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Attitudes toward Physical Activity of White Midlife Women

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Abstract

Objective—To explore attitudes toward physical activity of White midlife women in the United States using a feminist perspective.

Design—A cross-sectional qualitative study using a thematic analysis.

Setting—Internet communities for midlife women.

Participants—Twenty-nine White midlife women in the United States recruited using a convenience sampling method.

Methods—We used 17 topics on attitudes toward physical activity and ethnic-specific contexts to administer an online forum. We analyzed the data using thematic analysis.

Results—We found three themes: “thinking without action”; “gendered and sedentary culture”; and “motivating myself.” The women knew and understood the necessity of physical activity for their physical and mental health but in most cases had not been able to take action to increase their physical activities. Although the culture that circumscribed the women's physical activity was sedentary in nature, the women tried to motivate themselves to increase their physical activities through several creative strategies.

Conclusion—The findings strongly suggest that although women were doing their best, American culture itself needs to be changed to help women increase physical activity in their daily lives.

Keywords

physical activity; attitudes; midlife; women; online forum

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Health care providers have tried to increase physical activity of midlife women in order to prevent chronic diseases including cardiovascular diseases and specific types of cancer (Ball, Timperio, & Crawford, 2006). However, they have rarely incorporated ethnic-specific attitudes toward physical activity in existing interventions (Berg, Cromwell, & Arnett, 2002; Felton, Boyd, Bartoces, & Tavakoli, 2002; Segar, Spruijt-Metz, & Nolen-Hoeksema, 2006; Wilbur, Vassalo, Chandler, McDevitt, & Miller, 2005). Furthermore, despite a large number of studies on physical activity, little is known about attitudes toward physical activity of midlife women in the United States, especially their ethnic-specific attitudes toward physical activity.

When the PUBMED database was searched with the key words “attitudes” and “physical activity,” 1,431 articles were retrieved. When the search was narrowed to “attitudes,” “physical activity,” “midlife,” and “women,” 535 articles were retrieved. Yet, only a few were explicitly about women's attitudes toward physical activity (Berg et al., 2002; Felton et al., 2002; Im & Choe, 2004; Segar et al., 2006; Wilbur et al., 2005). Furthermore, in these few studies researchers rarely provided ethnic-specific data related to midlife women's attitudes toward physical activity. Also, only few studies of national scope on midlife women's physical activity in the United States could be retrieved, which included the National Health and Nutrition Examination Survey (NHANES) (Young, Cunningham, & Buist, 2005), the Study of Women's Health Across the Nation (SWAN) (Sowers et al., 2003), a multisite study by Wilbur, Vassalo, Chandler, McDevitt, and Miller (2005), the Well-integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN) (Will, Farris, Sanders, Stockmyer, & Finkelstein, 2004), and the Women's Cardiovascular Health Network Project (Eyler et al., 2002). However, even these studies provided few ethnic-specific data on attitudes toward physical activity of midlife women in the United States

Despite the paucity of the studies, the researchers reported certain ethnic-specific attitudes toward physical activity. As the main reason for their physical inactivity, White women in the United States reported being too tired or self-conscious; African Americans reported lacking a safe place to exercise or walk; and Hispanic Americans reported a lack of time and being too tired (Heesch, Brown, & Blanton, 2000). Post-menopausal African American women reported that their reason for not participating in physical activity was lack of time due to work and family responsibilities (Williams, Bezner, Chesbro, & Leavitt, 2006). White women gave their attention to individual outcomes of exercise, and reported personal factors (rather than family issues) as the major factors influencing their physical activity (Berg et al., 2002). Hispanic Americans reported family responsibilities and family attitudes as the factors that limited their physical activity (Berg et al., 2002; Cromwell & Berg 2006) and considered perceived benefits of physical activity including health promotion and personal health as significant factors that promoted their physical activity (Juarbe, Turok, & Perez-Stable, 2002). Korean immigrant women in the United States chose to take care of their households and children if they could find spare time (rather than participating in physical activity) mainly due to their patriarchal cultural heritage influencing them to not place their needs for physical activity as a priority (Im & Choe, 2004).

Despite these findings, very little is known about attitudes toward physical activity of midlife women in the United States, even White women. The purpose of this study was to explore ethnic-specific attitudes toward physical activity of White midlife women in the United States through a 6-month online forum. This is a part of a larger study that explored attitudes toward physical activity of four major ethnic groups of midlife women in the United States (Whites, Hispanics, African Americans, and Asians) (Im et al., 2010). Only the data from the online forum among Non-Hispanic White women are reported here.

