Beyond Symptoms: The Economic Value of Early Mental Health Interventions in Workplace Settings

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Abstract

Mental health issues continue to grow in the workforce, significantly affecting individual well-being, work performance, and company profitability. Despite decades of rising prevalence of mental health issues, little action has been taken in the corporate sector to address them.

This review examines various early mental health workplace intervention programs to evaluate their economic and individual impacts.

A modified systematic review was conducted using modified PRISMA guidelines. The MeSH filters “Mental Health AND Economic Impacts AND Workplace” were applied. Relevant studies were limited to those published between January 1, 2003, and July 6th, 2025. Eligible research abstracts were screened based on inclusion and exclusion criteria. Relevant articles were then assessed via full text review.

After screening eligible articles, six were found to match the inclusion criteria. Included articles focused on interventions which embraced psychotherapy, pharmacotherapy, cognitive-based therapy, wellness programs, physical activity, and digital screening tools. After assessing their impacts, it was found that at the individual level, interventions reduced mental health symptoms, improved quality of life, and enhanced cognitive skills. Economically, interventions yielded high ROIs for companies and reduced absenteeism and presenteeism. These benefits demonstrated that early workplace interventions may be effective in combating economic and individual impacts of mental health disorders.

The review demonstrates that early workplace mental health interventions effectively improve mental health in workplace settings and generate measurable economic benefits. Employers, policymakers, and researchers can use these findings to support, implement, and lead future research in mental health.

Introduction

Mental health has become a pressing issue among working adults worldwide. More than 1 in 5 U.S. working adults report symptoms of anxiety or depression, a trend that continues to worsen, negatively affecting employee well-being and company financial performance (National Alliance on Mental Illness, 2025).

In the US alone, mental health problems cost the economy $282 billion annually, an estimate 30% higher than prior estimates (Sperling, 2024). These costs are due to rates of absenteeism, employees missing work, and presenteeism, employees attending work but not fully being present. According to the Uprise Health (2024), presenteeism costs U.S. employers approximately $150 billion annually due to reduced productivity and lost efficiency, while absenteeism adds another $225 billion in costs from unplanned absences and temporary replacements. On a global scale, an estimated 12 billion working days are lost every year to depression and anxiety, with $1 trillion annually in lost productivity (World Health Organization, 2024). These figures don’t factor in the full societal impact of mental health issues, including healthcare and pharmaceutical costs, which heighten the economic burden.

Anxiety and depression are the primary disorders responsible for much of this burden. Globally, as of 2019, 301 million people are living with anxiety, whereas 280 million people are living with depression (World Health Organization, 2022). According to the American Psychiatric Association (n.d.), anxiety disorders involve excessive fear or worry that interferes with a person's ability to engage in daily life fully. Likewise, depression is defined as a condition marked by persistent sadness, irritability, and reduced energy. Together, these disorders disrupt daily functioning and impair focus, performance, productivity, and profitability. When anxiety and depression are unaddressed, workers are at risk of neglecting responsibilities assigned by their employers.

Despite the substantial burden of mental health issues, progress towards implementing interventions remains limited. Mental health concerns are at an all-time high, with a continued impact on the workforce. Notably, employee confidence in how much their employers care about them has steadily declined. Mayer (2024) stated that in 2023, 48 percent of employees reported having confidence in their employers' care, down from 56 percent in 2022 and 59 percent in 2021. Moreover, businesses still fail to implement early intervention programs for detecting and supporting employees with mental health illnesses, and over half (54.7%) of adults with a mental illness are not receiving treatment, totaling over 28 million individuals (Mental Health America, n.d.). This gap in intervention programs contributes to worsened mental health and increased economic costs.

While previous reviews have examined workplace mental health interventions, few have comprehensively evaluated both individual outcomes and economic return on investment, which this review aims to address. For this reason, this research paper seeks to evaluate these benefits by looking at the following question: What are the individual benefits and economic return on investment (ROI) of implementing early intervention programs in workplaces? A modified systematic review was conducted, where research from previous findings was compiled and synthesized to give better insight into understanding the impacts of intervention programs on mental illness.

