make use of categories of things which are based on perception and purposes in a particular situation. The use of particular metaphors in the telling of a story is significant because the metaphors represent the reality of the teller. In the use of metaphor, the narrator highlights certain properties of the category, while downplaying or even hiding others. PA adherence behavior is complex and dependent on a variety of individual experiences. In order to understand the motivation involved in this behavior,

the use of a human emotion common to most people allows the narrator to put the concept into a human form, such as love, for the expression of meaning. Linguistic interpretation of metaphor can be accomplished by viewing the narration as a poetic structure. Gee (1985) suggested that when we narrate we organize our thinking in terms of stanzas which are lines that tend to go together because they are said without much hesitation between them and with a similar tempo. (Reissman, 1993, p. 45) Metaphorical analysis can be facilitated by organizing transcripts according to stanzas, or a series of lines presenting one new piece of information in each line (Gee, 1985).

Core narratives may also be used to uncover fantasy types which emerge in the process of story telling (Borman, 1982, 1985; Terry, 2001). When humans communicate such that a common consciousness is portrayed through descriptions of shared emotions, motives and meanings, a social theory of communication can be used to analyze the stories. Symbolic Convergence Theory (SCT) was developed by Borman (1985, 1996) as a result of his work with small groups. He suggested that social realities and group consciousnesses are built through the practice of story telling. Individuals with seeming disparate experiences can join together and develop a common culture (group consciousness) as they recognize each other in their individual stories. When there is an energetic reaction to the stories of others, a sort of fantasy chain reaction occurs. In this study hearing another's workout stories or struggles can set off such a reaction. SCT can help illuminate the importance of these shared fantasies.

According to Borman (1985) there is a three-part structure to SCT. The first part deals with the discovery and arrangement of recurring communicative forms and patterns that indicate the evolution and presence of a shared group consciousness. The second part

consists of a description of the dynamic tendencies within communication systems that explain why group consciousnesses arise, continue, decline, and disappear and the effects such group consciousnesses have in terms of meanings, motives, and communication within the group. The basic communicative process is the dynamic of people sharing group fantasies. The third part of the theory consists of the factors that explain why people share the fantasies they do when they do (p. 129).

### Summary

Maintaining regular patterns of PA requires motivation. Many authors suggest that intrinsic as opposed to extrinsic motivation should result in the ability to adhere to PA for a longer duration. It is difficult; however, to find a pure intrinsic motivation among women involved in the studies reviewed here. A range of theories have been used to study motivation and PA adherence for both men and women. The authors of the studies reviewed proposed the following: 1) the ability to overcome barriers to PA adherence was stronger for women who were involved in vigorous exercise programs and who had been regular participants for more than one year, 2) the expectation of self-efficacy promoted by role models was a stronger motivator than the expectation of an outcome, 3) the intention to exercise was promoted by perceptions of social support, normative beliefs, and a motivation to comply with a behavior, 4) novelty and enjoyment of activity were important to sustaining interest, 5) families were able to promote PA behaviors in children by supporting them with resources, social encouragement and modeling, 6) competency, autonomy, and relatedness contributed to the development of intrinsic motivation, 7) in some cases extrinsic motivation appeared similar to intrinsic motivation when the reasons for participation were internalized and valued by the



participant, and 8) challenging comments did not negatively impact intrinsically motivated individuals and in some cases actually encouraged them.

Motivation is impacted by culture. In cultures where conformity is valued autonomy did not have a strong influence on motivation. Furthermore, Latinas take a holistic view of health, connecting the mind, body and spirit so that fatalism plays a role in their thinking. Latinas have a tendency to believe that their health is controlled by a higher being and that they do not have much control over behaviors pertaining to their health. This view might prevent them from adhering to PA.

Using a feminist lens to study women's physicality was recommended. Women's perceptions of their bodies are socially constructed; therefore women may be controlled by a society's emphasis on looks. In physical education girls bodies were viewed as objects, and they were disadvantaged by being in co-educational settings. Women's leisure is subject to constraints that are different from men's. Studying women's PA adherence requires a deeper understanding the structures at the base of their PA behaviors.

The study of women's PA adherence behaviors may be facilitated by the use of narrative research techniques since the stories women tell about their lives can provide a powerful counterpoint to masculine PA discourses. Through storytelling women construct a reality that is understandable to them and others providing a deeper insight into their behavior. Metaphorical language use in stories also enables insight into reality. When groups share common stories a fantasy type emerges which can further illuminate PA motivation.

## CHAPTER III

### METHODOLOGY

In order to allow the voices of Latinas to be heard I employed a life history approach by eliciting life stories through interviews. The interview process was designed to facilitate a narrative form of data analysis. The primary analytical focus was on the following questions:

1. What factors contribute to the PA adherence of Latinas?
2. To what extent is intrinsic motivation a valid construct for Latina's adherence behaviors?
3. To what extent do extrinsic motivators result in PA adherence in Latinas
4. How do Latinas perceive their own physicality related to PA adherence behaviors?

In this chapter I will describe the methods used for selection of participants, the participants, how the data were collected and analyzed. Contextual information about the participants and researcher will be included to enable the reader to make judgments about the analyses presented. The process was designed to make use of Foucault's genealogy where histories are understood as random and piecemeal fabrications (Scheurich & McKenzie, 2005). Therefore, the reader shares responsibility for interpretation, moving this research into a postmodern perspective appropriate for viewing a complex psychological and sociological phenomenon like PA adherence behaviors.

### Selection of Participants

Approval for the study proposal was obtained from the university's Institutional Review Board. The approved proposal stated that six to eight participants would be recruited for the study. The participants in the study responded to a posted flyer (Appendix A) soliciting participation in a research project. The flyers were posted in health clubs, sporting goods stores, community centers, and on a group e-mail. The participant requirements were stated as:

- Adult women of Hispanic origin who have experienced at least three life transitions like, high school graduation, marriage, taking a first job, having children, changing jobs, college graduation, children entering school etc.
- Professed commitment to regular PA
- Willingness to talk about their PA life history in an interview lasting 60 to 90 minutes.

Each participant who volunteered received \$25 compensation for their participation in the study. Six women volunteered; four from two large metropolitan areas in Texas and two from the community where the university is located. Four were identified as Mexican American; two of these were second generation (both parents from Mexico), one was third generation (one parent from Mexico) and one was fourth generation (one or both grandparents from Mexico). One participant was from Brazil and one from El Salvador.

### The Participants

Following each interview I noted impressions and specific information shared either before the interview taping began or after the taping stopped. Descriptions of each participant follow. Their names have been changed to maintain their anonymity.

Christina, a trim and fit second generation Mexican American in her mid thirties, was married with one son, and dressed in stylish camo pants and a tight fitting tank top which featured her body in a very flattering way. We met at a local coffee shop where her son worked near the downtown area of a large metropolitan city in Texas. The neighborhood was predominantly Hispanic. Her speech was not accented. Christina was very animated in her talk showing obvious excitement about her activity life. Her husband and son were mentioned often in her stories and she frequently used the term "we" when telling stories about her life. Christina's husband worked in a running shoe store and also was a personal trainer. She was an accountant. Prior to the interview she purchased a piece of carrot cake and water and had eaten half of it. After the interview I offered to sit with her while she finished the cake. She said that she always orders sweets but never finishes them and she would take the cake home to her husband.

Analisa, also a second generation Mexican American and sister-in-law of Christina, was about 30-32 years old. She was trim, fit and dressed in tight blue jeans and a fitted white tank top. Her speech was not accented. We sat outside a local coffee shop near the downtown area of a large metropolitan city in Texas, at a table with an umbrella. The day was clear and comfortable for being outside. Analisa ordered a chai latte and made sure it was made with low fat milk. Upon reading the consent form she became quite animated and interested in the study. She was a Physical Education (PE) teacher at an elementary school with an 80% Hispanic demographic. I was tempted to just talk with her about the children at her school but resisted that temptation until late in the interview. We were able to establish a rapport based in common experiences since I have also been

an elementary PE teacher. Frequently Analisa could not remember specific details about her PA life; however, she provided some stories used in the analysis.

Julie, a third generation Mexican American, her mother from Mexico and her father from the US, was a six foot tall, fit 25 year old attorney. Though quite young she had been through the required transitions, having gone to college, then law school followed by professional employment as an attorney. We met in her loft apartment located in a major metropolitan city. The apartment was very open with a high ceiling in the living area and a loft sleeping area upstairs. While we were visiting, her boyfriend was in the loft. I did not meet him. The apartment building belonged to her uncle and was her residence during law school. She remains there although she now has a job. We sat at her kitchen table to talk. According to Julie, both of her parents were thin most of their lives until recently, but Julie did not consider them overweight. She talked very fast and did not create long stories but she did share many interesting vignettes. Hers was the shortest interview.

Lillian, a fourth generation Mexican American, having only one or more grandparents from Mexico was short, overweight and wore a loose fitting t-shirt and slacks. Lillian was in her mid thirties and her current PA was primarily lifestyle. Her primary activity was walking for transportation, since there was only one car in the family. We met in her home located in a metropolitan city in Texas, because she was home-schooling her children. The house was modest in size and situated very close to the street. In the front were many potted plants, of which she was proud. Lillian had three children; one child was away at boarding school, and the other two were in their rooms doing school work while we talked and did not interrupt us. She identified as a "stay-at-

home mom." Lillian was relaxed, and seemed very happy to share her stories. Her stories were rich with detail and opinion about activity adherence.

While Lillian shared many stories in the interview, she relayed one story outside of the interview which I think is important. During her childhood, her extended family including cousins would gather at her grandparent's house on Sunday afternoons for a meal. Across the street was a park and she recollected that they would play softball together as a family. She said that she really enjoyed that activity.

Margarite was a short woman in her mid thirties born in El Salvador who maintained a healthy weight. Her parents still live in El Salvador and she returns there frequently to visit. She came to this country to study at a major university as an undergraduate, stayed to get a masters' degree, and currently works at the same university. We met at her home located in a suburban neighborhood close to a health club to which she belongs. She had a roommate who was not present during our visit. Margarite was enthusiastic while telling her stories and had a strong accent. She was comfortable with me since we were already acquainted prior to the interview. She volunteered, however, because she saw the flyer at her health club, not because I asked her personally.

Elena, was born in Brazil where her mother still resides. Her father is deceased. She is in her forties and moved to the US around five years ago to marry. She wore a dress and looked to be of normal weight (not thin and not overweight). I thought she looked very healthy. Elena had a thick accent but I was able to understand her quite well. We met at her husband's business. He was present in the building for part of the time and then went outside to mow the grass. I met him while I was there and I knew he was aware

of the nature of the research because he asked Elena if she was telling me about certain events in her life. We sat at a table in a break room. Elena was calm while relaying her stories and was particular about dates. She had a good memory for details and her stories were rich. Her method of story telling suggested to me that she had thought about what she would say before I arrived. She was the only participant who chose to alter my transcription slightly after I shared it with her. Elena works in another town on the weekends, does not drive, and rides a bicycle for transportation. She travels frequently with her husband. She does not have children.

As the interviewer and researcher, my profile must be considered a factor in the analysis. I am Caucasian in my late fifties, committed to regular PA, and maintain a high level of physical fitness. I have been a PE teacher for the last 33 years, thirty of those at the university level. I have not had any periods when exercise was not a part of my life despite the life changing transitions of college graduation, job changes, marriage, divorce, arrival of children, and children leaving home. I self-define as an adherent to PA. During the interview process my enthusiasm for activity was evident and I was able to be empathetic and supportive of the participants' struggles with PA.

#### Collection of Data

Interviews were used to collect data. Since I was seeking stories, the interview questions were broad and open-ended. After having the participants think about transition stages in their lives, I asked them to tell me about times in their lives when they were physically active, to talk about what was happening in their lives during those times, and what contributed to their attitudes and behaviors regarding PA. The interviews were

recorded with an I-Pod, and the data were transferred to a computer. Following each interview I wrote down my impressions and additional information not recorded.

The recordings were transcribed first using voice-activated transcription software, and then revised after I listened to them two more times. After I was satisfied with the transcriptions I sent them back to the participants to get their impressions.

The initial transcript of the interview was shown to the participant to verify the perceived accuracy of the transcription. Each participant had the opportunity to alter the language they used at this stage (prior to analysis) lessening the likelihood of misrepresentation of the spoken word. One participant returned an amended transcript of her interview. The others accepted the interviews as written. Since one of the purposes of this study was to empower the women in the feminist tradition, their input was very important. However, I had to keep in mind that I was interpreting what they actually said and not what they may have intended to say. I was responsible for the interpretation, therefore, and I chose not to seek input after the analysis, though I did share the analysis with them (Chase, 1996). The review of the interview by the participant served as a second consent opportunity.

#### Analysis of Data

The interview data were recorded and transcribed verbatim and then analyzed using several narrative analysis techniques. First, the Holistic-Content Perspective as described by Lieblich, et al. (1988) was used. The analysis was accomplished in five stages. The first stage involved reading the life histories several times seeking a focus for each history. Second, global impressions of each history were recorded noting exceptions and unusual features of the stories within the history. Third, I identified themes and



followed each of those themes from the start of the history to its end. Fourth, using colored markers, the various themes were highlighted in the text with each theme being represented by a different color. Fifth, as each theme was followed throughout the history conclusions were developed as to the significance of the theme by attending to stories within the history that contradicted the theme either by the author's evaluation or the general sense derived from the reading (pp. 62-63). Each interview was analyzed using this method, and themes were identified for analysis.

