

Cultural Beliefs and Attitudes of Black and Hispanic College-Age Women Toward Exercise

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The purpose of this study was to examine the cultural knowledge that informs exercise behaviors among Black and Hispanic college-age women. Focus groups were conducted among 26 Black or Hispanic female college students. Questions were based on constructs from social cognitive theory. Data were analyzed using content analysis. Latinas were found to be more likely to view vigorous exercise as "unfeminine" and cited family responsibilities as barriers. Black women enjoyed the competition and camaraderie of exercise, but felt pressure to conform to White standards of beauty. There appear to be distinct differences in the cultural beliefs that inform exercise behaviors among these women.

Keywords: *focus group analysis; health promotion; physical activity; Black and Hispanic; college-age women; exercise*

Physical inactivity has become a major public health issue in the United States. Although recent data suggest that a significant percentage of Americans do not accrue sufficient amounts of daily physical activity (Centers for Disease Control and Prevention [CDC], 2003), it has been demonstrated that sedentarism is particularly acute among minority women, irrespective of socioeconomic status (Crespo, Smith, Andersen, Carter-Pokras, & Ainsworth, 2000). Differences in levels of moderate to vigorous physical activity are apparent between Black, Hispanic, and White non-Hispanic females as early as 8 years of age (Grunbaum et al., 2004; Kimm et al., 2002; Trost, Pate, Ward, Saunders, & Riner, 1999). These disparities suggest that culture-specific beliefs

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and attitudes about exercise may influence participation in physical activity among Black and Hispanic females.

There is some empirical evidence that cultural beliefs about the meaning of physical activity and exercise may play a role in the adoption and maintenance of physical activity by minority women. Eyler et al. (1998) conducted a qualitative study using focus groups to explore the physical activity patterns of middle-aged and elderly minority women. Less is known about the perceived importance of physical activity in the lives of younger Black and Hispanic women. D'Alonzo, Stevenson, and Davis (2004) reported that only 16% of those participants who completed a 16-week exercise intervention targeting Black and Hispanic college-age women were Hispanic and that Hispanic subjects were more likely to cite family responsibilities as interfering with exercise plans. There is increased interest in the applicability of theoretical models, e.g., social cognitive theory (SCT; Bandura, 1997), to clarify the influence of culture-specific factors which likely play a key role in exercise intentions among minority populations. Bandura (2004) has addressed the issue of human functioning in cultural embeddedness from the viewpoint that cultural knowledge shapes the development, structure, purpose, and function of efficacy beliefs and outcome expectations. Qualitative methods are ideally suited to uncover this type of culture-specific information.

The purpose of this qualitative study was to examine what cultural knowledge informs the decision to initiate and adhere to a program of exercise among Black and Hispanic college-age women. The investigation was carried out via focus group interviews. Data obtained from this study will be used to inform a culturally appropriate exercise intervention for Black and Hispanic college-age women based on constructs from SCT. This article addresses the focus group process, data analysis techniques, and results.

BACKGROUND

There is considerable evidence that obesity and sedentarism have reached epidemic proportions in the United States. Less than one half of adults and less than two thirds of children currently meet the minimum recommendations

for physical activity (30 or more minutes of moderate activity 5 or more days/week or 20 or more minutes of vigorous activity 3 or more days/week; CDC, 2003). Rates of inactivity are even higher for Black and Hispanic females at all ages and these discrepancies become more pronounced during the college years (Suminski, Petosa, Utter, & Zhang, 2002; Wallace, Buckworth, Kirby, & Sherman, 2000). Therefore, Black and Hispanic young women are particularly at risk for the development of chronic illness, such as cardiovascular disease, cancer, and diabetes, which are associated with a sedentary lifestyle.

These gender-based racial and ethnic disparities in physical activity appear to have their beginnings in childhood, which suggests that culture-specific beliefs about the role of exercise in the lives of females may influence participation in moderate and vigorous physical activity. Few qualitative studies have examined the exercise beliefs and behaviors of minority women. Belza et al. (2004) used focus groups comprised of older Black, Hispanic, Native American, and Asian women to explore beliefs and patterns of physical activity. Social support was a major facilitator for exercise among both Black and Hispanic women. In another qualitative study, Nies, Vollman, and Cook (1999) likewise reported that social support was a major factor in the decision to initiate and continue a program of exercise. Juarbe, Lipson, and Turok (2003) reported that cultural attitudes about exercise influenced the exercise beliefs and behaviors of Mexican immigrant women. Rogers et al. (2004) used focus groups based on SCT constructs to examine exercise beliefs among women with breast cancer. There is a paucity of theory-based research conducted among younger minority women to identify the similarities and differences in exercise beliefs and behaviors for cross-cultural comparison. Qualitative research methods are well matched to this type of investigation.

