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Men on the Move: A Pilot Program to Increase Physical Activity Among African American Men

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Abstract

Despite the important contribution increasing physical activity levels may play in reducing chronic disease morbidity and mortality, there is a paucity of interventions and research indicating how to improve physical activity levels in African American men. Men on the Move was a pilot study to increase African American men's levels of physical activity by improving access to age and ability-appropriate, male-focused physical activity opportunities and facilitating access to social support from male peers. Forty-one African American men ages 35 to 70 enrolled (mean age = 53.8). Groups of 5 to 10 men met once a week with a certified personal trainer for 10 weeks. Each meeting addressed barriers to physical activity, provided men with community resources, and incorporated activities that promoted flexibility, strength, balance, and conditioning. Improvements (p < .05) were detected for the following outcome measures: perceived selfefficacy to sustain physical activity, endurance, overall health status, and stress level. Physiological and fitness outcome measures improved, although not to significant levels. Whereas 40% of the men met the recommendation of 150 minutes of moderate or vigorous physical activity weekly at baseline, 68% of the men met this recommendation by the end of the project. These positive results attest to the feasibility of successfully engaging middle-aged and older African American men in a physical activity intervention, and our findings demonstrate the initial efficacy of this intervention approach. More research is needed that includes a more intensive intervention and one that helps motivate men to be physically active outside of the structured, small-group sessions.

Keywords

African American men; men's health; peer social support; physical activity

Strong and consistent evidence suggests that physical activity plays an important role in the etiology of chronic diseases (e.g., cancer, cardiovascular disease, diabetes) that disproportionately affect African American men (Howlader et al., 2010; Keenan & Shaw,

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2011). Although men tend to engage in more physical activity than women, half of African American men report no leisure-time physical activity (Ball, Jeffery, Abbott, McNaughton, & Crawford, 2010; Ward et al., 2004). African American men over age 45 are less likely than their White counterparts to participate in leisure time physical activity (25% vs. 36%) or walking for exercise (43% vs. 52%; Brownson, Boehmer, & Luke, 2005). In their 30s, African American men's rates of physical activity tend to decline in part due to increasing responsibilities to fulfill social and cultural roles associated with work, family, and the community (Griffith, Gunter, & Allen, 2011). The risk for developing chronic diseases increases with age, yet African American men's participation in physical activity typically decreases as they get older (Ahmed, 2005).

Despite the important contribution increasing physical activity levels and decreasing obesity could play in reducing disease morbidity and mortality rates of African American men (Griffith, Gunter, & Allen, 2012), the majority of studies on the treatment and prevention of obesity, unhealthy eating, and sedentary lifestyles have included samples that were predominantly comprised of women (Kumanyika et al., 2008). A review of physical activity or physical fitness intervention studies with African American adults published between 1985 and 2006 found 29 studies, but only one that focused solely on African American men (Whitt-Glover & Kumanyika, 2009). A recent review of 32 studies to alter dietary intake or physical activity or foster weight loss in African American adults (age 21) published between 2006 and 2012 found only six studies that reported data separately for African American men (Newton & Griffith, 2013). Of these six studies, only two specifically focused on changes in physical activity, and none of the six studies included an objective measure of physical activity, and none included a measure of adiposity (Newton & Griffith, 2013).

Physical activity and physical fitness interventions that have treated African Americans as a homogeneous group have been unsuccessful at engaging large numbers of men and have tended to include samples with less than 30% men (Bopp et al., 2006; Griffith, Metzl, & Gunter, 2011; Warren et al., 2010; Whitt-Glover & Kumanyika, 2009). This suggests that these approaches have not been optimally effective in engaging African American men (Alexander et al., 2010; Dumbrell & Mathai, 2008; Griffith, Gunter, et al., 2012). More interventions are needed that explicitly attend to the barriers and facilitators that African American men have identified that influence their levels of physical activity.