In a second technique developed by Labov (1982) I parsed out the interview transcripts into sections representing key functions in separate core narratives. The lines were numbered and the sections identified by functions like orientation, complicating action, and resolution (Appendix B). Some details in the narrative were removed so that only the core narrative remained. Through repeated listening to the recordings I identified pauses and other features of speech and represented those in the newly re-transcribed text. Removing the extra dialog enabled me to view how different stories in the life history were linked and how the narrator chose language to represent herself (Riessman, 1993). Through this technique I was able to see the themes more clearly and also focus more closely on the use of language.

The analysis of the core narratives, for example, revealed some interesting common use of the words "love" and "addiction" in relationship to exercise. Since the use of these terms ran through at least five of the narratives, I arranged a follow-up focus group meeting at which I queried the participants further about their use of these particular words. I invited all five of the participants whose use of these terms was most prevalent, three of whom were able to meet. Christina, Analisa, Julie and I met one

Saturday morning at the coffee shop where we had met once before. Since the purpose of the focus group meeting was to get more detailed information about the women's use of specific language and did not elicit more stories, I chose to use Gee's (1985) ideas about the poetic features of language and Lakoff and Johnson's (1980) work on metaphors to frame the analysis. I organized the responses into stanzas so that I could establish coherence among the parts of the responses. Appendix C is an example of the stanzas derived from the focus group interview. According to Reissman (1993) when listening to a discourse one can determine what lines go together by noticing how the lines are spoken. When the pace of speaking is similar and there is little hesitation between lines, a stanza is created. Gee (1985) posits that this is the method most individuals use to plan their speech, as a sort of poetic structure. In this section each of the three participants had different pacing and ways of structuring their responses to the same question. The stanzas I created out of their discourse were arranged according to the words we were exploring and similarities among the participants' responses.

Finally, the analysis of all the participants' core narratives also revealed a shared common theme relating to body image. I used Borman's Symbolic Convergence Theory to analyze the core narratives in which a shared group consciousness emerged (Borman, 1985). In particular a "perfect body" fantasy emerged from the stories of several of the women. Using this technique I analyzed motivation related to achieving the "perfect body."

### Summary

Six Latinas who had experienced at least three life transitions and identified themselves as PA adherents volunteered for this study. They were interviewed using

broad questions designed to elicit personal PA stories. The transcribed interviews were shown to the participants to check their perceptions of accuracy before analysis was begun. The interviews were re-transcribed into core narratives for thematic analysis. The Holistic-Content Perspective was used to identify main themes throughout the stories in the core narratives. A focus group meeting was organized to gather more information about the participants' use of the words love and addiction. Linguistic analysis using poetic structures was applied to the focus group transcript and metaphorical language was examined for meaning. A shared consciousness about achieving the "perfect body" was examined using Symbolic Convergence Theory.

## CHAPTER IV

### DATA ANALYSIS

#### Introduction

In the reading and re-reading of the transcripts the complexity of the women's lives became increasingly evident to me. My interpretations of their stories involved the use of several different techniques as explained in the previous chapter. Throughout the readings I was cognizant of the need to provide the reader with significant pieces of the narratives so that they might judge the interpretations I made. The data analysis presented here is divided into three parts according to the analysis techniques used. Using Lieblich et al.'s, (1998) Holistic-Content Perspective, I discovered five broad themes that are explored in the first section of this analysis. This section is titled Adherence Themes.

The themes included in this section are:

1. Culture and family
2. Being pushed
3. Health
4. Role models
5. Competency

When I looked at the core narratives using Labov's (1982) technique, I noticed two other major concepts which required different analytical tools. The second section of this analysis was completed using Gee's (1985) Poetic Structures Technique and Lakoff & Johnson's (1980) metaphorical interpretation of language because of the interesting use of language in at least five of the histories. The words "love" and "addiction" were

analyzed in the context of the histories and then further in an analysis of a follow-up focus group meeting. This section is titled Language Use.

The third section of the analysis was devoted to understanding the "perfect body" fantasy using Borman's (1982, 1985) Symbolic Convergence Theory by identifying a shared group consciousness. The stories that presented as part of the fantasy theme were similar in that they were stories of struggle with weight. The recurrence of these stories was evidence of symbolic convergence. This section is titled The Perfect Body.

Each of the sections in this chapter was developed separately but the same purposes were paramount in the analyses. I was always cognizant of the research questions posed at the outset of the project. I focused each of these sections on the research questions: 1) providing direct answers related to the factors contributing to adherence behaviors, 2) clarifying the type of motivation (intrinsic or extrinsic) involved or 3) identifying the factors contributing to Latinas' perceptions of physicality. In this chapter key pieces of the stories are presented as they relate to the themes and sections. In making much of the primary data available to the reader, the trustworthiness of the analyses are confirmable (Reissman, 1993, p. 68).

Christina, Analisa, Julie, Lillian, Margarite, Elena and I have co-created this analysis and it is my hope that through our eyes the reader will be able to see the diverse realities of Latinas' feelings and experiences related to PA adherence.

## Adherence Themes

### *Culture and Family*

All six histories contained stories of culture and family. I was not surprised by this since most children are influenced by their parents and siblings. Family influence is particularly strong in the Hispanic culture. Children who are encouraged by their parents to be physically active generally are more active, particularly when the parents participate with them, thereby socializing them into active lifestyles (Taylor, et al., 1994). In these stories none of the women were active with their parents, but in some cases siblings and cousins played an important role in their PA interest. I present early life memories here to establish the influence of family and culture in childhood, and to establish profiles of the women which endure as they pass through life transitions.

Christina and Julie's parents encouraged them to be physically active. Both were involved in sports in middle school and high school, whereas Analisa was discouraged by her family. As a child Lillian participated in dance activities as finances would allow, but did not think exercise was emphasized in her family. Margarite was not very active as a child other than in school PE, and when her mother would take her to her exercise classes or arrange for an activity at their home. Elena believed that in her culture each person needed an activity to do, and her parents encouraged this by supporting her financially.

#### **Christina**

Christina described her parents and family as supportive. She said:

As far as from the family I was probably one of the most active because I was maybe the second one who actually joined some sort of activity in school. Everyone else was more like just go to school and come back home. So at that

point, pretty much everyone was very supportive. My parents were, you know understood, because in a Hispanic family, a lot of times, because they're not so fitness oriented, a lot of them they say well, no, you need to come home immediately from school because there's stuff to do at the house. In my case I would tell them hey I need to stay after school to study, to practice, whatever. In my experience, they basically were very supportive.

During high school Christina became pregnant but even after she had her son, her parents continued to be supportive of her PA. She explained:

Because of having a child at that age and basically a lot of responsibilities came along with that single parent so I lived with my parents and even then, they were extremely supportive. As far as, you know, they asked me hey, you still want to play a sport, you know we'll be willing to go ahead and help you out with him.

It was a family affair for her. She had a large family and her siblings all maintained an interest in a physically active lifestyle:

Everybody as far as my sisters and brothers um even when two of them who live in Mexico are always asking about our runs what we're doing. And we asked them it's like oh my gosh, it's been so long since I've run. But yet when they're here, they actually go out to Memorial and run with a couple of us. So I think the whole running scene has been instilled in everyone. Become part of our daily lives.

**Julie**

Julie's parents encouraged activity and modeled this for her. Both her parents were active. The family had a swimming pool when she was young, so Julie's early memories of activity involved the pool and friends:

I had a lot of friends that live on my street and my parents had a pool so we were swimming all the time always swimming always playing the typical childhood games like tag and stuff. I always remember being outside and just running. I very rarely was watching TV, I mean not like these days or movies or anything. But, I remember the pool mostly is what we did a lot.

Her parents were involved in their own activities but did not participate with her. She remembers:

My dad at one point, he was um, on, in a basketball league at the YMCA and, um, but he tore his ACL. And after he tore his ACL his activity kind of stopped for probably about five years but then he got into running and he got to the point that he could run eight to 10 miles a day because he was just so consistent with it. And my mom, I would say is pretty active she's still I mean all through my life has worked out here and there and even if she didn't she never gained a pound. They didn't really swim much they're always just watching us, but pretty active.

**Analisa**

Analisa was active with her brothers but was not encouraged by her parents to be active because they viewed PA as inappropriate for girls. She was determined to be active despite the attitude of her parents. She stated:



I guess because of the culture and my parents were very traditional. I am first-generation here so my parents are from, you know Mexico. So they have different I guess roles that each sex has to play so during my childhood and growing up, adolescence. A lot of the times, it was, no, you can't do that because you're a girl, and it, it's, that was just ignorance you know. And you know they had passed that on to my brothers, you know children pick up what their parents teach. So it, for a while, it was no you can't do that you can't play with us cause you know you are a girl and girls can't do stuff like that. So that kind of fueled the fire for me like no, I can do it.

Analisa was determined to be active despite the prohibitions of her family.

### **Lillian**

Lillian recalled very little family related PA during her interview. However when the interview was complete and the recorder turned off she fondly remembered Sunday afternoons at her grandparents' house and playing softball in a vacant lot across the street with her cousins. Regarding her childhood she claimed:

We were not actually a traditional Mexican family. My mom is like a fourth-generation my father is, I guess second or third but there was never any emphasis on exercising whatsoever. Our exercise was, really, we had free reign of the neighborhood, and that's when, our neighborhoods you know were still safe or perceived to be safe. And we were you know lots of bike riding and walking to our friends house and so I do remember not being home much not using my room much, because we have a tiny two-bedroom house and I had two siblings so we were a family of five. And um, I was just always walking around the

neighborhood, and um, or riding my bike to friends' houses. That would've been the extent of any exercise, I received.

### **Margarite**

Margarite and Elena were not Mexican Americans, did not grow up in the United States, and seemed to exhibit a different perspective than the other women. Margarite is from El Salvador and she recalled that exercise was not emphasized in her family. She stated:

I am the youngest of three daughters, my dad is a doctor my mom is a housewife  
You know, PA, I don't know if it's a Latin American thing or if it's an El Salvadorian thing but it wasn't really ever emphasized. My family was never the sporty type, I don't know. My mom did exercise.

Margarite's primary source of PA was recess and PE and she suggested that the whole sport thing was before her time.

I think through my school years, age 6 to 18 or what ever there was PA in just in the form of those breaks or those PEs in school, nothing extracurricular, because that wasn't very popular in El Salvador when I was growing up.

### **Elena**

Elena was from Brazil where according to her it was important to have an activity. She explained:

My family, my father was a very active man, he played tennis. My brother play tennis, my godmother plays tennis now today she's old she doesn't play but she played a lot. In a certain way we are raised to do something you have to do something. When you are 12 if you don't do a sport, people won't like you.

From an early age she was seeking a sport and tried tennis because her brother was successful and finally settled on modern ballet as an activity she could do well.

For each of the women, family circumstances and culture mediated their level of involvement. Nevertheless, a pattern of PA was set for them early in their lives which persisted in various forms. There were specific challenges they faced due to family biases and socioeconomic circumstances.

I found it interesting that Analisa was discouraged by her parents due to gender bias in the Hispanic culture, yet she is one of the strongest adherents today. When asked about participation in school sports, Analisa again returned to the culture prohibition and added that she also felt unable to do school sporting activities:

I just I think that I didn't because I was intimidated, and I felt like I, I couldn't do it because I just, you know it's going back, to my family and how you know you're kind of born into. I just really didn't think I could do it. So, and I knew, that I didn't have a car so that would pose a problem for my parents because of transportation so it was something that I just didn't that was, I think those are some of the reasons why I didn't. But the main reason was because I just didn't think I would be able to do it.

She did not participate in activity during middle school and high school years but came to her current active lifestyle in college. Analisa had a belligerent attitude about the prohibitions her family placed on her. She was determined to do what she wanted to do. This clash of culture and the associated injustice is evident in her explanation about attending college despite her Mother's objections. Analisa's personality and self-concept distinguished her from the others in this study. Her motivation arose from within herself

because the reasons for her participation were not influenced by others or outside factors. She showed a high level of self-concordance citing intrinsic reasons for participation (Bailis, et.al., 2004). Analisa's attitude of self-concordance is evident in this passage about going to college:

What do you mean you're going to go away to college? My mom refused she said "no way you're not going," well that was kind of the story of my life. And I said oh yeah, I'm going to go. I just didn't see the justice in that how is that fair you know, and I feel that these girls are kind of in the same boat as I was. But the difference is that.... it is the immediate environment, their family wasn't the way mine was, some people are motivated and some people aren't. For me it was I'm gonna prove to you that I can do it and I was going to prove to you that I could do it better than you, that was my thing and these girls, some of them, they just don't really care. But like I say there are a handful of girls that do.