Methods

Inclusion Criteria	Exclusion Criteria
Mental health interventions (depression, anxiety)	Case reports, magazine articles, news articles, systematic reviews, and COVID-19-specific literature
Analyzes the impact of the intervention	Any non-mental health-related diseases (Atherosclerosis, arthritis, low back pain, cancer, pregnancy, and tobacco usage)
Economic analysis of intervention	Individuals below the age of 18
Focus on the workplace or specific job sectors	Not written in English
Adults (18+), no schools	Papers focusing on executives and CEO's

Worldwide	Non-workplace setting

Table 1: Inclusion and exclusion criteria for studies in the systematic review.

This systematic review was conducted in accordance with modified PRISMA guidelines. Modifications included that this was a single-author review and the review was not pre-registered. Using MEDLINE (through PubMed), the MeSH filters “Mental Health AND Economic Impacts AND Workplace” were applied. This search was limited to studies published between January 1, 2003, and July 6th, 2025. Titles and abstracts were screened for relevance independently by one reviewer, followed by a full-text review once the article was deemed a good fit as per the inclusion and exclusion criteria (Table 1).

Studies selected for inclusion analyzed mental health interventions within workplace environments. Included studies also analyzed the economic OR employee-related impacts of their interventions. Only studies that focused on individuals aged eighteen years or older were taken into consideration. Studies excluded were case reports, magazine/news articles, systematic reviews, and articles not focused on mental health impacts, such as COVID-19 due to the atypical workplace conditions during the pandemic, which could confound economic and productivity outcomes. Additionally, articles not written in English or those focused exclusively on executives or CEOs were also excluded to maintain generalizability to the broader workforce. Once a final list of studies was formed, data were extracted to answer the research question. Key data extracted from each article included study design, major study interventions being tested, and measured economic or employee outcomes. Extracted data were then categorized into three domains: type of intervention, individual outcomes, and economic outcomes. Due to the limited number of eligible studies and the exploratory nature of this review, a formal meta-analysis and standardized risk-of-bias scoring tool were not applied.