Identifying and addressing the factors that may improve physical activity among African American men is an under-developed area of research (Bopp et al., 2006; Griffith, Gunter, et al., 2012; Griffith, Metzl, et al., 2011; Warren et al., 2010). In one of the few studies in this area, Hooker, Wilcox, Rheaume, Burroughs, and Friedman (2011) conducted individual interviews with 49 African American men and identified a number of barriers and facilitating factors associated with physical activity. Barriers that African American men discussed included lack of time, limited access to places to engage in physical activity, inadequate social support, lack of motivation, physical ailments, and chronic health conditions. Whereas many of these factors also have been identified as being relevant for women (Segar, Eccles, & Richardson, 2008), few studies have explored how these factors influence men's physical activity. Facilitators of physical activity that African American

men described included receiving positive messages about physical activity from a trustworthy and reliable source; making physical activity enjoyable; physical activity interventions with peer social interaction, social support, and competition; and having spousal support but only limited spousal involvement (Hooker, Wilcox, et al., 2011). Informed by this exploratory research, Hooker, Harmon, Burroughs, Rheaume, and Wilcox (2011) piloted a physical activity intervention with African American men. Their 8-week physical activity intervention with middle-aged and older African American men (N = 25) improved overall and moderate to vigorous physical activity and increased perceived social support from friends and family (Hooker, Harmon, et al., 2011).

This article describes a pilot physical activity intervention for African American men called *Men on the Move. Men on the Move* was a community-based, physical activity intervention designed to improve the health and physical activity levels of African American men ages 35 to 70. The intervention was designed based on the findings of exploratory formative research conducted by Griffith and colleagues (Griffith, Allen, & Gunter, 2011; Griffith, Ellis, & Allen, 2012; Griffith, Gunter, et al., 2011; Griffith, Gunter, et al., 2012; Griffith, King, & Allen, 2013) and the experiences and insights of our community and academic partners. Using these findings and resources, our goal was to pilot an intervention that attended to the unique gendered and cultural factors that influence physical activity levels among African American men ages 35 to 70.

Method

Men on the Move was developed by a partnership that included the Center on Men's Health Disparities at the University of Michigan (UM), the UM Comprehensive Cancer Center Community Outreach Program, and the Physical Activity Network. The Physical Activity Network is a coalition of personal trainers in the Ann Arbor/Ypsilanti, MI, area interested in improving physical activity among African American men. We used a one-group, pretest—posttest design in this pilot study. The study was reviewed by the University of Michigan Institutional Review Board.

Recruitment

We recruited men through the UM Comprehensive Cancer Center Community Outreach Program's Men's Fellowship Breakfasts. These quarterly events have been conducted since 2008 and regularly attract 100 to 150 African American men at each event. Previous breakfast participants were sent information about the study via email, and flyers were disseminated at the breakfasts so men could learn how they and others could participate in the study.

Participants

We recruited men who self-identified as African American or Black, were 35 years old or older, reported having a physician's clearance to participate in an intervention to increase physical activity, and resided in the greater Ann Arbor/Ypsilanti, MI, area. Ypsilanti is in the fifth largest metropolitan statistical area in Michigan, adjacent the more affluent City of Ann Arbor (U.S. Census Bureau, 2009, 2010). Ypsilanti ranks below Michigan and the

country on most socioeconomic indicators (U.S. Census Bureau, 2009; U.S. Department of Labor, 2009). African American men in Ypsilanti have higher death rates for chronic diseases (e.g., heart disease, diabetes, cancer) associated with inadequate physical activity compared with Whites in Ypsilanti and residents of Michigan and the nation (Michigan Department of Community Health, 2008, 2010; National Center for Health Statistics, 2001).

