

CLINICAL RESEARCH REPORT

The Effectiveness of Evidence-Based Coaching Delivered Through Modern Health

Executive Summary

There is a significant shortage of therapists available to meet the worldwide demand for mental health care. One way to address the gap is by expanding the pool of providers equipped to provide effective mental health services to more people. At Modern Health, we refer members whose mental health needs do not surpass a clinically diagnosable threshold to certified coaches trained in evidence-based approaches. While a body of peer-reviewed research shows promising results for coaching as a mental health intervention, there is limited empirical evidence on the real-world effectiveness of coaching delivered through employee benefits for non-clinical mental health and workplace outcomes. By investigating whether coaching is associated with improved subjective well-being and workplace outcomes, this study contributes to that growing evidence.

Participants were 530 employees who utilized evidence-based coaching services through Modern Health, an employer-sponsored mental well-being benefits program, and did not have a clinical need for therapy at baseline. Participants who began care with elevated depressive-related symptoms experienced an average well-being increase of 10 points from baseline, with 47% reporting clinical recovery. Participants who completed 4+ visits experienced greater improvements in self-reported subjective well-being. We also saw changes in workplace outcomes: Participants who began care with elevated levels of burnout reported significant reductions from baseline and 19% experienced recovery. Participants also reported statistically significant reductions in presenteeism after engaging in coaching services. These findings demonstrate that evidence-based coaching is an effective intervention to improve well-being and workplace outcomes when delivered as part of an employer-sponsored mental health benefits platform.



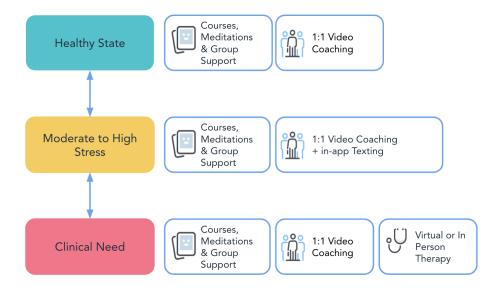
^{*}Among employees who had elevated baseline depressive-related or burnout symptoms



Introduction

At Modern Health, our mission is to make accessible high-quality, evidence-based mental health care to as many people as possible. When we share that mission, many assume we mean more people need to be in therapy. While we completely agree with the sentiment of getting mental health care to everyone who needs it, we have a different approach about how to do it and believe therapy isn't always the answer. For one, there is a dramatic shortage of licensed therapists around the world, so finding a therapist who's accepting new patients can be a challenge. High quality one-on-one psychotherapy is also understandably expensive, partly due to the shortage and partly due to the level of education required for licensure. Therapists are also disincentivized to join medical insurance networks offering low reimbursement rates, compounding the financial blocker to care. There is social stigma surrounding therapy, which represents a meaningful barrier for many people. And the assumption that mental health means therapy can result in mismatched care, wherein someone with moderate mental health needs (but who can afford to pay out-of-pocket) may get therapeutic care, while someone with more severe clinical needs (but lacking the means) may miss out on the therapy they need. This conundrum is especially disheartening to proponents of evidence-based care, because one-on-one therapy is the mental health care method with the greatest body of peer-reviewed research behind it.

In order to make high-quality evidence-based mental health care available to more people, we believe it is our duty to innovate in mental health care delivery methods. At Modern Health, we offer mental health employee benefits using a research-backed model called "stepped care," wherein everyone who needs care participates in a clinically validated baseline assessment process and is recommended to the right level of care for their needs. Within this model, people with the most serious mental health needs are directed to one-on-one therapy and people with the least severe needs get support through digital resources like online meditations and self-guided courses. To meet the needs of the majority—those with moderate mental health care needs—we must expand the definition of who, beyond therapists, can provide effective, evidence-based care.



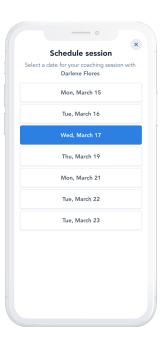


That's why we believe in coaching. At Modern Health, we are building on global, evidence-based approaches showing that coaches utilizing evidence-based interventions can fill the gap for people who need individual mental health support at a non-clinical level. There is less social stigma attached to coaching versus therapy, and coaching can be delivered at a significantly lower cost. Coaches professionally trained in evidence-based approaches like Cognitive Behavioral Therapy (CBT) techniques can provide effective and affordable care with a focus on early intervention and prevention, reaching people with moderate needs before clinical symptoms develop. While there is a good deal of promising peer-reviewed research on the efficacy of coaching, there are also shortcomings in our understanding of how effective coaching is, which we hope to help answer through this research.

The theoretical grounding for coaching as a mental health intervention is sound. For example, <u>studies suggest</u> that low-intensity care delivered by bachelor's level trained providers is effective in treating depression and other mental health challenges. This is an <u>increasingly common practice</u> with good results in low and middle-income countries due to severe shortages of more specialized personnel. The substance use treatment world has long relied on paraprofessionals who can assist clients in drug and alcohol treatment <u>to good effect</u>, and a recent <u>systematic review</u> found paraprofessionals using CBT methods to treat anxiety and depressive symptoms had similarly successful client outcomes when compared to professional therapists.