Results

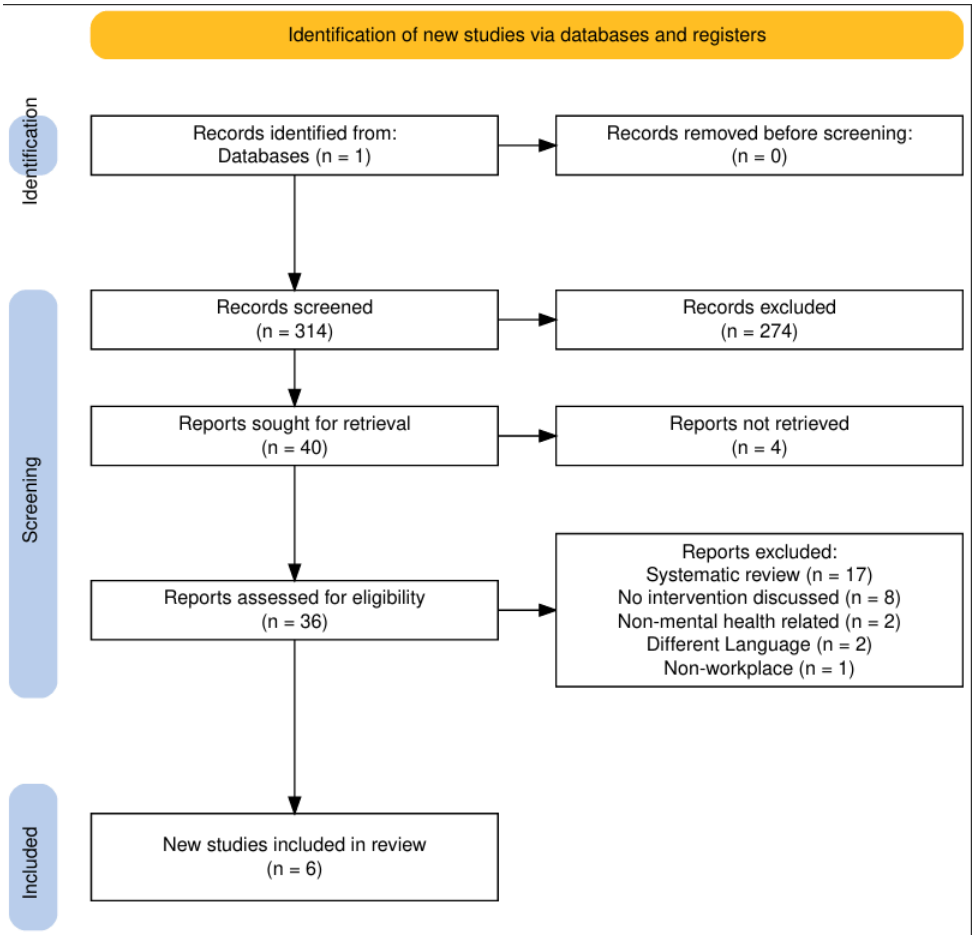

Figure 1: Flowchart outline of the database search and screening process.

After screening the 314 abstracts using the inclusion and exclusion criteria seen in Table 1, 274 were excluded, leaving 40 for full-text review. 4 were not accessible, leaving 36 articles. After further screening, 6 were selected for inclusion (Figure 1).

Across these 6 articles, a total of 4.1 million study participants were included in surveys and trials across various countries such as Germany, Australia, and the United States. Most studies were randomized controlled trials.

After reviewing eligible articles, a common framework can be applied to assess the effectiveness of interventions through three key themes: interventions, individual impact, and economic impact. Intervention factors looked at data on the design and delivery, such as type of intervention (pharmacotherapy, psychotherapy, CBT, physical activity, workplace trainings, medication, screenings), delivery setting (workplace-based or external provider), mental health condition targeted (anxiety, depression), specific components of the program, and other logistics (program duration, sample size). Next, individual impact was shown as how these interventions changed workers' mental health (symptom reduction), work performance, quality of life, and cognitive skills. Lastly, when looking at economic impact, data extracted compared costs pre-intervention (expenses related to untreated mental illness, revenue lost due to productivity & absenteeism/presenteeism, program implementation costs), as well as post-intervention costs

(return on investments, improved productivity, any other financial returns for employers) were extracted. Overall, these were the themes that I focused on, which shaped my review and data extraction process.

Types of Intervention Programs

Out of the six studies, one tested an intervention administered directly through their workplace, while the other five used interventions delivered by external providers such as clinics, outpatient mental health centers, and other organizations conducting intervention trials. These interventions were tested on a variety of mental health disorders, such as anxiety and depression, as well as suicide.

Three articles (Evans-Lacko et al., 2016; Sado et al., 2021; Lo Sasso et al., 2006) tested the effectiveness of receiving treatments such as pharmacotherapy and psychotherapy. Pharmacotherapy involved the use of antidepressant medications such as citalopram (Evans-Lacko et al., 2016), whereas psychotherapy involved talking with a trained mental health professional/physician to coordinate health services (Lo Sasso et al., 2006). Additionally, one study used cognitive-behavioral therapy (CBT), which is a form of psychotherapy. This therapy is a structured, goal-oriented approach that helps patients identify and change negative or unhelpful thinking patterns and behaviors to improve overall well-being. This can be through lifestyle changes, such as exercise or mindful practices (Sado et al., 2021).

Additionally, one study (Kinchin & Doran, 2017) allowed participants to use an intervention offered through their workplace. This was a training-based approach called Mates in Construction, a training program consisting of three components: general awareness training (GAT), connector training (Connector), and applied suicide intervention skills training (ASIST). GAT helps increase awareness about suicide prevention and mental health support. The connector then allows for workers with mental health challenges or suicidal thoughts to be connected with resources. Lastly, ASIST trains employees to recognize when a co-worker is at risk of suicide and then intervene to keep them safe (Kinchin & Doran, 2017).