Theoretical Basis

We chose to use a feminist perspective to theoretically guide the study because we wanted to be open to the women's own explanations and opinions and subsequently disclose the women's own perspectives and views on physical activity. Women's own perspectives and views on physical activity have rarely been incorporated in existing theoretical frameworks that researchers can use to explain the relationships of physical activity to other related concepts and sub-concepts. Using feminist theory, we could understand women's physical activity better through considering dynamics of physical activity, the female body, and cultural ideals of health and beauty within patriarchal societies (Balsamo, 1996; Im, 2001). Because our patriarchal culture often charges women with the moral duty of preserving their vital energy for childbearing and cultivating personality traits suited for the wife-and-mother role, feminists believe that our culture has discouraged women from participating in physical activity (e.g., sports)(Balsamo).

Feminist theorists assert that our culture has often discouraged women from soccer, rowing, lacrosse, basketball, or weight-lifting because these sports may make them look “strong” (Balsamo, 1996; Ellison, 2004; Parsons & Betz, 2001). Furthermore, feminist theory posits that an even more complex dynamic exists between beauty, health, and ideas of control of women's bodies (Im, 2001; Wolf, 1992). Because cultures possess ideals of beauty that are endowed with deeply held moral qualities that can make those ideals seem “natural,” they set out rigorous beauty practices that women themselves accept (Wolf, 1992). However, conceptions of beauty can change among cultures and historical periods (White, 1991). Indeed, the traditional association of fatness with prosperity and good health in the middle classes disappeared early in the 20th century in Western societies; now the slender body is valued. When ideals of beauty intersect with conceptions of health (e.g., obesity as a health risk, physical activity as beneficial), being healthy also acquires a moral quality that does not necessarily match women's attitudes or experiences. From this feminist perspective, in this study we assumed that promoting the health of diverse women through physical activity requires understanding these complexities, particularly as cultural attitudes shape and mediate them. Also, we assumed that women's lack of participation in physical activity comes from their interactions with their psycho-socio-cultural environment and from biases reflecting the way they view the world.

We prioritized women's own views and experiences and listened to participants' descriptions of and opinions about their physical activity throughout the research process for this study. Feminist theory instructs us to question the purported objectivity and neutrality of science, particularly scientific ideas about “woman's nature” (Andrist & MacPherson, 2001; Ford-Gilboe & Campbell, 1996; Hall & Stevens, 1991). Furthermore, feminist theory posits gender as a significant characteristic that interacts with other factors, such as race, ethnicity, and class, to structure relationships among individuals (Ruzek, Clarke, & Olesen, 1997). Thus, in this study, we viewed ethnicity as a significant characteristic that circumscribed women's physical activity and respected ethnic-specific contexts influencing women's physical activity. Finally, we tried to ensure the rigor of the study through evaluation criteria for rigor in feminist research (Hall & Stevens, 1991). We believe that this perspective helped disclose midlife women's own attitudes toward physical activity and provided a comprehensive view on physical activity within the ethnic-specific contexts of their daily lives.

Methods

This study was a cross-sectional qualitative study using a thematic analysis. The Institutional Review Board of the researchers' institution approved the study. This was a 6-month online

forum study that was part of a larger Internet study on ethnic specific midlife women's attitudes toward physical activity (Im et al., 2010). The online forum was chosen for this study because it provides a more comfortable environment for some to discuss sensitive personal health issues, and has been suggested as a feasible alternative to traditional face-to-face focus groups (Kramish et al., 2001).

Setting and Participants

The settings for the larger study included both Internet communities for midlife women (ICMWs) and Internet communities for ethnic minorities (ICEMs) that researchers found effective research settings for studies in midlife women (Barrera, Glasgow, McKay, Boles, & Feil, 2002; Im & Chee, 2008). We contacted a total of 2,309 ICMWs and 4,421 ICEMs (765 for Hispanic, 451 for African American, 3,150 for Asian American, and 55 for general) for the study announcement. The ICMWs and ICEMs were identified through Internet searches using Google, Yahoo, and Bing; they were retrieved through the search engines and verified by individually visiting and checking the contents of each website (if they were legitimate and appropriate for the study). We asked those who saw the study announcements and were interested in participating in the study to visit the project website. Among those who visited the project website, we allowed only those who met the inclusion criteria and passed the screening questions for the study to participate in the Internet survey. A total of 88 Internet survey takers were contacted and screened, and 55 were excluded based on the inclusion and exclusion criteria for the online forum that is described below. Thus, we recruited a total of 29 White women for a 6-month online forum for White women. By the end of the 6-month period, we retained 19 women. Considering the participants' feedback and research team's discussion, plausible reasons for the drop-outs could be the women's busy daily schedules, low participant reimbursement, and lack of interactions among the participants themselves. However, we could not find any significant differences in background characteristics between those who stayed and those who dropped out.