METHOD

Study Design

In this descriptive study, focus group interviews were utilized to examine the women's exercise attitudes and beliefs. Focus groups may provide an alternative means of examining communicative phenomena. They also offer a unique opportunity to interview participants as well as to observe their interaction. Focus groups have been used successfully with various groups to uncover attitudes about exercise (U.S. Department of Health and Human Services, 2002). In this study, the SCT framework was selected for the focus group questions because the purpose of the interviews was to inform an SCT-based exercise intervention.

Participants

Female undergraduate students, 18 to 35 years old, who self-identified as Black or Hispanic and were not regular

exercisers were recruited for the focus groups from three student organizations at a large public university in the north-eastern United States. The student organizations consisted of a Black women's group, a Latina group, and a minority leadership group comprised of both Black and Hispanic female students. A key informant or "culture broker" (Fetterman, 1998) was identified in each organization who assisted with recruitment. These formal and informal group leaders were later trained by the principal investigator (PI) to serve as a comoderator in each focus group. A purposeful sample was sought, specifically Black and Hispanic women who were not regular exercisers. In purposive sampling, the researcher intentionally selects participants according to the needs of the study. The PI and key informants used primary selection to recruit subjects who met the criteria and who would be willing to participate. A total of 26 women participated in one of three focus group interviews. The PI recruited 12 to 15 individuals per group, to allow for no-shows and to target approximately six to eight informants per group (Morgan, Krueger, & King, 1998). This technique was successful for two of the groups, which contained six and eight informants, respectively. All 12 individuals who were approached for the third group participated.

Measures

Prior to beginning the focus group discussions, a semi-structured interview guide was developed by the PI. The questions were constructed based on application of selected SCT constructs for health promotion interventions but were subject to modification as each session progressed. The SCT framework has consistently been found to be the strongest predictor of intention to exercise and maintenance of exercise over time among adolescents and young adults (Cash, Novy, & Grant, 1994). The two SCT constructs that most directly explain intention to exercise are self-efficacy and outcome expectations. Self-efficacy is defined as judgments of one's ability to perform at a particular level when executing a specific behavior, whereas outcome expectations are judgments of the likely consequences such performances will produce (Bandura, 1997). Specifically, exercise self-efficacy is defined as a person's confidence about their ability to perform specific physical activities under specific circumstances. Self-efficacy is influenced by four principal sources of information: performance accomplishments, modeling (vicarious experiences), verbal persuasion, and emotional arousal (physiological states). Outcome expectations include the positive and negative physical, social, and self-evaluative effects that influence the outcomes that flow from a given course of action. The joint influence of self-efficacy and outcome expectancies on human behavior is illustrated in Figure 1. The application of the conceptual framework is outlined in Table 1. and a copy of the interview schedule is presented in Table 2. Three questions were added to stimulate discussion about culture-specific influences on exercise attitudes and beliefs. These were

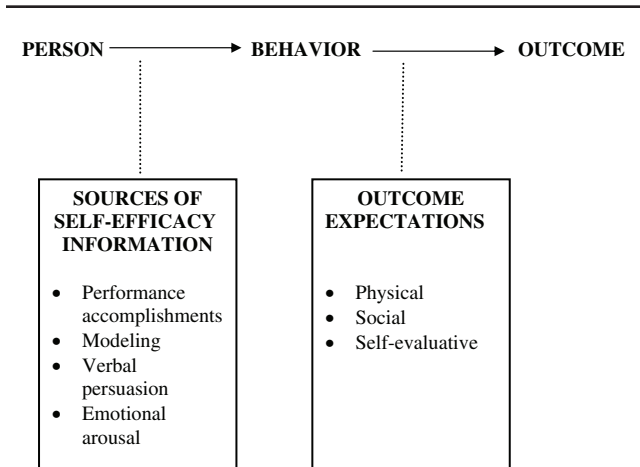


FIGURE 1. The Conditional Relationships Between Efficacy Beliefs and Outcome Expectations.

NOTE: From Bandura, A. (1997). *Self-efficacy: The exercise of control* (p. 22). New York: W.H. Freeman and Company. Adapted with permission.

TABLE 1
Application of Selected Social Cognitive Theory Constructs to Physical Activity

<i>Social Cognitive Theory Construct</i>	<i>Definition (Related to Physical Activity)</i>
Expectations	Expected effects of physical activity behavior.
Self-efficacy	Confidence in ability to engage in physical activity.
Behavioral capability	Knowledge of the type of physical activity needed and the skill to perform this activity.
Expectancies	The value of an expected effect of physical activity to the individual.
Environment	Factors influencing physical activity external to the individual.

NOTE: Adapted from Rogers et al. (2004).