Lillian's family was economically challenged; her parents were self-employed without health insurance. Lillian loved to dance and would occasionally be enrolled by her parents in dance classes as finances allowed. She explained the impact of the loss of dance classes as devastating:

And I did take ballet at around fourth or fifth grade, and it was something I begged my mother, my parents for, for years and years and it wasn't anything that they could afford. Okay, I actually I took I think my first dance class was probably in second grade, second-grade and I was going to a private school and then my sister was born around that time. And my parents have had, um. They were both self-employed, they were artists, and so um without medical coverage.

They had to cover the expenses of my mom had all three of us cesarean section. So that's when the dance classes ended and there was a lapse of several years up until about fourth or fifth grade. And they put me in Ballet Austin, and I was just in heaven, and I really excelled at it. And then I guess money ran out again and they pulled me again and it was really devastating like. I can't even express how devastating that was.

Lillian today struggles with finding an activity that she enjoys and wavers between periods of adherence and non adherence. Her mother had body image issues, dieting regularly, and not exercising. Lillian did not have a role model of a physically active female parent. She stated that; "I don't ever remember her exercising. I remember her dieting a lot, but exercise never seemed to be a remedy." Lillian's early activity experience was confounded by her extreme dislike of PE classes. She "despised" the games they played and preferred dancing.

Only two of the participants had models of physically active mothers, but in each of these cases their mothers participated in exercise classes without them.

Margarite explained that her mother was active but when she tried to take her daughters to an exercise class she and her sisters did not enjoy it:

I think my mom did try to take us to the gym to exercise. And I remember kind of hating it because it wasn't very directed. You know, like we had the stuff there, but we didn't know how to use it and it was while she was exercising and so you know, it was kind of an imposition to have to go with her because she was going and then we had to go.

The women who participated in this study each had different experiences in childhood and their family and cultural influences varied. None of them told any stories of their parents participating with them in PA, yet each of them have developed exercise adherence behaviors, some in middle school and high school and others later in life. Taylor et al. (1994) noted that parents can encourage PA through modeling, providing resources or social encouragement. With the exception of Analisa, the participants in this study received one of these forms of encouragement. Christina, Julie, Lillian, and Elena were encouraged either socially (Christina) or through resources provided for participation in extracurricular activities (Julie, Elena, and Lillian).

A factor that also impacted PA behaviors cited in the literature review was enjoyment. Christina, Analisa, and Lillian told stories of having fun playing with siblings and cousins as children, while Julie had positive memories of playing with friends and participating in school sports. Heck and Kimiecik (1993) found that individuals who participated in sport activities as children were more likely to report intrinsic motivation later in life which correlated strongly with PA adherence. For these women their later PA adherence behaviors may have been promoted by this early enjoyment.

Children are typically active; however early activity does not necessarily ensure PA adherence in adulthood. Lillian, who was active as a child told stories of struggle with PA adherence later in her life. These early stories of family and culture provide context for later stories of adherence.

### *Being Pushed*

As the women moved to adulthood their adherence behaviors became more established. In this process Christina, Julie, Analisa, and Lillian all described some type

of external motivator that was involved in their actualizing adherence. A personal trainer, training for races, spouses and families all pushed the women. Deci, et al.(1996) posited that external motivators can masquerade as intrinsic motivation when the reason for acting has been internalized. Four types of regulation are possible but only the autonomous integrated regulation is closely linked to intrinsic motivation. In the following examples different types of regulation are exhibited but only Analisa has achieved the integrated regulation closely allied with intrinsic motivation.

Lillian spoke about the need to be pushed to be active. She worked at a YMCA in the nursery and spoke about taking the job to "deal with her weight issues." This classifies as external regulation of behavior because she was seeking a way to lose weight (external reward). She told this story about the experience:

As far as I was concerned, and I thought that if I had this free gym membership, because I work there I worked in the nursery there would be no excuse not to exercise. And I could also learn how to exercise I had never done weights. I had never done cardio. I had never done yoga. I always liked stretching, but that was kind of from dance so I started training with like the weight trainers and I started training with cardio people and so there was actually probably about 2002. I decided to train for the Danskin marathon and I was exercising working out about two or three hours a day about five days a week.

She sustained this pace of activity for three months and then quit "cold turkey" because she did not lose a pound. The external regulation of behavior never had the opportunity to transform into an integrated regulation so that she could sustain the motivation. She professes to being a regular walker today as part of her lifestyle which is quite different

than the picture painted in the above story. However, she still needs a little nudge to get off the couch:

I like hiking. It's just my husband really has to twist my arm to get me out of the house, but once I'm out there I'm really happy. I love it and, and I'm really grateful that he did. I haven't gotten over that just don't resist from the beginning; I know I'm gonna like it.

Julie depended on a personal trainer for her external motivation. For example, she stated: "to be perfectly honest, if I don't have a trainer... no, it won't happen it won't happen that's the only way I can make it happen with my schedule." She emphasized this point several times. When she went to college she gained 20 pounds and stated "so when I had to do it on my own I gained 20 pounds." Currently she is an attorney and she recognized a continued dependence on the personal trainer, stating: "I mean if I don't have a trainer I won't do it. I mean I've always been very active except for the times I have to do it on my own."

I probed Julie to talk more about what she likes about having a personal trainer, and she said: "all the way through I would say I like just the one-on-one attention." She also noted that when she works out today with a larger group and the trainer, she likes that as well. She harkens back to her high school basketball playing experience: "You know but even now, when we work out with C (her trainer) we have just a big group workout and I like that as well because that goes back to the kind of the team feeling." She recognized that the group situation also made it easier for her to skip the workout: "Tomorrow, if I'm too tired and don't feel like going it's no big deal, but if it's just me and



my trainer I can't cancel on him like that so that I would say that's the big difference,"

Because of the personal accountability, she experienced guilt when she missed:

Honestly, I feel like I have to go or "C" is going to be mad at me, I mean, he'll tell me It's like I'm so mad you haven't been or he'll call me out and be like why you slacking what's wrong with you, what's happening and it just makes me feel guilty.

Julie believes this is what keeps her active. Although others in this study have used personal trainers from time to time, Julie is the only one who expressed dependence on this type of motivation as an external factor contributing to her adherence behaviors. Deci, et al. (1996) would identify her extrinsic motivation as introjected regulation because the behavior is exhibited to avoid guilt or enhance the ego.

Christina said she needed to be pushed to get out and do her activity. When talking about motivating her son to be active she stated: "he's like me we need to be pushed a little so we can go out there and actually do it." She ran in the Houston Marathon and told this story showing her progression from identified regulation to integrated regulation:

Since I graduated high school. I was leaving this out, I decided to run the marathon, the Houston Marathon in 2000. So after I finished the marathon of course you know. I am the type like I said that needs to be pushed so, I don't like training. I'm sure a lot of people don't like training, and um I procrastinate quite a bit, so for that first run that first marathon I didn't do many long runs and I decided well, you know what, let me just go out there and try it. Well, I did okay, I finished, but of course, you know, trying to recuperate was like definitely quite a

story. So after that, you know (I) came in, when I finished that marathon I came in and told the guys C. (her husband) and J. (her son), okay guys you know I'm done. And then of course they thought it was going to take me a lot longer (be)cause I think they do that reverse psychology. Well I'm like no, you know, I think I could do this again and I'm sure I could do it better and they are like yeah yeah, whatever. I think I could do this 10 times in a row, if I wanted to. Needless to say I'm in my, I just ran my eighth Houston Marathon in a row. I'm trying to get my 10 in I've got two more to go, hopefully.

When I followed up to find out if she wanted to improve her health level or place higher in the marathon she provided this answer which indicated a more integrated perspective:

I think it's just a challenge to do it. Um. Definitely you want to get better, but I don't think that's the main for me. I don't think that's the main reason why I'm out there, just to enjoy it and stay fit overall.

Analisa also trained for marathons. She used marathon training in her transition from college to work as a means of staying active. She recruited several other teachers to train with her in her first years as a teacher. I asked if she had any difficulty maintaining activity upon taking her first teaching job and her reply was,:" no, no, no, I didn't and in fact, I ran my first marathon, my second year here. I trained with two other teachers." She clearly identified her training for races as a personal goal. This is in keeping with her belligerent attitude about being able to do things others think she can't. She stated that "when I was training for the ultra it was like a personal thing for me to achieve that goal." She explicitly stated that she was intrinsically motivated:

It's not like anybody's forcing you to. It's I don't know, it's one of those intrinsic things, you know, I don't know what. I don't know. I don't know how I got to that point, where you know. I'm just doing this for me."

The idea of doing it for "me" demonstrated that she had integrated her behavior with her values.

One of the purposes of the present study was to determine the extent to which intrinsic motivation was a valid construct for Latina's adherence behaviors. Analisa was the only participant who exhibited fully developed characteristics of intrinsic motivation. Christina's motivation appeared to be integrated regulation showing internalization of extrinsic motivators. Julie's motivation could be classified as introjected regulation because she explicitly stated that she acted to avoid guilt. Lillian was pushed by her husband and the desire to lose weight but was unable to internalize the motivation and thereby motivate herself without external reward. Her motivation remained externally regulated.

Despite the fact that intrinsic motivation was not classically present in most of the stories, the women were all able to adhere to regular patterns of PA.

Three of the women told stories about health, either theirs or others, and specifically stated that staying healthy was an important reason for being active. Health as a motivator would be considered identified regulation because the benefits of the behavior are understood by the participant (Deci, et al., 1996). Again this is not clearly intrinsic but certainly closer to it than external regulation.

### *Health*

Christina, Lillian, and Margarite all identified the importance of staying healthy as a reason to be active. Christina and Margarite had parents whose health issues could be improved with regular PA. Because they witnessed the struggles of their parents both women clearly wanted to avoid the same problems. All three women also wanted to maintain health for themselves.

Christina's mother had diabetes and took medications for her health. Christina explained:

I also think it has to do you know with seeing the way my mother. You know the whole just it's so stressful to see her just seeing a purse (be)cause she carries this little bag with her full of medication. I mean it's just so much medication and I do not know how she does it to stay positive first of all. And then second of all to actually keep up with so much. And then after having 12 kids, how in the world do you keep up with everything mom, and seeing that. And I'm thinking I don't want to hopefully I'm as strong as her when I get to that age, but hopefully, I don't have as many problems with my health.

Margarite exhibits early signs of the osteoporosis that her mother also has. She wanted to maintain an active lifestyle because she has seen how her mother cannot:

My mom did exercise. She liked going to the gym, you know, and sadly, she has osteoporosis now and so despite the fact that she was always in very good shape, you know, nobody caught it in time, so it's a pretty bad case. So it's kind of a reminder for my sister and I and we both got tested and we both have very low bone density so we're both on medication trying to avoid it.

Margarite also had a back injury she called a life changing experience because it was so painful. She noted "in fact, that was a definite, called attention to the fact that I need to take care of myself. I need to really do exercise regularly, strengthen my upper back."

Lillian valued her health status, saying that "being healthy is a huge motivator."

She also wanted to be healthy to avoid embarrassment:

I've always felt very healthy and if I have a day where I am winded by something that my friends aren't winded by or my kids then this is a really bad sign, and I need to do something about it (be)cause, it's, it's just embarrassing. I don't wind easily but. And I don't like being winded, so I do try to stay really healthy. It just feels better. You can do more, there's more energy.

Part of Lillian's motivation is to be a role model for her children. Similarly, the desire to be a role model or the influence of other models on their lives was echoed in the stories told by Analisa, Lillian, Margarite, and Elena.

### *Role Models*

Bandura (1998) suggested in Social Cognitive Theory that behaviors modeled by others provided a strong foundation for self-efficacy. When we see others participating effectively in activities the tendency is to believe that we can also participate effectively. I observed two different types of modeling references in the participants' stories. The participants were either motivated by models or they wanted to be a model for others.

Analisa included references to both of these types of modeling behavior. First she wanted to be a role model for her female students in PE. When describing how she came to be a PE teacher she explained that despite taking a pay cut, "it's something I wanted to get, something that I think I would be good at, and most importantly a role model for

these girls because, because of my experience with parents that I dealt with their attitude toward exercise." She also had models that motivated her in different stages of her life. First, she had a weight lifting instructor in college who "wowed" her because she was a woman. Analisa explained:

The instructor was a woman you know, and her husband kind of assisted in the class and I was like you know, that's pretty cool and she was an older lady. And so you know, I just remember really enjoying you know going to that class.

Later on she was training for a marathon and recalled:

When I was out there, my greatest, greatest motivators were people that were double my age. I just think that is incredible, and so that, even now motivates me. I was running with people that were 60 years old I mean, I was half their age and could barely keep up with them so that to me. I want to be that, I want to be that.

Her most recent exercise program provided her with models. She went to a website to view videos of a particular exercise and noted:

They'll have a video demonstration on how to do a certain exercise, and it's a girl and most of the time it's a woman about my age. And she's just doing things that I want to do. And it's inspiring and it drives me to work that much harder because I want to do that one day....

Seeing others doing what she wanted to do was motivating for Analisa and contributed to her self-efficacious feelings.

It is possible, however, to have a negative model that motivates behavior. Margarite provided an example of a negative model that motivated her. She was concerned about her health because of the model of her parents. She explained:

You know I want to be in my 80s, and I still want to be active, and I think I also have the example of my family. That's the way life is in El Salvador. You know, at least in my family I don't know maybe other people don't do that. But you know, they ache and they you know they don't exercise at all in their little lives are just indoors. I think that I don't want that for me.

