



EMPLOYEE ENGAGEMENT IN HEALTH & WELL-BEING: INFLUENCERS, OUTCOMES, AND PRACTICE CONSIDERATIONS





ABOUT THIS REPORT

The Health Enhancement Research Organization (HERO) is a national non-profit dedicated to identifying and sharing best practices in the field of workplace health and well-being (HWB). HERO was established over twenty years ago to create and disseminate research, policy, leadership and strategy to advance workplace HWB, providing leadership of the nation's workforce. Much of the good work that HERO does is achieved through the efforts of its volunteer committees.

This report is a product of HERO staff and members of the HERO Engagement Study Committee and Environmental Scan Phase 2 Workgroup.

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INTRODUCTION

In 2015, the HERO Engagement Study Committee was directed to better understand the relationships between employee engagement in health and well-being (HWB), employee engagement in organizational success, and organizational engagement in employee HWB. With the successful completion of Phase 1, an insightful publication was produced and shared with HERO members, to help them garner a deeper understanding into how industry is defining and measuring these important concepts. The work also identified employee engagement in their own personal HWB as a key concept to address in order to optimize the value of employers investing in workforce HWB initiatives. This launched a second phase of work in which the committee analyzed the influencers and outcomes associated with employee engagement in their own personal HWB.

This publication provides a summary of the committee's Environmental Scan Phase 2 Workgroup efforts, and provides suggestions for subsequent steps for identified stakeholders, including HERO members, purchasers and providers of health promotion and well-being offerings, as well as researchers in the field.



KEY LEARNINGS FROM PHASE 1:

1. Clearly identify and define specific focus areas of engagement in HWB efforts.
2. Use applicable, validated measurement tools that best support measuring and tracking outcomes in employee engagement in business performance, employee engagement in health and well-being, and employer engagement in employee health and well-being.
3. Use as a conduit for additional scholarly research and “real world exploration” to better understand the role of the workplace in fostering/ inhibiting employee engagement in health and well-being. Characterize barriers to engagement (personal priorities, program relevance, cultural/ literacy considerations, program access).
4. Develop measurement capabilities to evaluate workplace policies/ practices within the context of their impact on employee health and well-being. Evaluate the extent of alignment between employer benefits programming and relevance to employee needs.
5. Consider development of a series of translational science activities to convert the results of this first research phase into tangible and actionable guidance for employers. Ideally, a step-by-step guide would likely yield the greatest perceived value.

For specific examples of definitions and measurement tools, access the full Phase 1 report *Employee Engagement in Work and Health: Definition and Measurement Insights—Opportunities for Industry* [here](#).





PHASE 2 INFLUENCERS AND OUTCOMES ASSOCIATED WITH EMPLOYEE ENGAGEMENT IN PERSONAL HWB

The Engagement Study Committee focused Phase 2 efforts on influencers and outcomes of employee engagement in their personal health and well-being. From the previously published 222 sources identified in Phase 1, a workgroup re-reviewed more than 60 articles noted as containing a definition for employee engagement in personal health and well-being, while also including associated influencers and outcomes. Influencers are considered anything that has been shown to have or be associated with an influence (positive or negative) on employee engagement. Outcomes are similarly being considered as anything (positive or negative) that resulted from employee engagement or lack thereof. Specifically, the committee aimed to address the following questions:

- What influencers were referenced or noted in the studies?
- What influencers were measured and/or tested?
- What influencers were statistically significant?
- What outcomes were tested to be related to engagement?
- What outcomes were found to be statistically significant?
- What effect sizes were noted in the outcomes?
- What types of studies have been conducted?

Quality and quantity of the evidence

A total of 60 articles were re-reviewed in Phase 2, focusing on those identified as either providing evidence of what influences engagement or what outcomes may be associated with engagement. Collectively, the results indicate moderate-quality evidence and ample room for opportunity. More research is needed, particularly emphasizing well-designed studies such as randomized trials, cohort studies, and literature reviews, to improve upon and synthesize the research findings thus far. The evidence cited below can be used to guide those research efforts, in terms of what might be expected to influence (improve or worsen) engagement and what outcomes might be reasonably expected to follow improved (or worsened) engagement.



Influencers of Engagement

Out of 60 studies, 34 noted potential influencers and 24 found statistically significant influencers of engagement in personal HWB (see Appendix A). These influencers can be divided into six broad categories: health-related factors, demographics, occupational factors, extrinsic motivators, environmental factors, and communication efforts. Table 1 shows the statistically significant outcomes found within these categories. Communication efforts were noted in four studies as being a potential factor that could influence engagement, but none found them to be statistically significant influencers.

