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West Virginia State Employees' Preferences for Worksite Wellness Programming

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ABSTRACT

Objectives: To investigate the wellness programming preferences of state employees in West Virginia.

Study Design: A survey-based, descriptive analysis of employees' preferences

Methods: State employees ($n = 18,791$) of West Virginia were given a 38-item wellness survey. Items assessed employees' interest in programming, methods for receiving wellness information, and incentives for participation. Descriptive statistics were run to provide a summary of state employees' preferences.

Results: The survey response rate was 40%. Respondents showed interest in physical activity (81.0%), nutrition (77.6%) and stress management programming (61.1%). A personalized webpage was the highest rated method of receiving wellness information and a discount on insurance premiums would be the most motivating incentive (69.6%).

Conclusion: Interest in wellness programming was high, which suggests that appropriately target interventions may engage a large portion of West Virginia citizens in health education and lifestyle change.

Keywords: Health Promotion, Incentives, Physical Activity, Nutrition, Stress Management

Introduction

Citizens of the United States have struggled over the last several decades with the rise of unhealthy lifestyle behaviors, such as poor nutrition and physical inactivity.¹ The consequence of these behaviors has been an increase in the prevalence of chronic conditions such as cardiovascular disease (CVD), diabetes, and obesity.² Unhealthy behaviors and their associated chronic conditions have also been linked to the rise in healthcare expenses that currently afflicts the United States. Looking for ways to reverse these trends, employers and interventionists have used worksite wellness programming to help individuals improve their health and curb increasing insurance expenses. With most adults spending a significant portion of their waking hours at work, the worksite provides a promising platform for wellness programming.³ Worksites also provide access to preexisting social networks that allow for connecting people and resources in a way that might not be possible in other settings.⁴ The effectiveness of worksite wellness programming, both in reducing health risks as well as healthcare costs, has been the subject of extensive review. Most research has concluded that programs with a solid theoretical foundation and tailored programming provide small, significant changes in health, and provide a meaningful return-on-investment for employers.^{4, 5, 6}

In a 2012 survey of employers (n = 3,000) who offer wellness programs, 71% offered “lifestyle management” programs, with nutrition (79%), fitness (72%), and stress management programs (52%) being the most frequently offered interventions.¹ Despite the availability of wellness programming, one review marked the median participation rate of employees at 34%.⁷ Beyond just participating, there is also evidence to suggest that employees who are more engaged in wellness programming are more likely to accrue the positive benefits of participation. In one study, participants who completed a health risk assessment (HRA) yearly were more

likely to report fewer health risks and healthcare costs than those who completed them less frequently.⁸ One recent program evaluation showed increased engagement (i.e., live coaching or virtual programming paired with an HRA, compared to simply completing an HRA) was also related to improved clinical outcomes.⁹ The relationship between increased engagement and increased effect has also been replicated for web-based programming, with one study finding that participants who logged on to the intervention site more frequently were more likely to lose weight than those with lower usage.¹⁰

Some programs have reported success by providing tailored choices for wellness programming that allow employees to experience a sense of control over their health behaviors.¹¹ To reach a large number of employees, many WWP's have begun using technology-based interventions with a variety of choices to participants. There is growing evidence that when structured correctly, web-based programming can be as effective as in-person meetings in positively influencing health behaviors.¹² Not only does the use of technology-based interventions have the potential to reduce barriers to participation (e.g., living in a rural community that lacks access to traditional wellness programming), but it may also increase engagement by providing people with the opportunity to engage their health behaviors in their own way on their own schedule.¹³

Throughout the literature for wellness programming, tailoring of programs to participants' needs and wants has consistently resulted in increased engagement and positive outcomes.⁴ These findings are particularly important in West Virginia, which according to the most recent Centers for Disease Control and Prevention report currently has the highest adult obesity prevalence (35.1%) and second highest adult diabetes prevalence (13.0%) in the nation.¹⁴ Therefore, the purpose of the current study is to explore the wellness programming preferences

of a large sample of state employees in West Virginia to aid in the development of tailored interventions. A secondary purpose was to explore the technology-based delivery preferences of state employees to identify novel ways of connecting participants with wellness programming.