Although her models were not positive, the result of witnessing the modeled behavior for Margarite was to motivate her to be active.

Lillian wanted to be a model for her children. She said; "That's another big motivator - setting an example for my children." I think intuitively she understood that her children needed a model to develop the self-efficacy for activity despite the fact that she never had such models. She also included stories about her husband's role as a model for activity. She felt that his life activity was helping her children become active. She stated, "I let my husband take the lead because he's much more athletic and he was a cross-country runner in high school cross country and track and he still runs."

Elena recognized that her models were family and talked about the importance of having an activity in her country. According to Elena, in Brazil you have to have an activity, consequently models for PA abound. She explained that her nephew was seeking an activity and did not know whether to do soccer or basketball. She expressed the importance of having an activity regardless of the type:

We need to do a sport or a physical activity. It's really, really important. So now I think he's going toward basketball I don't know. But in the country you have to. I don't know why it's something that I don't know why. It's just good I feel good

and I do it. I saw my father doing. My godmother, my mother never did so much, but it's important it's important for the mind and you clean yourself.

Her self-efficacy for activity was established early in life.

Self-efficacy is an important construct for adherence behaviors (Bandura, 2004). The development of self-efficacy is influenced by competence. In CET Ryan and Deci (2000) explained that when certain needs were met, intrinsic motivation was enhanced. The three needs were competence, autonomy, and a sense of security and relatedness. While looking for evidence of these needs in the stories I had to remember the influence of culture on this construct. Walker, Deng, and Dieser (2005) suggested that the process of improving may be more important than competence in interdependent cultures. Because the Hispanic culture has features of interdependence, feelings of competence in these women may be expressed more as a process of improvement.

### *Competence*

Competence has been cited as a strong factor impacting motivation (Ryan & Deci, 2000). Margarite, Elena, Lillian, Julie and Christina described experiences as children and adolescents that resulted in feelings of competence, while Analisa had adult experiences that accomplished the same goal. Christina identified improvement as being very important to her adherence behaviors.

As was noted earlier in Analisa's life history, she did not feel competent as a child or adolescent in movement activities. Her comment that "I just didn't think I would be able to do it," reflected her lack of confidence as well as the lack of support she received from her family. In the last story in her history she overcame the negative tapes of "I can't" and replaced them with "I can." Her confidence grew as she progressed and



experienced success. Analisa remarked that viewing women on a video was inspiring and she wanted to be able to do what they were doing. She was very animated when she stated:

It's inspiring and it drives me to work that much harder because I want to do that one day I'm gonna do it, I'm gonna do it. It's going to take me a while, but I'm gonna do it. And that's what I have to keep telling myself. I will be able to do it instead of I can't.

Early in life Margarite became a skilled swimmer. She explained how she learned to swim:

That I did learn at a very early age in the Olympic pool of San Salvador like at the wee hours of the morning. And I can't remember the classes were fairly large, but I do know that I did well because they moved me from like the beginning class to like really advanced fairly fast. And I remember the teacher pushing me to um, you know way in the deep where I wouldn't touch to you know swim longer, longer distances, because he knew I couldn't touch, so he knew I couldn't stop. So he was really tough on me but I think it was because he knew that I liked it and he knew that I was good at it.

Her love of swimming persisted through periods of inactivity. She returned to this specific activity throughout her history and currently she depends on swimming for her main type of PA.

For Elena, the need to find an activity was culturally mediated; she noted that she enjoyed modern dance as an adolescent and became skilled in it. She pursued modern dance variations moving into aerobics classes as an adult. Her competence translated into

a lifelong activity for her. Elena said that she tried tennis because her brother played and was getting a lot of attention. She wanted this same attention, but said she was not gifted in tennis. She explained:

I decided that I would like to play tennis too. I was between 10 and 11. Then I had some classes and my teachers said to my dad take her out from tennis. She doesn't, she's not gifted in tennis, and she's going to create problems for her brother. Her brother has much more potential. Just put her in another activity. My mother and my dad decided to put me to modern dance, not classical ballet, but modern dance. So then and I like it. It was dance for me from '75 when I was 11 to when I was 15; I think it was ballet a modern ballet. And I really love it.

She returned to this activity at a club which offered sliding and step aerobics after several periods of inactivity. In one story she explained that her motivation for going to a particular club was motivated by the presence of a very handsome doctor, but after a period of time the activity was more important than the doctor:

I started to do aerobics. I was stretching, and I found out about sliding and step, and just fell in love with them. So after awhile he stopped. So I didn't care about him anymore then I was so happy in the environment.

Elena returned to aerobics several times in her history and still participates in the activity today.

Lillian also found dance early in life. She disliked PE classes, but when she was in dancing school she was very happy and excelled. She described her experience in Ballet Austin like this:

They put me in Ballet Austin, and I was just in heaven, and I really excelled at it. I remember, she our dance ballet teacher would have us in rows, and I would be, based on ability, when we would demonstrate and I got promoted up to the first row after a short period of time.

When she was in high school she participated in drill team and gymnastics. She tried drill team to satisfy her enthusiasm for dance and gymnastics to avoid PE. Unfortunately due to the cliquish nature the drill team experience made it less than satisfying. She remembered her high school experience:

So high school. I did, I got into the gymnastics team, because it was an out of the PE class so I did that for like a year. I did move around a lot in high school I went to four different high schools. And junior year, ended up on the drill team and I despised the drill team, but I loved the dancing. So I stuck with it and senior year I made officer and because the cattiness of it there was just this fallout at summer camp. I was just like I'm out so I left, because I loved the, you know, the practicing and the performing, but everything else (sigh).

Lillian has not returned to dancing as an adult for regular PA but she dances occasionally with her friends. It is not something she can maintain, however, because her husband does not participate and she preferred not to leave him at home "or on a bar stool." Based on the other stories in this study it is possible that Lillian will find a way to return to dancing as a regular form of PA.

Christina and Julie both participated in school sports in middle school and high school. Christina played volleyball while Julie played basketball. Julie played through high school and understood that competence was important to enjoyment. She never

overtly stated that she was good at basketball, but she did understand that to be a starter you had to be good. Since she was a starter I assumed that she was competent. I asked her to describe what she liked about basketball and she explained:

The team. Just playing with a group of girls, but I also understand that you have to be one of the starters or one of the you know top eight that get rotated in to actually enjoy it. Because I had some friends of mine that came on and they weren't very good and never played and you don't really get invited into that team spirit, unless you're playing and you're active but just like the feeling of, you know having to work together and the just the excitement of the game and the excitement of winning a game. I would say that's probably what I liked about it.

Basketball is not easy to participate in as an adult because finding a team and league take considerable effort, however Julie expressed an interest in finding such a situation. She said:

I want to join a basketball league. My other friends, who we played basketball together actually, both of them one of them is moving back. She wants to join one too. We just haven't taken the initiative to actually go and find one so... I was on the intramural team in college so I was still you know part of the team and doing that in addition to my training but ever since I've been back for law school it didn't happen.

Julie struggled with her exercise routine upon returning to her home town for law school. Since graduation she has continued to have difficulty getting into a routine she can maintain.

Although Christina participated in school sports in middle school and high school she had ambivalent feelings about competition. She described her experience in middle and high school:

When I finished middle school and went to high school and then I joined the volleyball team also and, so I was basically pretty active then too. As far as running. I liked running. I didn't like to be told to run fast or slow or whatever. And I joined the track team, I do recall that, and I quit the next day, because the teacher kept saying go faster, faster so one day of that was enough for me.

Despite this negative experience, running for Christina is a mainstay of her PA life. The marathon story she told concluded with an explanation of why she continued to train:

I do find myself maybe, I'm maybe, I guess everyone's got the little competitiveness in them like I said, I just don't like to make it public. I am just more of it is a challenge to myself, and that's pretty much it. I think it's just a challenge to do it.

Christina participated in a training protocol in which there was a fair amount of competitive motivation used to encourage participants. Her reaction to that technique of motivation I think shows her commitment to the process of activity, not to the actual outcome, which in this case was going faster than someone else:

When people ask me and I tell everyone I'm not the competitive type but yet, if I'm in a group environment, and we're doing these Cross Fit challenges you tend to just get caught up with that and you know the clock is going and you just kind of go faster and faster. So I do not because C (her husband) is one of those that's very competitive he's always constantly basically telling me hey, you can go

faster and you should beat this person. You know what, I don't want to get caught up with that. Let me enjoy this for me it's just a sort of sense of just doing something and staying fit and that's what it's all about, to me.

#### Language Use

"I really love it."

"I love that."

"We love it."

All six histories had references to "love" in connection with exercise. As I thought about how we use language to express our feelings, I recalled that Lakoff and Johnson (1980) posited that understanding necessitates categorizing ideas in the context of interaction and as a result of our experiences (p. 165). In the context of our interviews, a shared experience common to all of us emerged and the word "love" was applied to the feeling associated with that experience. Exercise adherence behavior is complex and dependent on a variety of individual experiences. In order to understand the motivation involved in this behavior, the use of a human emotion common to most people serves the purpose of enabling us to put the concept into a human form so that we can better express its meaning in our lives (Lakoff & Johnson, 1980, p. 34). Lakoff and Johnson proposed that metaphors (understanding one kind of idea in terms of another) define our conceptual systems. For this reason, our interpretation of veracity in a statement is dependent on whether the statement fits "our understanding of the situation in which the statement is made." (p. 180) The term "love" as used in the interviews fits with the metaphor of love as health. I identified features of a healthy love relationship from the transcript of the

focus group meeting. The categories I assigned for these features were loyalty, consistency, variety, euphoria, community, and positive results.

In the interviews the participants were asked to express a level of self understanding. The use of the love-as-health metaphor helped them describe their activities and goals in a way that was understandable to them. When I encountered this term in all of the interviews, I decided to do a follow-up interview to get more information about why the term was used so consistently in each interview. I was able to gather three of the participants for a focus group meeting and query them about their use of this term. As Lakoff & Johnson suggested "self-understanding requires unending negotiation and renegotiation of the meaning of your experiences to yourself.... The process of self-understanding is the continual development of new life stories for yourself" (p. 233). In the focus group interview I was able to view the negotiation and renegotiation of meaning for Christina, Analisa, and Julie.

I used a technique proposed by Gee (1985) in which I arranged the transcribed discourse from the focus group interview into numbered lines and stanzas. Each numbered line represented a clause with at least one new piece of information at the end of the clause. Gee suggested that when we narrate, we organize our thinking in terms of stanzas comprised of groups of lines that go together because they are said with similar tempo and without much hesitation (Reissman, 1993, p. 45). As I examined the focus group transcript, I organized it into a format suitable for this type of analysis. When I studied the transcribed discussion of love as health in the context of PA, I paid special attention to the words connoting positive and negative features of love.

The focus group had a common experience of a particular exercise protocol. They all worked out with the same trainer, and in fact, since the original interview one of the three had become certified as a trainer in this technique. The activity type would be classified as a "boot camp" style of training. It involves high intensity activity where the heart rate is elevated to a point where one functions anaerobically and can only sustain activity for a short period (15-20 minutes). This is different from jogging and other "cardio" type aerobic activities where one can sustain activity for long periods of time. The vigor level of the activity may be important to understanding the love metaphor for these participants. They made a specific point to distinguish between aerobic and anaerobic work outs.

In the first stanza the unifying concept was how the participants experienced the activity when it was over. They used qualifying terms like "after," "at the end," and "when you're done." They linked the following phrases with the previous qualifiers: "feel good," "feel like I used my body for something productive," "accomplished something," "love the results," and "clothes fitting better." Being energized was also identified as another quality that occurred after the completion of the exercise. Julie said that she feels "hyper, really hyper," likening it to a "sugar high." This feeling lasts about an hour and then Julie and Christina noted that they "crash and burn," or "when it hits me I'm just like dead." They all noted that although the workout was hard, painful, or they hated it while they were doing it, the overall experience was positive to the extent that they loved it.

In the next stanza they identified their feelings about the experience of working out itself as they delineated the differences between the "boot camp" type of activity and running. The comparison showed that they likened the "boot camp" to the positive



features of love and the running to negative features. The phrases used to describe the boot camp experience included: "never know what it's going to be," "very interesting," "not dull," "give it all you've got," "it's a variety of things," and "I have a time, the group is there, and I'm expected to be too." In contrast, the language used to describe running included: "constant," "I've got to get it in," "chore," "like school," "have to do it," "bored," "monotonous," "hard," and "doesn't feel good." It is evident that the type of activity mattered to them.

The final stanza related to the love as health metaphor featured Analisa, who described the commitment aspect of PA by saying such things as:

It's part of my day, like eating, it's just a lifestyle, part of my routine. It's something that I do, shave your legs, workout, you eat, I feel like I have to squeeze it in. It's my time, my time for me.

Addiction and love seemed to be connected here in some of the verbiage.