Two cohorts of men participated in the *Men on the Move* physical activity intervention in October to December 2010 and February to May 2011, respectively. A total of 41 African American men enrolled in the *Men on the Move* physical activity intervention (see Table 1). The average age of the participants was 53.8 years, and the age range was 35 to 70 years. The majority of the men were married (82.5%), employed (72.5%), and college graduates (55%). In terms of their health, the majority of the men had been diagnosed with at least one chronic health condition (77.5%), and the most common condition was hypertension (50%). More than 60% of the men were obese, and 70% had a waist circumference of 40 in. or more. At baseline, nearly 40% of the men reported physical activity levels that met national recommendations of at least 150 minutes per week.

Theoretical Foundation

The objective of the study was to see if increasing men's access to age-appropriate, male-focused physical fitness opportunities, small-group male peer social support, and modeling from other men in their age-group increased their rates of physical activity and their intrinsic motivation to engage in physical activity. We selected this objective based on social cognitive theory (Bandura, 2004) and self-determination theory (Ryan & Deci, 2000). Social cognitive theory highlights that an intervention should provide opportunities for healthy behavior and social support, promote mastery through skills training, model positive outcomes and healthy behavior, present outcomes that have functional meaning, provide opportunities for self-monitoring and goal setting, include credible role models, promote self-initiated rewards, increase perceived self-efficacy through small practical steps, and provide opportunities to practice skills and problem solving (Bandura, 2001, 2004).

We augmented social cognitive theory with aspects of self-determination theory to highlight the important role our intervention needed to have in enhancing intrinsic, personally relevant types of motivation that was consistent with men's values and goals (Ryan & Deci, 2000). Intrinsic motivation is an element of self-determination theory that refers to choosing to engage in an activity because it is interesting, satisfying, or valued, and not solely because of real or perceived external benefits or consequences. People who reported higher intrinsic motivation have been found to be more likely to sustain higher rates of physical activity than those with lower rates (Ryan, Frederick, Lepes, Rubio, & Sheldon, 1997).

Components—Following a baseline assessment, men who were in the intervention group met in a small group of 5 to 10 African American men interested in becoming more physically active and a personal trainer once a week for 10 weeks. During these weekly sessions, men in the intervention participated in physical activity that included flexibility, strength, and cardiovascular components. An explicit goal of the intervention was to educate

men on how to work out anywhere, without a gym membership, without expensive machines or resources, and at low cost.

Screening and consent—Eligible men were invited to attend a "kick-off" event where they completed consent forms, a baseline demographic and psychosocial questionnaire, and a physiological assessment. UM staff reviewed the consent forms with the men and answered clarifying questions about that nature and extent of the consent they were providing. As part of this process, men also had to complete the Physical Activity Readiness Questionnaire (PAR-Q). The PAR-Q is a screening tool often used by fitness trainers or coaches to determine the safety or possible risk of exercising for an individual, based on his or her self-reported answers to specific health history questions. The PAR-Q has been designed to identify the small number of adults for whom physical activity may be inappropriate or those who should seek medical advice concerning the type of activity most suitable for them. If the men answered yes to one or more questions, we required them to consult with a primary care provider before they could participate in the weekly sessions to obtain a detailed activity plan articulating the conditions under which physical activity was safe.

Baseline physiological assessment—The baseline and final physiological assessments were conducted by nurses employed by MHealthy, a division of UM, using standardized techniques to ensure that pre—and post—data collection measures were consistent. The physiological assessment included measuring men's height, waist circumference and weight, taking a blood pressure reading, and drawing a small amount of blood to assess total cholesterol, high-density lipoprotein, low-density lipoprotein, glucose level, and triglycerides.

Baseline psychosocial assessment—The baseline and final survey data collected asked men for information on their demographic characteristics, overall health, amount and type of physical activity, motivation (Ryan et al., 1997), self-efficacy for physical activity (Resnicow et al., 2000; Resnicow et al., 2002; Sallis et al., 1988), perceived norms around physical activity (e.g., for men, women, African American men; Mahalik, Burns, & Syzdek, 2007), social support (from the Program for Research on Black Americans' National Survey of American Life), and (posttest only) utilization of resources and recommendations provided by *Men on the Move* (see Table 2).