METHODS

Design & Sample

Prior to beginning the study, approval was given by the Public Employees Insurance Agency of West Virginia (PEIA) to proceed with an evaluation of its members. An IRB addendum for the study (at West Virginia University) was added to an ongoing evaluation of the PEIA weight management program. Responses were collected from a sample that consisted of all PEIA policyholders who had provided an e-mail address to the insurance agency ($n = 46,780$), which is roughly 67% of all policyholders ($N = 70,021$). Potential respondents were contacted through Survey Monkey, and had the opportunity to complete the survey online, request a paper copy of the survey, or decline participation. Potential respondents received three follow-up e-mails, seven days apart, over the course of four weeks to ensure a response rate >30% which is considered average for web-based surveys.^{15, 16}

Measures

The Wellness Survey was a 38-item instrument developed using input from multiple stakeholders working with the current wellness program. The survey included sections regarding previous experiences with wellness programming (3 items), current health behaviors (7 items), preferences related to wellness programming (10 items), preferred delivery methods of wellness program information and technology use (6 items), and demographic information (8 items). The questions related to current health behaviors and programming preference were divided into specific questions relating to nutrition, physical activity, and stress management. The

technology questions asked participants to describe their access to different devices or media (e.g., smart phone) and their current use of technology related to their health behaviors (e.g., using an app to track their meals or fitness activities). After initial development, the survey was piloted with PEIA members at one worksite to receive feedback on the design, readability, and content of the survey, and feedback was used to revise the survey. The pilot participants reported completing the survey in 10-15 minutes.

Analysis

Consistent with the purpose of the study, descriptive statistics were compiled to provide a summary of participants' responses to the survey data. Specifically, means and percentages were calculated for respondents' demographic information, familiarity with previous programming, preferences related to wellness programming, and preferred delivery methods and incentives.

RESULTS

The final number of survey respondents was 18,791, which represents a 40% response rate. There were at least 27 responses from all 55 counties in West Virginia, and 36 counties had over 100 responses each. The average respondent to the Wellness survey was 48.06 years old ($SD = 11.17$), was female (66.2%) and had a BMI of 29.36 ($SD = 7.50$). On average, respondents described their health as 'good', with a mean of 3.36 ($SD = 0.84$) on a 5-point likert scale from 1 (poor) to 5 (excellent). With regards to previous experience with PEIA wellness programming, 70.5% ($n = 13,071$) had previously participated in the 'Improve Your Score' program at least once, 12.3% ($n = 2,309$) had participated in the Weight Management Program, 5.8% ($n = 1,086$) had been a part of the Face to Face Diabetes program, and 19.8% ($n = 3,715$) reported having participated in some other wellness program offered at their worksite.

Overall, there were some notable differences when respondents were compared to West Virginia averages retrieved from the BRFSS and U.S. Census (see Table 1). Specifically, the study sample reported a higher number of high school (99.7% vs. 83.4%) and college (64.2% vs. 17.9%) graduates when compared with West Virginia as a whole. A majority (57.2%) of survey respondents were classified as having a household income of \$50,000 or more, compared to 28.1% of the West Virginia population. For respondents, 6.2% reported making less than \$25,000, while 38.3% of the population fell into that income category (see Table 2). Thus, these prevalence numbers indicate that the survey sample is not economically or educationally representative of West Virginia as a whole.

Familiarity and Preferences

Familiarity with PEIA's wellness programming was moderate, with a mean of 2.64 (SD = 1.06) on a 5-point likert scale from 1 (not at all familiar) to 5 (very familiar). Overall interest in wellness programming was high, with 77.6% ($n = 14,024$) of the sample responding positively to the prompt "Would you be interested in wellness options related to helping you eat better?", 81.0% ($n = 14,510$) responding positively when asked about physical activity programs, and 61.1% ($n = 10,862$) reporting interest in stress management programming. The general preferences, along with specific program information, are summarized in Table 3. The nutrition programs that received the most frequent endorsement from respondents were a fruit and vegetable discount program (51.5%) and a personalized webpage with a food log (28.5%). The most selected physical activity programs were 'a discount on gym memberships' (50.5%), 'a pedometer to track your steps throughout the day' (34.7%), and 'in person exercise classes offered at your worksite' (33.8%). For stress management programming, 'in person stress management classes' (24.9%) and 'relaxation audio files' (24.1%) were the most selected items.

Of the technologies assessed (smart phone use, text messaging, use of an app to track food and exercise, and e-mail) responses on the survey suggest that e-mail or web-based platforms may be the most viable ways to reach potential participants (See Graph 1).

Incentives

Respondents were asked to select their preference from a list of external incentives, with 69.6% of respondents identifying a discount on insurance premiums as the reward that would most motivate them to participate in a wellness program. One-third of respondents chose learning new skills related to being healthy as the experience that would encourage them most to start or continue participating in a program (see Table 4 for a comprehensive review of incentives).