Christina said "it's like an addiction, like an addiction and we love it." According to WordNet (2007) addiction is defined as "being abnormally tolerant to and dependent on something that is psychologically or physically habit-forming, or an abnormally strong craving." In the case of PA both psychological and physical experiences might contribute to its habit-forming nature. In five of the participant's stories the term addiction and phrases that suggested an addicting type of experience were used often. In Julie's main interview she used the term addicted repeatedly. She said you "get addicted to how it makes you feel and the improvement that it does for your body." Analisa said, "I can't be without it." In the focus group interview I also asked about the use of this term and even when we were not discussing the nature of addiction, phrases were used that suggested

addiction. For example, in the description of the euphoria that accompanies PA Julie noted that she gets hyper like "a sugar high," and then she would "crash and burn." "High" and "crash" are two words commonly associated with addictive behavior. Analisa mentioned that "the more you do it the more your body gets used to it."

In the focus group I asked the women what it would be like if they did not have PA. In the most revealing stanza about addiction Analisa expressed her feelings which closely parallel verbiage addicts might use. "OOOO, I just wouldn't feel right. I just wouldn't feel right. I don't feel right today, (be)cause I didn't work out. I mean I'll be OK, I'll get through. I'll try, but if somebody said you can't do it any more" (long pause followed by a groan). Christina identified guilt as the reason she was addicted:

If we don't do a workout for example, we didn't do it today. If we see someone running throughout the outdoors, we're like darn, there they go. I should've done something today. That's the whole addiction part of it, because you're feeling guilty for not getting it in.

Overall the most interesting connection between PA and addiction is the fact that their bodies are used to it and they wouldn't feel right without it. The production of endorphins associated with vigorous PA, resulting in a sort of "high," may account for the addicting nature of PA identified by the participants. Physical activity has been shown to enhance positive affect through the production of endorphins (Biddle, Fox, Boutcher, & Faulkner, 2000). The consistent participation in PA became a body need: a need that must be satisfied or feelings of guilt and physical discomfort ensued. Guilt was also prevalent in the "perfect body" stories viewed in the following section.

## The Perfect Body

Motivation to persevere in PA as shown so far is a complex and multifaceted construct. When I discovered the common theme of the "perfect body," I realized that although striving for the perfect body could be considered an extrinsic motivator (Ryan & Deci, 2000), it was also important to recognize that social context plays an important role in understanding this phenomenon. I elected to use Symbolic Convergence Theory as described by Borman, Cragan, & Shields (1996) to illuminate this phenomenon, because I believe that the idea of a "perfect body" is a catalyzing feature of a metanarrative common in the United States. The focus of this study was on Latinas and at this point acculturation may have an impact on the participants. The "perfect body" fantasy is a cultural construct more prevalent in the United States. Hence, the length of time the participants have been in this country could play a role in their participation in this fantasy. Four of the participants in the study lived their entire lives in the United States while two grew up in Latin American countries, arriving in the United States after adolescence. In four of the participants, the "perfect body" fantasy was prevalent. Three of these participants grew up in the United States and one in Brazil. Elena stated that the culture in Brazil dictates that people be thin. Her stories were about constant weight loss and gain cycles. For example, before she left Brazil to come to the U.S. she had a weight loss cycle prompted by a doctor's visit. She said:

I went to the doctor. I gained weight back it's a cycle. You don't lose the weight in Brazil only because you close your mouth. They will prescribe you an amphetamine or something, and besides that I did the Atkins diet, then I lost maybe 15 pounds.

Lillian who grew up in the United States also was looking for the "perfect body" and thought of herself as fat when she was an adolescent. She explained in this passage the genesis of her fixation on weight:

I always perceived myself as fat. And because I have really ample hips and thighs and breasts, and I always did. When I was 108 pounds I thought I was fat, but that was because I was comparing myself to really really tiny, tiny girls like with the super super skinny thighs. Like the thighs were as big as my arms, and I thought that was, you know, that was really everyone likes that.

Likewise, Julie started exercising after high school following a 20 lb. weight gain as a freshman in college. She explained that she was:

Always incredibly skinny but I'm not now, but I was like stick, stick thin and because you know, I was growing and um, eating all the time, but I would say after my senior year. I'm about 6 feet, I was about 140 and I just couldn't put on weight, and I went to college and I gained probably about 20 pounds, the freshman 20. I stopped playing basketball all day every day.

Concern with weight was prevalent in these three histories; their stories of exercise as a way to achieve weight loss goals were similar. In the fourth history the references to "perfect body" are brief but definitely focused on weight. Christina explained her reasons for being active: "I'd just like to do it just because I get to maintain the weight and you know stay fit."

I see their efforts and desires to achieve the "perfect body" (very thin body) as a shared fantasy, which according to Borman, et al. (1996) enters them into a community of individuals with a shared group consciousness. Symbolic Convergence Theory as

originally proposed by Borman (1985) has been used to explain the phenomenon of group consciousness. Borman suggested that the three stages that occur in a symbolic convergence timeline are consciousness creating, consciousness raising, and consciousness sustaining.

The result of consciousness creating communication is the formation of a community with shared ideas and mores. In the "perfect body" fantasy the consciousness creation happened and continues to be promoted with images in the media. The earliest image of the skinny body was Twiggy in the 1960's. Prior to Twiggy the "perfect body" was more curvaceous and heavier. Though Twiggy was a real person, the image of the "perfect body" became her body. That image persists today.

Consciousness creating is guided by the principles of novelty, explanatory power, and imitation. The extremely thin body had novelty when Twiggy first showed up and I believe her personification of waif-like vulnerability in the form of a skinny body captured the imagination of the public. Additionally, the look she promoted had explanatory power because it created a "hip" or "mod" (modern) look for the era and provided a new model of appearance. The ideal type of figure as metanarrative coerces imitation. Women want to be the image they see. Conversely the result of not conforming to the metanarrative is perceived as disastrous.

Lillian described very accurately the "Twiggy look" in her lament about being fat. As an adolescent she wanted thighs that were the size of her arms. Brown and Gilligan (1992) have noted in their research on female development, that girls become extremely focused on their bodies in adolescence. Furthermore, girls are highly influenced by

images they see in print and video media (Oliver, 2001). Media images have done an exceptional job of creating and maintaining this consciousness.

In the second stage of Symbolic Convergence Theory (Borman et al., 1996), consciousness raising communication occurs. The main activity in this stage is attracting new converts to the community. In a period of rapid growth, a critical mass is generated whereby participants in the fantasy spread the message to others. The media continues to play a role in this stage but also parents and significant others promote the message. Today we have much more sophisticated methods for sharing the "perfect body" message. Photos can be touched up and airbrushed using advanced technology so that there really is an illusion of perfection. My participants were certainly influenced by the media but also by their mothers. For example, Lillian identified her mother as a model for obsession with weight. She said:

I guess that came a lot from my mother's body image issues, because she's had always had a weight problem. I don't ever remember her exercising. I remember her dieting a lot, but exercise never seemed to be a remedy.

Julie recognized her mother as a model of "perfect" activity and weight. She said "my mom, I would say is pretty active she's still I mean all through my life has worked out here and there and even if she didn't, she never gained a pound." What is more interesting is that Julie identified her mother and aunt as the ones who decided she was too heavy after gaining the "freshman 20." Her mother decided to get her a personal trainer. When I asked her how she began working with a trainer she explained:

I had gone to college, I gained my freshman 20 and um my mom one day was like you know you are not active. You're not doing it on your own I'm going to get

you a personal trainer. And I said okay. Honestly, with me it's weird and it's strange I mean I have to weigh myself. I can't tell if I'm gaining weight I cannot tell until one day I wake up and then it just slaps me across the face so I have to I keep a record I have a nutritionist and I keep a record of you know my weight and everything if not I can totally lose track of it, and not even realize it. It was my mom.

Another phenomenon in the consciousness raising stage is the principle of dedication (Borman, et al., 1996). Dedication practices are designed to garner new converts in a public way and provide them with a way to participate in the community. In the case of the "perfect body," dieting is one way to achieve the fantasy. The explosion of diet regimens, books, and programs over the last 30 years has been phenomenal. Elena referred to the Atkins diet as one of the ways she attempted to control her weight along with taking prescribed amphetamines. Exercise is another method of weight control and exercise programs have proliferated also. Videos, CD's, TV programs and gyms abound. There seems to be a way for everyone to exercise.

The final stage of Symbolic Convergence Theory (Borman, et al., 1996) involves consciousness-sustaining communication. In this, the current stage of the U.S. "perfect body" fantasy, the community acts in ways to sustain itself. It is important to keep the participants committed to the vision. One of the ways the PA part of the "perfect body" community has sustained itself is through constantly evolving and changing exercise protocols. In my career I have witnessed many changes in what is considered the "in" form of exercise. When I first started in the field we were running, doing body weight exercises, and also some weight lifting. Jackie Sorensen came on the scene and started

the aerobics revolution; Jane Fonda with her celebrity status contributed to the allure. Today, the celebrity status of the promoters of different exercise protocols, tapes, and CDs contributes to their sustaining capabilities. The illusion of the "perfect body" on the celebrity of the month is what helps to maintain the vision. Borman (1985) would label this a flexible vision because the plots, characters and scenes do not remain stable although the vision does. We have in place a community vision being sustained by a strong media presence along with products marketed to facilitate the achievement of the "perfect body."

Each of the four women participating in this fantasy community talked about their different forms of PA and how these should help them achieve their goals of weight loss or maintenance. Elena participated in modern dance, aerobics, cardio machine use, weight training and exercise with a personal trainer. Christina played sports in school, began running after graduation, and today participates in the "boot camp" style of training. Julie was a basketball player in high school and in her freshman year in college she began exercising with a personal trainer. She also rollerblades and runs for exercise. She has tried Pilates and yoga but did not like them as well as her current "boot camp" work outs. Lillian danced and did gymnastics while in school, tried cardio activities, weight training and yoga. Today she is a dedicated walker and has an active lifestyle . I would say the "perfect body" fantasy community is alive and well. In fact I would identify as part of this club.

While maintaining a healthy weight would be considered positive from a health perspective, an obsessive focus on weight control can result in disordered eating or extreme exercise regimens which could have a negative impact on health. In fact, Elena



experienced the negative impact when she was diagnosed as an exercise bulimic. She explained:

I went to see a doctor and he said that I have bulimia. I always did and I never knew that. And then, because I told him the way I was feeling and he said well, I don't vomit, I don't take laxatives however, I stay at the gym for a long time, and I want to burn everything that I eat. So then my doctor said the exercise. The exercise is doing the work of, of throwing up.

As a motivating concept the "perfect body" fantasy is powerful.

### Summary

In this chapter I organized the data into three sections. The first section was focused on adherence themes prevalent in the interviews as discerned by using Holistic Content Analysis (Lieblich, et al., 1998) and Labov's (1982) core-narrative transcription technique (see Appendix B). Using this technique the adherence themes of: 1) Culture and family, 2) Being pushed, 3) Health, 4) Role models, and 5) Competence were discovered. The second section was devoted to a linguistic analysis of the terms "love" and "addiction" in relationship to PA. To uncover how love was used as a metaphor for health and addiction, I used a technique recommended by Gee (1985), whereby narratives were organized as stanzas (see Appendix C). Lakoff and Johnson's (1980) work on metaphors was used to analyze the stanzas created in the analysis of a focus group meeting. This analysis yielded the understanding that love related to PA was a healthy love relationship that could result in a sort of addiction. Vigorous PA enhanced adherence behaviors. Finally, in the third section of this chapter I looked at a fantasy community formed by the communication of the "perfect body" image (Borman, 1985; Borman, et

al., 1996). The perfect body was a strong motivator for four of the participants. Two of them had positive adherence behaviors as a result of this motivation while two identified significant challenges to adherence. In all three sections I drew connections to the research questions. The information gleaned from these three different analysis techniques is rich and deep. In Chapter V, I will present the conclusions drawn from the analyses presented here.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

The current study was designed to shed light on the complex nature of exercise adherence in a specific population. Latinas were selected as the study group for two reasons: 1) according to Crespo, et al., (2000), Mexican-American women report the lowest levels of activity, and 2) the prevalence of overweight and obesity in this population is high. Through these life history interviews and the narrative analysis techniques used to interpret them, several interesting conclusions may be drawn which can impact physical education practices at all levels of development. Although the women interviewed for this study were all adults who had experienced at least three life transitions prior to being interviewed, their stories included references to experiences at multiple stages of development, thus providing a life view of adherence behaviors and motivation, an element which is missing thus far in the literature.

In this study I sought to explain the factors that contributed to PA adherence, the extent to which intrinsic motivation was a valid construct, whether extrinsic motivators resulted in PA adherence, and how Latinas experienced their own physicality related to PA adherence behaviors. The use of three different narrative analysis techniques resulted in the identification of five adherence themes and two phenomena of significant importance. In this section, I will provide my interpretation of the results of the data analysis. As a co-participant in this study, my experience with the women during and after the interviews as well as my professional PE experience and lifelong PA adherence

enhanced my ability to supply these conclusions. I understand that my interpretation of the analysis is one view and that readers of this research will also draw conclusions, as is expected in qualitative research in the narrative style (Polkinghorne, 1995). I have included significant passages from the interviews in order to encourage the reader to make his or her own interpretation.

