

**A STUDY ON FIT FOR HOSPITALITY: IMPACT OF  
EXERCISE ON MENTAL HEALTH**

## **Acknowledgment**

I would like to offer gratitude to my tutor for giving me opportunity for conducting the dissertation named “A Study on Fit for Hospitality: Impact of Exercise on Mental Health” which has encouraged me towards scientific research. I would to offer due respect to my professors for guiding me throughout the whole research and helping me address the issues during the execution of the research. I would like to offer thanks to my seniors for their significant guidance and valuable advices throughout the research which help me to finish the research significantly.

## **Abstract**

Management support is a prerequisite for any exercise initiative to be feasible at the hospitality industry level. Wellness programs can be incorporated into daily business practices only with a total shift in organizational priorities about employee health and well-being as part of the success or the bottom line. Such support might include incentive programs for participation, altered break schedules that offer time for exercise, or even including wellness targets in performance reviews. In addition, the operational possibilities will have to accommodate exercise programming. For instance, staggered break times or other flexible scheduling arrangements might be used to make it more possible for employees from different shifts to participate in exercise sessions or wellness activities.

Collaboration among managers, human resources, and health professionals is important in creating programs that are practical and beneficial. If exercise programs are not made convenient and fast-moving, they will not be appealing to the individual. If, let's say, exercising was offered in the form of few-ten-minute sessions during break periods, having fitness centres on-site, or even remote virtual fitness options, employees could mix in physical activity throughout their busy schedules. The less effort it would take to access these Programs; the more likely employees are to become involved at work. Programs that would easily integrate into their time allocation would be the best for them.

This study found that regular exercise significantly reduces stress and improves mental health in hospitality workers ( $p=0.001$ ). The need to incorporate exercise programs into work routines is very important in reducing mental stress. However, the barriers are a lack of awareness about mental health, which hinders participation. Despite these challenges, the hospitality industry has made progress through effective workplace wellness programs that enhance employee well-being. These findings point to the need for exercise and wellness programs to be promoted in order to enhance mental health and productivity in the hospitality industry.

## Table of Contents

Chapter 1: Introduction .....	8
1.1 Research Background.....	8
1.2 Research aim and objectives.....	9
1.3 Research Questions .....	10
1.4 Research Hypothesis .....	10
Chapter 2: Literature Review .....	12
2.1 Impact of regular exercise on the mental health of hospitality workers .....	12
2.2 Feasibility of incorporating exercise programs into the work routines of hospitality employees.....	14
2.3 Barriers and motivators influencing participation in exercise programs within the hospitality industry .....	15
2.4 Effective workplace wellness programs targeting mental health improvements in hospitality workers .....	17
2.5 Theoretical Framework .....	19
2.6 Literature Gap.....	20
Chapter 3: Methodology.....	22
3.1 Research philosophy .....	22
3.2 Research approach.....	22
3.3 Data collection.....	22
3.4 Data analysis.....	23
3.5 Reliability and validity of data .....	23
3.6 Sampling of data.....	24
3.7 Research ethics .....	24
Chapter 4: Findings and discussion .....	25
4.1 Quantitative analysis .....	25
4.2 Qualitative analysis .....	33

4.3 Discussion .....	39
Chapter 5: Conclusion and recommendations .....	45
5.1 Summary of Findings .....	45
5.2 Linking with Objectives .....	45
5.3 Recommendations .....	46
5.4 Limitations of the research .....	47
5.5 Future scope .....	47
References .....	48
Appendices .....	57
Appendix 1: Survey results .....	57
Appendix 2: SPSS Results .....	58

## **List of Figures**

Figure 2.1: Mental Health Issues .....	13
Figure 2.2: Mental Stressors in Hospitality Industry.....	16
Figure 2.3: SDT theory .....	20
Figure 4.1: Benefits of exercise in mental health .....	35
Figure 4.2: Wellness programs.....	36
Figure 4.3: Workplace wellness benefits.....	37
Figure 4.4: Wellness programs benefits .....	38

## **List of Tables**

Table 4.1: Descriptive statistics .....	26
Table 4.2: Reliability test.....	28
Table 4.3: Regression test.....	28
Table 4.4: Coefficient test .....	29
Table 4.5: Correlation test .....	32
Table 4.6: Hypothesis testing .....	33
Table 4.7: Thematic coding .....	34

# **Chapter 1: Introduction**

## **1.1 Research Background**

Life in the hospitality sector is intensive, fast, and often unpredictable. Employees working in this field, including hotel staff, restaurant employees, and event planners, work for a long duration, work irregular shifts, and constantly deal with one another. A dynamic environment imposes considerable mental strain upon workers, leading inevitably to the high possibility of stress, burnout, and even mental health disorders such as anxiety and depression (Li et al., 2022). Therefore, perhaps the most significant issue one needs to understand in this context concerns the role exercise plays as an intervention to improve mental health: the well-being it may contribute toward the hospitality industry's efficiency as a whole. While it was not recognized much earlier, the growing concern about mental health in the hospitality industry has become an issue over the last few years.

Research states that the high-pressure environment combined with a lack of recovery time turns into chronic stress and, as a result, lower psychological resilience levels in workers. That kind of burden weighs not only on the quality of life but also negatively influences the individual's job performance, productivity, and customer satisfaction. Studies suggest that the promotion of mental health is very essential for ensuring workforce sustainability and growth in the hospitality sector. Interest in mental health is on the rise, but not much attention is given to how physical exercise affects its mitigate/preventive role in this area (Li et al., 2022). Exercise has been familiar as a part of physical wellness over a long period, but its merit in terms of mental wellness is equally profound. Regular sports activity can help attenuate the symptoms of anxiety and depression, enhance mood, and improve cognitive functioning. Exercise promotes endorphins and other neurochemicals that underlie such an experience.

Research on different industries e.g., healthcare and law enforcement shows that exercise programs relieve work-related stress and improve psychological resilience. Such findings are likely usable in the application for hospitality workers (Zhu et al., 2022). There are previous studies, of course, there have been inadequate studies dedicated to the hospitality industry as it may hold some different definitions of stressors or challenges. Researching exercise in this context can give an insight into developing specific interventions that would deal with the exact groups' specific needs. In addition to such demand from the industry, most often, employees have little or no time to pursue physical fitness activities, which makes it even more necessary to have these exercise programs easily accessible and, at the same time, flexible enough to be



fitted into the daily schedules of workers. Possibilities might include organizing physical activities during shifts or group exercises organized on site; not excluding short Bursts of activity during the workday. Analysis of the feasibility and effectiveness of such initiatives will act as both a trigger for broader implementation and as a transformational opportunity for workplace culture to improve its well-being.

Thus, the objective of this research is to fill the gap by looking into the effect of exercise on mental health matters in the hospitality industry. The research intends to not only substantiate the psychological advantages of physical activity but also offer suggestions regarding better mental health results with hospitality employees (Roche et al., 2022). In effect, this study will greatly add value to the body of knowledge and the practical aspect of workplace wellness in this critical sector. All the signs in the industry indicate that this hospitality world is a very demanding one, full of long hours, irregular shifts, and great levels of interaction. Consequently, such conditions are rife with mental health implications-such as stress, anxiety, and burnout-toward both well-being and performance at work. Despite increasing attention to mental health issues in this sector, there is little research on effective interventions for such needs.

Exercise is a well-known and extensively researched avenue for enhancing mental health, improving symptoms of stress, anxiety, and depression, improving mood, and raising resilience. Physical activity stimulates the secretion of endorphins, regulates the secretion of stress hormones, promotes healthy sleep, and increases self-esteem (Li et al., 2022). Despite these well-documented benefits, research has not been extensively conducted on how these work benefits can be realized in the hospitality sector. This study aims to show how exercise can be one of the applied and effective ways to enhance mental health for hospitality workers, while also providing insights into workplace wellness programs that endorse healthier, more productive environments.

## **1.2 Research aim and objectives**

### **Aim**

This study aims to explore how exercise can improve the mental health and well-being of hospitality workers and find ways to boost their wellness and resilience at work (Yu, Park, and Hyun, 2021). It will involve talking to employees about their experiences with exercise and mental health, as well as reviewing existing research to better understand the topic. Combining these methods will provide insights to help create a healthier, more resilient workforce.

## **Objective**

1. To study how regular exercise affects the mental health of hospitality workers.
2. To evaluate the possibility of adding exercise programs to hospitality workers' routines.
3. To identify factors that encourage or prevent participation in exercise programs in the industry.
4. To offer recommendations for effective wellness programs to improve mental health in hospitality workers.

### **1.3 Research Questions**

- How does regular exercise impact the mental health of hospitality industry employees?
- What types of exercise are most effective in improving mental well-being among hospitality workers?
- What is the relationship between exercise frequency and stress levels in hospitality staff?

### **1.4 Research Hypothesis**

Regular engagement in physical exercise is associated with improved mental health outcomes, including reduced symptoms of stress, anxiety, and depression, among hospitality workers.

### **1.5 Outlining future chapter**

**Chapter 1:** Begins by introducing the demanding nature of the hospitality industry, where employees face intensive, fast-paced work environments with irregular shifts and constant customer interactions. This challenging environment often leads to significant mental strain, stress, and burnout among workers, making mental health a growing concern in the sector.

**Chapter 2:** Examines existing research on exercise's impact on hospitality workers' mental health, exploring the feasibility of workplace programs, participation barriers and motivators, and effective wellness initiatives. The chapter also introduces Self-Determination Theory as the theoretical framework and identifies gaps in current literature.

**Chapter 3:** Details the study's pragmatic mixed-methods methodology. It outlines both quantitative and qualitative approaches, including survey design and secondary research methods. The chapter covers data collection, analysis techniques, sampling strategy of 150 hospitality workers, and ethical considerations.

**Chapter 4:** Presents the research findings from both survey data and secondary analysis. It provides statistical analysis of exercise's impact on mental health outcomes among hospitality workers, along with thematic analysis of workplace wellness programs. The chapter includes data visualization and interpretation of key trends. Discusses the findings in context of existing literature and Self-Determination Theory. It evaluates the effectiveness of exercise interventions for mental health in hospitality settings, analyzes implementation challenges, and identifies successful workplace wellness practices based on the research results.

**Chapter 5:** Concludes by synthesizing key findings and providing actionable recommendations for implementing exercise programs in hospitality workplaces. It addresses study limitations, suggests future research directions, and offers practical guidelines for organizations to improve employee mental health through exercise initiatives.

## Chapter 2: Literature Review

### 2.1 Impact of regular exercise on the mental health of hospitality workers

The hospitality industry holds a reputation for being very fast and high-pressure in terms of work. Hotel and restaurant workers, as well as employees who work in event venues, have to cope with long and irregular shifts that are spent interacting with often very challenging customers, resulting in high levels of stress and mental strain. These ultimately lead to burnout, anxiety, and depression, which affect both the workers' well-being as well as productivity in organizations (Yu, Park, and Hyun, 2021). Hence, understanding how regular exercise can reduce these mental health issues is very significant to improving general wellness among hospitality employees.

Exercise has been long known to act as a panacea for mental health improvement. Physical exercises stimulate the discharge of endorphins as natural mood elevators; besides, they help to moderate the stress response of the body since they reduce cortisol production. Some of the beneficial effects of exercise also include better sleep patterns and improved cognitive function, as well as increased self-esteem which are important for mental well-being (Giandonato, Tringali, and Thoms, 2021). There is a high probability that for hospitality workers-the ones who experience extreme stress-there is a chance that exercise may have intervention effects in reducing the adverse effects of stress.