DISCUSSION

Overall, general interest in programming was high across nutrition, physical activity, and stress management programs, and key details regarding respondent preferences emerged. Survey respondents reported low familiarity with the programming offered by the agency, which suggests that despite high interest in programming, most of the employees involved in the study did not know how to participate. Previous research has highlighted a lack of knowledge related to wellness programming as a significant barrier to participation.¹⁷

The largest incentives to participate noted by respondents were a premium discount on their insurance and reduced fitness memberships. Linking participation to reduced premiums may end up discriminating against those who are less inclined or have less access to viable options to participate.¹⁸ This link may result in the agency reducing premiums primarily for those who are highly educated and healthy, which amounts to providing singing lessons to those already in the choir. This ethical issue is particularly relevant in West Virginia, where there is a

large discrepancy in the availability of programming, qualified staff, and adequate facilities across the 55 counties. However, the agency has pursued providing fitness classes at various worksites through their Pathways to Wellness program in the most recent plan year.

The results of the current study did not provide a clear consensus related to how state employees would like to consume their wellness information.¹⁶ While a personalized webpage was the most preferred delivery method, none of the technologies assessed were strongly endorsed by respondents. The lack of a clearly preferred contact method may speak to the need to offer a number of methods for employees to connect with their wellness information rather than finding a single method that will work for most. The case could be made that different segments of employees will be successfully reached via e-mail or a webpage, others with text messages, and some may require face to face interaction or paper-based communication to feel connected to their programming.

One possible way of satisfying some employees' desire to connect with a real person, instead of e-mail or text communications, may be to provide a wellness coaching hotline. Though this centralized approach to providing personalized services may not suit all employees, it would allow the agency to hire a few staff members to serve thousands of potential participants when they are ready. This phone-based approach to lifestyle coaching has been shown to be effective in rural areas.¹⁹ Additionally, if the agency were interested in developing content for a wellness newsletter, they might find success in allowing employees to decide if they wanted it delivered in the mail or to their workplace, or if they would prefer the information in an e-mail, hard copy, or through text message reminders.

Finally, it is worth noting that any and all efforts of the agency may fail to substantially impact public health of West Virginia employees unless systemic changes simultaneously occur

in the systems that influence health behavior, such as social norms, transportation policies, and the built environment. The specific role of public insurers in this health crisis warrants more attention in the literature, as it will take a coordinated effort among many agencies in the public domain to achieve meaningful impact.

The current study had a number of limitations. First, the survey was disseminated using e-mails that were provided to the agency, which impacted the sample that had an opportunity to take the survey. Similarly, the survey was administered online, which may have presented a barrier to some state employees, and likely skewed the results, particularly regarding the questions about technology use and preference. Second, the survey sample was more educated and reported higher income levels when compared to West Virginia as a whole, which likely influenced the results, and limits the generalizability of the survey results.

Future studies should attempt to better understand the preferences of employees who may be less “reachable” (e.g., high risk, non-participants, males) in an effort to increase participation among those at the highest risk for CVD. Lastly, a more dedicated feasibility assessment regarding the use of technology in delivering wellness programming may provide a clearer understanding of whether or not employees would be willing to participate in novel approaches to program delivery (e.g., web-based content, text message reminders, etc.).

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Table 1. A Comparison of Wellness Survey Responses with the General West Virginia Population

Demographic Variables	Wellness Survey (<i>n</i> = 18,791) (%)	West Virginia Residents (%)	Relative Difference (%)
High School Graduates ^b	99.7	83.4	+20
College Graduates ^b	64.2	17.9	+259
Obesity (BMI > 30) ^a	38.6	32.4	+19
Overweight and Obese (BMI > 25) ^a	69.1	68.9	--
Hypertension ^a	29.9	37.0	-19
High Cholesterol ^a	26.7	40.5	-34
Diabetes ^a	11.0	12.0	-8
Meeting Fruit and Vegetable Guidelines (>5/day) ^a	8.2	8.3	--
Meeting Physical Activity Guidelines (>150 min/week) ^a	16.9	43.0	-61
Meeting Strength Training Guidelines (at least 2x/week) ^a	31.2	20.2	+54

Note. The 'relative difference' calculation refers to relative change from the population data. For example, for obesity, the absolute difference is +6.2 but relative to the norm of 32.4%, this represent a 19% change in reported obesity in the sample

^a Information retrieved from the West Virginia BRFSS 2011

^b Information retrieved from the U.S. Census Bureau

Table 2. Income Stratification for Survey Respondents and West Virginian Residents

Income	Wellness Survey (%)	West Virginia Residents ^a (%)
Less than \$25,000	6.3	38.3
\$25,001 to \$50,000	36.5	33.6
\$50,000 +	57.2	28.1

Note. 9.9% ($n = 1709$) of the respondents chose 'I would prefer not to answer' for the income item, and another 8.0% ($n = 1497$) did not answer the item. Percentages were calculated after excluding those respondents.

