

The Invisible Employee: University Housekeeping Employees' Perceptions of Physical Activity

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Background: A significant literature links race and socioeconomic status with physical inactivity and negative health outcomes. The aim of this study was to explore physical activity (PA) perceptions of an underserved, lower socioeconomic minority sector of the workforce. **Methods:** Two focus groups were conducted to examine university housekeepers' perceptions of physical activity. Demographic and anthropometric data were also obtained. **Results:** Participants (N = 12; 100% female, 100% African-American) overwhelmingly associated PA with traditional exercise (eg, going to a gym). The most important barrier to PA was the perception of being active on the job, thus not needing to do leisure time PA. The most important perceived benefit to PA was improvement of physical and mental health. Employees perceived that a university investment in employees' health might improve morale, especially within low-pay employee sectors where low levels of job satisfaction may be present. **Conclusions:** Although perceived benefits to PA in this population are consistent with other employee sectors, perceived barriers to PA may be unique to this sector of the workforce. PA promotion programs should focus on providing resources as well as guidelines that demonstrate the need for PA outside of the workplace setting. Such programs may improve employee health, morale, and productivity.

Keywords: worksite, health disparities, qualitative research, health promotion

A significant amount of literature links race, ethnicity, and socioeconomic status (SES), with physical inactivity, obesity, and negative health outcomes.^{1,2} As such, physical inactivity and its associated chronic conditions remain crucial public health issues and thus physical activity promotion remains a public health priority.

Worksites provide an ideal setting for social-ecological based physical activity promotion interventions.³⁻⁵ Worksites are important because employees are spending more time at work⁶ than in the past. Programmatically, worksites offer the unique ability to reach diverse populations with regards to race, ethnicity, gender, age, and health status. Physical activity (PA) programs offered at worksites can benefit from the environment, as within worksites employees regularly interact with one another, creating a built-in social network and social support. Furthermore, policies promoting PA may be implemented easily due to established communication avenues.

The established educational mission, resources, high level of technology use, and campus community make the college or university environment a promising site for PA intervention efforts. The higher education venue has distinct attributes, such as a stable working population, built-in social networks, and mechanisms to implement policy changes that could potentially make implementation of PA programs highly successful and sustainable. For example, unlike many worksites, campuses typically have the physical infrastructure and resources to promote PA that can be used by all members of the university work community.

Although housekeeping workers are essential to any university, little attention is typically paid to these employees. We have termed these individuals the 'invisible employees' because they are often unnoticed and rarely the interest or focus of campus health

promotion efforts. This employee group is often composed of minorities with low SES. Health disparities, such as lower levels of PA, may exist for this population. Self-reported PA data from a nationally representative sample suggest that 51% of Whites, but only 40% of Blacks and 42% of Hispanics met PA guidelines.⁷ When PA was objectively measured with accelerometers, fewer than 5% of adults met PA recommendations.⁸ It is possible that accelerometer assessments more closely estimate the truth than self-report assessments, but regardless of how PA is measured it is apparent that many adults are not active enough to meet public health recommendations for PA.

Ecological models to promote PA operate under the premise that PA takes place in a specific environment and that environment likely influences the type and amount of PA in which one engages. Several studies have documented that race, ethnicity, and SES are related to opportunities for PA. Research demonstrates that communities with higher proportions of minorities and lower household incomes are associated with fewer available PA-related settings.¹ Such results highlight the importance of providing interventions that target minorities with lower levels of SES at their workplaces.

Despite that housekeeping workers may benefit from worksite-based PA promotion programs, there is a dearth of literature assessing PA perceptions of service/maintenance workers. These perceptions, including cues to action, barriers to PA, and benefits of PA, are crucial for successful PA program development and implementation. As such, the aim of this article is to explore perceptions of PA from an underserved, lower socioeconomic minority sector of the university workforce.

Methods

Working with the rural, 4-year, public university's Department of Human Resources, housekeepers were recruited to participate in an exploratory study examining employees' perceptions of PA,

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including barriers and benefits. Participants were eligible for the study if they were at least part-time employees defined as at least 20 hours per week, were categorized as a service/maintenance employee, and were at least 18 years of age. Participants were provided with work-release time and transportation to the facility to remove potential barriers to participation. In addition, participants received a \$25 gift card for study participation.