## Figure 2.1: Mental Health Issues

Source: (Aid, 2022)

Studies have already proven benefits accrued from exercise connected to mental health to hold among other highly stressful professions such as health care and law enforcement. For example, research shows that exercise reduces anxiety and depressive symptoms in health care workers, who seem to be beset by comparable sources of stress to those that beleaguers hospitality workers: long shifts, emotional requirements, and considerable doses of social engagement. Upon discovering whether exercise has similar effects on hospitality staff, we build knowledge on possible effective strategies for designing improved mental well-being. Exercise directly affects mental health, especially for those within the hospitality sector under considerable unique challenges as every industry faces. The hospitality industry is known to have erratic working hours, including late nights, weekends, and holidays.

Sleeping irregularities and disturbances in circadian rhythm due to this sleep pattern have been linked to anxiety and depression (Yu, Park, and Hyun, 2021). Such regular physical activity is said to regulate the patterns of sleep towards a deeper and restorative rest to prevent mental fatigue. Exercise can thus incorporate features of the shift worker's psychological stress from being imbalanced between weekends and weekdays. Not only is exercise helpful in alleviating anxiety and depression symptoms, but it also goes further into the broader category of mental health benefits, such as lowering a person's mood, raising energy levels, and improving focus—all necessary characteristics for being able to perform well and provide high-quality customer service within the hospitality industry (Varga et al., 2021).

Hospitality workers who feel mentally and physically well are more likely to be engaged, productive, and motivated, resulting in higher job satisfaction and improved service delivery. Moreover, exercising regularly will promote social well-being by increasing the sense of community and a brotherhood spirit, especially if exercise is undertaken collectively through corporate programs. The benefits of exercise are as well known, and yet, as it is for many employees, physical activity becomes very limited in hospitality work-life by several realities with some barriers (Baquero, 2023). The long and grueling nature of the occupations many work in face insurmountable shifts, and most do not find the time in their lives to fit in exercise. Even if they felt a compulsion to engage in a form of exercise, many would not know what to do or how to get started.

The popularity of exercise in mental health within workplaces will be facilitated by flexible wellness programs. Such programs will be modified to accommodate the various demands of exercise practice during the different seasons of The hospitality industry. For example, institutions can have onsite fitness facilities, short group exercise sessions during breaks, or some virtual access to fitness resources (Roche et al., 2022). These methods may create a culture a finalist one that values physical being and encourages employees to prioritize health in life as holistic office space and more sustainable and widespread participation in exercise.

## **2.2 Feasibility of incorporating exercise programs into the work routines of hospitality employees**

### **Understanding the Needs and Challenges**

Hospitality presents specific obstacles that make it unlike other industries, in which fitting exercise into daily work scores is quite a bit easier. For example, shifts are usually long; work hours vary; physical demands include standing for long hours, lifting, and multitasking. All these contribute to a lack of time or energy for much physical activity (Baquero, 2023). The greater levels of customer interaction in hospitality jobs mean that employees are called upon to be mentally sharp and physically present for long hours, again using more of their reserves for exercising. Many also have 24-hour operations, making it difficult for an employee to match his or her free time with exercise programs or wellness initiatives. Central to exercise feasibility should be how operational demands fit within the hospitality industry (Zhu et al., 2022).

### **Exercise Program Types**

Establishing what types of exercise programs will apply to hospitality workers is a primary step in the feasibility assessment (Roche et al., 2022). Ideally, programs would involve a minimal commitment of time and easy incorporation into a worker's shift. Short, high-impact Ones," such as stretch routines, yoga, or guided meditation, may be especially successful in providing almost instantaneous relief from mental and physical duress with little equipment or time needed. For instance, a short exercise period of 15 to 20 minutes before or during breaks could work as it would be feasible for workers to recharge during their workday. In addition, it also might have small gym spaces or fitness areas on-site that might provide dedicated fitness for employees to exercise during off-peak hours (Varga et al., 2021).

### **Employee Engagement and Participation**

Part of assessing whether to incorporate exercise programs is understanding employee engagement. Exercise has been promoted as important by conventional means, but not prioritization because of time, fatigue, or lack of motivation may be cognate for workers in hospitality (Xu et al., 2022). It is necessary to engage such employees in programs that are healthy and fit. It should be made clear to them how important exercise is for both mental and physical well-being, and create an environment that promotes involvement in wellness activities for staff. One approach might be to survey or conduct focus groups for hospitality employees to determine their attitudes toward exercise and wellness programs (Chiu, Grace Oh and Cho, 2021).

### **Cost and Resource Implications**

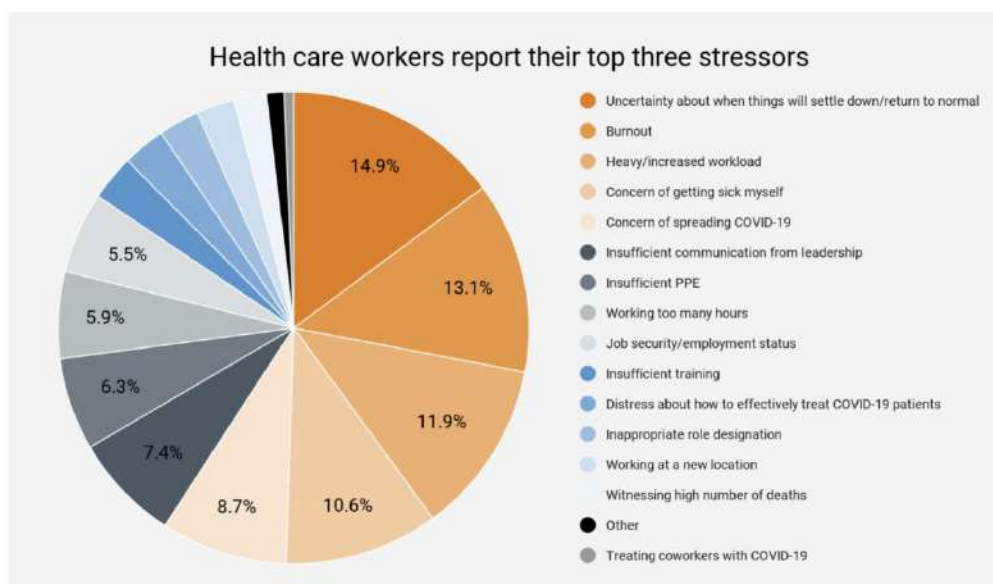
Last in appraisal costs and resources is this part of feasibility. Many hospitality chains can afford to set up training facilities on-site or hire wellness professionals, but small establishments may not have the budget required (Roche et al., 2022). Therefore, these exercise programs must be designed with maximum efficiency and scalability in mind. Virtual Wellness Programs, such as online workout programs or apps that provide convenient, affordable workout plans, could serve as an option for smaller businesses. Thus, determining the feasibility of implementing exercise programs in the working experience of the hospitality employee implies delving into the specific conditions under which those whose lifetime has come to be spent in this service face their challenges, followed by the selection of appropriate forms of exercise, ensuring employee

### **2.3 Barriers and motivators influencing participation in exercise programs within the hospitality industry**

The hospitality industry is considered the world's most vibrant and demanding environment. Employees of such industry are under a great deal of physical and mental strain. The promotion of exercise in this industry would improve the general health and wellness of the workers (Xu et al., 2022). Even so, participation in exercise programs is not always widespread and has varied participation for a fish. Therefore, one needs to understand the barriers and motivators that generalize and personalize employees concerning their readiness to take part in such programs for the successful design and implementation of workplace wellness programs. These critical factors influence many employees differently due to the peculiarities involved in the hospitality sector, thus making it necessary to have an identification exercise before the development of any kind of solution that would suit their individuality well.

Hindrances in Taking Part Very busy work schedules are among the barriers to joining any exercise programs suited for the hospitality industry. Consider those work odd hours including starting very early in the morning, ending very late in the evening, weekends, and holidays (Cortés-Denia et al., 2022). Employees find themselves disrupted, weakened, and suffer from sleep deprivation, and therefore often return from work late with little time available to pursue their interests and an absence of time to exercise. Additionally, many workers in the hospitality industry have to deal with shift work, which makes it even harder to develop a habit of keeping active. Consequently, an employee might think that he or she does not have the time, energy, or desire to engage in physical activities, which indeed lowers the percentage of attendance in wellness programs.

The other obstacle is that there are not many facilities or resources for exercising in most hospitality workplaces. Smaller businesses cannot afford on-site exercise facilities or organized exercise programs (Li et al., 2022). For Instance, still, a significant challenge Employees might have access to gym facilities or not feel comfortable using them due To a lack of privacy or proper equipment, and so on in large establishments (Bajrami et al., 2022). Some other workers might as well not know where to go to meet with local gyms or even other Fitness programs that could help integrate into their program more easily, as well as time-inhibiting to their participation.



**Figure 2.2: Mental Stressors in Hospitality Industry**

Source: (Injuries, 2022)



On the other hand, there are several dimensions motivating employees in the hospitality industry to enroll in exercise programs. Probably the most direct reason would be health-related- benefits that exercise helps attain, especially in managing stress and improving mental well-being (Roche et al., 2022). More than anything else, the hospitality industry is stressful since employees are in constant interaction with customers, handling complaints, and working in a high-pressure environment. It's been reported that exercise has uplifting effects on one's mental well-being. The fact that physical activity is directly related to alleviating symptoms of anxiety and depression, enhancing mood, and building resilience makes it valuable for employees in this sector. Understanding these benefits might induce in the worker a perception that exercise programs represent an opportunity to take control of stress and general life quality (Cortés-Denia et al., 2022).

Another motivator is social support. For instance, exercise programs like participating in outdoor running, swimming, or yoga classes together may interest employees even more with their sense of community (Xu et al., 2022). Group-related activities such as yoga classes and team sports would instill a sense of belonging while fostering interpersonal relationships among work colleagues important for morale in the hospitality field. Moreover, mutual accountability in a supportive environment motivates and encourages the "individual" to stick to the fitness commitment. So is workplace culture; it also plays a major role in encouraging participation. If the core values of the organization are wellness-centered with investments dedicated to wellness, employees would feel more encouraged and supported to work out (Giandonato, Tringali, and Thoms, 2021). It is the support of leadership and management that would put an environment of precedence of health. When employees see that their employer cares for their physical and mental health, they are likely to partake in wellness programs.

## **2.4 Effective workplace wellness programs targeting mental health improvements in hospitality workers**

Typically, the hospitality industry is known for its heightened levels of stress, undefined working hours, and physically challenging environments. These are the factors affecting the increase in levels of stress-anxiety-burnout in employees. Thus, it becomes vital for these organizations to provide efficacious wellness programs concerning mental health at the workplace. Such programs not only further the wellness of workers but also increase job satisfaction and productivity and improve overall customer service. In this regard, some

recommendations can be added for formulating wellness programs that can specifically cater to the mental health aspects of hospitality workers.

### **1. Incorporate Stress-Reducing and Relaxation Techniques**

Stress tops the list of factors contributing to poor mental health in the hospitality sector. High-paced and customer-oriented work environments have made almost every individual constantly pressured, resulting in burnout, anxiety, or depression. Well-being programs should thus be based on stress management and relaxation practices (Cortés-Denia et al., 2022). Such employees may find themselves taking part in mindfulness practice, meditation, or yoga at their workplaces. The modalities could involve brief, guided sessions during lunchtime breaks or the beginning or end of shifts, allowing workers to decompress without taking extensive time away from their duties. Another way of alleviating work pressure could be making relaxation spaces available in the workplace, such as quiet rooms or designated areas for relaxation, so that employees are well empowered to take short breaks during relatively busy yet stressful times (Chiu, GraceOh, and Cho, 2021).