TABLE 2
Social Cognitive Theory Constructs and Focus Group Questions

<i>Social Cognitive Theory Construct</i>	<i>Questions</i>
Expectations	Question 1: What is your general impression or thoughts about exercise? Question 2: What do you believe are the benefits of exercising on a regular basis?
Self-efficacy (modeling)	Question 3: Has anyone (e.g., your family or friends) influenced your beliefs about exercise? If so, who and in what ways?
Self-efficacy (performance accomplishments)	Question 4: Have you participated in an exercise program in the past? What did you enjoy about it? What did you dislike?
Behavioral capability	Question 5: What kinds of physical activity do you like to participate in? How important is this for you?
Expectancies	Question 6: Do you refer to exercise alone or in a group? In a structured program (e.g., exercise class) or something else? How important is this for you? Question 7: Would you come to an exercise class if you did not know anyone or no close friends came? Question 8: What do you think are the major facilitators that would keep women like yourself exercising on a regular basis?
Environment	Question 9: What do you think are the major barriers or problems that would keep women like yourself from exercising on a regular basis? Question 10: How important to you are options to exercise (e.g., different types of activities, classes tailored to individual needs/abilities, choice to exercise by yourself or with others)? Question 11: How important is the location where you exercise (e.g., in a gym, in the residence hall, indoors/outdoors)?

(1) Do you think there should be anything different about exercise programs for minorities? (2) If you could design an exercise program for minority college women, what would it be like? and (3) What do you think is the best way to encourage participation in an exercise program by both Black and Hispanic students? What could be done to keep these students coming on a regular basis?

An outside researcher with extensive experience in conducting qualitative studies among minority women reviewed the proposed questions. Face validity of the interview schedule was subsequently determined prior to the focus group sessions by having key informants review and approve the questions.

Procedure

Following approval from the Institutional Review Board at the university, written consent was obtained from all participants at the beginning of a focus group session. The PI, who has had previous experience in leading focus groups about exercise with minority students, served as the moderator. A key informant for each group worked as the comoderator, and one to two research assistants functioned as recorders. To help foster a naturalistic setting, each focus group was held in the group's regular meeting place in lieu of a regularly scheduled meeting. To promote attendance, a small monetary incentive was offered and pizza and refreshments were provided after

each session. The focus groups sessions were audiotaped; two tape recorders were used in the event one malfunctioned. The moderator, comoderators, and trained recorders held a copy of the interview guide during the session and added memos or reflective remarks during the interview process. The moderator followed the interview guide but used the informants' feedback to establish subsequent questions to be posed in the interview. Likewise, the moderator conducted periodic member checks during the interview to summarize or clarify points, gain consensus about emerging patterns, and, when appropriate, to encourage expression of opposing points of view. The focus groups continued until all questions were answered and no new information was provided by the informants. Each focus group session lasted 1.5 to 2.5 hours.

Data Analysis

In this descriptive study, directed content analysis was used to identify repetitive themes regarding exercise. Krippendorff (2004) defines content analysis as “. . . a research technique for making replicable and valid inferences from data to the contexts of their use (p. 18). Berelson (1971) noted that content analysis is a particularly effective technique for uncovering “cultural patterns” of population groups. Directed content analysis, driven by a theoretical framework (in this case, SCT) is a more structured process than conventional content analysis (Hickey & Kipping, 1996). The goal of a directed content analysis is to confirm and conceptually expand the selected conceptual framework (Hsieh & Shannon, 2005). In concept analysis, the use of an a priori theoretical framework with well-defined variables contributes to hypothesis validity (Weber, 1990).

The moderator, comoderator, and recorders debriefed after each focus group session to review the conduct of the session. The audiotapes were transcribed by a paid transcriptionist and the results were reviewed by the research team. To identify errors or incomplete data, the authors replayed the audiotapes while reviewing a copy of the transcript. Each researcher then independently hand-coded “chunks” of words, sentences, and paragraphs and clustered the codes into categories and patterns, using Krippendorff's analytic technique (Krippendorff, 2004). The thematic categories were based on questions from the SCT-based interview guide, but additional culture-specific categories were added that arose during the conduct of the focus groups. To assess reliability, the authors first tested the coding scheme on a sample of the transcript. Intercoder reliability (Weber, 1990) was satisfactory and minor coding, category, and theme discrepancies were discussed and resolved between the researchers. Subthemes were generated from the themes and compared with information in the literature, in an attempt to draw inferences from the data obtained in the focus group sessions. The results were reviewed by both researchers. Theme statements were then formulated and interwoven with the data to obtain a story line.

RESULTS

Fifteen Hispanic women and 11 Black women, ages 19 to 31, participated in the focus group interviews. Twenty-five of the 26 subjects were single women without children. One third of the informants were commuter students. Approximately one third of the subjects were classified by the university as economically disadvantaged; the responses of these subjects to the interview questions were not significantly different from the rest of the group. Demographically, the subjects in the study were very similar to the university's overall Black and Hispanic student populations with regard to age, marital status, residential/commuter status, and socioeconomic position. The women were also evenly distributed with regard to year in college. The responses of the informants were classified into seven thematic categories: (1) general impressions about exercise, (2) exercise role models, (3) social support, (4) benefits of exercise, (5) constraints to exercise, (6) exercise preferences, and (7) cultural issues influencing exercise.