Next, wellness interventions that emphasize mind-body approaches as well as lifestyle changes were implemented (Sado et al., 2021; Chu et al., 2014). This includes physical activity, yoga, aerobic exercise, resistance training, body stretching (all Chu et al., 2014), raisin exercise, body scan, meditation, and breathing exercises (all Sado et al., 2021). Also, 3 studies (Farzanfar et al., 2006; Sado et al., 2021; Lo Sasso et al.,2006) implemented the use of ongoing support and resource access, even after the intervention period was completed. This included: tailored info, educational videos, counseling, additional support (Farzanfar et al., 2006), mindfulness websites, guided practices, articles, and shared experiences from other users (Sado et al., 2021), and regular phone follow-ups with patients over two years to monitor progress and encourage continued treatment (Lo Sasso et al., 2006). Lastly, one study followed a preventative-based intervention (Farzanfar et al., 2006). This method uses a TLC-Detect system, a computer-assisted technology where a telephone-linked communication system speaks to users over the phone through pre-recorded human speech. The systems screen employees for anxiety and depression using a variety of assessment tools such as the Patient Health Questionnaire (PHQ), as well as the Mood Disorder Questionnaire (MDQ) - these are clinically proven to assess for conditions such as depression and anxiety. If the employee screens positive for any condition, the system will provide the user with tailored info and refer them to a variety of resources to get treated before the condition becomes worse.

Individual Impact

Between the 6 studies, most of them analyzed the effects the intervention had on the individual's mental health and work performance. They found that the intervention reduced mental health symptoms, improved participants' health-related quality of life, and developed individuals' cognitive skills.

Two studies (Kinchin & Doran, 2017; Chu et al., 2014)) found that their respective interventions helped reduce the initial mental health symptoms. Kinchin & Doran (2017) state that suicide and self-harm cases were 8.2 fewer annually, and 21 people were able to avoid being completely disabled or unable to work yearly. In Chu et al. (2014), one high-quality randomized trial found a 37% reduction in stress, also showing a 26% decrease in depression scores after a physical activity intervention of 24 weeks. Additionally, over 86% of participants no longer met the criteria for depressive symptoms, which is a 55% increase from pre-intervention.

One study (Evans-Lacko et al., 2016) found that the intervention improved participants' health-related quality of life, as measured by quality-adjusted life years (QALYs). QALYs combine both the quantity and quality of life into a single metric, with 1.0 representing one year in perfect health. In this study, pharmacotherapy had a QALY score of 1.26, psychotherapy had a score of 1.30, and a combination of both treatments achieved a score of 1.31. These scores were calculated over a span of 27 months, explaining why the QALY score is over 1.0, the usual threshold. When adjusted to the time frame of 27 months, these results indicate positive outcomes in the participant's well-being.

Additionally, Evans-Lacko et al. (2016) reported that those who received cognitive therapy developed their cognitive skills, which in turn helped them tackle negative thoughts and promote healthy coping skills. This contributed to greater improvement in employment status and supported sustained employment, while also helping them feel more present at work, improving their overall work performance.

Out of the 6 studies, three (Farzanfar et al., 2006; Sado et al., 2021; Lo Sasso et al., 2006) did not include an analysis of individual-level outcomes.

Economic Impact

These interventions also assessed and analyzed the interventions from an economic standpoint, such as delving into their return on investment (ROI), as well as looking into their cost savings.

Intervention	Article	Implementation cost	Savings/gain	ROI/ Benefit-Cost Ratio
Mates in Construction	3	AUD 40.97 million	AUD 61.26 million	1.50:1, every $1 invested had a $1.50 return
Psychotherapy/ Pharmacotherapy	6	Not reported	Gains per employee: $30 (Year 1), $257 (Year 2)	302% over 2 years, every $1 invested had a $3.02 return

Table 2: Implementation costs, economic gains, and return on investment for Mates in Construction.