### **2. Flexible Exercise Programs for Physical and Mental Health Promoters**

It has been said that physical exercise is very important for both the health of a person and the spirit, but then most hospitality personnel's jobs put them on demanding schedules that hardly leave time for them to be physically active. Therefore, a solution for this barrier will be flexible exercise programs to which employees can have easier access and incorporation into their lives. Such programs could be on-site exercise facilities, group exercise classes, or virtual workout options (Giandonato, Tringali, and Thoms, 2021). Introducing an exercise program of 15-30 minutes during breaks or after Shifts would qualify for this purpose as it would provide being active without messing up with work.

### **3. Implementing Mental Health Support and Counseling Services**

Such services should form an integral part of their wellness programs, and for this reason, mental health support services form an integral part of wellness offerings within organizations. Many workers in the hospitality industry might be suffering from anxiety, depression, or burnout but would find it difficult to reach for external help owing to the stigma or absence of outlets for such services (Han et al., 2021). Therefore, the establishment of such on-site counseling and virtual mental health resources will take the step to motivate individuals seeking such help from them. Workplaces must partner with licensed counselors or mental health

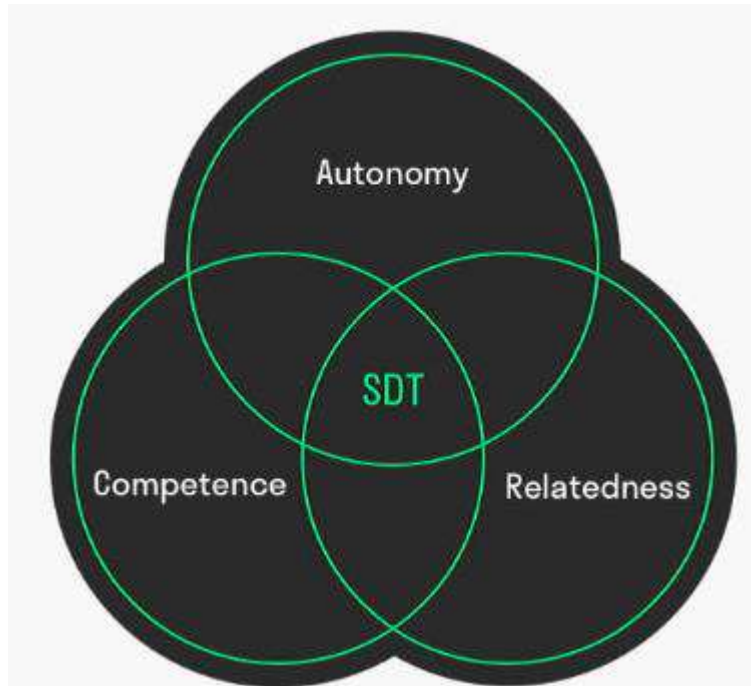
professionals to provide mental health workshops, counselling sessions, or therapy services at regular intervals. Businesses can also normalize the culture of open discussion about the issue of mental health.

#### **4. Promotions on a Healthy Work-Life Balance**

The feature that can promote the improvement of mental health for people working in the hospitality industry is that it can strike a healthy balance between work life and personal life. Long, irregular hours, together with the job's pressure, can lead to burnout and impede one's ability to function personally (Chiu, Grace) Oh and Cho, 2021). Companies should provide flex-time scheduling to permit employees to devote quality hours in a work setting and outside commitments related to personal and family lives. This could include allowing workers to shift schedules, offering more predictable planning, or additional paid time off in representation of mental health days.

For this purpose, a business also needs to have a culture that motivates employees to take breaks and rest during shifts (Bajrami et al., 2022). That is, managers and supervisors should make sure that the employee is not overworked and has convenient breaks to avoid mental exhaustion. Additionally, allowing workers to take time away from work to Engage in leisure or social activities outside of work, such as team-building outings or wellness retreats, can build strong bonds between colleagues as well as provide employees with a much-needed break from work stresses (Jeon et al., 2021).

## **2.5 Theoretical Framework**



**Figure 2.3: SDT theory**

Source: (Mulder, 2024)

This study is primarily based on two theories, namely Self-Determination Theory (SDT). The theory emphasizes mainly the demands of a job such as working long hours and suffering from high levels of stress from the environment of hospitality and aids from resources such as using an exercise program to avoid burnout and healthy living (Chiu, GraceOh and Cho, 2021). The SDT mainly holds that motivation to people is directly related to their autonomy, Competence, and relatedness to make healthy-typical behaviors happen (Jeon et al., 2021). Thus, they will provide the fundamental theoretical underpinning for designing tailored wellness initiatives, particularly exercise programs, which specifically will address the significant challenges of work in hospitality in the pursuit of improving mental health and intrinsic motivation for participation.

## **2.6 Literature Gap**

A positive workplace culture should promote mental and social well-being. Leadership should be proactive in creating a health-focused environment that encourages employee participation in wellness initiatives (Bajrami et al., 2022). Managers should model such behaviors by participating in wellness programs and encouraging their teams to engage in them. Employee recognition for engaging in wellness activities could further motivate participation. Also, attempts to create that feeling of community in the workplace may include team-building

activities, social events, and holistic wellness challenges (Han et al., 2021). It will contribute to making the workplace feel more connected to fellow workers or the organization.

This culture will keep employees having the impression that they are valued, respected, and supported; isolation will be reduced, morale improved, and job satisfaction enhanced. Nutrition is a very important factor in mental well-being and energy levels. Offering access to healthy meals and snacks during the work schedule indeed improves the physical and mental state of employees. Long hours of work or shortage of healthy nutritious food have made it very difficult for a majority of hospitality workers to eat healthily. Employers could have on-site meal provision for the workers, subsidize the costs incurred in eating at local healthy outlets, or sensitize their employees about the importance of good nutrition through workshops or informative sessions.

## **Chapter 3: Methodology**

### **3.1 Research philosophy**

In terms of research philosophy, this study takes a pragmatic stance as it employs both qualitative and quantitative methods to investigate the effects of exercise on mental health among hospitality workers. Pragmatism is the most preferable in this case as it allows all techniques of data collection such as surveys, and secondary research because it also addresses practical problems like that of employee wellness and resilience while at the same time showing that having multiple perspectives is fruitful in comprehending complex phenomena (Creese et al., 2020). By counting both numbers and personal experiences, the understanding of how exercise intervention might act on mental health will be aimed at providing a complete view and thus giving credible recommendations for improving the well-being of employees in the hospitality industry.

### **3.2 Research approach**

The study applies a mixed-method research methodology that engages both deductive and inductive reasoning approaches. The deductive approach is the quantitative survey that tests the theory that regular exercise has improved mental health outcomes, including reduced stress, anxiety, and depression among hospitality employees. Through measurement, data can be collected to either support or reject the hypothesis. It is the inductive approach that will be used during the qualitative stage in which secondary data will be collected. It is after analysing these data that themes and patterns may arise that are non-perceptible through quantitative methods (Mahindru, Patil, and Agrawal, 2023). Indeed, the convergence of these approaches aims to help shed more light on the relationship between physical exercise and mental well-being in the hospitality industry.

### **3.3 Data collection**

Data collection for this study will involve a combination of primary and secondary methods to ensure a comprehensive understanding of the topic. For this reason, primary data will be collected employing survey. The survey will be distributed to employees of the hospitality industry to determine the effect of exercise habits, mental health symptoms, and overall well-being on people (Schuch and Vancampfort, 2021). The survey's quantitative data collection will be to help establish the linkages between physical activity and mental health outcomes. Secondary data will be collected by taking information from books, articles, website and

journal. Google Scholar will be used for secondary data collection of articles where last 5 years non-copyrighted articles will be collected. Available research studies and other relevant literature will also supplement primary findings with secondary data and provide further understanding of the investigation.

### **3.4 Data analysis**

However, the data analysis for this study constituted both quantitative and qualitative techniques. The quantitative data collected from surveys will be analysed by statistically descriptive and diagnostic correlational and regression analysis tests that would help in testing the study hypothesis that regular exercises lead to better mental health among hospitality workers against mental health outcomes. Qualitative data collected through secondary data collection would be subjected to thematic analysis to find key patterns, themes, and insights (Smith and Merwin, 2021). This will be combined to result in a multi-perspective view of the question along with evidential support, giving nuanced analyses of exercise interventions through which hospitality can conceptualize mental health and resilience.

### **3.5 Reliability and validity of data**

#### **Reliability**

To ensure the trustworthiness of the data, such a survey will include standardized questions as used in previous studies on exercise and mental health. It will ensure that the answers are given in the same context. Internal consistency will then be evaluated using Cronbach's alpha and the pilot testing to improve measure intended constructs through testing of questions. The entire survey protocol will likewise also be standardized and those trained to do the survey will minimize variability in the collection of data (Theis et al., 2021). Consistency in data from repeated surveys with the same groups would thereby indicate the reliability of the findings. The case for reliability will be strengthened through the collection of survey data under conditions previously determined.

#### **Validity**

Content validity will ensure the use of and develop established scales to measure both mental health and exercise habits. The construct's validity will follow by having the survey questions carefully and thoroughly derived from established theories and literature (Creese et al., 2020). Triangulation of data from surveys and secondary sources would further enhance the study's validity and provide a fuller and more accurate picture of the exercise-mental well-being nexus.

### **3.6 Sampling of data**

The sampling for this study is based both random sampling techniques, which will ensure that the sample is diverse and representative. The focus of primary data collection is hospitality industry employees. The survey will also include stratified random sampling to ensure representation from different job roles such as front-line workers, management, etc., and from various demographics such as age and gender for a comprehensive experience on exercise and mental health (Mahindru, Patil and Agrawal, 2023). Approximately 150 survey respondents are expected to provide a balance between statistical depths.

### **3.7 Research ethics**

These will suffice as an underpinning across the entire study and practices of its participants and maintain their dignity and well-being. Informed consent will be taken from all participants who will be given transparent information about the study's purpose, procedures to be followed, and that they can withdraw from the study anytime without any consequences. Anonymity and confidentiality will be maintained, locked data, and removing identifying materials. The research will be bound by positive ethical guidelines and IRB requirements so that there will be no harm, discrimination, or coercion involved (Schuch and Vancampfort, 2021). The interest of both parties will be cared for in the survey process to provide a safe and respectful environment for participants concerning their experiences. Secondary data will be used responsibly while citing and upholding the copyrights and intellectual property rights.



## Chapter 4: Findings and discussion

The chapter utilises SPSS for interpreting the primary data through implementing different tests which include descriptive statistics, regression and correlation, however, for analysing the qualitative data, thematic analysis has been implemented.