General Impressions About Exercise

Among both Black and Hispanic informants, exercise was overwhelmingly seen in terms of planned, vigorous physical activity—strenuous and uncomfortable: “Getting down and dirty, I mean muscle strain, heart strain, pain.” The majority of the informants focused only on aerobic forms of exercise: “Sweating, you know, cardio stuff.” Exercise was conceptualized as a means to an end. Most often, the goal was weight loss/appearance enhancement: “You exercise to look good. If you already look good, you don't need to exercise. When you exercise to the point where you look good, you can stop exercising.” A few informants saw exercise as a lifestyle choice: “It's walking or normal activities that can be incorporated into what you would normally do in your day.” Fewer still conceptualized exercise as a life-long pursuit, “A part of your life plan.” Interestingly, none of the women in the focus group interviews associated exercise with either health promotion or prevention of disease.

Exercise Role Models

Black informants were more likely to identify a family member (often a male, but sometimes a female) who influenced them positively to exercise: “My dad and my mom both ran track in high school and that all kind of trickled down to my brothers and me.” Another Black informant said, “My mom used to go to the gym a lot and my sister is a body builder—she's very disciplined. So it rubs off a bit.”

Hispanic informants were less likely to have role models who exercised. Several women mentioned that they themselves were role models, trying to motivate their family members to exercise with them: “In my family, no one exercises. I'm into sports, I get to exercise, so I'm like the motivator instead of somebody motivating me.”

Social Support

Social support was most often conceptualized in the groups as “persons who would go to the gym with you or otherwise encourage you to exercise.” Such persons were seen as very important by Black and Hispanic informants, both in terms of initiating and maintaining a program of exercise: “It’s easier to go the gym when you have someone who motivates you.” One woman noted that her “exercise friends” had become a sort of surrogate family: “People who wanna exercise with you and stuff, its like they become your family.”

Social support was also discussed in the context of women’s sports. A significant number of Black informants indicated they played team sports in high school and valued the camaraderie of social support. Now that they were in college and no longer active, these women lamented the loss of such support: “When I was in high school, I played for four years . . . and that had to be the best time. You never wanted to let your team down. So that was exercise and you didn’t even realize it.”

Conversely, a few Black informants indicated they preferred to exercise alone, particularly when running: “When I’m on a treadmill, don’t talk to me. I like to run by myself because it’s kind of like a personal time. I don’t want a lot of people around me.” These women also found exercise to be a welcome break from classes and friends: “I like to exercise by myself when it comes to running. I don’t like to run with other people because they lower your motivation.”

Benefits of Exercise

Both Black and Hispanic informants focused on the immediate “feel-good” effects of exercise: “When you go to the gym, after you are finished, no matter what you did, you don’t feel bad. Yeah, hey! I made it! It’s so good when you finish.” Another informant said, “I used to exercise in the morning. And the rest of the day, I would have so much energy.” The Black women in particular emphasized that exercise was a good outlet for their competitive natures: “The person next to you is running five miles and you are only running two, and I want to run as fast as the next person.” One woman summarized the feelings of others in the group: “We’re all competitive.”

Constraints to Exercise

Informants all noted that exercise facilities often cater to experienced exercisers and this sets beginners up to fail: “You will not catch me in advanced classes, ‘cause it discourages me. You just don’t know if a class says ‘cardiovascular exercise’ and then you find out it’s really hard and then you don’t go back.” Long waiting lines at the campus gym and sophisticated equipment were also mentioned as barriers to exercise: “There is a long waiting line to get at the equipment at the gym, and there’s not enough equipment and so many members. That pretty much turns me off.” Another informant

said, “I didn’t know what the machines were for. You go there and you look like an idiot trying to read the diagrams. Then there are these people who look like they come to the gym all the time and they are looking at you like “You don’t know what you are doing.”

The Hispanic women (who in this study were more likely to be commuter students) focused more on time limitations as constraints to exercise, including childcare, commuting, and part-time jobs. Even the Hispanic women who were not commuters tended to travel home more frequently and to identify family responsibilities, such as babysitting siblings and assisting grandparents, as barriers to exercise: “You have to budget the time to get there, plus you have to budget the time to exercise, plus you have to budget the time to get yourself cleaned up and maybe to figure out where you’re going to be when you get yourself cleaned up.” Another informant said, “If I go to the campus gym and work out and I have a large gap of time, I want to go home and take a bath. But if I go home, I won’t come back to school.”

Preferences

Both groups noted that options, both in terms of specific activities and places to exercise, are preferred. Flexibility was seen as an important factor in adhering to an exercise program: “I don’t feel well that day, so maybe I don’t want to take an exercise class and I’ll just do the treadmill. I just like the option that I could do this for that day and see what happens the next day, how my body feels. If you try to plan, sometimes it just doesn’t work out right.” Another informant said, “I get bored with the same thing. So I change my activities. Not too different, but never the same thing twice.”