Weekly small groups led by a personal trainer—Following consent, completing the PAR-Q and other questionnaires and the baseline physiological assessment, men were assigned to a small group based on a time they identified they were available to meet on a weekly basis. There were a total of six workout groups—two in Cohort 1 and four in Cohort 2—ranging in size from 5 to 10 men, with a mean of 7. Each group had a regularly scheduled 1½ hour physical activity workout each week that occurred at a common location and time to provide consistency. These were led by a certified personal trainer at a local fitness facility for a total of 10 weeks. Most group workouts were held in the evenings or on the weekends, but some met during the day on weekdays. Each workout provided men with structured opportunities to exercise and included activities that promoted flexibility,

strength, balance, and conditioning. The trainers designed the contents of their group's workouts based on their individual styles and expertise and the fitness levels and diversity of the men in their groups.

Additionally, attendance was taken at all workout sessions to assess dosage, and men were asked to complete regular physical activity logs throughout the intervention to assess the type and amount of physical activity they engaged in over the course of the program. We also asked men during their impact assessment for open-ended feedback on the program.

The personal trainers leading the sessions were members of the Physical Activity Network and provided fitness classes and/or personal training in the local area. They were all experienced with assisting people with varied physical limitations, health issues, and fitness levels to become more active in a safe manner. Four of the five trainers were African American, three were within the age group eligible for the project (the others were younger), and all had trained numerous men previously. All the trainers were certified personal trainers and completed training and approval by the UM Institutional Review Board to collect data as part of this study.

Additional resources—In addition to the weekly workouts, intervention participants were given a schedule of fitness classes offered in the area by members of the Physical Activity Network (some free, others charging a fee), a handout of stretches and exercises to do at home, and a list of websites identified by the Physical Activity Network members as helpful for men starting to become more physically active. The men were also provided with a contact list for the group members and encouraged to get together between sessions to exercise.

Postintervention impact assessment—Each 10-week session ended with a "wrap-up" event during which the physiological assessment and psychosocial questionnaires were repeated. The men also were given the opportunity to provide feedback and reflect on their experiences. All men were asked two open-ended questions (How has participating in Men on the Move affected you? Please share any other thoughts you may have about Men on the Move.) as part of the written posttest. Only five took this opportunity to provide open-ended comments. We also informally tape-recorded men's feedback by asking the same two questions above (n = 9, convenience sample) at the wrap-up event for Cohort 1. The men were offered \$20 in incentives to complete the final data collection.

Data Analysis

We used the Wilcoxon signed-ranks test for repeated measures to assess change in outcome measures over the course of the intervention. This nonparametric test is suitable for analyzing small samples and data that cannot be assumed to be normally distributed or is ordinal; thus, it compares the medians, not means, of two groups. We were unable to analyze the change in high-density lipoprotein and low-density lipoprotein cholesterol, triglycerides, and glucose levels because we had fewer than 16 participants (as is typically accepted as the minimal number of matched data points for use with the Wilcoxon signed-ranks test) for which accurate readings were gathered on these measures at both time points. Level of

significance was p < .05, and all tests were one-tailed to reflect anticipated improvements in the outcomes of interest.

Results

Intervention Involvement

Sixty-eight percent of the men attended at least half of the workout sessions (see Table 3). When excluding the six men enrolled in the study who did not attend any workout sessions, the percentage of men attending at least half the workout sessions increased to 76%. Eightynine percent of the men took advantage of resources recommended for outside of the workout sessions, and almost three-fourths of them (74.1%) reported contacting men in their workout group outside of the regular meeting. The most common reason for contacting other participants in the group was to exercise together (48.1%).