### 4.1 Quantitative analysis

#### 4.1.1 Descriptive statistics

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Age group	93	1	4	2.61	1.053	-.020	.250	-1.225	.495
Current role in the hospitality industry	93	1	4	2.67	1.183	-.328	.250	-1.399	.495
Working experiences in the hospitality industry	92	1	4	2.92	1.082	-.432	.251	-1.211	.498
Frequency in engaging in physical exercise	93	1	4	2.57	.971	.017	.250	-.977	.495
Barriers preventing from exercising regularly	93	1	4	2.15	1.188	.298	.250	-1.545	.495
Reasons for High stress level	93	1	5	3.38	.943	-.269	.250	-.017	.495
The impact of exercise on the ability to manage stress	93	1	5	3.81	1.024	-.964	.250	1.010	.495
Factors motivates most to engage in physical activity	93	1	5	2.26	1.010	1.012	.250	.798	.495

Importance of exercising for maintaining mental health in the hospitality industry	93	1	5	4.25	.928	-1.433	.250	2.171	.495
Workplace supports employee health and well-being initiatives	93	1	5	3.14	1.059	.107	.250	-.421	.495
Individuals typically spend on exercise per session	93	1	3	2.03	.683	-.040	.250	-.813	.495
Workplace programs would encourage to exercise more frequently	93	1	5	2.47	1.273	.465	.250	-.694	.495
A change in mental health due to exercise while working in hospitality	93	1	3	1.29	.685	2.044	.250	2.374	.495
Irregular shifts and long working hours affect the ability to maintain a regular exercise routine	93	1	2	1.16	.370	1.872	.250	1.538	.495
Workplace's efforts to promote mental health and well-being	93	1	5	3.04	1.233	-.119	.250	-.760	.495
Valid N (listwise)	92								

**Table 4.1: Descriptive statistics**

(Source: Self-developed)

Descriptive statistics is a range of data analytics which concentrates across summarising and interpreting the historical data for gaining insights and patterns about the sample population utilising measures such as central tendency and variability. The mean, median and mode are utilised to describe and define the dataset and the measures of variability (skewness and

kurtosis) evaluate how dispersed the distribution is for the dataset (Jalolov, 2024). The variable “Frequency in engaging in physical experience” has been depicted .017 skewness value which is close to zero which indicating a symmetric distribution and the mean is equal to the median. The variable has carried a -.977 kurtosis value which specifies that a flatter distribution compared to a normal distribution which is an indication of “Platykurtic kurtosis”. The variable, “Barriers preventing from exercise regularly” has a .298 skewness value specifying that the distribution is almost symmetrical and -1.545 kurtosis specified that a “platykurtic” kurtosis. The variable “Reasons for high-stress level” has been disclosed -.269 skewness value means the distribution is almost symmetrical and -.017 kurtosis means the distribution is flatter. -The .964 skewness value is associated with the variable “The impact of exercise on the ability to manage stress” which indicates that the the tail is more pronounced across the left rather than the right. .107 skewness value of the variable “workplace supports employee health and well-being initiatives” suggests that the distribution is slightly asymmetrical and -.421 kurtosis specified that the distribution has fewer outliers and is flatter compared to a normal distribution.

#### 4.1.2 Data filtration

Data filtering is the procedure of narrowing down the most relevant data from a huge dataset through utilising particular criteria or conditions of the data which makes the analysis more effective and focused (Javatpoint.com, 2024). Variables which are not within the range of skewness (-1 to +1) and kurtosis (-3 to +3) have been excluded from the dataset for developing the accuracy of the result. The variables which are excluded are “Factors motivate most to engage in physical activity”, “Importance of exercising for maintaining mental health in the hospitality industry”, “A change in mental health due to exercise while working in hospitality” and “Irregular shifts and long working hours affect the ability to maintain a regular exercise routine”.

#### 4.1.3 Reliability test

#### 4.1.4 Cronbach’s alpha

#### Reliability Statistics

Cronbach's Alpha	N of Items
.452	15

**Table 4.2: Reliability test**

(Source: Self-developed)

Reliability test in statistical analysis is the degree to which the values which make up the scale measure the same attribute and the most utilised measure of reliability is Cronbach's Alpha which is the average correlation across all values on a scale. Cronbach's alpha reliability coefficient normally ranges across between 0 and 1 and The  $\alpha$  coefficient values  $\geq .70$  have been considered acceptable, .80 and above are considered better and 90 and above are considered as best (Amirrudin et al. 2021). In the study, Cronbach's alpha is .452 which specifies poor internal consistency.

**4.1.5 Regression test****ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.756	10	2.876	3.471	.001 <sup>b</sup>
	Residual	67.102	81	.828		
	Total	95.859	91			

a. Dependent Variable: The impact of exercise on the ability to manage stress

b. Predictors: (Constant), Workplace's efforts to promote mental health and well-being, Barriers preventing from exercising regularly, Age group, Frequency in engaging in physical exercise, Workplace programs would encourage to exercise more frequently, Reasons for High stress level, Individuals typically spend on exercise per session, Current role in the hospitality industry, Workplace supports employee health and well-being initiatives, Working experiences in the hospitality industry

**Table 4.3: Regression test**

(Source: Self-developed)

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	2.720	.736		3.696	.000
	Age group	.367	.126	.378	2.916	.005
	Current role in the hospitality industry	-.122	.097	-.141	-1.260	.211
	Working experiences in the hospitality industry	-.126	.114	-.132	-1.101	.274
	Frequency in engaging in physical exercise	-.374	.122	-.356	-3.081	.003
	Barriers preventing from exercising regularly	.058	.085	.067	.680	.498
	Reasons for High stress level	.213	.112	.197	1.905	.060
	Workplace supports employee health and well-being initiatives	.146	.115	.151	1.271	.207
	Individuals typically spend on exercise per session	.079	.171	.052	.464	.644
	Workplace programs would encourage to exercise more frequently	.007	.082	.009	.092	.927
	Workplace's efforts to promote mental health and well-being	.099	.094	.120	1.053	.295

a. Dependent Variable: The impact of exercise on the ability to manage stress

**Table 4.4: Coefficient test**

(Source: Self-developed)

A regression test is a widely utilised set of statistical analysis methods for facilitating the true impact of some factors across particular facets of business and it estimates the connection between a response variable (dependent) and one or more independent variables (predictor). Regression analysis involves different variations which include non-linear, linear and multiple linear, here, linear regression has been utilised for analysing the connection between a dependent and an independent variable (Alita et al. 2021). In the context of regression, the p-

value has helped to verify the hypothesis through justifying whether there are any relationships between the variables or not. A significance level of 0.05 simplifies a 5% risk if conducting that a difference exists across the variables when there is no actual difference means the sample data offer enough evidence across rejecting the “null hypothesis” (Statology.org, 2021). However, a p-value which is bigger than 0.5 dictates weak evidence and fails to reject the “null hypothesis”. In this research, the p-value is .001 which means the sample data has offered significant evidence against the “null hypothesis” which led to its rejection. The variable, “Frequency of engaging in physical exercise” has carried a .003 “p-value” which means the data has offered significant evidence to exclude the “null hypothesis”. On the other hand, the variable “Barriers preventing from exercising regularly” has carried a .498 “p-value” has indicates the acceptance of the “null hypothesis” as it failed to offer enough evidence against it.

#### 4.1.6 Correlation test

##### Correlations

		Current role in the hospital ity industry	Working experien ces in the hospitalit y industry	Frequen cy in engagin g in physical exercise	Barriers preventi ng from exercisi ng regularl y	Reaso ns for High stress level	The impac t of exerci se on the ability to mana ge stress	Workpla ce supports employe e health and well- being initiativ es	Individu als typically spend on exercise per session	Workpla ce program s would encoura ge to exercise more frequent ly	Workplac e's efforts to promote mental health and well- being
Current role in the hospitalit y industry	Pearson Correlati on	1	.306**	-.088	-.165	.094	.045	.012	.094	-.075	-.042
	Sig. (2- tailed)		.003	.400	.114	.369	.669	.912	.369	.477	.688
	N	93	92	93	93	93	93	93	93	93	93

Working experiences in the hospitality industry	Pearson Correlation	.306**	1	-.032	-.043	.114	.126	.248*	.229*	-.204	.027
	Sig. (2-tailed)	.003		.764	.686	.278	.232	.017	.028	.051	.798
	N	92	92	92	92	92	92	92	92	92	92
Frequency in engaging in physical exercise	Pearson Correlation	-.088	-.032	1	.000	.202	-.281**	.218*	-.470**	.245*	.115
	Sig. (2-tailed)	.400	.764		.998	.052	.006	.036	.000	.018	.270
	N	93	92	93	93	93	93	93	93	93	93
Barriers preventing from exercising regularly	Pearson Correlation	-.165	-.043	.000	1	-.216*	.015	-.146	-.113	.125	-.019
	Sig. (2-tailed)	.114	.686	.998		.038	.884	.161	.280	.233	.854
	N	93	92	93	93	93	93	93	93	93	93
Reasons for High stress level	Pearson Correlation	.094	.114	.202	-.216*	1	.223*	.317**	-.002	-.132	.182
	Sig. (2-tailed)	.369	.278	.052	.038		.032	.002	.983	.208	.080
	N	93	92	93	93	93	93	93	93	93	93
The impact of exercise on the ability to manage stress	Pearson Correlation	.045	.126	-.281**	.015	.223*	1	.226*	.242*	-.154	.187
	Sig. (2-tailed)	.669	.232	.006	.884	.032		.030	.019	.140	.072
	N	93	92	93	93	93	93	93	93	93	93
Workplace supports	Pearson Correlation	.012	.248*	.218*	-.146	.317**	.226*	1	.084	-.058	.503**

employee health and well-being initiatives	Sig. (2-tailed)	.912	.017	.036	.161	.002	.030		.424	.583	.000
	N	93	92	93	93	93	93	93	93	93	93
Individuals typically spend on exercise per session	Pearson Correlation	.094	.229*	-.470**	-.113	-.002	.242*	.084	1	-.205*	.166
	Sig. (2-tailed)	.369	.028	.000	.280	.983	.019	.424		.048	.111
	N	93	92	93	93	93	93	93	93	93	93
Workplace programs would encourage to exercise more frequently	Pearson Correlation	-.075	-.204	.245*	.125	-.132	-.154	-.058	-.205*	1	-.152
	Sig. (2-tailed)	.477	.051	.018	.233	.208	.140	.583	.048		.147
	N	93	92	93	93	93	93	93	93	93	93
Workplace's efforts to promote mental health and well-being	Pearson Correlation	-.042	.027	.115	-.019	.182	.187	.503**	.166	-.152	1
	Sig. (2-tailed)	.688	.798	.270	.854	.080	.072	.000	.111	.147	
	N	93	92	93	93	93	93	93	93	93	93

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Table 4.5: Correlation test**

(Source: Self-developed)



Correlation is a bivariate analysis that measures the strengths and weaknesses of connection across two variables and the direction of the relationship. The value of the correlation efficiency varies across + 1 to - 1, where a value of  $\pm 1$  showcases a perfect degree of relationship across the variables and when the correlation value is near about 0 it indicates a weaker relationship (Watkins, 2021). The variables, “The impact of exercise on the ability to manage stress” and “Frequency in managing physical exercise” have carried -.281 “Pearson correlation” value which disclosed that they are weak negatively correlated. The variables, “The impact of exercise on the ability to manage stress” and “Barriers preventing from exercising regularly” have developed a weak positive correlation with regard to .015 “Pearson correlation value”. Moreover, .884 “p-value” indicates that their correlation is not statistically significant at the level of 0.01 two-tailed. A weak, yet positive correlation has been related to the variables, “The impact of exercise on the ability to manage stress” and “reasons for stress level” as per .223 “Pearson correlation value”. .032 “p-value” has disclosed that their correlation is statistically significant through rejecting the “null hypothesis”. .226 “Pearson correlation value” has been associated with the variables “The impact of exercise on the ability to manage stress” and “workplace supports employee health and well-being initiatives” which indicated a weak positive correlation.