Both groups preferred to exercise in places where there were women who looked like themselves, both in terms of body size and race/ethnicity: “I look for someone of my body type.” “If I go to a class that seems to be more Caucasian than Hispanic and Black, that gets to be a little weird.” Both groups identified musical preferences/dislikes and how they affect their motivation to exercise: “I don’t want to go into a class and hear the Dave Matthews Band. I’d like to hear rap music or even a mix of music.”

Cultural Issues

Both groups spoke at length about cultural issues relating to exercise and body image. Some topics, such as preferences in the design of classes, have been previously noted. Much of the discussions focused on differences in attitudes about exercise. The Hispanic women focused on adherence to culturally constructed “rules” about what physical activities are appropriate for women and girls. These responses varied according to the women’s country of origin and degree of acculturation. Foreign-born women were more likely to feel that certain types of vigorous physical activities were “unfeminine:” “I just came back from Peru and girls over there only play

volleyball. I started playing soccer with the guys, and they're like, 'What's she doing?' When I first came to practice, they would say that. They have certain sports for girls."

Several immigrant women noted that parental support for girls who exercise was not as strong in their country of origin as in the United States: "When my sister and I first started playing soccer here, my father would never come to watch us play. He really didn't approve. But once he saw that everyone else does it here and that we are good—now he comes to all the games. It would have been different if he had a son." Dancing was a preferred form of exercise for both groups, but particularly among Hispanic women: "I went to a class and the popular instructor was this Latino guy—it was a dancing Latin aerobics class. There was so much more variety—it was much more of an attraction, I really think so."

As previously noted, both groups conceptualized exercise primarily as a means of appearance enhancement. Both groups emphasized how their bodies were different than those of White non-Hispanic women and that exercise programs designed for minority women should acknowledge and embrace these differences: "My family is from Puerto Rico. I used to hear my father talk. That's what they'd say, 'A little meat here, a little meat there.' They don't like thin—they don't marry thin—they like a little bit of curves and stuff like that."

Another woman from Puerto Rico described the cultural conflict associated with female body image in the mainland United States and in Puerto Rico: "Jennifer Lopez, she looks like an American now. Yeah and she's lost her uniqueness." Black women expressed similar feelings about their bodies: "I walk into the gym, and they all look like Workout Barbie—blonde-haired, ultra slim, big chest, super thin thighs. Only I don't look like Workout Barbie. If anything, I want to look like Halle Berry. She's got a nice little shape, she's got hips." In one focus group in particular, the Black informants reported they often felt pressured (particularly by their mothers) to stay physically active to avoid becoming overweight. Being overweight did not fit with (White) society's expectations for a successful young woman. Many of the Black women felt bitter about exercising only to comply with the expectations of White people: "This is a country that values appearances."

Some of the women noted the pressure to conform to societal standards of beauty was particularly acute for young Black women who are aspiring to highly visible careers: "And so because I want to be a lawyer, she's like 'How are you going to walk around the courtroom in like (that body)?" Another informant responded, "Ooh, but you can't be fat on the news. You gotta be skinny. You know what I mean? So it's always been this thing of how like, people are gonna respond to you."

DISCUSSION

The responses of the focus group informants to many of the 10 SCT-based questions were consistent with those

reported by majority populations (Cash et al., 1994; Tiggerman & Williamson, 2001). Among adolescents and young adults, exercise is most often conceptualized as a means of weight control/appearance enhancement. Both Black and Hispanic informants in this study expressed similar such opinions. Few informants mentioned the health benefits of exercise, which suggests that it is likely not a major motivator in this age group. Time constraints were cited by a number of the respondents as barriers to exercise, along with environments that did not support neophyte exercisers (Ainsworth, 2000; Sallis, Bauman, & Pratt, 1998). Consistent with other studies, social support from family and friends was seen as important by many of the informants (Treiber et al., 1991). The women identified numerous benefits associated with exercise, e.g., renewed energy, and Black women in particular cited a sense of camaraderie and competitiveness as benefits. These findings suggest that these concepts may play an important role as motivators to exercise among some adult minority women.

There were major differences between the Black and Hispanic women's responses with regard to cultural beliefs and influences to exercise. Hispanic informants, particularly those who were born outside the United States, were less likely to have participated in competitive sports or vigorous exercise in the past and were less likely to identify family members who were role models for physically active lifestyles. In addition, the foreign-born women were more likely to believe that certain vigorous physical activities were "unfeminine," whereas both foreign-born and American Hispanic women were more likely to cite family responsibilities as constraints to exercise. In the empirical literature, it has been noted that Latinas are often socialized into placing family needs above their own throughout their lives (Alvarez, 1993), which can serve as a barrier to participation in exercise. This phenomenon is referred to as *marianismo* (Comas-Diaz, 1988; Stevens, 1973) and may contribute to low self-efficacy for exercise, either directly or indirectly, by contributing to feelings of depression. There is evidence to suggest that level of acculturation strongly influences *marianismo* beliefs in Hispanic women (Gil & Vasquez, 1996).