The inclusion criteria were midlife women aged 40 to 60 years who were ambulatory and able to participate in all forms of physical activity; could read and write English; were online (had access to the Internet); and whose self-reported ethnic identity was non-Hispanic White. We excluded those who had high cardiovascular and musculoskeletal risk factors by using the screening questions developed and used by Wilbur et al. (2006). In general, 6 to 12 participants are thought to be ideal for a focus group discussion. In qualitative study designs including this online forum method, intensive, focused, and in-depth data collection is of greater value than a large number of participants (Stevens, 1996). Thus, we believe that 29 women were more than adequate for this online forum. We summarized background characteristics of the participants in Table 1 and their health and menopausal status in Table 2.

Online Forum Topics

Ten online forum topics were used to explore midlife women's attitudes toward physical activity: (a) terminology used to describe physical activity and the term's meanings; (b) meanings of physical activity to the women; (c) usual physical activities during daily life; (d) perceived influences of physical activity on body and mind; (e) recent changes in physical activity and their influences on women's daily life; (f) factors motivating and inhibiting women's participation in physical activity; (g) preferences for specific types of physical activity; (h) gender differences in attitudes toward physical activity; (i) ethnic differences in attitudes toward physical activity; and (j) overall feeling about physical activity. Seven online forum topics were also used to explore ethnic-specific contexts circumscribing the women's participation in physical activity: (a) women's daily life schedules, and hardships and sufferings in daily lives; (b) culturally unique aspects of

women's daily lives; (c) gender-related difficulties and advantages in daily lives influencing women's participation in physical activity (e.g., gender roles, ideal beauty, child care, etc); (d) ethnicity-related difficulties and advantages in daily lives influencing women's participation in physical activity (e.g., cultural taboo related to physical activity, cultural views on physical activity, etc); (e) things/life events influencing women's participation in physical activity in their daily lives; (f) culturally available support for physical activity and women's preferences for support; and (g) women's preferences for physical activity promotion programs. Each topic included the introductions and prompts that were posted on the online forum in a serial fashion across the 6-month period of data collection. These topics, introductions, and prompts were developed in previous studies (Im, Chee, Lim, Liu, & Kim, 2008). For this study, the topics were refined based on the reviews by five experts in the area of physical activity and two experts in qualitative research methods (mean feasibility/usability score=4.34, SD=.32 on a 5-point Likert scale from 1 to 5) (Im et al., 2008).

Data Collection Procedures

For this study, a project website was set-up based on the Health Insurance Portability and Accountability Act (HIPAA) and SysAdmin, Audit, Network, Security Institute (SANS)/FBI recommendations. Then, the study announcements were made through the ICMWs and ICEMs. When potential participants visited the project website, they were asked to give their informed consent and were checked against the inclusion criteria including age, mobility, literacy, internet access, ethnicity, and socioeconomic status (SES). Only those who met the inclusion criteria were allowed to proceed to the Internet survey questionnaire which included questions on background characteristics and several measurement scales to measure physical activity and its related predictors. At the completion of the Internet survey, the participants were asked if they would be interested in participating in an additional 6-month online forum. When they agreed, they were checked against the inclusion criteria for the online forum. At the initiation of the online forum, the participants were provided with their user IDs and passwords that they could use to login to the online forum site. Then, biweekly we posted the topics with the introductions and related prompts (5 to 10 open-ended questions per topic) in a serial manner. The participants could post their messages in any forms that they wanted (e.g., stories, conversations, responses to others' messages, etc.). Whenever a new topic was posted with its related prompts (biweekly), the participants were asked/reminded to visit the online forum site and post their responses at their convenience. The average number of postings each month was 77.17 (SD=32.5), and a total of 463 messages were posted during the given time. At the completion of their participation, the participants were asked to add more topics that they wanted to discuss. The participants added no topic, but they provided some feedbacks on the online forum. We also asked them to provide their feedback on the preliminary findings that were posted on the project website. Throughout the process, all the participants and research team members (one moderator and two co-moderators) could see all of the postings and interact with each other.