Table 1 Statistically significant influencers of employee engagement in personal HWB.

Health-related factors	Demographics	Occupational factors	Extrinsic motivators	Environmental factors	Communication efforts
<ul style="list-style-type: none"> • Vigor (physical and emotional energy) • Lifestyle risk level • Lifetime major depressive disorder • Lifetime drug use • Patient activation • Regular exercise • Low-fat diet • Non-smoking • Positive affect and hope 	<ul style="list-style-type: none"> • Group identification* • Age • Race • Gender 	<ul style="list-style-type: none"> • Organizational/supervisor support • Teamwork • Perception of fair pay • Perception of employer • Fulfilled psychological work contract • Leadership • Risks & hazards • Complexity • Knowledge • Autonomy 	<ul style="list-style-type: none"> • Incentives 	<ul style="list-style-type: none"> • Safety climate • Family support • Social support 	<ul style="list-style-type: none"> • None were statistically significant

*Refers to the extent to which a person feels comfortable as the member of a given group. HWB = Health and Well-being

Similarly, 14 studies found outcomes that were significantly related to employee engagement in their own health. These outcomes can be broadly divided into the following categories: physical health status/behaviors, mental health status/behaviors, health program participation, occupational factors, environmental factors. (See Table 2)



Table 2 Outcomes associated with employee engagement in personal HWB

Physical health status/behaviors	Mental health status/behaviors	Health program participation	Occupational factors	Environmental factors
<ul style="list-style-type: none">• Physical strength• Obesity• Perceived health status• Regular exercise• Healthy eating• Non-smoking	<ul style="list-style-type: none">• Perceived stress• Cognitive liveliness• Emotional energy• Resiliency• Self-reported mental health	<ul style="list-style-type: none">• Biometric screening• Health risk assessment surveys• Vaccination status	<ul style="list-style-type: none">• Employee retention• Organizational commitment• Job satisfaction• Presenteeism• Morale	<ul style="list-style-type: none">• Safety

It is noteworthy that some factors were treated as both influencers and outcomes, depending on the study and the research question being examined. This potentially speaks to the bi-directional nature of health behaviors, which may reinforce one another and lead to a “snowball effect” but also highlights the need for more research and higher-quality study designs that would allow researchers to determine whether engagement preceded or followed from the factors listed in the Tables 1 and 2.

RECOMMENDATIONS FOR STAKEHOLDERS

Despite the questions to be answered by future research, the results of this project point toward several steps that employers, health promotion practitioners, and researchers can take to improve the employee engagement in their health and help guide future efforts.



1. EMPLOYERS

- Begin or continue measuring the factors described in Table 1. Various occupational factors show promise relating to improving employee engagement.
- Create an action plan to improve those factors that show the most room for improvement. Consider tailoring messages to focus on individuals who are less likely to engage.
- Focus efforts to improve engagement on factors that can be changed or influenced by employers. Several factors that may influence engagement are not modifiable or are not within the scope of employers to change, such as the age and gender mix of employees or each employee’s family support for health.
- Increase environmental support factors associated with higher levels of engagement.
- Use evidence-based incentives to increase engagement rates in programs/activities such as health risk assessments, biometric screenings, or population-based awareness-building campaigns.



2. HEALTH PROMOTION PRACTITIONERS AND VENDORS

- a. To understand the potential impact of employer strategies to improve engagement, begin measuring employee engagement in their health using one or more of the methods identified in the **Phase 1 report**.
- b. Focus on factors that can be changed or influenced by vendors. Several factors that may influence engagement are not modifiable or are not within the scope of practitioners or vendors, such as the age and gender mix of employees or each employee's family support for health.
- c. Work with employers to measure the occupational factors identified as potential outcomes of improved employee engagement. See Table 2.
- d. Use targeting, tailoring, or personalization strategies to improve engagement for groups that tend to be more difficult to engage.



3. RESEARCHERS

- a. Refine tools to measure employee engagement in their health.
- b. Design longitudinal studies to identify the temporal relationship between employee engagement and the various influencers and outcomes described in this report, considering the existing evidence and the potential pathways by which these relationships may occur.