#### 4.1.7 Hypothesis testing

<b>H1: Regular exercise has positively impacted the mental health of hospitality industry employees</b>	Accepted
<b>H0: Regular exercise has negatively impacted the mental health of hospitality industry employees</b>	Rejected

**Table 4.6: Hypothesis testing**

(Source: Self-developed)

## 4.2 Qualitative analysis

### 4.2.1 Thematic coding

<b>Keywords</b>	<b>Sub-theme</b>	<b>Main theme</b>
Regular exercise, mental health, symptoms	Regular exercise has assisted in developing mental health in hospitality worker	Regular exercise has helped in mental improvement in hospitality workers through decreasing symptoms of stress
Feasibility assessment, Exercise programs, hospitality	Exercise programs in the work routines of hospitality employees helped for fostering the feasibility assessment	Exercise programs in the work routines of hospitality employees are significant steps in the feasibility assessment for improving their mental stress
Exercising program, mental health	The hospitality industry has faced complex challenges in establishing exercise programs.	The hospitality industry has faced adverse barriers such as a lack of awareness about mental health regarding participation in exercising program
Wellness programs, mental health improvements	The hospitality industry has fostered mental wellness programs within the organisation	The hospitality industry has facilitated mental health improvements in their employees through effective workplace wellness programs

**Table 4.7: Thematic coding**

(Source: Self-developed)

#### **4.2.2 Thematic analysis**

**Theme 1: Regular exercise has helped in mental improvement in hospitality workers through decreasing symptoms of stress**



**Figure 4.1: Benefits of exercise in mental health**

(Source: Priorygroup.com, 2024)

The hospitality industry has significant a reputation for being very fast and having huge work pressure, therefore more coworkers and employees were linked to more negative physical and mental health symptoms. Hotel and restaurant employees who work across event venues, have to adapt to long and irregular shifts which they have spent interacting with consumers sometimes highly challenging for them which has resulted a high level of stress and mental health damage (Xiong et al. 2023). Therefore, regular exercises is one of the best ways which assist in decreasing the effects and developing mental health. Moreover, meeting with consumers is complex which leads to stress and therefore, observing how regular exercise may decrease mental health issues is highly required for developing well-being across hospitality workers (Varga et al. 2021). Regular exercise has a significant effect on depression and ADHD as it relieves stress, develops memory, assists to sleep better and enhances the overall mood.

Exercise encourages the release of hormones across the brain which may contribute to decreasing stress and sharpening thinking and memory. In addition, regular exercise may also positively affect different mental health conditions which include ADHD, depression, OCD and generalised anxiety disorder (Xu et al. 2022). Exercise also causes the release of chemicals such as endorphins and serotonin which assist in developing mood and reduce anxiety.

**Theme 2: Exercise programs in the work routines of hospitality employees are significant steps in the feasibility assessment for improving their mental stress**



**Figure 4.2: Wellness programs**

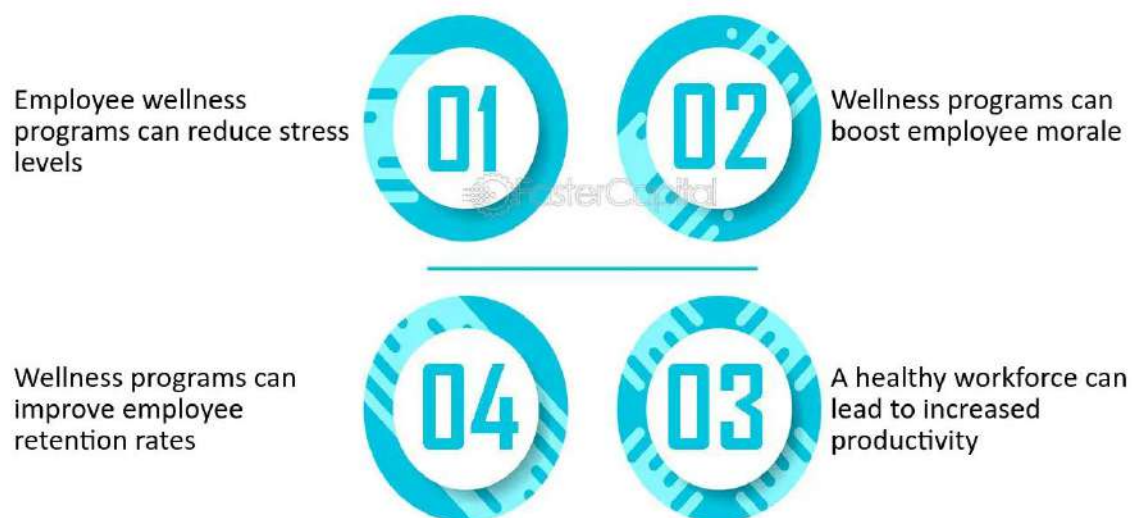
(Source: Uptoskills.com, 2024)

Exercise programs are some structured activities for developing healthy behaviour across employees which include stress management and health risk management. Through these programs, employers may disclose productivity, decrease work-related stress, lower healthcare costs and promote a safer workplace. For example, *Marriott's TakeCare Program* which provides a range of different opportunities for employees which includes fitness breaks, designed relaxation spaces and walking breaks for all Marriott associates which promote mental and physical well-being (Employers.hosco.com, 2021). The combination of mental and

emotional initiatives comprising an exercise program which developed job satisfaction which may lead to the development of employee morale. Where employees are likely to engage across both physical and mental labour as a part of their duties, exercise programs are significant for developing their productivity level and decreasing burnout (Al-Alawi et al. 2021). Regular exercise through the program may decrease symptoms of depression and anxiety which lead to a significant sense of emotional balance which is crucial in consumer-facing roles. It also encourages better sleep patterns which helps workers feel better sleep patterns which assist in feeling more alert and rested (Varga et al. 2021). A significant part of assessing whether to implement exercise programs is observing employee engagement and cost and resource implications. Hospitality organisations may include virtual exercise programs as these are convenient and cost-effective.

**Theme 3: The hospitality industry has faced adverse barriers such as a lack of awareness about mental health regarding participation in exercising program**

Understanding the Connection Between Wellness and Employee Engagement



**Figure 4.3: Workplace wellness benefits**

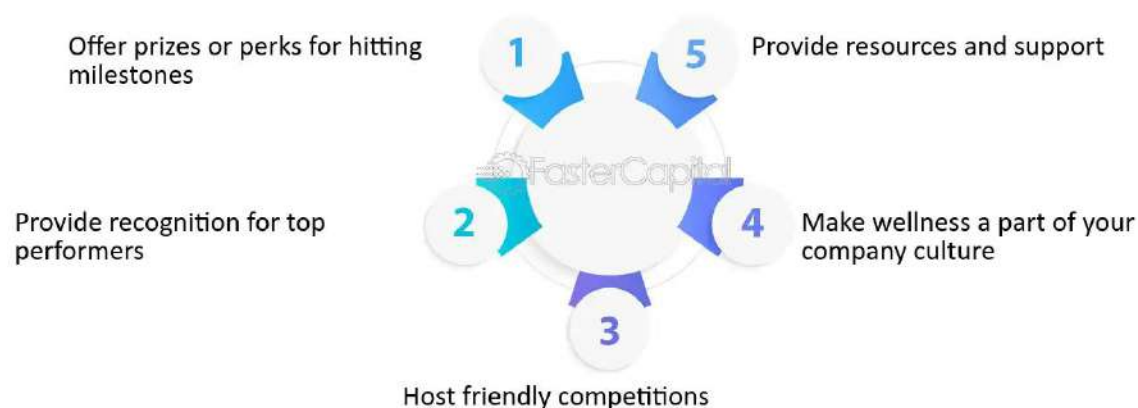
(Source: Fastercapital.com, 2024)

The hospitality industry has faced complex issues across developing participation of their employees within exercise program. Scarcity of time, insufficient facilities, culture and workload are sometimes the major issues to physical activity participation in the hospitality sector. Workplaces supporting PA, health and well-being programmes understand benefits

across multiple ways which include developed productivity, greater loyalty, decreased sickness absences and higher staff retention (Kalargyrou et al. 2023). Moreover, participation in exercise programs is not widespread and employees need to understand the importance of the programs. However, open access across a campus or gym has been perceived to be the core facilitator for participation engagement and a way to decrease mental stress and burnout within the hospitality sector. Moreover, due to lack of time and no access to resources and also significant barriers in participation in an exercise program (Varga et al. 2021). Lack of knowledge regarding the importance of exercise programs, proper management support and workplace culture are other major causes which decreased the participation level of employees.

**Theme 4: The hospitality industry has facilitated mental health improvements in their employees through effective workplace wellness programs**

## Encouraging Participation in Your Wellness Program



**Figure 4.4: Wellness programs benefits**

(Source: Fastercapital.com, 2024)

Effective wellness programs which include Stress-reducing and Relaxation Techniques, Flexible Exercise Programs and Counselling Services have helped to foster mental health improvements across their wellness programs. A range of employees across the hospitality industry have suffered from anxiety, depression and burnout yet would find it complex across reaching for external assistance owing to the absence of outlets for these services. Therefore, significant counselling services are crucial which increase employee morale within the

organisation (Hayat and Afshari, 2022). These wellness programs assist in decreasing stress and developing their overall well-being through promoting healthier lifestyle choices and through offering significant resources which include mentoring and training. Moreover, changing and improving employee behaviours is the main goal of the wellness program, through developing the behaviours of the employees, the hospitality industry may assist in decreasing health risks and encourage employees to manage stress significantly (Khattak et al. 2021). Wellness programs such as Flexible Exercise Programs may assist employees in developing and managing their symptoms of depression and stress which leads to developing overall well-being. Wellness programs prompt employees to exercise which may decrease the risk of long-term health issues and assist them feel more energised and happy across their work within the hospitality sector. A wellness program assists in developing employee morale as participating in one may establish feelings of satisfaction across employees (Gallan et al. 2021). Wellness programs such as Mental Health Promoters and Relaxation Techniques assisted employees to feel more supported across their health and wellness goals which may assist them to feel more valued within the hospitality sector.

### **4.3 Discussion**

#### ***Discussion on Theme 1***

Regular exercise is one of the major ways through which the mental health status of hospitality workers can be improved by relieving stress. Xiong et al. (2023) stated that this is because most studies indicate that physical activity tends to reduce levels of cortisol, a major hormone associated with stress, while boosting the release of endorphins, which enhances mood and reduces anxiety. Physical exercise, as a common stress outlet, can also be an effective coping strategy within the high-stress environment of hospitality, given the fast-paced nature of such environments, where the staff most closely interacts with customers, often for extended hours (Chodor, 2024). It is suggested that physical activity also improves emotional resilience, leading to reduced burnout and greater job satisfaction, which also leads to quality service in response to a better mental condition.

It goes hand in hand with ***Self-Determination Theory*** as it fosters intrinsic motivation, personal growth, and autonomy through exercise.

Exercise promotes mental well-being, supporting SDT's autonomy, competence, and relatedness, both for the employees and organizations.

### ***Discussion on Theme 2***

The need to use exercise programs embedded in the schedules of hospitality industry employees in treating mental stress has become important for better overall welfare. Ngo et al. (2023) opined that long shifts, demanding consumers, and pressure among hospitality employees could result in chronic stress. Working out helps handle stress, stabilize mood, and retain energy among hospitality industry shift workers. Simple exercises like stretching, walking, or short breaks to exercise can reduce the level of cortisol and increase cognitive ability with overall productivity (Albulescu et al. 2022). Exercise also improves sleep quality and job satisfaction, which have been proven in direct correlation with lower turnover and a more motivated workforce. This is supported by ***Self-Determination Theory (SDT)***, where motivation by individuals is studied in terms of autonomy, competence, and relatedness.