Out of the 6 interventions, two studies (Kinchin & Doran, 2017; Lo Sasso et al., 2006) included a return on investment (ROI) evaluation to assess cost-effectiveness. It is clear that both programs provided substantial economic benefits for employers by improving absenteeism and productivity. For example, in Table 2, it is evident that implementing Mates in Construction (Kinchin & Doran, 2017) had a significant ROI when comparing its implementation costs to its savings cost, resulting in a positive benefit-cost ratio. These savings were measured due to reduced suicides and self-harm. Similarly, Lo Sasso et al. (2006) showed a strong ROI over two years, with the gains coming from decreases in absenteeism and presenteeism, defined by the researchers as higher rates of employee attendance at work and greater presence while at work. These findings indicate that workplace mental health interventions are associated with measurable financial returns for organizations.

Table 3a: Cost savings associated with psychotherapy interventions per 500 employees

Cohort size	Implementation costs	Savings from presenteeism	Savings from absenteeism	Total savings
500 employees	€79,613	€62,097	€38,180	€100,277

Table 3b: Cost savings associated with pharmacotherapy interventions per 500 employees

Cohort size	Implementation costs	Savings from presenteeism	Savings from absenteeism	Total savings
500 employees	€68,399	€62,097	€37,704	€99,501

Evans-Lacko et al. (2016) also assessed overall economic impact through a cost-savings analysis. It found that psychotherapy and pharmacotherapy treatments led to large net savings, with the largest gains coming from reductions in presenteeism and absenteeism. As shown in Table 3a, the total savings from psychotherapy exceeded its implementation costs, demonstrating positive cost-savings. Similarly, Table 3b shows that pharmacotherapy followed the same trend, with total savings surpassing initial implementation costs. While both interventions required considerable investment, the resulting reductions in costs outweighed them. The study estimates that when scaled up to the full working population in Germany (37.8 million people), billions are estimated in economic returns due to these interventions.

Out of the 6 interventions, three studies (Farzanfar et al., 2006; Sado et al., 2021; Chu et al., 2014) did not include an economic analysis of costs or benefits but did say projected economic benefits were likely to be significant.

Across studies, preventive and early-detection interventions demonstrated higher economic efficiency than treatment-only approaches, particularly in large-scale workplace settings. Interventions integrating continued support mechanisms showed more sustained productivity gains compared to one-time programs.

Discussion

This review identified consistent evidence that workplace mental health interventions generate both individual and economic benefits. At the individual level, the studies demonstrated reductions in mental health symptoms, improvements in health-related quality of life, and improved cognitive skills. At the financial level, interventions yielded positive returns on investment and cost-benefit ratios, largely through reductions in absenteeism and presenteeism. Collectively, these findings indicate that implementing mental health interventions in the workplace can simultaneously improve employee well-being and provide measurable economic benefits.

These findings are impactful because they demonstrate the combined impact of workplace mental health interventions for employees and organizations. Historically, companies made little investment into mental health programs. For example, employees were expected to handle mental health challenges on their own, with little attention paid between workplace output and happy and healthy employees. The present research demonstrates that employees may see benefits from programs that substantially improve mental health, with employers benefiting secondary to reduced absenteeism and presenteeism. In addition to helping employees, mental health interventions enhance productivity. By demonstrating both clinical and functional improvements, this research emphasizes the ability of workplace interventions to maintain workforce engagement, enhance employee quality of life, and reduce the broader social and economic costs associated with untreated mental health conditions.

The results of this review have direct implications for multiple groups: employers, policymakers, and researchers. For employers and companies, the evidence supports adopting implementation of early mental health interventions, as they can increase economic gains, enhance employee well-being, improve productivity, and bolster finances. For example, in the tech sector, a study of over 3,200 software developers showed that poor organizational culture and low inclusiveness were strongly tied to increased burnout, which often correlates with turnover risk. This research shows how employers in AI or software companies could use the research to argue for the implementation of mental health interventions and support tools in their companies to counter burnout and retain talent.