### Researcher Perspective

It is important that the reader of this research understand the researcher. I present here some important information about myself which should help readers understand my perspective. I was born in 1950 on the East coast of the United States to Caucasian parents of German descent. I have lived my entire life in the United States. During my childhood, the attraction of indoor sedentary activities was not as significant as it is today. Television was in its infancy and video games and computers had not yet been made available to the general public. When not in school I was outdoors as much as possible. In my neighborhood I played active games like coed kick the can as well as more sedentary imaginative play with dolls. School PE was a daily event from elementary school through high school. At the age of 10 or 11 I played one season of "Lassie League" softball which was similar to "Little League" baseball. Other than that one experience, my PA life was free play, school PE, intramurals, or interscholastic sports. Even though I participated in competitive interscholastic activities, I was also in school PE throughout high school. My mother was always a tennis player and both my parents swam regularly in the summertime. Our family did not participate in PA together very much. For example, I never played tennis with my mother until after I graduated

from college. My father typically played catch only with my brothers, but to help me prepare for a fitness competition he taught me how to throw.

While in high school I participated in a PE leaders' organization which enabled me to help teach the PE classes. I think that experience started me on the way to becoming a physical educator. Although I started college as a math major, I soon changed to PE because I thought I would enjoy it and I missed the activity levels I experienced in high school. At the time I did not think about my weight, or the connection between PA and weight control. PA was enjoyable in all its forms and I embraced with relish the variety of classes in the curricula.

Upon graduation from college I began my career as a physical educator in a rural elementary school in upstate New York. The job kept me active, and I also joined a local YMCA to play squash and racquetball. During this time I had several friends who enjoyed PA and we regularly played tennis also. In the winter I skied. I was active because it was fun. Still there was no concern about weight control. Within two years I moved to Colorado to attend graduate school. Skiing, hiking and teaching activities at the university kept me active. I still had no worries about weight. Moving to Phoenix AZ for a teaching job, I played tennis, racquetball, and hiked regularly. Accepting a faculty position at a major university in Texas, I took up jogging and continued tennis and racquetball but not as frequently. I maintained a healthy weight without much effort but began to think about PA and weight control because I was teaching a class titled "weight control."

I have been teaching at this same university for 30 years. During this time I married, had three children and continued to work at least part time. After having

children I recognized the importance of PA in reducing the weight left from child bearing. I continued to run, added swimming and weight training to my repertoire of activities. I played tennis and racquetball infrequently and today do not participate in those sports at all. I have had several injuries that have changed the way I look at PA. I ride a bike for transportation, swim, walk, and participate in a "boot camp" type of training three days a week. I am very active, and I am very aware of my weight. I do some activity daily and maintain a healthy diet so that I do not gain weight. My weight has remained constant throughout most of my life. I have not experienced any cyclical gain and loss periods.

During the interview process for this study I easily understood the participants' struggles with weight, because I now pay very close attention to my own weight. I consider myself part of the "perfect body" fantasy type. I also use the love and addiction metaphors to describe my relationship with PA. Some of the adherence themes resonated with me while others did not. What I concluded from this is that despite cultural and age differences between me and the women in this study, the similarities were striking. I expected to find something different from my own perspective.

## Conclusions

### *Adherence Themes*

A review of the adherence themes outlined in the data analysis allowed me to closely scrutinize the intrinsic and extrinsic motivational factors contributing to overall PA adherence behaviors. The impact of culture and family on early experiences with PA was significant for each participant, though the results of these experiences varied. Each of the participants was active in childhood, and with the exception of Analisa they all

continued to be active throughout their years of formal schooling. Parental involvement in the children's PA was missing from all of these stories. Some parents were active but none participated with their children. I concluded that, contrary to what Taylor, et.al. (1994) suggested, the presence of a parental model may be more important than the co-participation of parents. It is also very important that parents provide activity support in the form of resources, modeling, and social encouragement (Taylor et al., 1994). Each of the participants who had this support reported active participation in PA throughout the time they lived with their parents. The encouragement required does not necessarily mean enrolling children in organized sports, but rather allowing them to be active however they choose, and providing positive reinforcement for participation.

In Analisa's family, girls were discouraged from being active, so she did not participate in activities in middle school and high school. According to Bandura (1998, 2004) the perception of self-efficacy may be the deciding factor determining whether an individual participates in PA. In Analisa's situation, a lack of self-efficacy resulted in her decision to refrain from PA in secondary school. Positive reinforcement from her parents or another significant person in her life might have motivated her to continue to be active through these important years. However, because she was told by her parents that girls should not be active, she used that challenge to enhance her intrinsic inclinations and show them that she could be active, further validating Bailes et al. (2005). Although parental support in a variety of forms was important to the women, enjoyment was also prevalent in their early stories and can be seen as an important factor as they moved through life transitions. Each of them continued to seek out activities that they enjoyed (Heck & Kimiecik, 1993; Wankel, 1985; Wankel 1988).

For Lillian, negative experiences in PE class impacted adherence (Kunesh et al., 1992). She "despised" PE and did what she could to avoid it in high school. Her difficulties with adherence as an adult may be linked to her early negative experiences of PE.

The initial reasons for PA participation according to Wankel (1985) may be less important than resulting variables like competition, curiosity, friendship, and perceived social support. In the theme "being pushed," extrinsic motivators like, guilt, weight control, competitive events, and significant others' encouragement was used to get the women off the couch. Four of the women, for example, talked about participating in a competitive event such as a marathon or triathlon. The motivation to train was related to the specific event and provided the women with a goal and reason to be consistently active. It is interesting that the desire to win was not expressed in any of the stories related to the events. Guilt and weight control were often mentioned together as reasons to go out and be active. For two women, their spouses were the pushers. Both of these women had husbands who were active themselves and would push them to join in their activity. The co-participation seemed to be more important than the actual activity in these cases which is similar to what Waid and Frazier (2003) reported. Personal trainers were also mentioned as pushers. When participants believed that a significant other such as their spouse or personal trainer wanted them to do the activity, the result was higher motivation and an increased likelihood of participation in PA (Ajzen, & Fishbein, 1980; Ajzen, & Driver, 1991).

According to Deci, et al. (1996), extrinsic motivation can appear very much like intrinsic when the participant has internalized the reasons for PA. Participation in



formally organized events seemed to help the participants sustain motivation, transforming it into either introjected or integrated motivation, but only when the participant successfully completed the event.

The push of weight control was not enough to sustain the PA behaviors for Lillian because she was not successful at losing weight. However, when her husband invited her to join in hiking activities she was able to sustain this. The external pushers seemed to be more successful at promoting PA adherence when the results were positive. Extrinsicly motivated positive results included the ability to complete an event, lose weight, be active with a significant other, or achieve other fitness goals.

Health was another external motivator, but one with much stronger translation to integrated regulation (Deci, et al., 1996). The women who identified health reasons for being active witnessed others who had health problems related to inactivity, saw PA as an integral part of their own healthy self-image, or had health problems. Only Margarite mentioned alleviation of pain caused by an injury as a reason for her regular activity. The physical sensation of pain can be a strong motivator. I know that for me one of the reasons I am so regular about PA is that I want to avoid the aches and pains associated with aging. Lillian's self image as a healthy person was a strong motivator for her regular lifestyle activities. She did not want to be embarrassed by being seen as unhealthy. Christina, on the other hand, really wanted to avoid her mother's diabetes issues through her regular activity. Since diabetes is such a significant problem in the Hispanic population, the possibility of avoiding it is a strong motivator. Although maintaining good health can motivate initial participation in PA, it may not be enough to sustain a

lifelong habit (Wankel, 1885). Health motivation is, however, one more factor contributing to the overall picture.

Christina and Margarite had mothers who were experiencing health problems related to inactivity, whereas Analisa, Julie, Elena, and I had models of positive PA. Having a model is a factor that contributes to self-efficacy (Bandura, 1998, 2004). When we see another participating in an activity, we get the idea that we can do it too. For Analisa, this was a particularly strong factor contributing to her already significant intrinsic motivation to be active. Her comment, which was repeated several times, was that she "wanted to be that" in reference to viewing models of healthy activity. It is interesting to note here that her models varied from women she knew (an instructor), to women she saw at events (older women runners) to women she saw on a video (training video). For others the models were family members. It did not seem to matter who the models were or whether they were negative or positive. Two of the women also recognized their roles as models, either as a mother or as a PE teacher. I too am strongly motivated by wanting to be a good model of PA adherence as a professional.

The last adherence theme was related to competence (Ryan & Deci, 2000). When we believe we are good at something, we are more inclined to participate. The women who had early PA successes were motivated by these because they knew they could be active in something at which they excelled. The type of activity varied from school team sports to individual activities like dancing and swimming, but early successes were an important factor mentioned by four of the participants. Research on competence as a factor in PA adherence is strong (Deci, et.al., 1996; Ryan, & Deci, 2000; Roberts, 1999). The idea that culture might mediate the effects of competence was not observed. It is

likely, that due to the level of acculturation of the participants, particularly the ones who have been in the United States since childhood, cultural influences were not observed.

In all of these themes the motivation is extrinsic, because the reason for participation is to receive an outcome that is separate from the activity itself. However, the adherence themes all contributed to integrating the particular extrinsic motivator into the individual's personal schema. The results were PA adherence. These particular stories do not support the contention that PA adherence is more likely when the motivation is intrinsic. In fact extrinsic motivation seemed to be as good as intrinsic provided it was introjected, identified, or integrated (Deci, et al., 1996). Of all the women, only Analisa seemed to have intrinsic motivation and she could not explain where it came from. Since these are particular stories of individuals, one conclusion cannot be proposed. The adherence themes described here leave me with the following ideas for physical educators working with Latinas:

1. Provide activities that are fun and can be taken home for participation with friends and family in neighborhoods and homes.
2. Provide positive reinforcement for participation and encourage students' parents to do the same. A parent education program would be useful for helping parents understand the important role they play in PA motivation.
3. Encourage participation in, and even organize events requiring a level of training for participation.
4. Provide models of physically active women in a variety of different cultures so that they may see themselves, and encourage their mothers to be models also.

5. Provide opportunities for early success in activity for all.
6. Recognize that the activities must be varied so that each may find an activity suitable to their levels of competency.

### *Language Use*

The notion that one can love and even become addicted to PA was an idea that went to the heart of the physicality question. As agents in their own lives, the women chose to be active and used the term love to express their relationship to PA. Love is a term that has physical as well as ideological meaning. A healthy love relationship can include positive outcomes, euphoria, variety, loyalty, and consistency. The same qualities were identified by the women in this study when they were discussing their participation in PA. Positive measurable outcomes were most important; clothing fit better, weight was lost, or pain was alleviated. When there were no results, disappointment was expressed and the activity in some cases was terminated.

When one is "in love", physical actions like sex are involved with specific positive bodily responses. The euphoria experienced after a vigorous work out could be likened to the bodily sensations experienced in love. Once the participants experienced euphoria after working out they were more prone to persist in the activity. Variety was also a feature mentioned frequently by the participants. They preferred work outs that were different each day.

Loyalty to a trainer or their work out community also facilitated PA adherence. In some cases the work out community was family but in others it was a class. Loyalty resulted in consistency which is in fact adherence.

The idea that they cannot go without PA was prevalent, particularly among the vigorous exercisers in the focus group. Several described their PA commitment level as an addiction. This obviously is an extreme example of adherence, but some lessons may be learned from this. Perhaps the repeated euphoria commonly experienced in vigorous PA (Biddle, et al., 2000) is an element to be considered as contributing to the use of the term addiction. Teaching practitioners should have an awareness of the potential addicting qualities of PA. For example, one of the participants in this study experienced exercise bulimia as a result of over exercising.

Based on these findings I recommend the following for the teaching practitioner:

1. Establish a daily program of vigorous activity. The activity should be intense enough to cause heavy breathing (a sign of anaerobic work) and be in periods of ten to twenty minutes in duration
2. Analyze the interests and capabilities of students prior to developing lesson plans to promote positive interest.
3. Structure the class so that there are a variety of activities and settings. Outdoor settings are particularly aesthetic and enjoyable
4. Be sensitive to the participants needs and consider same gender activity groups to mitigate the bully effect.
5. Allow for group activities to promote community and loyalty.

### *Perfect Body*

The "perfect body" rhetorical vision is well established in western culture. The participants in this study have been in the United States long enough to be members of

the "perfect body" rhetorical community. Their level of acculturation has influenced their participation in this body fantasy. While the result of participation in the "perfect body" rhetorical community may promote PA adherence, I believe that the negative psychological and sociological impact of participation in the fantasy type far outweighs this positive. PA adherence for the sole purpose of achieving a particular body shape is a gendered and oppressive concept. Society defines women's sexuality as their body in order to control them by shaming them about their looks (McDermott, 1996, 2000; Oliver, 2001; Scraton, 1992).

Two of the women in this study who were heavily involved in this fantasy type, expressed the most difficulty with PA adherence. Both of these women had cyclical patterns of activity and inactivity, dependent somewhat on whether the activity resulted in moving them closer to the "perfect body." Lillian would try different activities, and if the results were not acceptable, then the activities would be ceased or traded for a particular diet or other idea related to weight loss. Elena had periods of weight loss promoted by various diets and extreme patterns of PA participation to the point that she was diagnosed as exercise bulimic. As noted by Roberts (1999) when women view PA as a means to a gender stereotyped end, exercise adherence in adulthood will be a constant challenge. The stories of these two women provide a poignant example of this problem.