At the individual level, coaching has been shown to help people move beyond maladaptive patterns of thinking and it can significantly improve feelings of self-efficacy. Participation in coaching is tied to enhanced mental health, quality of life, and goal attainment, and preventive coaching interventions can positively impact psychological distress, burnout, and life satisfaction. When managers at work engage in coaching, positive effects appear in team members and peers, including increased job satisfaction and work engagement and improved communication skills.

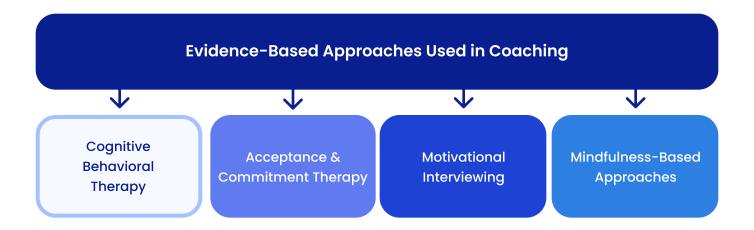
However, there is more research that needs to be done to understand the role coaching can play in meeting mental health needs. Coaching is a newer mental health intervention compared to therapy, so the body of peer-reviewed research on its effectiveness when delivered in real-world settings is smaller. Further, coaching for mental health is largely unrequlated and the term "coaching" can be broadly interpreted; we are specifically interested in outcomes for coaching utilizing evidence-based therapeutic practices like CBT, Acceptance and Commitment Therapy (ACT), and Motivational Interviewing (MI), but that's not the case for all coaching research. In this study, we hope to add to the body of literature and examine the real-world effectiveness of evidence-based coaching for non-clinical mental health and workplace outcomes.

Study Overview

The purpose of this study is to evaluate an evidence-based coaching program delivered through Modern Health, an employer-sponsored mental well-being benefits program. Using a retrospective cohort design, we analyzed data from employees who engaged in short-term coaching through Modern Health. To examine coaching's real-world effectiveness, we measured employees' self-reported subjective well-being, burnout, absenteeism, and presenteeism before and after coaching to examine coaching's real-world effectiveness. We define subjective well-being as a person's cognitive and emotional evaluations of their life, with more positive emotions, less negative emotions, and higher life satisfaction characterizing greater well-being. We define burnout as a state of emotional exhaustion caused by prolonged stress. We define absenteeism as a pattern of being absent from work due to illness, and presenteeism as a pattern of working despite illness. We hypothesized that participants would report significant improvements in well-being and significant reductions in burnout, absenteeism, and presenteeism after engaging in coaching. The results of this study have been submitted to a peer-reviewed scientific journal and we are sharing preliminary outcomes in a condensed format here.



Modern Health's Evidence-Based Coaching Program



Modern Health has built a global network of high-quality coaching providers who practice evidence-based care in support of employees. All coaches are accredited by the International Coaching Federation or have similar certifications, must have completed at least 60 hours of training and 100+ hours of coaching, and are screened and vetted by Modern Health to ensure they are trained in and offer evidence-based approaches (primarily CBT, ACT, MI, and mindfulness-based approaches).

Coaching sessions are 30 minutes long and coaches all follow a similar structure. The coach begins by creating a psychologically safe space and then explains the concept of coaching and sets expectations of confidentiality. The coach and participant choose a topic for discussion and through evidence-based principles, the coach then helps the participant develop insight into their current situation, identify an outcome or goal the participant would like to work toward, and think about self-beliefs or behaviors that might be impeding their progress toward that goal. The coach then helps the participant explore possible action plans and solicits commitment on timelines to complete those actions.





Study Design

Participants were employees from a total of 93 companies who started the evidence-based coaching program through Modern Health between May 1, 2019 and August 20, 2020. Eligible participants were 18 years of age or older, not currently in therapy through Modern Health, and the majority were between 25 and 34 years old. Participants utilized an average of 1.7 coaching sessions (total range between 1 and 18 sessions) across an average of 7.5 days in care (total range between 1 and 60 days).

Participants completed a baseline assessment and reported scores that did not indicate a clinical need for therapy. They were then matched with a coach and completed the evidence-based coaching program and a follow-up assessment.

A total of 530 people participated in the study by completing at least one baseline assessment within 14 days prior to their first coaching visit, one follow-up assessment within 14 days after their last coaching visit, attended at least one coaching visit between May 1, 2019 and August 20, 2020, and completed all coaching visits within 60 days. Of the participants, 76% completed all visits and assessments after the COVID-19 pandemic began.

For the baseline assessment, participants first completed the World Health Organization-Five Well-Being Index questionnaire (WHO-5); if they scored below the clinical cutoff for probable depression (\le 28), we offered the Patient Health Questionnaire-2 (PHQ-2) depression screener and the Generalized Anxiety Disorder-2 (GAD-2) anxiety screener. Participants were recommended to the coaching program if they reported a WHO-5 score above the clinical cutoff (\ge 28) or below the clinical cutoff (\le 28) but below the clinical cutoffs for the PHQ-2 (< 3) and GAD-2 (< 3). They also completed measures of burnout, absenteeism, and presenteeism during the baseline assessment.