Two focus groups (N = 12) were conducted to examine employees' perceptions of barriers and benefits to PA. In addition to the focus group activities described below, demographic data including sex, age, race, ethnicity, marital status, education level, income level, self-reported health status, self-reported stress status, and self-reported PA⁹ were collected. Objective PA data were collected with New Lifestyles NL-1000 (New Lifestyles, Inc., Lee's Summit, MO) pedometers. The NL-1000 is a piezoelectric pedometer, is relatively small in size (6.4 × 3.8 × 2.0 cm), and can be clipped to a belt or waistband. The pedometers were worn for 1 week before focus group participation to obtain a baseline measure of PA. Participants were instructed to wear the NL-1000 for all waking hours and to only remove the instrument for water-based activities. McMinn et al (2010) provided evidence of validity for the NL-1000 for assessment of minutes of moderate-to-vigorous physical activity (MVPA).¹⁰ They reported that estimates of MVPA were similar for the NL-1000 (using activity minutes) and the criterion accelerometer (ActiGraph GT1M). Schneider et al (2004) reported no significant difference between the NL-2000, which uses the same internal engine as the NL-1000, and the criterion pedometer over 24-hours.¹¹ For the current study, the activity minutes output from the pedometer was used to quantify PA. Anthropometric data, including height, weight, waist and hip circumferences, and body fat percentage through bioelectrical impedance analysis, were also obtained.

Krueger's focus group methodology¹² was used for the 2 focus groups. Per the methodology, researchers followed the recommended pattern for introducing the group discussion. The first part included a welcome to a group followed by the overview of the topic. Next, ground rules were discussed and established. Finally, questions were posed to focus group participants. Each focus group was held in a private space to ensure confidentiality, lasted approximately 90

minutes, and was audio-taped. All focus groups were led by a trained individual with extensive experience conducting focus groups; the moderator used probes to further elicit responses from participants. Researchers used an open-ended, semistructured question guide, using the tenets of the Health Belief Model (HBM) to direct the focus group discussion. As the focus groups progressed, the moderator adapted the protocol to incorporate new issues or pose follow-up questions. Focus groups were then transcribed by a researcher. Once the focus group scripts were obtained, 2 independent researchers coded the data separately, determining themes for each construct of the HBM. After each independent researcher provided themes for each HBM construct, discussion among the 3 researchers occurred, resulting in the themes. Finally, the researchers looked for emerging themes for the overall study, which the authors believe may be some of the most interesting and pertinent findings of this exploratory, pilot study. In addition, demographic, self-reported PA, and objective PA data were summarized using descriptive statistics.

Results

Out of 18 interested employees, 13 employees signed informed consent documents and 12 employees completed the study (Table 1). Participants (100% female, 100% African-American) were 51.3 ± 11.6 years old with a BMI of 34.1 ± 8.6 kg/m² and body fat of 40.1 ± 8.1%.

Focus group questions were developed using the theoretical framework of the HBM (Table 2). The HBM focuses on the beliefs and attitudes of individuals in an effort to explain and predict health behaviors. The 4 main constructs of the model, as well as the additional modifying variables, are described below.

"Perceived seriousness" is characterized as an individual's beliefs about the seriousness or severity of the disease. This construct has also been defined in the literature as one's beliefs of the seriousness or severity of not engaging in a specific health behavior, such as PA.¹³ "Perceived susceptibility" is characterized as an individual's beliefs about being at risk for developing a disease.¹³ This tenet has been noted as a significant factor in prompting individuals to change health behaviors. "Perceived benefits" is defined as one's belief in

Table 1 Participant Demographics (N = 12)

Demographics	
Age	51.3 ± 11.6 years
Sex	Females (n = 12) Males (n = 0)
Race	White (n = 0) African American (n = 12)
Education level	High school graduate/GED (n = 8) High school graduate, some college (n = 2) Other (n = 2)
Individual income	\$15,000–\$24,999 (n = 2) \$25,000–\$34,999 (n = 8) \$35,000–\$49,999 (n = 1) I choose not to answer (n = 1)
Physical activity (steps/day)	6977 ± 3114
Physical activity (moderate to vigorous minutes/week)	52.8 ± 64.5
Self-reported physical activity (moderate to vigorous minutes/week)	205.1 ± 189.0

Table 2 Focus Group Questions

Questions
1) What does it mean to be physically active?
2) What are issues that come from being physically inactive?
3) How much is being physically inactive a problem for you?
4) What keeps you from being physically active?
5) What benefits do you get from physical activity?
6) How confident are you that you could be physically active?
7) What can be done to increase your confidence to be physically active?
8) What things may motivate you to be physically active?
9) What could the university do to help you be more physically active?

the value of a new health behavior in decreasing the risk of disease development or improving quality of life.¹³ Individuals are more likely to engage in healthy behaviors if they believe the behavior will decrease their risks of developing disease.¹³ “Perceived barriers” is one’s beliefs about the obstacles present in adopting a new health behavior.¹³ “Perceived barriers” pose the most significant factor in determining behavior change. “Self-efficacy” is defined as an individual’s belief in his/her ability to succeed in task specific situations.^{14,15} Self-efficacy plays a pivotal role in one’s goals, tasks, and challenges.^{14,15} Finally, the HBM states that health behaviors are influenced by “cues to action,” which are defined as events, people, or things that motivate people to change their behaviors.¹³