Program Impact

Over the course of the project, significant (p < .05) improvements were observed for selfreported amount of physical activity, intensity of physical activity, self-efficacy to sustain physical activity, overall health status, and stress level (see Table 4 for details). The change reported in physical activity was based on men's self-reported response to a question asking them to report the weekly number of minutes they were physically active, on average for the past 4 weeks. We provided a broad definition of physical activity prior to this question, defining physical activity as "exercise or work that is hard enough to make you breathe more heavily and makes your heart beat faster; this includes taking the stairs, sports, yard work, manual labor, and other things." We did not use the CHAMPS physical activity log data because (a) we used two different methods to track physical activity (i.e., a log for session one and the CHAMPS for session two); (b) we had poor rates of completion of both tools for tracking physical activity; and (c) the data, particularly with the log, was formatted such that a great deal of it could not be used (e.g., number of minutes walked, response "yes"). We cannot speak to frequency (though assumed to have increased because we provided weekly sessions with Men on the Move to what they were already doing, and many men informally reported doing more physical activity outside the group, too) or duration with data.

All other outcome measures improved, although not to significant levels. The number of available sessions was either 9 or 10 because one group had to cancel a session due to bad weather that was not rescheduled. Because there were not 10 sessions available to all persons, descriptive statistics for the proportion of sessions attended is provided. For all 41 men, the mean proportion of sessions attended was 0.61 (SD = 0.35). For the 35 men who attended at least one session, the mean was 0.71 (SD = 0.27).

In addition to the physiological measures and closed-ended psychosocial questionnaires, we invited men to comment on the program at their impact assessment appointments. In general, participants reported considerable satisfaction with the intervention and that it helped increase their motivation to become more physically active and healthier overall. On the final open-ended questions as part of the final data collection, a total of 12 men offered written comments, and 9 men offered verbal feedback at the final data collection event. All

of the verbal and written comments were positive. For example, one participant commented, "I didn't have a real interest in exercising until I did this 'Men on the Move' project. Working out once a week encouraged me to work out even more." Several of the men commented that they felt better and stronger, and they knew more about what types of physical activity they could do. As one participant noted, "I enjoyed it. I've learned a lot and I don't think I've lost any weight, but I've gotten stronger, and I've gained some knowledge about how to exercise without lifting weights." Participants seemed to particularly enjoy the social support and camaraderie of male peers. One participant noted, "I enjoyed working with the other guys that were in the group; it made it fun." Similarly, another participant commented,

It motivated [me] to be more physically active. It gave me a blueprint on what I need to do to get better health and everyone was helpful. I enjoyed the camaraderie with guys and I'll be more physically active in the future.

Discussion

In this pilot study seeking to increase physical activity in middle-aged and older African American men, we found that *Men on the Move* significantly—but modestly—increased physical activity and self-efficacy to sustain physical activity. The men who participated in the intervention also reported that their stress levels decreased, and their general health status improved. Based on the findings that more than two thirds of participants attended at least half of their small group sessions and almost 9 out of 10 of them also used one or more of the resources we provided, there seems to be some modest evidence that the *Men on the Move* intervention approach is promising and worthy of further study.

We designed the pilot to address men's limited opportunities to be physically active and lack of social support for physical activity (Hooker, Wilcox, et al., 2011). Since three fourths of the men contacted a male peer outside of the regular weekly meeting, our study provides additional support for the notion that peer social support may help facilitate physical activity (Griffith et al., 2013; House, Landis, & Umberson, 1988; Kahn et al., 2002). Similar to previous research (Bleich, Pickett-Blakely, & Cooper, 2011; Bopp et al., 2006; Hooker, Harmon, et al., 2011), we found that middle-aged African American men appear to like and modestly benefit from an intervention focused on attending to the needs and interests of African American men and whose core component is a small group training session.