Exercise reports support ***SDT***, by enhancing autonomy, personal control over health; competence, improvement of both physical and mental capabilities. Additionally, it also improves relatedness, and social connections improvement and reduces stress and promotes good mental health of the employees.

### ***Discussion on Theme 3***

A significant barrier to dealing with mental health in the hospitality industry is the lack of exercise programs among staff. Lange and Kayser (2022) stated that most employees are put under high levels of stress mainly due to their long working hours and tough jobs, but none tends to have any form of exercise as a way of reducing stress. One of the main barriers is not knowing that exercise helps one improve his or her mental health by reducing stress and anxiety and improving the general mood. Employees would not have the time or resources to engage in such activities during work hours (Chodor, 2024). There is a lack of awareness and proper infrastructure in realizing complete exercise potential. This would mean that developing awareness and providing support for exercise programs would be necessary for the well-being of employees. ***SDT*** emphasizes intrinsic motivation and the role of autonomy, competence, and relatedness in fostering sustainable well-being through exercise.

### ***Discussion theme 4***

The hospitality industry has slowly learned that mental health matters and the right workplace wellness programs are now managing to increase employee welfare. Althammer et al. (2021) mentioned that these stress reduction, work-life balance improvements, and general mental



health improvements will all be in favour of the employees and the organization. Many hospitality companies have introduced initiatives such as flexible working hours, access to fitness programs, and mental health resources. These wellness programs would give employees the tools to manage stress and burnout, and then foster a positive work environment. Healthy lifestyle promotion and further prioritization of mental wellness also create a helpful and productive workplace (Xiong et al. 2023). This benefits the workplace with improved job satisfaction, better employee retention, and increased productivity. Besides, wellness programs enhance the development of a caring culture and a compassionate culture within the hospitality sector, hence increasing the strength of the employees who can easily manage pressure at work. ***SDT*** is consistent with the wellness program's focus on employee autonomy, competence, and relatedness to enhance mental health and motivation.

## **Discussion of quantitative data**

### ***Frequency of engaging in physical exercise***

Various studies have proved that the physical exercise frequency bears a strong positive effect on the mental health status of individuals working in the hospitality industry. Since the P-value is 0.003, it indicates the strength of the relationship between regular engagement in physical exercise and improved well-being among hospitality employees (Demirović Bajrami et al. 2022). The higher the frequency with which employees engage in physical exercises, the lesser the symptoms of stress, burnout, and anxiety, and this statistically holds.

Physical exercise releases endorphins, which are natural mood elevators that enhance general mental health. In a high-stress environment such as the hospitality industry, where employees face long hours, demanding customers, and high expectations, regular exercise can be an effective tool to counterbalance stress (Zhao, 2024). Exercise not only improves the fitness of a human being but also provides the workforce with a feeling of achievement that increases self-esteem and motivation.

Physical exercise and regular activities during work will boost employee engagement, productivity, and job satisfaction. In this context, wellness culture and promotion of regular exercise might be one way to address employees' mental health challenges as mental health problems have increased in the hospitality industry and stress in the workplace has also increased (Zhao, 2024).

**SDT** emphasizes the demand for as much intrinsic motivation and autonomy as can be granted that is met once employees work voluntarily for their gain.

### ***Reasons for high-stress level***

This suggests that, although the finding has a p-value of 0.060, which indicates a trend towards statistical significance but not at conventional levels of 0.05, there may be a presence of a relationship between certain factors and stress but needs further evaluation. Other research has pointed to various causes of stress, such as excessive job demands, insufficient social support, and work-life conflict (Kurtuluş et al. 2023). Besides that, there are strong correlations between stress with role conflict, burnout, and emotional exhaustion at the workplace (Danauskė et al. 2023). The most crucial factors from a psychological standpoint that can predict stress include perceived competence and control. The cumulative impact of these stressors can result in negative health outcomes, for example, anxiety, depression, and burnout.

**SDT** provides a conceptual framework for understanding the contribution of unmet psychological needs to stress (Vansteenkiste et al. 2023). This means that stress is obtained due to experiencing low autonomy, competence, and relatedness, to which supportive environments can reduce stress and increase well-being.

### ***The workplace supports employee health and well-being initiatives***

The finding of a p-value of 0.207 concerning support for employee health and well-being from workplaces hints that the relationship between workplace support and employees' well-being is not statistically significant at the conventional threshold of 0.05. However, this result hints that though the association of workplace support with well-being cannot be ruled out precisely, there may still exist a trend worthy of exploration.

According to research, workplace efforts to promote the health of employees, including wellness programs, mental health services, and flexible work arrangements, increase employee satisfaction, reduce stress, and enhance general well-being (Chang, 2024). Other research has also revealed that organizational support is related to lower burnout, better work-life balance, and higher job satisfaction (Irfan et al. 2023).

Such results can be better explained with the help of ***Self-Determination Theory*** which points out that an autonomous, competent, and related work environment leads to greater employee well-being support as those needs facilitate intrinsic motivation and superior mental health.

### ***Workplace programs would encourage to exercise more frequently***

This result of a p-value of 0.927 for the relationship between workplace programs and encouraging employees to exercise more frequently shows almost no weak or non-significant association. The higher p-value, in this case, indicates that the data may not have much of an association with workplace programs having a strong effect on promoting exercising among employees. However, this would also mean other factors such as individual motivation and external barriers that could have led to the variability in exercise frequency.

Mixed results are found in the literature about workplace wellness programs as exercise-related programs, such as gym memberships or on-site fitness facilities, increase physical activity (Gjestvang, 2022) However, others suggest that if there is inadequate employee engagement or support, then such initiatives have little impact on behaviour change (Rasool et al. 2021).

Here, applying the Self-Determination Theory can be useful as it suggests there is a higher probability of exercising when employees experience autonomy, competence, and relatedness within the program, factors potentially absent here.

### **Critique between qualitative and quantitative analysis**

As per the quantitative analysis, workers who exercise regularly have better mental health and emotional well-being and lower mental illness and work better within the hospitality sector as it is known for its intensity which includes fast-paced and long hours. Regular exercise has assisted in decreasing the symptoms of anxiety and depression which lead to a significant sense of emotional balance. Exercise has also developed cognitive function which may develop decision-making and problem-solving capabilities which are skills which are crucial while managing multiple guest needs in the hospitality sector (Kotera et al. 2021). A physically and mentally fit body is required for better equipped with stress which leads to less burnout and workers in hospitality who feel mentally well tend to remain motivated and productive across their shifts (Rabiul et al. 2023). Regular exercise, mainly flexibility training and mental support training may offer a significant foundation across handling physical and mental demands in the hospitality sector.

Similarly, qualitative analysis has also disclosed that a significant way of decreasing work pressure may be establishing relaxation spaces accessible across the workplace which include quiet rooms and designated areas for relaxation. Therefore, the workers are well empowered across taking short breaks over the relatively busy yet stressful time which has led to

improvement in their mental well-being and decreased burnout (Al-Alawi et al. 2021). Through embracing regular exercise, hospitality workers may transform how they approach their roles, from handling physical demands with ease to establishing resilience against stress. Moreover, Varga et al. (2021) have stated that for employers, encouraging fitness programs is more than a contribution to health as it is a commitment across cultivating a healthier and engaged work environment. While stress does occur in the hectic tasks and schedules in the hospitality sector, a wellness program may assist across decreasing or eliminating prolonged stress which reduces productivity and leads to unnecessary absenteeism from sickness. Similarly, Kalargyrou et al. (2023) have stated that through establishing a wellness program which concentrates across decreasing stress across the workplace, the hospitality sector may develop the performance of their employees and foster employee retention.

Moreover, prioritising mental well-being has contributed to worker satisfaction and mitigates challenges associated with burnout and stress. A comprehensive wellness program encourages a healthier work environment through encouraging employees to adopt a healthier lifestyle. Therefore, the hospitality industry should prioritise mental health through implementing different wellness programs which include exercise programs and mental support training for their employees to develop retention, productivity level and overall performance within the industry.

## **Chapter 5: Conclusion and recommendations**

### **5.1 Summary of Findings**

It has been concluded that employees in the hospitality sector need to prioritise mental health as they need to adapt to constant pressure and the fast pace of the sector despite suffering from burnout. The purpose of the research is to analyse the impact of exercise in developing the mental health and well-being of hospitality employees and detect strategies to develop their wellness at work. A range of hospitality professionals encounter immense pressure and stress which leads to burnout and in many cases, mental health crises. This issue is widespread and impacts a scale of hotels and restaurants which highlights the requirement for mental health awareness initiatives. Quantitative data and qualitative data collection have helped to gain significant numeric and evidence-based information regarding the importance of mental health within hospitality and how it may benefit them. As per findings, there are different factors which contribute to mental health issues in hospitality which include poor scheduling and long hours of work. Irregular schedules and constant changes across work hours have disrupted sleep and life patterns which has made it difficult for employees across maintaining a consistent routine. The lack of regularity has posed a negative effect across their mental health as stable routines and sleep are crucial for psychological well-being. Moreover, employers need to promote mental health resources which include counselling services and stress management workshops for preventing issues from escalating and supportive wellness programs which encourage work-life balance such as flexible scheduling, breaks between long shifts, gym areas and adequate time off which may significantly improve employees' mental health. Moreover, wellness programs which include mindfulness training, flexible working hours and mental health days off may help to foster mental development. In addition, employers may offer resources which include counselling services and access across mental health professionals to employees who may require additional guidance and support.

### **5.2 Linking with Objectives**

The objective 1 is linked to the literature review through point 1 which has elaborated on how regular exercise helps to decrease mental stress and depression which develops their morale and productivity level. It is also connected with findings which have also elaborated on regular exercise-making release chemicals which help to stay calm. The objective 2 is connected with literature review 2 through point 2 which illustrates that developing exercise programs into the work routines of hospitality employee may help to develop their mental wellbeing. The

objective is also connected with findings which have disclosed that regular exercise may assist hospitality and service workers enhance their physical health, manage stress and develop their overall performance.

The objective 3 is connected with the literature review through point 3 which elaborates on the lack of time, excessive workload and lack of awareness posed barriers while implementing regular exercise programs within the organisation for developing worker's mental health. Moreover, it is also linked with findings which disclose that there are different aspect which motivates workers in hospitality which makes them participate in exercise programs. The objective 4 is connected with the literature review through point 4 which explores the most direct aspect would be health-based- advantages that exercise assists attain, mainly in controlling stress and developing mental well-being. It is also linked with findings which disclose that wellness programs such as significant counselling services are important which develop employee morale within the organisation.

### **5.3 Recommendations**

The hospitality industry needs to facilitate group fitness activities which include team challenges and after-work yoga, to encourage employees for connecting outside of their typical roles. These shared experiences may assist in developing relationships and establish a culture of unity and may also establish a culture of wellness through embracing fitness as a group initiative which promotes a sense of culture of wellness through making staff feel supported across their personal and professional lives (Globacare.co.uk, 2024). In a high-energy industry such as hospitality, it is crucial for incorporating regular physical activity across the work routine and the industry needs to foster effective training programs through concerning the needs and requirements of the employees within the hospitality sector. The hospitality industry needs to promote active commuting through encouraging employees to bike and take public transportation and offer exercise opportunities through providing online and offline classes and gym facilities for employees during after or breaks from work (Vorecol.com, 2024). The industry needs to provide incentives which include fitness trackers, wellness programs and gym memberships for encouraging physical activity. The Hospitality industry needs to organise company-wide events which include sports tournaments, fitness challenges and walkathons for encouraging physical activity.