Data Analysis

The online forum data from all of the topics were analyzed using the thematic analysis by Braun and Clarke (2006). The Internet survey data on background characteristics were also analyzed using descriptive statistics to describe background characteristics of the participants. First, the saved qualitative data in the ASCII files were printed-out as transcripts. Four analysts thoroughly read and re-read the printed transcripts for line-by-line coding: three of the analysts were doctorally prepared researchers, and one was a doctoral student who had been intensely trained in qualitative research. Then, the codes from the line-by-line coding process were finalized upon agreement by all the analysts. The finalized codes were summarized as a coding book. Using the coding book, categories were made

based on the internal cognitive process and reflexive thinking by analyzing contents and contexts. Then, the categories were reviewed and finalized upon agreement by all the analysts. Then, we formulated relationships between categories by mapping associative links among the categories. We used an interactive process involving reading and re-reading text to produce successively more abstract and refined ideas about domains of interest to identify themes common to research participants. Then, themes were identified and finalized through a series of research meetings and discussions among the research team. This procedure served as an ongoing system of checks and balances. During the analysis process, effects of variable contextual factors (general and ethnic-specific) including variable health status, socioeconomic circumstances, families' responses and roles, stability of their daily lives, and social support networks were examined. Changes in women's attitudes toward physical activity and ethnic-specific contexts during the 6-month period of the online forums were also examined throughout the data analysis process.

Adherence to standards of rigor in feminist qualitative research including dependability, reflexivity, credibility, relevance, and adequacy assured scientific adequacy of this study (Hall & Stevens, 1991). We ascertained dependability by examining the methodological and analytic decision trails created by the investigators during the course of the study itself. We supported reflexivity by chronological research diary, memos, and field notes. We also tried to achieve credibility and relevance by posting the developing analytic categories on the website and asking for participants' reactions. In addition, we tried to assure adequacy by continuously questioning research methods, goals, research questions, design, scope, analysis, conclusions, and impact of the study within the social and political environment. Finally, we held weekly group meetings with the research team to ensure the quality of data collection and analysis.

Findings

Three major themes were extracted from the data analysis process: thinking without action; gendered and sedentary culture; and motivating myself. Each major theme had several associated sub-themes that were linked to it.

Thinking without Action

The major theme of thinking without action involved three sub-themes: not an option; easily breakable and changeable; and no help for physical activity. The women perceived that physical activity was not an option, but a necessity for their health. However, participants believed that additional intentional efforts were necessary to increase their physical activity. It was often not prioritized as highly as family and work, and the physical activity schedules were easily breakable and changeable by their life events. Also, the women believed that more supports were essential to promote their physical activity. Because of all of these reasons, the women could not do physical activity although they were thinking about increasing it.

Not an option—All participants defined physical activity as any bodily movement that resulted in energy expenditure. Physical activity was sometimes interchangeable with 'exercise' and 'work out.' Particularly, the words "planned," "organized," "concentrated," "with purpose," and "intentional" were often used to describe physical activity among the participants. Most participants said that they needed additional intentional efforts (e.g., devotion, time, money) in their daily lives to increase their physical activity. Although these women sometimes had no desire to do physical activity, they still thought they should do physical activity because they knew that in doing so they could get physical and social benefits. They said that physical activity was not an option, but a requirement for their health.

Easily breakable and changeable—Although all participants felt the benefits of physical activity on their body and mind, the majority of them were not as physically active as they should or could be in their daily lives. The physical activity schedules of the participants were easily breakable and changeable by their life events. The most commonly cited constraint on physical activity participation was lack of time due to family obligations and working schedules. In addition, most participants cited physical limitations as barriers to physical activity participation. We could categorize the physical limitations mentioned by participants into: (a) physical problems associated with aging, such as a musculoskeletal disorder, (b) women's unique physical condition, such as large breasts and menstrual cycles, and (c) negative body images. Participants said that they did not have the same amount of energy as when they were young, so they needed to be more careful in order to protect their muscles and joints from injury. Also, the participants had a hard time doing physical activity with large breasts, while menstruating, or with menopausal symptoms. Some of them did not feel comfortable about doing physical activity due to possible attention they might receive from others because of their large breasts. The majority of participants said that they were not in good enough shape, so they were unwilling to exercise in public and preferred solitary exercise.