Limitations

Despite the modest success of our intervention, we realized that the biggest limitation in our intervention was its frequency. Although meeting in a small group with a personal trainer once a week for an hour was an important first step, our assumption that this small intervention would increase motivation to be physically active, perceived self-efficacy to be more physically active, social support for physical activity and actual increases in physical activity outside the session were only partially supported. Though self-efficacy and physical activity increased, it seems that that increase in physical activity of 60 minutes could primarily be attributed to men participating in the session with the trainer once a week. In the future, these types of interventions are likely to require more structured meetings or

activities, more information about where and how to be more physically active, more individualized goals and plans, and more self-monitoring to help men track their progress (Osei-Assibey, Kyrou, Adi, Kumar, & Matyka, 2010). It also may be beneficial to focus on physical activity but frame the intervention in the context of creating healthier lifestyles and include healthy eating, reducing sedentary behavior, weighing yourself regularly, and so on (Greaney et al., 2009). Given the work of Hooker, Harmon, et al. (2011), we believe that promoting healthy competition may help increase social support, group identity, and cohesion among the men. Although we hoped that providing basic education and social support would help men engage in more physical activity, we recognize that these increases primarily came from the weekly sessions with the trainer. Although we seemed to successfully help men achieve the levels of physical activity recommended for weight and health maintenance, 150 minutes a week, we were unable to increase their physical activity to the degree that it facilitated weight loss or created a change in a diagnosed chronic condition, waist circumference, or other physiological health indicators. We also recognize that our small sample size and lack of a true comparison group means that we have to interpret our findings cautiously.

Implications for Research and Practice

Future research should consider using a similar model to the one we described but find more effective ways to support participants in being physically active outside of the structured exercise sessions. Some of our formative research also suggests that there are key elements of men's daily lives that are important to consider in efforts to promote physical activity. For example, for men who are married, and given that over 80% of our participants were married, it may be helpful to enlist men's spouses or partners in helping provide encouragement and support for physical activity, though not necessarily suggesting that they engage in physical activity together. Returning to the work by Hooker, Wilcox, et al. (2011), men who participated in their formative interviews indicated that they liked male peer physical activity interventions but that attentive and encouraging women in their lives could be important sources of motivation.

In addition to enlisting the support of spouses and partners, since the majority of our participants were employed college graduates who still had some difficulty paying bills, future research may consider more directly addressing issues related to stress and strain. In previous research, we found that African American men prioritized being active and engaged family men, contributing economically to their households, maintaining steady employment, and being responsible community members over efforts to be physically active (Griffith, Gunter, et al., 2011; Griffith et al., 2013). The difficulty middle-aged African American men face in seeking to fulfill provider role obligations has been shown to compromise family satisfaction (Orbuch & Custer, 1995) as well as men's psychological health and overall well-being (Bowman, 1989). For most other groups of men and women, socioeconomic status is negatively related to stress and health, but African American men's socioeconomic status is positively related to stress (Watkins, Walker, & Griffith, 2010; Williams, 2003). Future research should consider addressing these stressors and strains as a part of interventions to promote physical activity and healthy lifestyles in African American men.

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Table 1

Characteristics of Study Participants at Baseline.

Characteristics	Participants (N = 41)
Demographics	
African American men	100.0%
Average age (years)	53.8, range 35–70
Married/in a relationship	82.5%
Children 18 and younger in home	27.5%
College graduates	55.0%
Employed full-time/part-time	72.5%
Somewhat/very difficult to pay bills	50.0%
Health	
Diagnosed with 1+ chronic condition	77.5%
Most common	
High blood pressure/hypertension	50.0%
High cholesterol	22.5%
Diabetes	15.0%
Obese (body mass index 30)	63.4%
Unhealthy waist size (>40 in.)	70.3%
150+ minutes of physical activity/week	39.5%

Table 2

Assessment Measures.