Both Black and Hispanic subjects saw their body types as distinctly different from those of White women and acknowledged that they felt uncomfortable comparing their bodies to those of White non-Hispanic women. This is in contrast to the findings from previous studies which noted that Black subjects were not influenced by idealized images of White women (Frisby, 2004). These concerns reflected their conceptualization of exercise as a means of weight control. The Black women were more vocal in describing exercise in terms of a dichotomy. Although they had many positive exercise experiences, they simultaneously felt "pressured" to exercise to conform to "White" standards of beauty. In the past, some of these women had intentionally avoided comparisons with White women in exercise and sport by either (1) participating

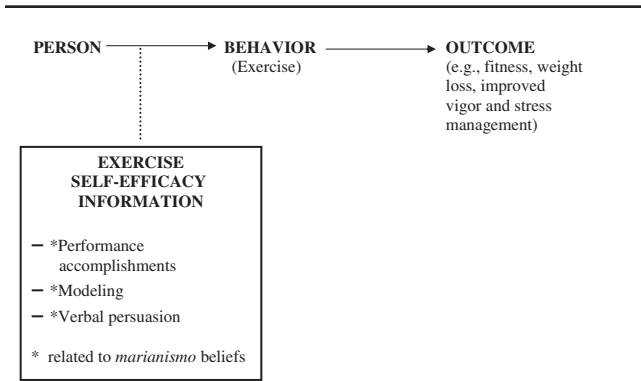


FIGURE 2. The Proposed Impact of Cultural Beliefs and Attitudes of Hispanic Women on Intention to Exercise.

NOTE: From Bandura, A. (1997). *Self-efficacy: The exercise of control* (p. 22). New York: W.H. Freeman and Company. Adapted with permission.

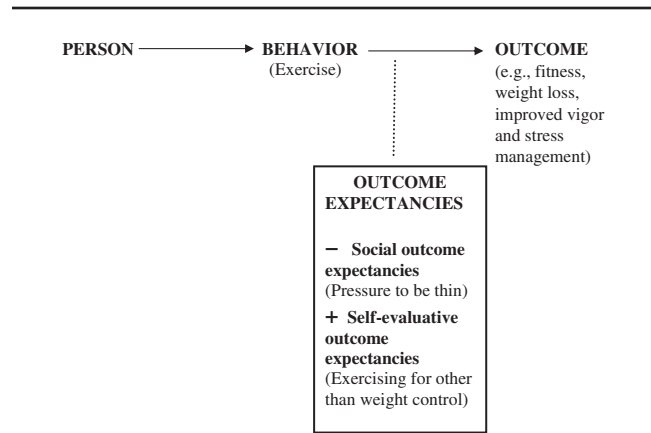


FIGURE 3. The Proposed Impact of Cultural Beliefs and Attitudes of Black Women on Intention to Exercise.

NOTE: From Bandura, A. (1997). *Self-efficacy: The exercise of control* (p. 22). New York: W.H. Freeman and Company. Adapted with permission.

in “color-blind” sports, e.g., track and swimming, where performance is measured objectively, or (2) gravitating to activities, such as basketball, where there are larger numbers of Black women. As college students, they were now revisiting some of these issues and struggling with how to reconcile two competing value systems.

The impact of these culturally related beliefs and attitudes on intention to exercise using SCT is illustrated in Figures 2 and 3. As depicted in Figure 2, *marianismo* beliefs may directly impact exercise self-efficacy through limited performance accomplishments, few vicarious experiences (*modeling*), and a lack of verbal persuasion. Women who have had less positive exercise experiences and have had few familial role models for physical activity are unable to devise effective “self-talk” strategies to initiate and sustain exercise behaviors. Consequently, women with strong *marianismo* beliefs are more likely to have low exercise self-efficacy and are less likely to participate in physical activity. *Marianismo* beliefs may also influence exercise self-efficacy indirectly, because satisfaction with *marianismo* beliefs may contribute to feelings of depression and self-efficacy beliefs operate as mediators to depression. In these women, exercise is seen as a selfish indulgence, rather than a health-promoting lifestyle behavior.

The Black women in this study experienced negative outcome expectations in the form of negative social reactions, which discouraged them from participation in exercise. Bandura (1997) has noted that individuals resist goals that are externally imposed and when they see no personal benefit. Conversely, individuals will willingly adapt and stick to a goal when their self-interests are linked to goal attainment. In this instance, the women’s responses indicated that they personally exercised for reasons other than weight control. The proposed impact of the outcome expectations

on intention to exercise is illustrated in Figure 3. Smith, Thompson, Raczynski, and Hilner (1999) have suggested that Black women may possess a source of influence that allows them to feel attractive and satisfied with their appearance, even when at a higher body weight. Thus, their self-evaluative outcome expectations may override the negative social reactions. There is evidence that self-image is a more multifaceted concept for Black women than for White women (Parker et al., 1995; Thomas & James, 1988). One informant in this study echoed these beliefs: “My concept of beauty has to do . . . with what you feel is healthy for you, the individual. It’s not just about your looks. It’s like a total package deal.”