## **5.4 Limitations of the research**

The major limitation of the research is to selection of mixed methods as they are more costly and complex despite single-method approaches. It required more time, skills and resources for designing, implementing and analysing. They also involved more logistical and ethical issues which include managing data, confirming validity, reliability and obtaining data. Another drawback is they were difficult to interpret and integrate as they combined different kinds of data which may not be easily compared. It also required coherent and clear rationale across how methods are associated and how to address the research questions.

## **5.5 Future scope**

For addressing the limitation of the research, the further researchers need to utilise the mono method through primary data collection methods despite implementing both secondary and primary data collection methods. Primary data collection permits for more reliable and more results as it offers relevant and authentic data. It is faster and easier to gather primary data despite secondary data that may take a long time. Primary data may be gathered in real-time which makes it crucial for tracking events and monitoring procedures. Researchers need to use the mono-method as it permits a more concentrated approach for research.

## References

- Aid, A.W.F. (2022). *The Reality of Mental Health in the Workplace*. [online] Australia Wide First Aid. Available at: <https://australiawidefirstaid.com.au/resources/mental-health-and-workplace>.
- Al-Alawi, A.I., Al Mahamid, S.M. and Baloshi, M.B., 2021. Factors Associated with Participation in a Corporate Wellness Program: The Case of International Hospitality Company. *Jurnal Pengurusan*, 62. <https://www.academia.edu/download/87533677/489540024.pdf>.
- Albulescu, P., Macsinga, I., Rusu, A., Sulea, C., Bodnaru, A. and Tulbure, B.T., 2022. " Give me a break!" A systematic review and meta-analysis on the efficacy of micro-breaks for increasing well-being and performance. *Plos one*, 17(8), p.e0272460. <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0272460&type=printable>.
- Alita, D., Putra, A.D. and Darwis, D., 2021. Analysis of classic assumption test and multiple linear regression coefficient test for employee structural office recommendation. *IJCCS (Indonesian Journal of Computing and Cybernetics Systems)*, 15(3), pp.295-306. <https://journal.ugm.ac.id/ijccs/article/download/65586/31843>.
- Althammer, S.E., Reis, D., van der Beek, S., Beck, L. and Michel, A., 2021. A mindfulness intervention promoting work–life balance: How segmentation preference affects changes in detachment, well-being, and work–life balance. *Journal of Occupational and Organizational Psychology*, 94(2), pp.282-308. <https://bpspsychub.onlinelibrary.wiley.com/doi/pdfdirect/10.1111/joop.12346>.
- Amirrudin, M., Nasution, K. and Supahar, S., 2021. Effect of variability on Cronbach alpha reliability in research practice. *Jurnal Matematika, Statistika dan Komputasi*, 17(2), pp.223-230. <https://journal.unhas.ac.id/index.php/jmsk/article/download/11655/6173>.
- Bajrami, D.D., Terzić, A., Petrović, M.D., Radovanović, M., Tretiakova, T.N. and Hadoud, A. (2022). Will we have the same employees in hospitality after all? The impact of COVID-19 on employees' work attitudes and turnover intentions. *International Journal of Hospitality Management*, [online] 94(94), p.102754. doi:<https://doi.org/10.1016/j.ijhm.2020.102754>.



Baquero, A. (2023). Hotel Employees' Burnout and Intention to Quit: The Role of Psychological Distress and Financial Well-Being in a Moderation Mediation Model. *Behavioral Sciences*, [online] 13(2), p.84. doi:<https://doi.org/10.3390/bs13020084>.

Chang, R., 2024. The Impact of Employees' Health and Well-being on Job Performance. *Journal of Education, Humanities and Social Sciences*, 29, pp.372-378. <https://drpress.org/ojs/index.php/EHSS/article/download/20336/19903>.

Chiu, W., Grace) Oh, G. and Cho, H. (2021). Impact of COVID -19 on consumers' impulse buying behavior of fitness products: A moderated mediation model. *Journal of Consumer Behaviour*, 21(2). doi:<https://doi.org/10.1002/cb.1998>.

Chodor, D., 2024. Enhancing Well-Being in Transit. <https://stud.epsilon.slu.se/20702/1/doriana-c-20241210.pdf>.

Cortés-Denia, D., Isoard-Gautheur, S., Lopez-Zafra, E. and Pulido-Martos, M. (2022). Effects of vigor at work and weekly physical activity on job stress and mental health. *Scientific Reports*, 12(1). doi:<https://doi.org/10.1038/s41598-022-19966-z>.

Creese, B., Khan, Z., Henley, W., O'Dwyer, S., Corbett, A., Silva, M.V.D., Mills, K., Wright, N., Testad, I., Aarsland, D. and Ballard, C. (2020). Loneliness, physical activity and mental health during Covid-19: a longitudinal analysis of depression and anxiety in adults over 50 between 2015 and 2020. *International Psychogeriatrics*, [online] 33(5), pp.1–21. doi:<https://doi.org/10.1017/S1041610220004135>.

Danauskė, E., Raišienė, A.G. and Korsakienė, R., 2023. Coping with burnout? Measuring the links between workplace conflicts, work-related stress, and burnout. *Business: Theory and Practice*, 24(1), pp.58-69. <https://journals.vilniustech.lt/index.php/BTP/article/download/16953/11559>.

Demirović Bajrami, D., Petrović, M.D., Sekulić, D., Radovanović, M.M., Blešić, I., Vuksanović, N., Cimbalević, M. and Tretiakova, T.N., 2022. Significance of the work environment and personal resources for employees' well-being at work in the hospitality sector. *International Journal of Environmental Research and Public Health*, 19(23), p.16165. <https://www.mdpi.com/1660-4601/19/23/16165/pdf>.

Employers.hosco.com, (2021). *4 Examples of Employee Well-Being Programs in Hospitality*. Available from <https://employers.hosco.com/blog/4-examples-of-employee-well-being-programs-in-hospitality>. Accessed on 11.01.25.

enjuris. (2022). *Health Care Workers Are Suffering From Mental Health Issues*. [online] Enjuris. Available at: <https://www.enjuris.com/workplace-injury/healthcare-worker-mental-health-workers-compensation/>.

Fastercapital.com, (2024). *Boosting Employee Engagement Through Your Wellness Program*. Available from <https://fastercapital.com/content/Boosting-Employee-Engagement-Through-Your-Wellness-Program.html>. Accessed on 11.01.25.

Gallan, A.S., Kabadayi, S., Ali, F., Helkkula, A., Wu, L. and Zhang, Y., 2021. Transformative hospitality services: A conceptualization and development of organizational dimensions. *Journal of Business Research*, 134, pp.171-183. <https://scholarsindex.com/newuploads/tranformative-services.pdf>.

Giandonato, J.A., Tringali, V.M. and Thoms, R.C. (2021). Improving Mental Health through Physical Activity: A Narrative Literature Review. *Physical Activity and Health*, 5(1), pp.146–153. doi:<https://doi.org/10.5334/paah.108>.

Gjestvang, C., 2022. Fitness clubs: A venue for public health?. <https://nih.brage.unit.no/nih-xmlui/bitstream/handle/11250/2979992/Gjestvang%20C%202022.pdf?sequence=1>.

Globacare.co.uk, (2024). *Tips to encourage physical activity in the workplace*. Available from <https://www.globacare.co.uk/guides/tips-to-encourage-physical-activity-in-the-workplace>. Accessed on 11.01.25.

Han, H., Lee, S., Ariza-Montes, A., Al-Ansi, A., Tariq, B., Vega-Muñoz, A. and Park, S. (2021). Muslim Travelers' Inconvenient Tourism Experience and Self-Rated Mental Health at a Non-Islamic Country: Exploring Gender and Age Differences. *International Journal of Environmental Research and Public Health*, 18(2), p.758. doi:<https://doi.org/10.3390/ijerph18020758>.

Hayat, A. and Afshari, L., 2022. CSR and employee well-being in hospitality industry: A mediation model of job satisfaction and affective commitment. *Journal of Hospitality and Tourism Management*, 51, pp.387-396. [https://www.researchgate.net/profile/Aamir-Hayat/publication/360217242\\_CSR\\_and\\_employee\\_well-](https://www.researchgate.net/profile/Aamir-Hayat/publication/360217242_CSR_and_employee_well-)

[being\\_in\\_hospitality\\_industry\\_A\\_mediation\\_model\\_of\\_job\\_satisfaction\\_and\\_affective\\_commitment/links/642e0648ad9b6d17dc3997e2/CSR-and-employee-well-being-in-hospitality-industry-A-mediation-model-of-job-satisfaction-and-affective-commitment.pdf](https://antonopoulos.info/wp-content/uploads/2021/10/10-1108_ECAM-04-2021-0316.pdf).

Irfan, M., Khalid, R.A., Kaka Khel, S.S.U.H., Maqsoom, A. and Sherani, I.K., 2023. Impact of work–life balance with the role of organizational support and job burnout on project performance. *Engineering, Construction and Architectural Management*, 30(1), pp.154-171. [http://antonopoulos.info/wp-content/uploads/2021/10/10-1108\\_ECAM-04-2021-0316.pdf](http://antonopoulos.info/wp-content/uploads/2021/10/10-1108_ECAM-04-2021-0316.pdf).

Jalolov, T.S., 2024. USE OF SPSS SOFTWARE IN PSYCHOLOGICAL DATA ANALYSIS. PSIXOLOGIYA VA SOTSIOLOGIYA ILMIY JURNALI, 2(7), pp.1-6. <https://bestpublication.net/index.php/psixsot/article/download/30/30>.

Javatpoint.com, (2024). *What is Data Filtering?* Available from <https://www.javatpoint.com/what-is-data-filtering>. Accessed on 11.01.25.

Jeon, Y., Kim, D., Han, S., Huang, Y. and Kim, J. (2021). How Does Service Environment Enhance Consumer Loyalty in the Sport Fitness Industry? The Role of Servicescape, Cosumption Motivation, Emotional and Flow Experiences. *Sustainability*, 13(11), p.6414. doi:<https://doi.org/10.3390/su13116414>.

Kalargyrou, V., Sundar, V. and Jahani, S., 2023. Managers’ attitudes toward employees with depression and organizational citizenship behaviors in the hospitality industry: Assessing the mediating role of personality. *International Journal of Contemporary Hospitality Management*, 35(2), pp.602-629. <https://www.emerald.com/insight/content/doi/10.1108/IJCHM-01-2022-0082/full/pdf>.

Khattak, S.R., Nouman, M., Fayaz, M., Cismaş, L.M., Negruţ, L., Negruţ, C.V. and Salem, S., 2021. Corporate social responsibility and employee green behavior in the hospitality industry: a cross-country study. *Sustainability*, 13(19), p.10534. <https://www.mdpi.com/2071-1050/13/19/10534/pdf>.

Kotera, Y., Adhikari, P. and Sheffield, D., 2021. Mental health of UK hospitality workers: Shame, self-criticism and self-reassurance. *The Service Industries Journal*, 41(15-16), pp.1076-1096. <https://repository.derby.ac.uk/download/caf2bcb8085d7aba1469e406efd48c7f618a9829d6e3f>

[1f7dc125fee0e5d6fac/503321/ACCEPTED%20MANUSCRIPT%20Mental%20Health%20of%20UK%20Hospitality%20Workers.pdf](https://dergipark.org.tr/en/download/article-file/2569642).