Title	Number of Items	Scale	Brief Description		
Physical Activity (adapted from CHAMPS questionnaire)	1 item	N/A	The average weekly number of minutes they were physically active for the past 4 weeks. Physical activity was defined as "exercise or work that is hard enough to make you breathe more heavily and makes your heart beat faster; this includes taking the stairs, sports, yard work, manual labor, and other things."		
The Motivation for Physical Activity Measure (Ryan et al., 1997)	30 items	 5 subscales 7-point scale from Not at all true for me to Very true for me 	Five motivational factors related to sport and exercise activities: • Interest/enjoyment motivation • Competence motivation • Appearance motivation • Fitness motivation • Social motivation		
Social Support to Engage in More Physical Activity (modified from the items used in the Eat for Life Trial)	8 items		Each item assesses perceived support to engage in physical activity from family, friends/work, colleagues, and other study participants		
Self-Efficacy to Engage in More Physical Activity (Resnicow et al., 2008)	10-item scale (Cronbach's $\alpha = .90$)	4-point scale from <i>Not at all</i> confident to Very confident	Sample item: How confident are you that you could, "Get up early, even on weekends, to engage in physical activity."		
Perceptions of Normative Health Behaviors, Physical Activity subscale (adapted from Mahalik et al., 2007)	6 items	5-point scale (Strongly disagree to Strongly agree)	Men's perceptions of how normative it is that the reference group was physically active (e.g., "Most of my male friends are physically active at least 30 minutes a day 3 times a week") Reference groups: Male friends Male relatives (e.g., cousins, brothers, father) White men in the United States Black men in the United States Female relatives (e.g., cousins, sisters, mother) Spouse or girlfriend		
Social Network of People that Support Engaging in More Physical Activity (Items adapted from those developed as part of the National Survey of American Life conducted by the Program for Research on Black Americans at the University of Michigan)	 2—Freqency of contact with family/ friends 2—Closeness with family/ friends 10 items— Expression of Support 1 item—Help Friends 	 Frequency questions: 7-point scale ranging from Almost Every Day to Never Closeness questions: 4-item scale from Very close to Not close at all Expression of Support questions and Help Friends question: 4-point 	 Frequency of Contact (family or friends): "How often do you see, write, or talk on the telephone with family members (and other people you consider to be family) who do not live with you?" Closeness (family or friends): "Overall, how close do you feel toward your family members?" Expression of Support (family or friends): Concern about your physical wellbeing Encouragement Help to be more physically active 		

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Title

Number of Items

Scale

Scale from Very often to Never

Scale from Very often to Never

Listen to you talk about challenges or barriers you face in becoming more physically active

Criticize your current level of physical activity

4 Help Friends: How often do you help your friends to be more physically active

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Table 3

Intervention Involvement.

Involvement	Participants (N = 41)	
Attended at least half the workout sessions	68.3%	
Used 1+ resource suggested for use outside of workout sessions	88.9%	
Contacted men in workout group outside of regular meetings	74.1%	
To exercise together	48.1%	
Attended other Physical Activity Network classes	14.8%	
Used suggested web resources	37.0%	
Used handout of stretches and exercises	37.0%	

 $\label{eq:Table 4} \textbf{Assessment of Program Impact (Wilcoxon Signed-Ranks Test)}.^a$

Outcome Measure	n	Pretest Median	Posttest Median	Z
Facilitating factors				
Relative autonomy for physical activity (PA)	25	10.75	10.50	0.20
Intrinsic motivation for PA		5.63	6.00	1.32
Self-efficacy to make time for PA		3.00	3.17	0.38
Self-efficacy to sustain PA		3.00	3.13	1.92*
Perceived social support from friends for PA	26	1.67	1.67	0.05
PA and fitness				
Total minutes PA/week	23	120	180	2.24*
PA intensity	26	3	4	1.78*
PA endurance		2	2	1.41
Health indicators				
General health status	26	2	2	1.67*
Stress level	26	2	1	1.94*
Body mass index	20	33.06	32.79	0.80
Waist circumference	19	43.00	44.00	0.76
Systolic blood pressure	20	137	130	0.87
Diastolic blood pressure	20	86	81	0.34
Total cholesterol	17	192	181	1.28

 $^{^{}a}$ For all measures in Facilitating Factors and Engagement sections, higher responses indicate greater levels. In the Health Indicators section, lower responses for the general health status and stress level measures indicate better health and lower stress, respectively.

^{*} p < .05, one-tailed.