The Effects of Health and Wellness Coaching on Health Status When Added to an Employee Wellness Program

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ABSTRACT

Objective: Examine effects on employee health of adding various doses of health coaching to wellness programming. **Methods**: Random assignment of >300 volunteers to three coaching treatments, or a control, with assessments of blood pressure, resting heart rate, health risk appraisal including nutrition and fitness subscales, LDL-cholesterol, and glucose at baseline, three and six months. **Results**: Data inspection via latent growth curve analyses, and ANOVA, revealed blood pressure to be positively affected by health coaching, regardless of dose. All other variables positively responded to wellness programming but health coaching did not add further to this effect. **Conclusions**: College employees in a well-orchestrated wellness initiative do not require health coaching to substantially impact most health variables. However, even this population (well-informed, supported, and great access to wellness programming) can benefit from health coaching (i.e., blood pressure).

INTRODUCTION

- Many corporate wellness intervention studies find positive impact on employee health or function[1] however, there are instances when such programming is not effective at improving employee health status [2].
- There are a variety of reasons to explain corporate-organized wellness initiative's lack of effect however, less than 50% participation in available programs seems a primary reason [1].
- Most people easily recognize maximizing wellness is a priority because culturally available means as well as scientific publications, deliver the message daily. Yet many are not willing or able to manage a meaningful behavior change to positively impact their wellness.
- Barriers to participating in healthy eating and exercise [3] often include mention of lack of knowledge, lack of access, expense, and not enough time.
- Findings from our previous work [2] indicates that simply eliminating barriers of cost and improving access to information and wellness programming does not always improve health status in an employee population because when allowed to opt out, the participation rate in health programs can be ineffectively low [1].
- Therefore, engaging employees in a wellness program can be a useful solution to many health concerns, but only for those employees who choose to participate.
- Fostering behavior change at the individual level is important for the adoption of effective wellness behaviors and the success of any corporate-sponsored wellness initiative.
- In recent years, the emergence of health and wellness coaching (HWC), as a discipline and profession, offers a new strategic prospect for promoting healthy behavior change. Brinthaupt et al. [4] demonstrated that HWC intervention could alter perception of barriers, particularly lack of knowledge.
- While there are indications that HWC is effective at promoting positive behavior change[5] some trials do not demonstrate participant health improvement [6]. Lack of consistent application of HWC might be responsible for differences in research outcomes. Wolever et al. [7] systematically developed a definition for the HWC process.
- There are currently no published large-scale randomized and controlled trials using HWC for primary prevention in a typical employee population. Given spiraling healthcare costs, keeping the population free of chronic lifestyle-related disease is important. Using HWC techniques to enhance wellness possesses tremendous untested potential to improve health, reduce suffering, and keep healthcare costs in check.

Statement of Purpose

- The primary purpose of this research was to determine if HWC, as defined by Wolever et al., [7] might enhance the impact of an employer-sponsored wellness initiative on participant health status.
- A secondary purpose was to determine if dose of the coaching intervention had an influence on any HWC effects observed.

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METHODS

- Mind, Body, Me (MBM), a new employee benefit, is a multifaceted program with an educational component, access to fitness facilities and programming, health trackers, health appraisal, and small incentives (e.g., coffee mug, T-shirt) for healthy behaviors.
- MBM is well promoted in campus literature, and employees sign up to enter the program in cohorts of 50 to 55 participants. Over 300 participants were recruited and 257 are included in the final analyses. The project was ongoing for 2.5 years. Each participant was studied in a six-month timeframe with assessments every 3 mo.
- Figure 1 illustrates group and participant flow through this longitudinal study's protocol.

Coaching Intervention

- All coaching was conducted telephonically with the three treatment arms:
- **6-mo coaching (6HWC)** - 30-40 min sessions of weekly coaching for 6 mo.
- **3-mo plus coaching (3+HWC)** -3+HWC provided the same as 6HWC for 3 mo followed by a second 3-mo period with coaching reduced to one session every other week.
- **3-mo coaching (3HWC)** - provided weekly coaching for only the first 3 mo after which coaching access was discontinued.
- HWC was standardized, as defined by Wolever et al., [7] using only experienced (>1 year posttraining) coaches who were similarly trained (i.e., 3 mo of basic coach training via Wellcoaches Corp, Wellesley, MA) and who possessed a health-related B.S. or above.
- All 13 coaches employed in this project took part in a 12-week advanced coach training program (90 min/wk) emphasizing understanding of mindfulness, autonomous motivation, positivity, and character strengths.