According to Borman et al. (1996), to end a rhetorical vision an "explosion of counter-rhetoric in informal channels" (p. 20) needs to take place. A new rhetorical vision needs to be created which will challenge this dominant "perfect body" fantasy type. Teachers need to be aware of the messages they send to girls in PE. Shifting from solely external motivators to a more balanced internal/external set of motivators and from solely

negative motivators to positive reasons for exercise adherence is recommended for teaching practitioners. Although the "perfect body" message would be effective, it should be mediated with more positive reasons for PA.

#### Recommendations for Future Study

In this study the conclusions were developed on a small sample size. Small sample size is common in narrative research because interview depth yields information which may not be included in shorter interviews, but it would be beneficial to have more participants in future studies. Since participants in this sample were self identified exercise adherents, a different sample of adherents identified with criteria established by the American Council for Sports Medicine (ACSM) might yield different results. The participants in this study were well acculturated, some of them living in the United States their entire lives. The impact of acculturation was beyond the scope of this research; however as a factor contributing to PA adherence it must be considered. Evenson, et al. (2004) noted that acculturation was correlated with higher levels of leisure time PA in Latinas of mostly Mexican heritage. Repeating this study with less acculturated participants would be of interest since the Latina population is growing rapidly. Repeating the study with African American women who historically have low activity levels would significantly contribute to the knowledge base on PA adherence with women who are historically underserved. Finally, comparing different age groups would also be interesting.

The narrative approach used here to study PA adherence illuminated concepts well supported in the literature on motivation and adherence. However, among these participants certain types of extrinsic motivation seemed to be as useful for PA adherence

as intrinsic motivation, a different finding than what has been previously identified in the literature. The influence of culture particularly related to interdependent cultures did not have a direct impact on motivation and adherence to PA for these participants. I expected relatedness to be more important than it was for the women. I was surprised to find that at least two of them do not participate in PA with a group at all. The independent participation in activity by Margarite and Elena may be due to the fact that they were not Mexican-Americans, and did not have a sizeable cultural group available in their community. Christina and Lillian both married with children mentioned that participation with their families was important which is in line with interdependent cultural norms (Iyengar, & Lepper, 1999). Analisa and Julie also Mexican-American, unmarried, without children, expressed enjoyment in group participation or personal training scenarios. A comparison of participants with clearly defined patterns of PA participation such as group or independent participation would help determine the cultural importance of relatedness.

The importance of this study was to allow the individual voices of the women to be heard, which does not happen in other quantitative and qualitative designs. I believe that when women participate in research of this nature their lives are enriched by the experience. In fact the women thanked me for the opportunity to participate as I was thanking them for their contributions. It was a mutually beneficial process.



## REFERENCES

- Addiction. (n.d.). *WordNet 3.0*. Retrieved December 13, 2007, from Dictionary.com  
Website: <http://dictionary.reference.com/browse/addiction>
- Ajzen, I., & Driver, B. L. (1991). Prediction of leisure participation from behavioral, normative, and control beliefs: An application of the theory of planned behavior. *Leisure Sciences, 13*, 185-204.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs: Prentice-Hall.
- Albright, C. L., Pruitt, L., Castro, C., Gonzalez, A., Woo, S., & King, A. C. (2005). Modifying physical activity in a multiethnic sample of low-income women: One-year results from the IMPACT (Increasing motivation for physical activity) project. *Annals of Behavioral Medicine, 30*(3), 191-200.
- Azzarito, L., & Solomon, M. A. (2005). A reconceptualization of physical education: The intersection of gender/race/social class. *Sport Education and Society, 10*(1), 25-47.
- Bailis, D. S., Fleming, S. J., & Segall, A. (2005). Self determination and functional persuasion to encourage physical activity. *Psychology and Health, 20*(6), 691-708.
- Bandura, A. (1998). Health promotion from the perspective of social cognitive theory. *Psychology and Health, 13*, 623-649.
- Bandura, A. (2004). Health promotion by social cognitive means. *Health Education and Behavior, 31*, 143-164.
- Bell, S. E. (1988). Becoming a political woman: The reconstruction and interpretation of experience through stories. In A. D. Todd & S. Fisher (Eds.), *Gender and discourse: The power of talk* (pp. 97-123). Norwood, N.J.: Ablex.
- Biddle, S.J., Fox, K.R., Boutcher, S.H., & Faulkner, G.E. (2000). The way forward for physical activity and the promotion of psychological well being. In S.J.H. Biddle, K.R. Fox, & S.H. Boutcher (Eds.), *Physical activity and psychological well being* (pp. 154-168). New York: Routledge.
- Berrigan, D., Dodd, K., Troiano, R. P., Reeve, B. B., & Ballard-Barbesh, R. (2005). Physical activity and acculturation among adult Hispanics in the United States. *Research Quarterly for Exercise and Sport, 77*(2), 147-157.
- Borman, E. G. (1982). A fantasy theme analysis of the television coverage of the hostage release and the Reagan inaugural. *Quarterly Journal of Speech, 68*(2), 133-145.

- Borman, E. G. (1985). Homo narrans symbolic convergence theory: A communication formulation. *Journal of Communication*, 35(4), 128-138.
- Borman, E. G., Cragan, J. F., & Shields, D. C. (1996). An expansion of the rhetorical vision component of the symbolic convergence theory: The cold war paradigm case. *Communication Monographs*, 63(1), 1-28.
- Bouchard, C., Shephard, R. J., & Stephens, T. (1993). *Physical activity, fitness, and health: Status and determinants*. Champaign, IL: Human Kinetics.
- Brown, L. M., & Gilligan, C. (1992). *Meeting at the crossroads: Women's psychology and girls' development*. Cambridge, MA: Harvard University Press.
- Bryson, L. (1987). Sport and the maintenance of masculine hegemony. *Women Studies International Forum*, 10(4), 349-360.
- Chase, S. E. (1996). Personal vulnerability in interpretive authority in narrative research. In R. Josselson (Ed.), *Ethics and process: The narrative study of lives* (Vol. 4, pp. 45-59). Thousand Oaks, CA.: Sage Publications.
- Chase, S. E. (2005). Narrative inquiry: Multiple lenses, approaches, voices. In N. K. Denzin & Y. S. Lincoln (Eds.), *The sage handbook of qualitative research* (pp. 651-680). Thousand Oaks, CA: Sage Publications.
- Costa, D. M., & Guthrie, S. R. (1994). Feminist perspectives: Intersections with women and sport. In D. M. Costa & S. R. Guthrie (Eds.), *Women and sport: Interdisciplinary perspectives* (pp.235-252). Champaign, IL: Human Kinetics.
- Crespo, C. J., & Arbesman, J. (2003). Obesity in the United States. *The Physician and Sports Medicine*, 31(11), 23-28.
- Crespo, C. J., Smit, E., Anderson, R. E., Carter-Pokras, O., & Ainsworth, B. E. (2000). Race/ethnicity, social class, and their relation to physical inactivity during leisure time: Results from the Third National Health and Nutrition Examination Survey, 1988-1994. *American Journal of Preventive Medicine*, 18, 46-53.
- Dacey, M., Baltzell, A., & Zaichkowsky, L. (2003). Factors in women's maintenance of vigorous or moderate physical activity. *Women in Sport and Physical Activity Journal*, 12, 87-111.
- de Beauvoir, S. (1989). *The second sex* (H.M. Parshly, Trans). New York: Vintage Books.

- Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of Educational Research, 71*, 1-27.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (Eds.). (1995). *Human autonomy and true self-esteem*. New York: Plenum Press.
- Deci, E. L., Ryan, R. M., & Williams, G. C. (1996). Need satisfaction and the self-regulation of learning. *Learning and Individual Differences, 8*(3), 165-183.
- Deem, R. (1987). Unleisured lives: Sport in the context of women's leisure. *Women's Studies International Forum, 10*(4), 423-432.
- Delgado-Bernal, D. (1998). Using a Chicana feminist epistemology in educational research. *Harvard Educational Review, 68*(4).
- Dewar, A. (1987). The social construction of gender in physical education. *Women's Studies International Forum, 10*(4), 453-465.
- Dishman, R. K. (1988). *Exercise adherence: It's impact on public health*. Champaign, IL: Human Kinetics.
- Duda, J. L., Chi, L., Newton, M. L., Walling, M. D., & Catley, D. (1995). Task and ego orientation and intrinsic motivation in sport. *International Journal of Sport Psychology, 26*, 40-63.
- Duquin, M. E. (1994). She flies through the air with the greatest of ease: The contributions of feminist psychology. In D. M. Costa & S. R. Guthrie (Eds.), *Women and sport: Interdisciplinary perspectives* (pp. 285-303). Champaign, IL: Human Kinetics.
- Estabrooks, P., & Courneya, K. S. (1997). Relationships among self-schema, intention, and exercise behavior. *Journal of Sport and Exercise Psychology, 19*, 156-168.
- Evenson, K. R., Sarmiento, O. L., & Ayala, G. X. (2004). Acculturation and physical activity among North Carolina Latina immigrants. *Social Science & Medicine, 59*(12), 2509-2522.
- Eyler, A.A., Brownson, R.C., Donatelle, R.J., King, A.C., Brown, D., & Sallis, J.F.(1999). Physical activity, social support, and middle- and older -aged minority women: Results from a U.S. survey. *Social Science & Medicine. 49*, 781-789.

- Fallon, E. A., Hausenblas, H. A., & Nigg, C. R. (2005). The transtheoretical model and exercise adherence: Examining construct associations in later stages of change. *Psychology of Sport & Exercise, 6*(6), 629.
- Flegal, K. M., Ogden, C. L., & Carroll, M. D. (2004). Prevalence and trends in overweight in Mexican-American adults and children. *Nutrition Reviews, 62*(7), 144-148.
- Flintoff, A., & Scraton, S. (2001). Stepping into active leisure? Young women's perceptions of active lifestyles and their experiences of school physical education. *Sport, Education and Society, 6*(1), 5-21.
- Gee, J.P. (1985). The narrativization of experience in the oral style. *Journal of Education, 167*(1), 9-35.
- Gergen, K. J., & Gergen, M. M. (1988). Narrative and the self as relationship. *Advances in Experimental Social Psychology, 21*, 17-56.
- Gittlesohn, J., Evans, M., Helitzer, D., Anliker, J., Story, M., Metcalfe, L., Davis, S., & Iron-Cloud. (1998). Formative research in a school-based obesity prevention program for Native American school children (Pathways). *Health Education Research, 13*, 251-265.
- Godin, G. (1994). Social cognitive models. In R. K. Dishman (Ed.), *Advances in exercise adherence* (pp.113-136). Champaign, IL: Human Kinetics.
- Green, K. (2002). Lifelong participation, physical education and the work of Ken Roberts. *Sport, Education and Society, 7*(2), 167-182.
- Hardeman, W., Griffin, S., Johnston, M., Kinmonth, S. L., & Wareham, N. J. (2000). Interventions to prevent weight gain: A systematic review of psychological models and behavior change methods. *International Journal of Obesity, 24*, 131-143.
- Heck, T. A., & Kimiecik, J. C. (1993). What is exercise enjoyment?: A qualitative investigation of adult exercise maintainers. *Wellness Perspectives, 10*(1), 3.
- Henderson, K. A. (2003). Women, physical activity, and leisure: Jeopardy or wheel of fortune? *Women in Sport and Physical Activity Journal, 12*(1), 113-125.
- Henderson, K. A., & Bialescheki, M. D. (1991). A sense of entitlement to leisure as constraint and empowerment for women. *Leisure Sciences, 13*, 51-65.
- Henderson, K. A., & Bialescheki, M. D. (1993). Negotiating constraints to women's physical recreation. *Society and Leisure, 16*(2), 389-412.

- Iyengar, S. S., & Devoe, S. E. (1997). Rethinking the value of choice: Considering cultural mediators of intrinsic motivation. *Nebraska Symposium on Motivation*, 45, 129-176.
- Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology*, 76(3), 349-366.
- Kendzierski, D. (1994). Schema theory: An information processing focus. In R. K. Dishman (Ed.), *Advances in exercise adherence* (pp. 137-159). Champaign, IL: Human Kinetics.
- Kilpatrick, M., Hebert, E., & Bartholomew, J. (2005). College students' motivation for physical activity. *Journal of American College Health*, 54(2), 87-94.
- Kunesh, M. A., Hasbrook, C. A., & Lewthwaite, R. (1992). Physical activity socialization: Peer interactions and affective responses among a sample of sixth grade girls. *Sociology of Sport Journal*, 9, 385-396.
- Labov, W. (1982). Speech actions and reactions in personal narrative. In D. Tannen, (Ed.) *Analyzing discourse: Text and talk*. (pp. 219-227). Washington D.C.: Georgetown University Press.
- Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago: The University of Chicago Press.
- Lieblich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative research: Reading, analysis, and interpretation* (Vol. 47). Thousand Oaks, CA: Sage.
- Linde, C. (1993). *Life stories: The creation of coherence*. New York: Oxford University Press.
- Loue, S. (1999). *Gender, ethnicity, and health research*. New York: Kluwer Academic/Plenum Publishers.
- Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-258.
- Mannell, R. (2005). Comments on the paper by Walker, Deng, and Dieser. *Journal of Leisure Research*, 37(1), 100-105.
- Marquez, D. X., McAuley, E., & Overman, N. (2004). Psychosocial correlates and outcomes of physical activity among Latinos: A review. *Hispanic Journal of Behavioral Sciences*, 26(2), 195-229.