No help for physical activity—The majority of the participants mentioned that they received strong support from their families and friends in many avenues of life, but did not have anyone to help them when it came to physical activity. They wanted assistance in household chores from family members during their physical activity, and desired the company of those who could work out with them and encourage their physical activity. Participants said that they needed more professional and individual support in order to promote their physical activity. They thought that they had sufficient exercise equipment and could access ample information via books, the Internet, and so on. However, many felt that these resources had no in-depth information. For example, the resources did not include topics detailing when or how to exercise and if what they were doing was the best for them. Most participants wanted a tailor-made service for physical activity.

Gendered and Sedentary Culture

The second major theme, gendered and sedentary culture, involved two sub-themes: privileged but sedentary and gendered experience. The participants felt that U.S. culture is very supportive of women's participation in physical activity, but at the same time it tended to encourage sedentary lifestyles. They also mentioned gender roles and cultural stereotypes that limited their participation in physical activity, which only women faced in their daily lives. Thus, the women's culture could be depicted as “gendered and sedentary.”

Privileged, but sedentary—Participants wrote that their cultural characteristics and advantages as White women allowed them to be more active than women in other cultures. They felt that they had more access to places in which they were comfortable to workout since they had more facilities in their areas that were mostly populated by Whites. They thought that their high level of comfort compared to other race/ethnic groups stemmed from the fact that Whites are predominant in the United States. Many of the women felt that their busy schedules, lack of personal spare time, and increasingly sedentary lifestyles were due to the prominence of consumer electronics in their day-to-day lives. They also wrote that their preference for convenience often made them opt for less healthy options, like eating fast food, and driving or riding the elevator rather than walking.

Gendered experience—Most of the women thought that the U.S. culture is basically a gendered culture, and their physical activity experience was heavily influenced by their gender. Because they were women, some participants thought that doing physical activity

outside their home would be dangerous (e.g., traffic, unexpected and serious crimes on the street like kidnapping, etc.). They also thought men did not have the same level of fear as women did in unaccompanied exercise outdoors. Traditionally, women had a heavier burden with respect to household chores and responsibilities than men did. Many women found it difficult to distinguish between work, chore time, and personal time. Consequently, women complained that they lacked both spare time and the right mind set for physical activity.

Some participants mentioned social gender biases. To them, women were limited in the types of physical activity in which they could participate, both in school and in public. Additionally, the lack of information or ideas of what activities were proper for girls and how they should act when doing them also set limitations. The public was more interested in men's rather than women's sports, and these social differences inhibited the development of women's sports in general and their individual participation in physical activity. On the contrary, others wrote that women and men today did not have as large of a disparity in the types of sports they participate in as they had in the past. They stated that women had a great increase in their social opportunities to participate in sports. However, it did not mean that women had equal opportunities as men in sports, but just meant that women today had more available team sports and more competitive opportunities than prior generations had. Interestingly, several women wrote that they had better opportunities than men in some areas, such as dance or yoga. They felt that these physical activities were more socially acceptable for women to participate in than for their male counterparts. They also felt that classes that had a teacher and other participants of the same sex were easier to access.

Motivating Myself

The third major theme of “motivating myself” included four related sub-themes: making a routine; finding a companion; getting more information; and involved in social interactions. Most women tried to motivate themselves by making a routine of walking as it was easiest to practice in their daily busy schedules. Moreover, the women tried to motivate themselves by finding a close friend or a pet to accompany them during their physical activity. They knew about the positive effects of physical activity, and of participating in social interactions alongside physical activity, which also motivated them to increase physical activity.

Making a routine—The women tried to motivate themselves to participate in physical activity by making a routine in their daily life schedules. Most of the participants wrote that their usual, day-to-day physical activity was walking; their choice of walking stemmed from its ease to practice and participate in. Moreover, some women monitored their own physical activity by wearing a pedometer when walking. Some women who worked in sedentary or semi-sedentary job environments tried to find opportunities to incorporate physical activity into their daily schedules. These women actively participated in their physical activity by parking far away from the door, and walking instead of driving.

Finding a companion—The women tried to increase physical activity with a close friend or a pet, through which they believed that they could encourage their own physical activity, increase enjoyment during physical activity, and even make their physical activity more vigorous. The participants also said that participating in physical activity with friends or family provided them with a higher sense of enjoyment.