^aInformation retrieved from the West Virginia BRFSS 2011

Table 3. Preferences for Nutrition, Physical Activity, and Stress Management Programs

Programming	(%)
Interest in Nutrition Programming	77.6
A fruit and vegetable discount program	51.5
Your own personalized webpage with a food log	28.5
In person classes related to buying and preparing healthy food	19.8
Home gardening programs	19.
Interest in Physical Activity Programming	81.0
A discount on gym memberships in your community	50.5
A pedometer to track your steps throughout the day	34.7
In person exercise classes offered at your worksite	33.8
Your own personalized webpage with an exercise log	25.1
Interest in Stress Management Programming	61.1
In person stress management classes	24.9
Relaxation audio files	24.1
Text messages related to your stress management goals	13.3
Podcasts that provide tips on how to reduce your stress	11.9

Table 4. Respondents' Preferred Incentives

Specific Incentive	%
External Incentives	
Receiving a discount on your insurance premium	69.6%
Cash or gifts	11.4%
Getting time off to participate in wellness programming at your worksite	10.4%
Getting 'wellness points' for completing programs, and exchanging them for gift cards or prizes	7.9%
Being enrolled in a drawing to win prizes	0.6%
Intrinsic Incentives	
Learning new skills related to being healthy	32.6%
Connecting with other coworkers to build support for better health in your life	25.9%
None of these would encourage me to start or continue a wellness program	22.6%
Getting to make choices about how and when you choose to be healthy	18.9%

Note. Respondents could only select their "most preferred" incentive for each item

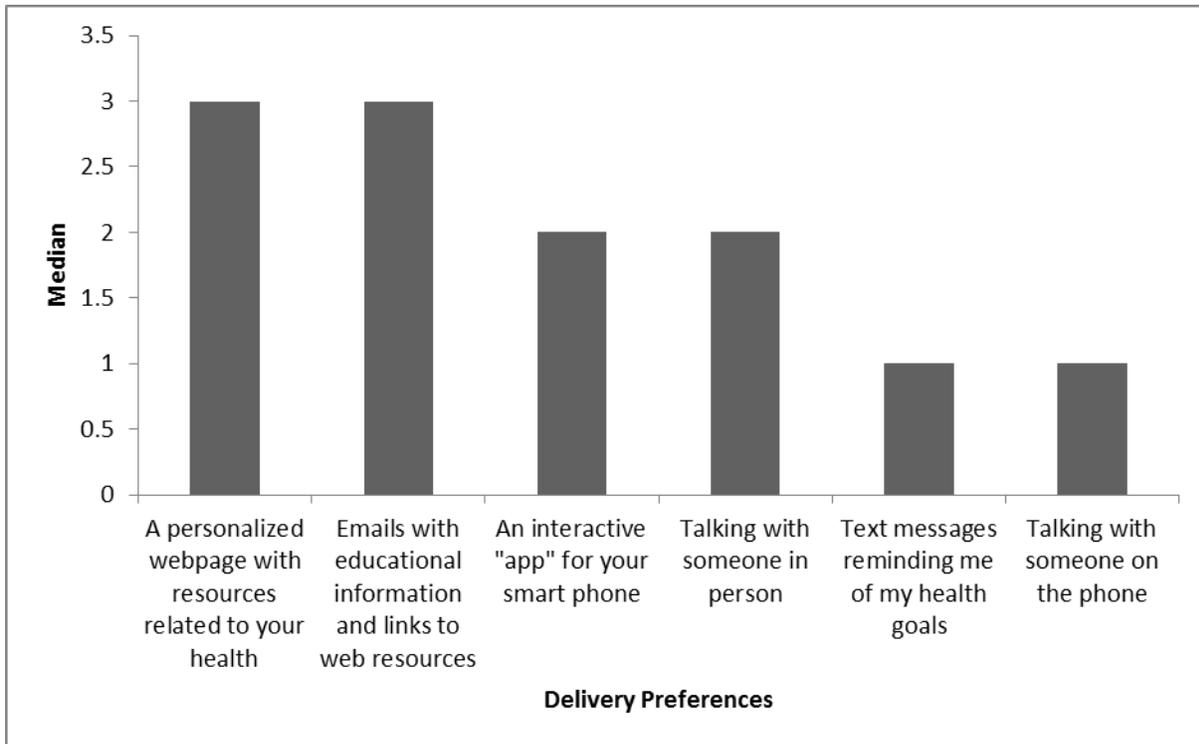


Figure 1. Wellness program delivery preferences of West Virginia state employees. Preferences were measured from 1 (not at all interested) to 4 (very interested).