Next, participants selected a coach from a list provided by a matching algorithm and scheduled their first visit. All coaching visits were conducted within the mobile application via video. As this was a pragmatic, real-world effectiveness study, no specific number of visits for each participant was defined. Participants could message with their coach before and after visits and were able to rate their satisfaction after each visit. Follow-up assessments were voluntary and participants completed them after their final visit. The follow-up assessment included the WHO-5 and measures of burnout, absenteeism, and presenteeism.

For our analysis, we used paired samples *t* tests to examine changes in well-being, burnout, absenteeism, and presenteeism before and after coaching and moderated regressions to test whether these changes depended on session utilization. We also analyzed rates of clinically relevant change for well-being (i.e., WHO-5 score increasing 10 or more points) and recovery for well-being and burnout (i.e., score moving above or below the clinical cutoff). We conducted analyses in the full sample and in participants presenting with elevated symptoms at baseline.



Results

🐠 Changes in Well-being

• 23% of employees experienced a clinically relevant increase in well-being.

- Among participants who began care with elevated levels of depressive-related symptoms, well-being significantly increased from baseline to follow-up: 47% of employees who began care with depressive-related symptoms experienced clinical recovery in well-being.
- The degree of improvement depended on the number of sessions completed: When
 participants completed 4+ sessions, they experienced a 10% overall increase in well-being.

Changes in Burnout

- Participants who began care with elevated levels of burnout experienced a significant decrease from baseline to follow-up, with improvements representing an 8% reduction.
- 19% of employees who began care with elevated burnout symptoms experienced clinical recovery.

Changes in Absenteeism

• There was no significant difference in absenteeism between baseline and follow-up.

Changes in Presenteeism

- Participants experienced a statistically significant decrease in presenteeism from baseline to follow-up, with improvements representing a **7%** reduction.
- This change in presenteeism also depended on session utilization: Participants completing 4+ sessions experienced the largest reductions in presenteeism compared to those completing fewer sessions.

Coaching Satisfaction

There were 898 coaching visits completed across the 530 participants. Of all participants, 57% submitted at least one visit rating and the mean satisfaction score was 4.95 out of 5.



Interpretation

Changes in well-being and recovery were primarily observed for those who initially scored low on the baseline assessment and for those who completed 4+ visits. This indicates that evidence-based coaching may be best suited for people with mild to moderate mental health needs, and that 4 or more visits are needed to see more significant clinical change. We did not observe any changes in absenteeism, suggesting that coaching to the degree utilized in this study may not be enough to change the behavior of missing work. We did observe changes in presenteeism, however, suggesting coaching may be well suited to helping people show up fully ready to work and to not work while sick.

Limitations and Future Directions

While a longitudinal study like this one is the gold standard in demonstrating individual change over time, this was a single cohort study and therefore lacked a control group which dampened our ability to make conclusions that the coaching program caused improvements. We limited the study to a single cohort to avoid withholding mental health care from a control group. However, there are workarounds. In future studies, we could create a control group with a subset of employees at a company doing a gradual rollout of benefits across different departments, for example. We are also in discussions about a collaboration with researchers at the Stanford Clinical Excellence Research Center in which we are planning to investigate Modern Health outcomes across active comparison groups, which are preferred to control groups in the scientific community.

The average number of coaching sessions utilized by participants in the study was 1.7, and the total time in care was an average of 7.5 days. Although this utilization appears low, it is slightly higher than 1—which is the <u>modal number of psychotherapy visits</u> in community mental health systems (based on Medicaid claims data collected over several decades). Importantly, in our study improvements were strengthened when participants completed 4+ visits, so for improved coaching effectiveness we must encourage higher engagement in coaching and for longer periods of time.

Future studies should try to capture more complete data. Because this was a pragmatic, real-world trial, there was some degree of missing data (for example, if a participant declined to complete a follow-up assessment then they were subsequently excluded from analyses). Note that in our analyses, missing data were determined to be missing completely at random and therefore we are confident they did not bias results.

Finally, while the individuals participating in this study benefited from coaching, they may have benefited more from a combination of mental health interventions as is now offered through Modern Health; specifically, incorporating lighter touch preventive interventions like digital CBT and mindfulness meditations with group support sessions in combination with coaching.



Conclusion

Evidence-based coaching is an effective intervention to improve well-being and workplace outcomes when delivered as part of an employer-sponsored mental well-being benefits platform. Modern Health's comprehensive and cost effective model is a scalable way to effectively meet this need. This pilot demonstrates that coaching can be effective at supporting mild to moderate mental health needs, and suggests that this model is not only effective, but cost effective, as coaching can be delivered at a significantly lower cost than therapy. By referring people to the right level of care at the right time, Modern Health is demonstrating a scalable and cost effective approach to mental well-being.