Getting more information—Many women said that knowledge about positive effects of physical activity or other health information they had acquired made them more inclined to exercise despite their busy schedules. Many of them sought out more information on these benefits in order to motivate themselves to increase their level of physical activity. The

information on benefits of physical activity to the body and mind made the women try to increase their physical activities although they had little time for exercise.

Involved in social interactions—Most of the participants tried to increase their physical activity by being involved in more social interactions. In this way, they could also heighten their involvement in social activities. Some of the women felt that participation in sports groups increased both their social interactions and their physical and mental health. Some participants also enjoyed hearing others' perspectives on daily life through joining groups to walk with.

Discussion

The third theme of the study, motivating myself, could be the overriding theme of all the themes found in this study. The White midlife women in the United States had very positive attitudes toward physical activity: the women knew and understood the necessity of physical activity for their physical and mental health although they could not take action to increase their physical activities in most cases (the first theme). Although the culture that circumscribed the women's physical activity was sedentary in nature (the second theme), the women tried to motivate themselves to increase their physical activities through several creative strategies (the third theme). All the themes strongly supported that the women were doing their best by motivating themselves through multiple strategies, but that culture itself needs to be changed to help women increase their physical activity.

In the literature on the barriers to women's physical activities, researchers have frequently reported similar findings to the first theme of “thinking without action.” The participants of this study understood the benefits of physical activity on their physical and mental health, but could not participate in physical activity because of multiple barriers in their daily lives. Indeed, researchers have reported that perceived barriers to physical activity were a significant factor that negatively influenced physical activity (Wu & Pender, 2002). The perceived barriers reported in the literature included lack of time, feeling tired, feeling that they were active enough at their jobs, and lack of motivation (Felton et al., 2002; Im & Choe, 2004). Yet, these findings were not ethnic-specific; rather, they were identified across ethnic groups including African Americans, Korean Americans, and Hispanic Americans in the United States (Banks-Wallace & Conn, 2002; Felton et al., 2002; Im & Choe, 2004).

The first theme of thinking without action is consistent with the finding that roughly one third of the U.S. White women aged 40 or greater are at the pre-contemplation or contemplation stage for exercise (Bull, Eyler, King, & Brownson, 2001). The literature on physical activity implicitly indicated similar findings to this theme as social influence. Social influence is one of the main environmental determinants of physical activity (Buckworth & Dishman, 2002), which consists of the opinion of family, friends, colleagues, and health professionals, but also the general opinion of society (Baker, Brennan, Brownson, & Houseman, 2000). Researchers repeatedly reported that family and friends, community resources, group support, and cultural unity had a positive influence on physical activity behavior across ethnic groups and across countries (Buckworth & Dishman, 2002; Felton et al., 2002; Giles-Corti, & Donovan, 2003; Sternfeld, Ainsworth, & Quesenberry, 1999). The participants of the study reported here perceived lack of support from their family members or friends for their physical activity, and wanted more support that could enable them to participate in physical activity.

We can interpret the second theme of gendered and sedentary culture from the perspective of social influence as well. The midlife White women in the United States perceived that U.S. culture supported and encouraged their physical activity but also discouraged their

physical activity with electronics and transportation vehicles. Indeed, in the current literature, we can easily identify the barriers to physical activity that were found in the second theme. Researchers have reported environmental barriers such as neighborhood safety, availability of facilities, distance to these facilities, and cost as the most common barriers to physical activity in the United States (Eyler et al., 1998). The women's gendered experience can also be understood within the contexts of social influences. Researchers reported that social gender norms could play a role in whether midlife women in the United States participate in physical activity or not (Banks-Wallace & Conn, 2001; Wilcox, Richter, Henderson, Greaney, & Ainsworth., 2002).

We can also easily find similar results to the last theme of motivating myself in the literature on White midlife women in the U.S., but not on ethnic minority women in the United States. We can interpret the finding that the women tried to encourage and motivate themselves through various creative strategies as a very positive sign because it might mean high physical activity self-efficacy (the degree of confidence individuals have in their ability to be active). Researchers have reported that self-efficacy is positively associated with adherence to and regularity of physical activity across ethnic groups and across countries (Felton et al., 2002; Merom et al., 2009; Resnick, 2001; Stroud, Minahan, & Sabapathy, 2009; Wilbur et al., 2005). Also, they have indicated that self-efficacy is a significant predictor of women's participation in physical activity across countries (Barnett & Spinks, 2007; Kim, Kim, Park, & Kim, 2009).