Physical Activity

Despite believing they were physically active during their jobs, only 1 of the 12 employees recorded adequate activity minutes to meet PA and public health guidelines of at least 150 minutes of PA per week. Participants averaged 52.9 ± 64.5 (range: 5.2 to 239.5) activity minutes per week. Only 2 participants accumulated over 60 activity minutes per week. The 1 participant who met the physical activity recommendations attributed her active lifestyle to her university job along with her part-time job at a local big-box store, which kept her moving all evening. In addition, employees, overwhelmingly, associated PA with traditional exercise (eg, going to a fitness center) rather than the lifestyle PA currently being touted by public health practitioners and researchers. One participant stated, “Being active, doing something at the gym, like swimming.”

Perceived Seriousness

This sector of the workforce strongly believed physical inactivity leads to a series of problems that greatly impact quality of life. The most pertinent theme for perceived seriousness for physical inactivity was detrimental effects on health status. Participants believed being inactive would negatively impact not only physical health, but also mental health. A participant reported, “Being active would help with my health problems: high blood pressure, weight, and monitor [sic] my sugar.” Another individual stated, “It would help with my tiredness and depression.”

Perceived Susceptibility

Participants had similar beliefs to “perceived susceptibility” to physical inactivity as they did for “perceived seriousness.” Individuals

believed that the perceived susceptibility for physical inactivity would result in poor health status, leading to more physicians visits and increased medication usage. Physicians visits coupled with increased medication usage had tangible effects on employees’ finances, a fact that was stated several times. An employee remarked, “Heart disease and depression – those make me have to go to the doctor and that gets expensive, especially with the pills they give. I find that my pocketbook is affected,” which demonstrates the vicious cycle physical inactivity can have on individuals in the different facets of their life.

Perceived Benefits

Perceived benefits to PA included improvement of physical and mental health and reduction in current and future medication usage, which would impact not only their health, but also their household budget. Other pertinent findings included meeting work demands and being there for family/friends. The individual meeting physical guidelines noted, “If I’m not active, I only have the energy to walk only 2 miles and I’m not as good as I’m required to be to perform this job.” Another notable benefit was being there for family and friends. Six of the participants either had children under 18 or adult dependents over 65 living in their households. In addition, many of the participants reported being primary or secondary caregivers for their grandchildren and great-grandchildren. Being physically active would allow these individuals to “keep up with their babies.” One employee and caregiver reported, “I have 16 grandchildren and 2 great-grandchildren. I need to be there for them.”

Perceived Barriers

The most salient barriers for this population are perception of activity and work demands. For perception of activity, 7 of the 12 participants believed they met public health guidelines of obtaining at least 150 minutes of moderate intensity activity each week. One housekeeper stated, “By the time I get off work, I am tired and I want rest. I don’t want to do anything.” Despite believing they were physically active during their jobs, only 1 of the 12 employees actually recorded adequate activity minutes to meet PA and public health guidelines of at least 150 minutes of PA per week. In addition, PA appeared to be limited in this population due to family obligations (eg, caring for grandchildren) and pain from physical ailments, some of which are occupation related (eg, lifting heavy equipment).

Self-efficacy

All of the employees stated they were not confident they could become physically active. Lack of money played a significant role in employees’ lack of confidence in being physically active. Participants believed they could become physically active if the university provided more environmental and policy resources (eg, flexible working hours), if they lost weight making it easier to move, and if tools (eg, structured plan on how to incorporate activity into the day) were provided to employees. One housekeeper remarked, “I need direction based as far as this particular exercise you need to do x times a day to get these results. I need a plan.” Her feelings were echoed by many focus group participants. Other individuals wanted external incentives because they wanted “acknowledge from peers and supervisors.”

Cues to Action

Many employees believed their employer has a responsibility to help employees become more physically active. One of the most commonly heard responses was that the university could provide

reduced or free memberships to the campus recreation facility. While this university had relatively inexpensive memberships at \$22 per month, for many of these low-wage earning employees, the fees were simply cost-prohibitive, when accounting for other essential needs, such as food, housing, and transportation. Employees believed that while raises may be out of the question, providing free memberships to the campus recreation facility could increase employee morale and demonstrate administrative recognition of these underserved employees. There is also a lack of communication to this sector of the workforce regarding the types of wellness activities that the employer and health insurance company sponsors. Finally, employees believed changes in human resources policies (eg, better benefits, mandated breaks, work-release time) would lead to more physically active employees. One of the participants stated, "If they gave free memberships, I would work out the gym. I like to walk. I am not going to pay all that to walk. But it's hard to walk outside when it's hot or raining. It'd be nice to have the gym to just walk but it doesn't make sense to pay all that money to walk."