Policymakers may leverage these results to justify the promotion of workplace programs as part of broader public health strategies and initiatives by advocating for funding of employee assistance programs and expanded access to resources. For example, in the healthcare sector, retaining talent has been difficult due to high levels of burnout and stressful working conditions. Recent data shows that approximately 45.2% of U.S. physicians reported at least one symptom of burnout in late 2023 to early 2024 (Stanford Medicine, 2025). This sector is important to be employed by the US government because strong healthcare is essential for protecting public health, ensuring access to treatments, and serving as one of the nation's largest employers and major drivers of the economy. Therefore, mental health programs may be incentivized by policymakers to retain and attract talent to the healthcare sector to ensure a stable workforce capable of meeting the nation's health needs and reap its economic benefits.

Finally, researchers can apply the review's framework to evaluate interventions across clinical and economic domains, as well as to guide future research to develop more targeted styiudies linking both employee well-being as well as organizational performance. Overall, this paper offers actionable insights that can inform decision-making, policies, and research.

While much of existing literature appears to focus on individual clinical outcomes, such as symptom reduction, there has been comparatively less emphasis on economic outcomes like absenteeism, presenteeism, and return on investment. By assessing both individual and

economic outcomes across diverse intervention types, this review extends prior research and offers a more complete evaluation of workplace mental health programs. Additionally, it extends prior research by including a wider range of intervention types, including: psychotherapy, pharmacotherapy, wellness programs, workplace-based training, physical activity, and digital screening tools. This review extends the scope of previous research, which has received limited attention for these interventions. By evaluating not only the interventions themselves but also their tangible impacts on employees and organizations, this study offers a perspective that complements and builds upon existing literature.

This review has several notable strengths. It integrates both individual and economic outcomes through a structured, systematic review process, ensuring study quality and intervention effectiveness. The inclusion of a diverse range of interventions provides comprehensive, robust data, allowing for a thorough evaluation of their effectiveness across varied contexts. Economic analyses were thorough and detailed, providing concrete data that clearly demonstrated the financial impact and cost-effectiveness of the interventions. Finally, this review contextualizes workplace mental health in a broader economic analysis, which is highly relevant in today's labor market. Weaknesses stem from the limited number of eligible studies, reflecting a shortage of research that addresses both individual and economic outcomes. Despite consistent positive trends, economic outcomes were frequently derived from modeled assumptions rather than direct financial accounting, warranting cautious interpretation. Also, this was a single author review, which may introduce the opportunity for bias with interpretation of studies. More research should be completed to understand the important and growing relationship between workplace mental health and economic outcomes.

Future research should focus on addressing the impacts of interventions on both employee well-being and organizational outcomes. By doing this, the gap in the shortage of research that addresses both factors will be bridged, allowing for more comprehensive research. Researchers should also explore the role of other factors such as workload, remote work, or external stressors in shaping intervention outcomes. Additionally, the rise of artificial intelligence (AI) raises important questions about its influence on mental health, as there are few studies which uncover how AI shapes workplace mental health interventions. Future studies should therefore investigate not only whether AI improves or worsens mental health, but also how it can be integrated into workplace contexts, such as through ; early stress detection tools, chatbots, or other AI-driven applications. By implementing these factors, future studies can guide the development of more targeted workplace mental health programs.

Conclusion

Mental health disorders such as anxiety and depression create substantial individual and economic burdens for working adults worldwide. In response, this review examined how early workplace interventions can impact employee well-being, organizational outcomes, and ROI for companies by synthesizing evidence from six relevant studies. The included research was methodically screened to focus on studies which discussed mental-health related programs in workplace settings. Employee programs which focused on mental health were effective in reducing symptoms, improving work performance, and bringing about a significant economic gain for companies. The review also highlights implications for employers, policymakers, and researchers, while identifying gaps and future directions for research in this field. As workplace mental health concerns continue to rise, so too should the development and evaluation of targeted interventions.

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