In the study reported in this paper, we had several limitations because of the inherent nature of a qualitative online forum study. First of all, the participants might not adequately represent diverse groups of midlife White women in the United States because they tended to be a select group of midlife women who were highly educated, employed, and married. Also, we might have not achieved theoretical saturation adequately because of asynchronous interactions between the participants and the data collectors/analysts. Although the research staff members tried to respond to the postings promptly, the participants were sometimes not available when a new posting was made to encourage further discussion on some topics or issues that were not clear to the data collectors/analysts. For future studies using online forums, more frequent email reminders and follow-ups and/or use of chat functions (if allowable) would be helpful to reach theoretical saturation.

Conclusions

Based on the findings, we suggest that women's health nurses develop interventions that could provide tangible supports and adequate and reliable information to midlife White women in the United States. The findings reported in this paper indicated that the midlife White women in the needed supports that could enable them to actually participate in physical activity and information that could fit with their actual requirements for physical activity. When considering the women's busy daily schedules reflected in the sub-theme of easily breakable and changeable, online support groups or online education programs may work better for women. We also suggest that women's health nurses develop and test effective infrastructures in communities that could provide support for women when they are engaged in physical activity.

As the sub-theme of gendered experience reflected, providing interventions in safe environments where women can accompany their family members, friends, or pets would work well for this specific group of women. Also, women-only programs would work well for this specific group as the findings indicated that the majority of the participants were unwilling to exercise in public and preferred solitary exercise because of their "not-good-enough" body shape. Finally, we suggest more in-depth cultural studies that focus on sub-

ethnic groups within Whites in the United States (e.g., recent immigrants from Eastern European countries, etc.) to determine social influences on women's physical activity. Although we found a cultural theme in this study (privileged, but gendered and sedentary culture), the findings are limited because of inherent diversities among midlife White women in the United States and the broadness of the U.S. culture itself.

Callouts

1. The authors sought to explore ethnic-specific attitudes toward physical activity of White midlife women in the United States.
2. White women thought that the culture of the United States supported and encouraged but also discouraged their physical activity.
3. Women motivated themselves through multiple strategies, but culture itself needs to be changed to help women increase their physical activity.

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Table 1

Background Characteristics of the Participants (N=29)

Characteristics	NH* White n (%)	Characteristics	NH White n (%)
Age (Mean $\pm$ SD)	49.24 $\pm$ 5.21	Social support** (Mean $\pm$ SD)	2.62 $\pm$ 1.18
Education		Income level	
High school	1 (3.5)	Low	10 (34.5)
College	18 (62.0)	Middle	8 (27.6)
Graduate degree	10 (34.5)	High	11 (37.9)
Religion		No. of children	
Protestant	6 (20.7)	None	7 (24.1)
Catholic	4 (13.8)	1–2	13 (44.8)
Others	7 (24.1)	3–5	8 (27.6)
No religion	12 (41.4)	More than 5	1 (3.5)
Marital status		Country of birth	
Married/partnered	22 (75.9)	U.S.	27 (93.1)
Non-married/partnered	7 (24.1)	Outside U.S.	2 (6.9)
Employment			
Yes	21 (72.4)		
No	8 (27.6)		
Walkability of community*** (Mean $\pm$ SD)	4.10 $\pm$ 1.47		

* NH=Non-Hispanic

** 1=None of the time ~ 4=Most of the time

*** 1=Awful ~ 6=Excellent

Table 2

Perceived health and menopausal status of the participants (N=29)

Characteristics	n (%)
BMI(kg/m2) (Mean±SD)	29.33±8.17
BMI Category	
Normal (<25)	13 (44.8)
Overweight (25 to <30)	6 (20.7)
Obese (≥30)	10 (34.5)
General health* (Mean±SD)	3.82±1.17
Having a diagnosed disease**	7 (24.1)
Taking medicine	12 (41.4)
Menopausal status	
Premenopausal	3 (10.3)
Perimenopausal	14 (48.3)
Postmenopausal	12 (41.4)
Self-reported physical Activity*** (Mean±SD)	1.83±1.07

BMI = body mass index.

* On a 5 point Likert scale (1=very unhealthy ~ 5=very healthy)

** Those who were previously diagnosed with a disease (e.g., hypertension, diabetes)

*** On a 5-point Likert scale (1=much less than other women of your own age ~ 5= much more than other women of your own age).