Other Pertinent Findings

Other pertinent findings came out during the focus groups that are important to discuss. These findings demonstrate how inextricably interconnected health, morale, and productivity are, especially in this sector of the workforce. Many of the employees, expressed their anger and frustration at the perceived university class system (eg, differences in how faculty were treated versus staff, particularly those in their sector). To these individuals, the perceived university class system led to their work being undervalued and unappreciated. As a result, there was significant distrust in the system. One participant remarked, "You didn't get a lot of people to do this [study] because we just don't trust anyone. You came in all chummy with [our boss]. Right there, people thought you were up to something." There was 1 individual who signed the informed consent but declined to complete the study. The participant stated, "I do not feel that this particular survey has this department's best interest in mind. I feel that the truth has not actually been given as to the true nature of this particular interest."

The lack of morale, especially in acknowledging workers and their needs, is particularly critical as morale has been linked to workplace productivity and wellbeing.^{16,17} As one employee stated, "I clean the bathrooms 364 days a year. It's the 365th day that I forget to clean that someone pays attention to me. I don't get praise. I just get criticized. How would you feel if you only were paid attention to when you messed up?"

Conclusion

The results of this study provide many insights into both the university workplace studied and the attitudes of the service workers within this workplace. Specifically, results identified some factors that may be both facilitating and impeding the likelihood that employees in the service sector engage in PA. Given our sample, these factors are especially pertinent, as previous research suggests that the barriers to PA experienced by African American women may be unique.¹⁸ The results of this study contribute to the current literature by identifying work demands as a profound barrier to PA. This finding supports other works as well as identifies SES as a significant barrier.¹⁹ For the employees interviewed, the necessity to work and produce income to support their families was of greater importance than PA. While no direct relationships can be made here, the impact of SES on PA among various populations

is a fruitful avenue for future research. Further, the intersection of multiple minority statuses (ie, women, African American, low SES) warrants further inquiry.

The employees interviewed believed that quality of life and PA were positively related. According to the HBM, possessing this belief is indicative of engaging in PA behaviors to circumvent negative health effects.¹³ The employees in this study, however, did not engage in regular, structured exercise and fitness behaviors. Most notably, this lack of structured exercise was attributed to the perceived nature of their work. The housekeeping employees believed they were receiving the necessary levels of PA by engaging in their physically demanding job duties. Based on objectively measured activity levels, however, PA guidelines were not being met. Thus, the majority of those interviewed believed they were more physically active than they really were and were, therefore, more susceptible than they believed to the negative effects associated with lack of PA.

Also noteworthy, a sizable number of employees lacked the self-efficacy necessary to begin successfully engaging in regular PA. While employees attributed this lack of self-efficacy to both internal and external loci of control, the university was believed to have significant control over their efforts. This is an important finding, as it provides a potential avenue for which the university can help aid its employees in attaining physically active lifestyles by providing the necessary information and facilities. Research suggests organizations that take a vested interest in their employees by facilitating programs that disseminate health-related information and by creating environments that advocate for healthy behaviors not only create a positive return for the employees, but also for the organization as a whole.²⁰ Likewise, research has indicated that organizations that show interest in the health and well-being of low-wage employees may also be communicating that they value their workforce.²¹ This latter point is particularly pertinent to the current findings, as many of those interviewed felt unappreciated by administrators and faculty and that the university did not have their best interests in mind. Reaching out to this sector of employees about their health and wellness could quell some of these negative feelings.

Although this study has significant strengths, including the use of a theoretical framework to guide focus group questions and focusing on a disadvantaged sector of the university workforce, there are limitations to the study. First, study participants were identified solely as African-Americans, which is representative of this particular university's housekeeping workforce. Including other races into the focus groups may have provided additional information about the housekeepers. In addition, participants identified as female. Male housekeepers may have different perceptions of PA than their female colleagues. Despite these limitations, we believe this study contributes to the workplace and minority population PA literature.

To the authors' knowledge, this is the first study to examine PA barriers and benefits for an underserved population of the university workforce. Because many employees of this workforce sector are minorities with low SES, it is imperative to address the health needs of this population. Findings from this study have important implications for health promotion practice and research on underserved populations. Furthermore, these findings may assist in development, implementation, and evaluation of worksite-based PA programming for this population.

Findings from focus group interviews indicating a lack of PA self-efficacy and a perceived lack of recognition by the employer emphasize the need to design health promotion programs targeted for this population. While many studies have focused on university worksites, the participants have been faculty or staff (eg, office workers, administrators). To our knowledge, no study has focused

on promoting health in housekeeping staff, a subsector of the population that may be at a heightened need for health promotion programs based on their low SES and minority status. Because a lower SES is generally associated with negative health behaviors, particularly physical inactivity, it is imperative to develop and implement PA programs that are targeted to this audience.

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