- McChesney, J., Gerken, M., & McDonald, K. (2005). Reaching out to Hispanics in recreation. *Parks & Recreation, 40*(3), 75-78.
- McDermott, L. (1996). Toward a feminist understanding of physicality within the context of women's physically active and sporting lives. *Sociology of Sport Journal, 13*(12-30).
- McDermott, L. (2000). A qualitative assessment of the significance of body perception to women's physical activity experiences: Revisiting discussions of physicality. *Sociology of Sport Journal, 17*, 331-363.
- McGannon, K. R., & Mauws, M. K. (2002). Exploring the exercise adherence problem: An integration of ethnomethodological and poststructuralist perspectives. *Sociology of Sport Journal, 19*(1), 67.
- McKenzie, T. L., Sallis, J. E., Broyles, S. L., Zive, M. M., Nader, P. R., Berry, C. C., et al. (2002). Childhood movement skills: Predictors of physical activity in Anglo American and Mexican American adolescents. *Research Quarterly for Exercise and Sport, 73*(3), 238-244.
- McKenzie, T. L., Sallis, J. E., Nader, P. R., Broyles, S. L., & Nelson, J. A. (1992). Anglo-and Mexican-American preschoolers at home and at recess: Activity patterns and environmental influences. *Journal of Behavioral and Developmental Pediatrics, 13*, 173-180.
- National Center for Health Statistics. (2005). Health, United States, 2005. Retrieved May 2, 2006, from <http://www.cdc.gov/nchs/fastats/exercise.htm>
- Nigg, C. R. (2003). Do sport participation motivations add to the ability of the transtheoretical model to explain adolescent exercise behavior. *International Journal of Sport Psychology, 34*, 208-225.
- Noddings, N. (1998). *Philosophy of education*. Boulder, CO: Westview Press.
- O'Connor, M. J. (1994). Exercise promotion in physical education: Application of the transtheoretical model. *Journal of Teaching in Physical Education, 14*, 2-12.
- Olesen, V. L. (2005). Early millennial feminist qualitative research: Challenges and contours. In N. K. Denzin & Y. S. Lincoln (Eds.), *The sage handbook of qualitative research* (pp. 235-278). Thousand Oaks, CA: Sage Publications.
- Oliver, K. L. (1998). A journey into narrative analysis: A methodology for discovering meanings. *Journal of Teaching in Physical Education, 17*, 244-259.
- Oliver, K. L. (2001). Images of the body from popular culture: Engaging adolescent girls in critical inquiry. *Sport, Education and Society, 6*(2), 143-164.

- Polkinghorne, D. E. (1995). Narrative configuration in qualitative analysis. In A. Hatch & R. Wisniewski (Eds.), *Life history and narrative* (pp. 5-23). London: Falmer Press.
- Pratt, M., Macera, C. A., & Blanton, C. (1999). Levels of physical activity and inactivity in children and adults in the United States: Current evidence and research issues. *Medicine and Science in Sports and Exercise*, 31(S), 526-533.
- Prochaska, J. O., & Marcus, B. H. (1994). The transtheoretical model: Applications to exercise. In R. K. Dishman (Ed.), *Advances in exercise adherence* (pp. 161-180). Champaign, IL: Human Kinetics.
- Prochaska, J. O., & Velicer, W. E. (1997). The transtheoretical model of health behavior change. *American Journal of Health Promotion*, 12, 38-48.
- Rhodes, R.E., Blanchard, C.M., Matheson, D.H., & Coble, J. (2006). Disentangling motivation, intention, and planning in the physical activity domain. *Psychology of Sport and Exercise*. 7, 15-27.
- Riessman, C. K. (1993). *Narrative analysis*. Thousand Oaks, CA: Sage.
- Roberts, K. (1999). *Leisure in contemporary society*. Wallingford, UK: CABI.
- Ryan, M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well being. *American Psychologist*, 55(1), 68-78.
- Sallis, J. E., Greenlee, L., McKenzie, T. L., Broyles, S. L., Zive, M. M., Berry, C. C., et al. (2001). Changes and tracking of physical activity across seven years in Mexican-American and European-American mothers. *Women & Health*, 34(4), 1-14.
- Sallis, J. F. (1993). Influences on physical activity of children adolescents and adults. *Physical Activity and Fitness Research Digest*, 1(7), 1-7.
- Sallis, J. F., Prochaska, J. J., & Taylor, W. C. (2000). A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise*, 32(5), 963-975.
- Sallis, J. F., Prochaska, J. J., Taylor, W. C., & Hill, J. O. (1999). Correlates of physical activity in a national sample of girls and boys in grades 4 through 12. *Health Psychology*, 18(4), 410-415.

- Scheurich, J. J., & McKenzie, K. B. (2005). Foucault's methodologies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The sage handbook of qualitative methods* (3rd ed., pp. 841-868). Thousand Oaks, CA: Sage Publications.
- Scheurich, J. J., & Young, M. D. (1997). Coloring epistemologies: Are our research epistemologies racially biased. *Educational Researcher*, 26(4), 4-16.
- Schumann, A., Nigg, C. R., Rossi, J. S., Jordan, P. J., Norman, G. J., Garber, C. E., et al. (2002). Construct validity of the stages of change of exercise adoption for different intensities of physical activity in four samples of differing age groups. *American Journal of Health Promotion*, 16(5), 280-287.
- Scruton, S. (1992). *Shaping up to womanhood: Gender and girls' physical education*. Philadelphia: Open University Press.
- Shephard, R. J., & Trudeau, F. (2000). The legacy of physical education: Influences on adult lifestyle. *Pediatric Exercise Science*, 12, 34-50.
- Sparkes, A. C. (1999). Exploring body narratives. *Sport Education and Society*, 4(1), 17-30.
- Taylor, W. C., Baranowski, T., & Sallis, J. F. (1994). Family determinants of childhood physical activity: A social cognitive model. In R. K. Dishman (Ed.), *Advances in exercise adherence* (pp. 319-342). Champaign, IL: Human Kinetics.
- Terry, V. (2001). Lobbying: Fantasy, reality, or both? A health care public policy case study. *Journal of Public Policy*, 1(3), 266-281.
- Tierney, W.G., (2002). Get real: Representing reality. *Qualitative Studies in Education*, 15 (4), 385-398.
- Triandis, H., & Gelfand, M. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*, 74, 118-128.
- U.S. Department of Health and Human Services. (1996). *Physical activity and health: A report of the Surgeon General*. (Report). Atlanta: Centers for Disease Control.
- Vansteenkiste, M., & Deci, E. L. (2003). Competitively contingent rewards and intrinsic motivation: Can losers remain motivated? *Motivation and Emotion*, 27(4), 273-299.
- Vansteenkiste, M., Simons, J., Soenens, B., & Lens, W. (2004). How to become a persevering exerciser? Providing a clear, future intrinsic goal in an autonomy-supportive way. *Journal of Sport & Exercise Psychology*, 26, 232-249.



- Waid, L.D., & Frazier, L.D. (2003). Cultural differences in possible selves during later life. *Journal of Aging Studies, 17*, 251-268.
- Walker, G. J., Deng, J., & Dieser, R. B. (2005). Culture, self-construal, and leisure theory and practice. *Journal of Leisure Research, 37*(1), 77-99.
- Wallace, L. S., & Buckworth, J. (2001). Application of the transtheoretical model to exercise behavior among nontraditional college students. *American Journal of Health Education, 32*, (39-47).
- Wankel, L. M. (1985). Personal and situational factors affecting exercise involvement: The importance of enjoyment. *Research Quarterly for Exercise and Sport, 56*(3), 275-282.
- Wankel, L. M. (1988). Exercise adherence and leisure activity: Patterns of involvement and interventions to facilitate regular activity. In R. K. Dishman (Ed.), *Exercise adherence: It's impact on public health* (pp. 369-396). Champaign, IL: Human Kinetics.
- Whaley, D. E., & Schrider, A. F. (2005). The process of adult exercise adherence: Self-perceptions and competence. *Sport Psychologist, 19*(2), 148.
- White, J. L., Ransdell, L. B., Vener, J., & Flohr, J. A. (2005). Factors related to physical activity adherence in women: Review and suggestions for future research. *Women & Health, 41*(4), 123.
- Zizzi, S. J., Keeler, L. A., & Watson Ii, J. C. (2006). The interaction of goal orientation and stage of change on exercise behavior in college students. *Journal of Sport Behavior, 29*(1), 96.

**APPENDIX A**  
**RECRUITMENT FLYER**

## Recruitment Flyer



## What's your workout story?

**\$25 for your contribution to Hispanic**

**Women's exercise adherence research**

### **Participant requirements:**

- Adult women of Hispanic origin who have experienced at least three life transitions like, high school graduation, marriage, taking a first job, having children, changing jobs, college graduation, children entering school etc.
- Professed commitment to regular physical activity
- Willingness to talk about your physical activity life history in an interview lasting 60 to 90 minutes.

### **To volunteer contact:**

- Susan Wagner (MS Physical Education, Doctoral Student, Sr. Lecturer at TAMU (30 yrs), and public school teacher 4 yrs)
- (979) 695-9072 (Home after 6 pm most evenings)
- (979) 845-2063 (Work from 8:30-5)
- swagner@tamu.edu
- I have an answering machine at both numbers and will return your call at time and day suggested by you.

### **Interview procedure:**

- Interview will occur in a place and at a time of your choosing. This should be a place where you are comfortable and few distractions are present
- With your permission the interview will be audio taped
- The interview will be confidential and you will not be able to be identified in the findings
- This procedure has been approved by the Institutional Review Board at Texas A&M University
- You will be compensated for your time with \$25

**APPENDIX B**

**CORE NARRATIVE TRANSCRIPTION EXAMPLE**

## Core Narrative Transcription Example

- 22 So I went back to school started the 11th grade and basically got the part-time job and did co-op and all of that. (A)
- 23 And then after that I basically when I would get home from work I would ask you know my parents. My parents would always like, you know, if you want to go run just kind of de-stress from everything. (O)
- 24 I would go run at the park which was nearby, my 3 miles go straight back home and you know take care of a child do homework and do everything. (CA)
- 25 That went on for a couple of two years or so. (O)
- 26 Um. When I was a senior, I decided to, I made a couple of friends at the park that were starting to do five Ks. And I got involved with that. (O)
- 27 After that, I kind of got hooked on it you know. (E)
- 28 of course there at a park I met my husband, which is Carlos and he's extremely active so from that point on, we basically.(CA)
- 29 I'm not a very competitive person, (E)

30 I'd just like to do it just because I get to maintain the weight and you know stay fit because I see a lot you know the sickness. (R)

**APPENDIX C**

**POETIC STRUCTURES TRANSCRIPTION EXAMPLE**

## Poetic Structures Transcription Example

Focus Group Meeting

Talking about love

Analisa

I think for me

The best part is really like the after

After I'm done

I like the way I feel like

I used my body for something

Productive

You know that I used it

Christina

It's kind of hard

Kind of weird

I guess when you

Combine the love

With the pain part of it

Because it is working out

It is so tough

But yet at the end

You feel like

You've actually accomplished something

For the day



And it makes you feel good

And as a result

You might see the results

Along the line when you see

Your clothes fitting better

You actually love

That part of it

Yet

Julie

That's when you get addicted to it

When you're doing the workout

You probably hate it

But when you're done with it

It all kind of goes together

Talking about Euphoria

Julie

I get hyper

For like a good hour afterwards

I get really hyper

And then I come down hard

Crash and burn

It's like a sugar high or something

I get really  
Hyper  
To the point that  
I'm gonna go run a mile or something  
I get home and I'm like  
Yeah that went away  
It only lasts about an hour

Talking about addiction

Susan

What would it be like  
If you didn't  
Have it

Analisa

OOOOO  
I just wouldn't feel right  
I just wouldn't feel right  
I don't feel right today  
Cause I didn't workout  
I mean I'll be OK  
I 'll get through it  
I'll try  
But if somebody said you can't do it any more.....

Christina

It's a way of relieving

Your stress

If you don't get it in

Because your body's so used to it

It's nice to be able to go out there

And just kind of do it and then

Come back and be tired and

OK I got it in

Analisa

It's just a lifestyle

It's something

It's part of my routine

It's something that I do

Shave your legs

Workout

You eat

I feel like I have to

Squeeze it in

It's my time for me

Just committed to it

**VITA**

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**EDUCATION**

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9/76 - 6/77	Physical Education Teacher, grades 4-8 Madison Meadows School, Phoenix, AZ
5/75 -7/76	Recreation Director Shepherd of the Hills Lutheran Church Littleton, CO
9/72 - 6/75	Physical Education Teacher, grades 1-6 Saratoga Springs, NY