Implications for Nursing Practice

The findings of this study support Bandura’s (2004) assumption that cultural knowledge shapes efficacy beliefs and outcome expectations and provide support for the use of SCT as a framework for exercise interventions among Black and Hispanic young women. Moreover, these findings have important and distinctly different implications for the design of culturally appropriate exercise intervention studies. When working with Hispanic women, nurses need to address the balance between meeting responsibilities toward others (*marianismo*) and self-care activities, such as exercise, particularly among immigrant women. Because women need to be healthy and strong to care for their families, it may be useful in this group to emphasize the health benefits and enhanced vigor that are the outcomes of regular physical activity. Likewise, Hispanic women can be encouraged to engage their family members in the process of establishing regular exercise programs. The responses of the informants in this study suggest that dancing may be an appropriate form

of exercise for young Latinas. When working with young Black women, it may be helpful to place less emphasis on weight loss as an outcome of exercise and focus instead on “color-blind” outcomes, such as feeling good and making friends. There is growing evidence that as more social and economic opportunities arise for women of color, Black women may become more susceptible to body image dissatisfaction and eating disorders (Root, 1990). By emphasizing their own positive physical and self-evaluative reactions, Black women can learn to use the self-efficacy skills they acquire through exercise to overcome the negative social pressures to conform to maladaptive aspects of what they perceive as “White” behavior.

Limitations

Limitations to this study include a limited period of contact between the PI and the informants. The PI met with the comoderators in advance of the focus group sessions, but did not interact with the informants until the night of the interview. Nonetheless, the informants were eager to participate. The moderator and comoderator monitored the participation of the informants at each session to ensure that everyone had the opportunity to speak and also periodically interacted with informants to foster discussion of opposing points of view. Two focus group sessions ran longer than expected, with the richest discussion coming toward the end and often continuing after the formal meeting. These two groups consisted of only Black and only Hispanic women. Participants in the session involving both Black and Hispanic women were somewhat more reluctant to share their experiences. For future research, it is recommended that the focus groups be kept as homogenous as possible. It is advisable to have smaller numbers of participants with similar racial and ethnic backgrounds and similar exercise histories in each group. This may require additional focus group sessions, each with the use of a moderator and a key informant as comoderator. Although the literature suggests that overrecruitment strategies are recommended to account for no-shows, our experience has been that contingency plans are needed in the event of snowballing or otherwise larger-than-expected numbers of individuals at the focus group sessions. Lastly, care must be taken that the cultural themes identified are not based only on the researcher’s view of the cultural system. In addition to the periodic member checks of the informants’ responses, it would have been helpful for the moderator and comoderator to have the informants validate the specific cultural categories derived from the data.

The results of this study suggest that there are distinct differences between Black and Hispanic young women in their cultural beliefs and in the attitudes that inform decisions about exercise. Further identification and explication of these cultural beliefs will be valuable for designing future culturally appropriate exercise intervention studies among minority women based on constructs from SCT.