Employee engagement in health and well-being is seen as an important factor in the success of employer health and well-being programs. In reviewing dozens of studies and papers published by industry leaders, the HERO Engagement Study Committee found several factors that show promise in promoting higher levels of engagement as well as longer-term outcomes that may result. Future work by employers, practitioners, and researchers, using these findings as a starting point and guide, can help clarify the role of these influencers in promoting engagement and, ultimately, health and business outcomes.





APPENDIX A

1. Aikens, K.A., Astin, J., Pelletier, K.R., Levanovich, K., Baase, C.M., Park, Y.Y. & Bodnar, C.M. (2014). Mindfulness goes to work: impact of an online workplace intervention. *Journal of Occupational and Environmental Medicine*, 56(7), 721-31.
2. Arena, R., Guazzi, M., Briggs, P.D., Cahalin, L.P., Myers, J., Kaminsky, L.A., Forman, D.E., Cipriano, G. Jr, Borghi-Silva, A., Babu, A.S. & Lavie, C.J. (2013). Promoting health and wellness in the workplace: A unique opportunity to establish primary and extended secondary cardiovascular risk reduction programs. *Mayo Clinic Proceedings*, 88(6), 605-17.
3. Barbier, M., Dardenne, B. & Hansez, I. (2012). A longitudinal test of the Job Demands-Resources model using perceived stigma and social identity. *European Journal of Work and Organizational Psychology*, 22(5), 532-46.
4. Brunetto, Y., Xerri, M., Shriberg, A., Farr-Wharton, R., Shacklock, K., Newman, S. & Dienger, J. (2013). The impact of workplace relationships on engagement, well-being, commitment and turnover for nurses in Australia and the USA. *Journal of Advanced Nursing*, 69(12), 2786-99.
5. Burton, W.N., Chen, C.Y., Li, X. & Schultz, A.B. (2017). The Association of Employee Engagement at Work With Health Risks and Presenteeism. *Journal of Occupational and Environmental Medicine*, 59(10):988-992. doi:10.1097/JOM.0000000000001108
6. Cahill, K., Moher, M., & Lancaster, T. (2014). Workplace interventions for smoking cessation. *Cochrane Database of Systematic Reviews*, (4), CD003440.
7. Chapman, L.S. (2006). Employee participation in workplace health promotion and wellness programs: how important are incentives, and which work best? *North Carolina Medical Journal*, 67(6), 431-2.
8. Cheyne, A., Tomas, J.M. & Oliver, A. (2013). Multilevel models in the explanation of the relationship between safety climate and safe behavior. *The Spanish Journal of Psychology*, 16, E54.
9. Draper, D.A., Tynan, A. & Christianson, J.B. (2008). Health and wellness: the shift from managing illness to promoting health. *Issue Brief (Center for Studying Health System Change)*, (121), 1-4.
10. Grossmeier, J. (2013). The influence of worksite and employee variables on employee engagement in telephonic health coaching programs: A retrospective multivariate analysis. *American Journal of Health Promotion*, 27(3), e69-80.
11. Hibbard, Mahoney, Stockard, Tusler. (2005). Development and testing of a short form of the patient activation measure. *Health Research and Educational Trust*. Doi: 10.1111/j.1475-6773.2005.00438.x
12. Hibbard, Stockard, Mahoney, Tusler. (2004). Development of the patient activation measure: Conceptualizing and measuring activation in patients and consumers. *Health Services Research*.
13. Jacobson, J.M. & Sacco, P. (2012). Employee assistance program services for alcohol and other drug problems: Implications for increased identification and engagement in treatment. *The American Journal on Addictions*, 21(5), 468-75.
14. Kaspin, L.C., Gorman, K.M. & Miller, R.M. (2013). Systematic review of employer-sponsored wellness strategies and their economic and health-related outcomes. *Population Health Management*, 16(1), 14-21.
15. Law, R., Dollard, M.F., Tuckey, M.R. & Dormann, C. (2011). Psychosocial safety climate as a lead indicator of workplace bullying and harassment, job resources, psychological health and employee engagement. *Accident Analysis & Prevention*, 43(5), 1782-93.
16. Lemon, S.C., Zapka, J., Li, W., Estabrook, B., Rosal, M., Magner, R., Andersen, V., Borg, A. & Hale, J. (2010). Step ahead a worksite obesity prevention trial among hospital employees. *American Journal of Preventive Medicine*, 38(1), 27-38.
17. Malinowski, P. & Lim, H.J. (2015). Mindfulness at work: Positive affect, hope, and optimism

mediate the relationship between dispositional mindfulness, work engagement, and well-being. *Mindfulness*, 6(6), 1250-62.