Kurtuluş, E., Kurtuluş, H.Y., Birel, S. and Batmaz, H., 2023. The effect of social support on work-life balance: The role of psychological well-being. *International Journal of Contemporary Educational Research*, 10(1), pp.239-249. <https://dergipark.org.tr/en/download/article-file/2569642>.

Lange, M. and Kayser, I., 2022. The role of self-efficacy, work-related autonomy and work-family conflict on employee's stress level during home-based remote work in Germany. *International journal of environmental research and public health*, 19(9), p.4955. <https://www.mdpi.com/1660-4601/19/9/4955/pdf>.

Li, Y., Xu, S. (Tracy), Yu, Y. and Meadows, R. (2022). The well-being of gig workers in the sharing economy during COVID-19. *International Journal of Contemporary Hospitality Management*, 35(4). doi:<https://doi.org/10.1108/ijchm-01-2022-0064>.

Mahindru, A., Patil, P. and Agrawal, V. (2023). Role of Physical Activity on Mental Health and Well-Being: a Review. *Cureus*, [online] 15(1). doi:<https://doi.org/10.7759/cureus.33475>.

Mulder, P. (2024). *Self Determination Theory by Deci and Ryan explained*. [online] Toolshero. Available at: <https://www.toolshero.com/personal-happiness/self-determination-theory-sdt/> [Accessed 6 Jan. 2025].

Ngo, T., Le, D. and Doan, T., 2023. "Are your employees mentally prepared for the pandemic?" Wellbeing-oriented human resource management practices in a developing country. *International Journal of Hospitality Management*, 109, p.103415. <http://vinspace.edu.vn/bitstream/handle/VIN/72/%E2%80%9CAre%20your%20employees%20mentally%20prepared%20for%20the%20pandemic%E2%80%9D%20Wellbeing-oriented%20human%20resource%20management%20practices%20in%20a%20developing%20country.pdf?sequence=1&isAllowed=y>.

Priorygroup.com, (2024). *How exercise benefits mental health*. Available from <https://www.priorygroup.com/blog/exercise-to-improve-mental-health>. Accessed on 11.01.25.

psycnet. (2024). *APA PsycNet*. [online] psycnet.apa.org. Available at: <https://psycnet.apa.org/fulltext/2021-64697-001.html>.

Rabiul, M.K., Mohamed, A.E., Patwary, A.K., Yean, T.F. and Osman, S.Z., 2023. Linking human resources practices to employee engagement in the hospitality industry: the mediating influences of psychological safety, availability and meaningfulness. *European Journal of Management and Business Economics*, 32(2), pp.223-240. <https://www.emerald.com/insight/content/doi/10.1108/ejmbe-12-2020-0347/full/pdf>.

Rasool, S.F., Wang, M., Tang, M., Saeed, A. and Iqbal, J., 2021. How toxic workplace environment effects the employee engagement: The mediating role of organizational support and employee wellbeing. *International journal of environmental research and public health*, 18(5), p.2294. <https://www.mdpi.com/1660-4601/18/5/2294/pdf>.

Roche, C., Fisher, A., Fancourt, D. and Burton, A. (2022). Exploring Barriers and Facilitators to Physical Activity during the COVID-19 Pandemic: A Qualitative Study. *International Journal of Environmental Research and Public Health*, 19(15), p.9169. doi:<https://doi.org/10.3390/ijerph19159169>.

Schuch, F.B. and Vancampfort, D. (2021). Physical activity, exercise and mental disorders: It is time to move on. *Trends in Psychiatry and Psychotherapy*, 43(3), pp.177–184. doi:<https://doi.org/10.47626/2237-6089-2021-0237>.

Smith, P.J. and Merwin, R.M. (2021). The Role of Exercise in Management of Mental Health Disorders: an Integrative Review. *Annual Review of Medicine*, 72(1), pp.45–62. doi:<https://doi.org/10.1146/annurev-med-060619-022943>.

Statology.org, (2021). *How to Interpret a P-Value Less Than 0.05 (With Examples)*. Available from <https://www.statology.org/p-value-less-than-0-05/>. Accessed on 11.01.25.

Theis, N., Campbell, N., De Leeuw, J., Owen, M. and Schenke, K.C. (2021). The Effects of COVID-19 Restrictions on Physical Activity and Mental Health of Children and Young Adults with Physical and/or Intellectual Disabilities. *Disability and Health Journal*, [online] 14(3), p.101064. doi:<https://doi.org/10.1016/j.dhjo.2021.101064>.

Uptoskills.com, (2024). *Workplace Wellness: Cultivating a Healthy*. Available from <https://uptoskills.com/workplace-wellness-cultivating-a-healthy-and-productive-environment/>. Accessed on 11.01.25.

Vansteenkiste, M., Soenens, B. and Ryan, R.M., 2023. Basic psychological needs theory: A conceptual and empirical review of key criteria. *The Oxford handbook of self-determination*

pp.84-123.

Varga, S., Mistry, T.G., Ali, F. and Cobanoglu, C. (2021). Employee perceptions of wellness programs in the hospitality industry. *International Journal of Contemporary Hospitality Management*, ahead-of-print(ahead-of-print). doi:<https://doi.org/10.1108/ijchm-12-2020-1417>.

Varga, S., Mistry, T.G., Ali, F. and Cobanoglu, C., 2021. Employee perceptions of wellness programs in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 33(10), pp.3331-3354.  
[https://www.academia.edu/download/75348552/10\\_1108\\_IJCHM\\_12\\_2020\\_1417.pdf](https://www.academia.edu/download/75348552/10_1108_IJCHM_12_2020_1417.pdf).

Vorecol.com, (2024). *Strategies for promoting physical activity in the workplace*. Available from <https://vorecol.com/blogs/blog-strategies-for-promoting-physical-activity-in-the-workplace-9774>. Accessed on 11.01.25.

[illegible]



[AiEAz7bxo69vgTRggAG%2F1i7wxtFoiWo3lhI99Owcxis%2FSVEqtAMiABACGgwwMTI  
xNzcyNjQ1MTEiDPDMdGZ%2BrDmRK8FhoiqRAxoiL%2Fp7D66VaXTZw%2ByvPOiaw  
z61QHrlAksnzDocwuyRfybgXKYOJS0hZZmdG0csUNqQ97q7Jpj1xPjg78tke3OjpZVf7RQ  
1ij9%2BPepH0jlp8HMnFTTCeE1ECLUfhajvMSE8QOW%2FOqhSsEdy%2BacEk38XxPD  
hBJrX5BrIod%2BORU%2BWKGvq2%2Bu765ZagaSZnW5oZPkKPJFqEWy43jsELJkfHXz  
sAMH2xNDvgl2kr%2Bk%2FbpJl4ppwHYnMTZJTBi3VqUR7hXXtRxTpIxPko4%2Ff3OG  
XDqqsNyIz4RA0Sh0kDICX%2FjULL2lkfO8nJ2QL2SIXkZaggEKcfS0z3Dw6v%2B5RwW  
a34UR3Mjg2CKIL8Jl0w1dAidfm62PWM5d%2BzQD5PxjUMJasPedf8ZbOZVY4B170tuY  
LILPqtLkbFP0dlhoSBZ%2BgYYhT6H1gBIgmeEEytlttryh%2FPukl7IIF2qgXPnaoVBG67sOi  
FA%2BImcgpmOYr6if9to9CP22aeWcyP8x%2BIEbB2Tv1jeGOLQl1Udc1axPz90kr0fZKHJ  
MLnGkP4FOusBEutsnBwU4aCRnGMhed2JZI0xSyoZ82Yju7SuCzJXF1p%2FaR9MmPVo  
%2FAa0EwUqIH3NguRfdqN0o40XCncFQRp3M1wBV4ELpuaUm8GH2o9lV9D5%2B1pp  
mkVf8Y4rWa4oYVJKtVQR99NBxGC6isxUeDvzDiAv9GeXdP2hX83W66qZD1A2zC8hv5  
cf5ETj5A%2BR6lBmQDwp0hA4Ce%2B6rPe9DBCc6DaDPxOzul06N3F5yZObm7264gF2  
WgBSAjCE5JNi81eq39U9n448VbNcJ%2FofYWrAr%2BCZNvJVPZVFyuyaivAVnuTyc68  
HrmdUBUVgVg%3D%3D&AWSAccessKeyId=ASIAQFVOSJ57YMVUM5ZI&Expires=1  
607297415&Signature=4BtpXlc9oElRLfw%2BPFJlXkUHJAE%3D.](https://drive.google.com/file/d/1pxFffl1d9BRDOa55N2w70OZ7NeqTHCqyZ/view)

Xiong, W., Huang, M., Okumus, B., Leung, X.Y., Cai, X. and Fan, F., 2023. How emotional labor affect hotel employees' mental health: A longitudinal study. *Tourism Management*, 94, p.104631. <https://drive.google.com/file/d/1pxFffl1d9BRDOa55N2w70OZ7NeqTHCqyZ/view>.

Xiong, W., Huang, M., Okumus, B., Leung, X.Y., Cai, X. and Fan, F., 2023. How emotional labor affect hotel employees' mental health: A longitudinal study. *Tourism Management*, 94, p.104631. <https://drive.google.com/file/d/1pxFffl1d9BRDOa55N2w70OZ7NeqTHCqyZ/view>.

Xu, Y., Jie, D., Wu, H., Shi, X., Badulescu, D., Akbar, S. and Badulescu, A. (2022). Reducing Employee Turnover Intentions in Tourism and Hospitality Sector: The Mediating Effect of Quality of Work Life and Intrinsic Motivation. *International Journal of Environmental Research and Public Health*, [online] 19(18), p.11222. doi:<https://doi.org/10.3390/ijerph191811222>.

Xu, Y., Jie, D., Wu, H., Shi, X., Badulescu, D., Akbar, S. and Badulescu, A., 2022. Reducing employee turnover intentions in tourism and hospitality sector: The mediating effect of quality

of work life and intrinsic motivation. *International journal of environmental research and public health*, 19(18), p.11222. <https://www.mdpi.com/1660-4601/19/18/11222/pdf>.

Yu, J., Park, J. and Hyun, S.S. (2021). Impacts of the covid-19 Pandemic on Employees' Work stress, well-being, Mental health, Organizational Citizenship behavior, and employee-customer Identification. *Journal of Hospitality Marketing & Management*, [online] 30(5), pp.1–20. doi:<https://doi.org/10.1080/19368623.2021.1867283>.

Zhao, X., 2024. Long-Term Effects of Aerobics Training on Cognitive Function and Emotional Regulation. *Studies in Sports Science and Physical Education*, 2(4), pp.20-27. <https://www.pioneerpublisher.com/SSSPE/article/download/1158/1059>.

Zhu, Y., Wang, R., Zeng, R. and Pu, C. (2022). Does gender really matter? Exploring determinants behind consumers' intention to use contactless fitness services during the COVID-19 pandemic: a focus on health and fitness apps. *Internet Research*, ahead-of-print(ahead-of-print). doi:<https://doi.org/10.1108/intr-07-2021-0454>.



## Appendices

### Appendix 1: Survey results



survey results.xlsx

## Appendix 2: SPSS Results



Output.spv



Input.sav