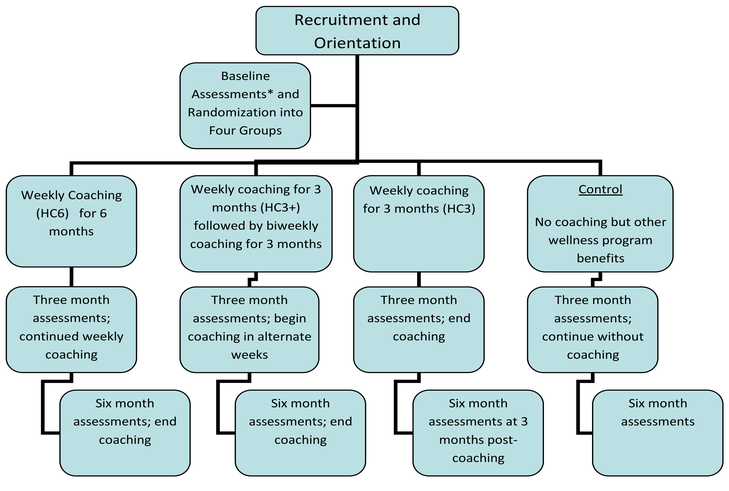

Figure 1. Participant flow through the study protocol

Outcomes

Outcome data were health risk appraisal (HRA) (overall; nutrition, fitness, safety subscales), blood glucose and LDL-cholesterol, body weight (BW), waist-to-hip ratio (WHR), resting heart rate (RHR), systolic blood pressure (SBP), and diastolic blood pressure (DBP). Readiness to change was measured at baseline. Outcomes were collected at baseline, 3- and 6-mo.

Data Analyses

HWC participants with less than 4 coaching sessions in the first 3 mo, 6HC with less than 4 coaching sessions and 3+HC with less than 2 coaching sessions in the second 3 mo, were dropped from analyses. A series of 3 (time) x 4 (group) repeated measures ANOVA were conducted in SPSS v22. A series of latent growth models with an intercept and linear slope specified were conducted in Mplus 7.2 [8] .

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RESULTS

Table 1 Average Health Coaching Sessions

	3 Month			6 Month		
Group	Range	M	SD	Range	M	SD
HWC6	5-13	8.97	1.93	4-13	8.77	2.71
HWC3+	2-13	9.51	2.13	2-8	5.37	1.36
HWC3	3-13	8.91	2.58			

RHR, BW, HRA, fitness, nutrition variables all improved ($p < .05$) over time; no interaction was observed for groups over time. WHR, glucose and LDL did not change over time nor were any interactions detected for these variables.

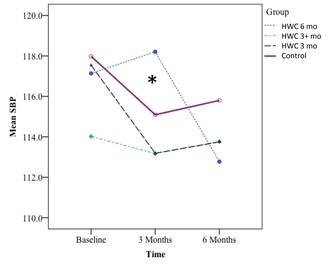

Figure 2. SBP in three coaching groups (and controls) over six mo. HWC = Health & Wellness Coaching. *significant interaction ($p < .05$)

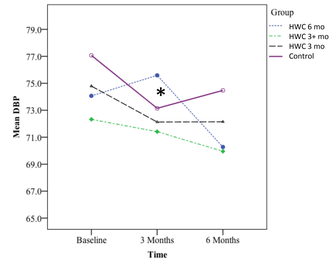

Figure 3. DBP in three coaching groups (and controls) over six mo. HWC = Health & Wellness Coaching. *interaction trend ($p = .052$)

DISCUSSION

- HWC, as a part of participating in this multifaceted wellness program, assisted with lowering BP values with any coaching dose.
- Wellness programming successfully impacted most outcome variables, but coaching did not seem to add to this effect. HR, BW, and HRA including nutrition and fitness scores, all improved over the duration of the wellness program.
- Perhaps MBM was so well promoted and accessible that coaching could not greatly add to the already potent wellness programming effect.
- Higher baseline readiness to change scores were associated with better initial fitness and nutrition ratings, lower BW, and lower RHR, SBP, and DBP in females. It is no great surprise that women who have started making behavior change already have a healthier profile. In males, such commitment was not related to current health status. Behavior change scores can be a useful tool for HWC, as noted in a recent report on smoking cessation.[9] The potential for gender differences in behavior change scores is a topic worthy of future consideration.

Conclusions

- In conclusion, HWC had a favorable effect on lowering blood pressure. Other health indicators (e.g., RHR, BW, HRA scores) were positively impacted simply by MBM wellness program participation.
- It may be that blood pressure is a uniquely sensitive variable to coaching because HWC might affect a collection of hemodynamically impactful factors. Other than the important blood pressure effect, it seems a well-organized and implemented, extensive wellness program can obviate other potential HWC benefits.
- Health coaching should be considered in conjunction with employee wellness programming, particularly for those susceptible to, or suffering with resistant hypertension.

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