18. Marinescu, L.G. (2007). Integrated approach for managing health risks at work--the role of occupational health nurses. *AAOHN Journal*, 55(2), 75-87.
19. McLellan, R.K., Mackenzie, T.A., Tilton, P.A., Dietrich, A.J., Comi, R.J. & Feng, Y.Y. (2009). Impact of workplace sociocultural attributes on participation in health assessments. *Journal of Occupational and Environmental Medicine*, 51(7), 797-803.
20. Nahrgang, J.D., Morgeson, F.P., Hofmann, D.A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1), 71-94.
21. Ofstead, C.L., Sherman, B.W., Wetzler, H.P., Dirlam Langlay, A.M., Mueller, N.J., Ward, J.M., Ritter, D.R. & Poland, G.A. (2013). Effectiveness of worksite interventions to increase influenza vaccination rates among employees and families. *Journal of Occupational and Environmental Medicine*, 55(2), 156-63.
22. Oude Hengel, K.M., Joling, C.I., Proper, K.I., Blatter, B.M. & Bongers. (2010). A worksite prevention program for construction workers: Design of a randomized controlled trial. *BMC Public Health*, 10, 336.
23. Parzefall, M.R. & Hakanen, J. (2010). Psychological contract and its motivational and health-enhancing properties. *Journal of Managerial Psychology*, 25(1), 4-21.
24. Rakovec-Felser, Z. (2011). Professional burnout as the state and process--what to do? *Collegium Antropologicum*, 35(2), 577-85.
25. Renaud, L., Kishchuk, N., Juneau, M., Nigam, A., Tereault, K. & Leblanc, M.C. (2008). Implementation and outcomes of a comprehensive worksite health promotion program. *Canadian Journal of Public Health*, 99(1), 73-7.
26. Sanders, C.L., Krugman, M. & Schloffman, D.H. (2013). Leading change to create a healthy and satisfying work environment. *Nursing Administration Quarterly*, 37(4), 346-55.
27. Sforzo, G.A., Kaye, M.P., Calleri, D. & Ngai, N. (2012). Free choice access to multipoint wellness education and related services positively impacts employee wellness: A randomized and controlled trial. *Journal of Occupational and Environmental Medicine*, 54(4), 471-7.
28. Sliter, K.A., Sinclair, R., Cheung, J. & McFadden, A. (2014). Initial evidence for the buffering effect of physical activity on the relationship between workplace stressors and individual outcomes. *International Journal of Stress Management*, 21(4), 348-60.
29. Sutton, A., Evans, M., Davies, C., & Lawson, C. (2016). The development and longitudinal evaluation of a wellbeing programme: An organisation case study. *International Journal of Wellbeing*, 6(1), 180-195. doi:10.5502/ijw.v6i1.487
30. Terry, P.E., Fowles, J., Harvey, L., Xi, M. (2011) The ACTIVATE Study: Results from a group randomized controlled trial comparing a traditional worksite health promotion program with an activated consumer program. *American Journal of Health Promotion*, 26(2):e64-e73.
31. von Thiele Schwarz, U., Augustsson, H., Hasson, H., Stenfors-Hayes, T. (2015). Promoting employee health by integrating health protection, health promotion, and continuous improvement: A longitudinal quasi-experimental intervention study. *Journal of Occupational and Environmental Medicine*, 57(2), 217-25.
32. Wilhilde, C., Hayes, J.R. & Farah, J.R. (2008). The use and influence of employee incentives on participation and throughput in a telephonic disease management program. *Population Health Management*, 11(4), 197-202.
33. Winwood, P.C., Colon, R. & McEwen, K. (2013). A practical measure of workplace resilience: Developing the resilience at work scale. *Journal of Occupational and Environmental Medicine*, 55(10), 1205-12.
34. Zapka, J., Lemon, S.C., Estabrook, B.B. & Jolicoeur, D.G. (2007). Keeping a Step Ahead: Formative phase of a workplace intervention trial to prevent obesity. *Obesity*, 15(s1), 27S-36S.

This report is a product of HERO staff and members of the HERO Engagement Study Committee and their Environmental Scan Phase 2 Workgroup. The findings and conclusions in this report are those of the contributors and do not necessarily represent the official position of the organizations listed.

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