REFERENCES

- Ainsworth, B. E. (2000). Issues in the assessment of physical activity in women. *Research Quarterly in Exercise and Sport*, 71(2), S37-S42.
- Alvarez, R. R. (1993). The family. In N. Kanellos (Ed.), *The Hispanic American almanac: A reference work on Hispanics in the United States*. Detroit, MI: Gale Research, 151-173.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company.
- Bandura, A. (2004). Social cognitive theory in cultural context. *Applied Psychology: An International Review*, 51(2), 269-290.
- Belza, B., Walwick, J., Shiu-Thornton, S., Schwartz, S., Taylor, M., & LoGerfo, J. (2004). *Preventing chronic diseases. Older adult perspectives on physical activity and exercise: Voices from multiple cultures*. Retrieved September 24, 2005, from <http://www.cdc.gov/pcd/issues/2004>
- Berelson, B. (1971). *Content analysis in communication research*. New York: Hafner.
- Cash, T. F., Novy, P. L., & Grant, J. R. (1994). Why do women exercise? Factor analysis and further validation of the Reason for Exercise Inventory. *Perceptual and Motor Skills*, 78(2), 539-544.
- Centers for Disease Control and Prevention. (2003). *Behavioral Risk Factor Surveillance Survey (BRFSS) Data*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention.
- Comas-Diaz, L. (1988). *Feminist theory with Hispanic/Latina women: Myth or reality?* Binghamton, NY: The Hayworth Press.
- Crespo, C. J., Smith, E., Andersen, 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.
- D’Alonzo, K. T., Stevenson, J. S., & Davis, S. E. (2004). Outcomes of a program to enhance exercise self-efficacy and improve fitness in Black and Hispanic college-age women. *Research in Nursing and Health*, 27, 357-369.
- Eyler, A. A., Baker, E., Cromer, L., King, A. C., Brownson, R. C., & Donatelle, R. J. (1998). Physical activity and minority women: A qualitative study. *Health Education Behavior*, 25(5), 640-652.
- Fetterman, D. M. (1998). *Ethnography step-by-step* (2nd ed.). Thousand Oaks, CA: Sage.
- Frisby, C. M. (2004). Does race matter? Effects of idealized images on African American women’s perceptions of body esteem. *Journal of Black Studies*, 34(3), 323-347.
- Gil, R. M., & Vasquez, C. I. (Eds.). (1996). *The Maria paradox*. New York: G.P. Putnam & Son.
- Grunbaum, J. A., Kann, L., Kinchen, S., Ross, J., Hawkins, J., Lowry, R., et al. (2004). Youth risk behavior surveillance—United States, 2003. *Morbidity and Mortality Weekly Report (MMWR)* 53(SS-2), 1-95.
- Hickey, G., & Kipping, C. (1996). Issues in research. A multi-stage approach to the coding of data from open-ended questions. *Nurse Researcher*, 4, 81-91.
- Hsieh, H. S., & Shannon, S. E. (2005). Three approaches to content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Juarbe, T., Lipson, J. G. & Turok, X. P. (2003). Physical activity beliefs, behaviors and cardiovascular fitness of Mexican immigrant women. *Journal of Transcultural Nursing*, 14(2), 108-116.
- Kimm, S. Y., Glynn, N. W., Kriska, A. M., Barton, B. A., Kronsberg, S. S., Daniels, S. R., et al. (2002). Decline in physical activity in Black girls and White girls during adolescence. *New England Journal of Medicine*, 347, 709-715.
- Krippendorff, K. (2004). *Content analysis: An introduction and its methodology* (2nd ed.). Thousand Oaks, CA: Sage.
- Morgan, D. L., Kreuger, R. A., & King, J. A. (1998). *Focus group kit*. Thousand Oaks, CA: Sage.

- Nies, M. A., Vollman, M., & Cook, T. (1999). African American women's experiences with physical activity in their daily lives. *Public Health Nursing, 16*(1), 23-31.
- Parker, S., Nichter, M., Nichter, N., Vockovic, N., Sims, C., & Ritenbaugh, C. (1995). Body image and weight concerns among African American and White adolescent females: Differences that make a difference. *Human Organization, 54*, 103-114.
- Rogers, L., Matevey, C., Hopkins-Price, P., Shah, P., Dunnington, G., & Courneya, K. S. (2004). Exploring social cognitive theory constructs for promoting exercise among breast cancer patients. *Cancer Nursing, 27*(6), 462-473.
- Root, M. P. (1990). Disordered eating in women of color. *Sex Roles, 22*, 525-536.
- Sallis, J. F., Bauman, A., & Pratt, M. (1998). Environmental and policy interventions to promote physical activity. *American Journal of Preventive Medicine, 15*(4), 379-397.
- Smith, D. E., Thompson, J. K., Raczynski, J. M., & Hilner, J. E. (1999). Body image among men and women in a biracial cohort: The CARDIA study. *International Journal of Eating Disorders, 25*, 71-82.
- Stevens, E. D. (1973). Marianismo: The other side of machismo in Latin America. In A. Decastello (Ed.), *Female and male in Latin America*. Pittsburgh, PA: University of Pittsburgh Press.
- Suminski, R. R., Petosa, R., Utter, A. C., & Zhang, J. J. (2002). Physical activity among ethnically diverse college students. *Journal of American College Health, 51*(2), 75-81.
- Thomas, V. G., & James, M. D. (1988). Body image, dieting tendencies and sex role traits in urban Black women. *Sex Roles, 18*(9), 523-529.
- Tiggerman, M., & Williamson, S. (2001). The effect of exercise on body satisfaction and self-esteem as a function of gender and age. *Sex Roles, 43*, 199-127.
- Treiber, F. A., Baranowski, T., Braden, D. S., Strong, W. B., Levy, M., & Knox, W. (1991). Social support for exercise: Relationship to physical activity in young adults. *Preventive Medicine, 20*(6), 737-750.
- Trost, S. G., Pate, R. R., Ward, D. S., Saunders, R., & Riner, W. (1999). Determinants of physical activity in active and low-active sixth grade African-American youth. *Journal of School Health, 69*, 29-34.
- U.S. Department of Health and Human Services. (2002). *Physical activity evaluation handbook*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- Wallace, L. S., Buckworth, J., Kirby, T. E., & Sherman, W. (2000). Characteristics of exercise behavior among college students. *Preventive Medicine, 31*, 494-505.
- Weber, R. P. (1990). *Basic content analysis* (2nd ed.). Newbury Park, CA: Sage.