

**University of Bahrain**

**College of Business Administration**

**Department of Management and  
Marketing**



**Factors Associated with Participation in  
Corporate Wellness Program: The Case of XYZ  
Company in the Kingdom of Bahrain**

A Thesis Submitted in Partial Fulfilment of the Requirements for the  
Master's Degree in Business Administration

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# جامعة البحرين

قسم الإدارة والتسويق

كلية إدارة الأعمال



العوامل المرتبطة بمشاركة الموظفين في برامج الصحة المثالية

حالة شركة XYZ في مملكة البحرين

اطروحة مقدمة كجزء من متطلبات الحصول على درجة ماجستير في

إدارة الأعمال – جامعة البحرين

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The student is awarded a grade B in the thesis subject.

☐ Without making any changes to the thesis.

☒ After making the modifications attached with this decision.

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## Abstract

**Purpose:** The purpose of this study is to identify factors that associate with employees' participation in corporate wellness programs, these factors are: personal, social, environmental, policy, and culture. This study explains that participation in corporate wellness programs endorses a healthier lifestyle which leads to healthier employees who can contribute to their organization by being more productive.

**Approach:** This study investigated participation in corporate wellness programs of employees of XYZ Company in the Kingdom of Bahrain. A questionnaire based on the relevant literature was designed to collect the relevant data. A web-based questionnaire was adopted and sent to the respondents. The population of this study consisted of 900 employees. Due to the small size of the population, a decision was taken to survey all the population. The researcher was able to obtain 307 completed questionnaires out of the 900 which represented a 34% response rate. The respondents represented all the company levels. The collected data were checked for any missing data or miss-filling, then, the data entered to the SPSS version 23.0 software for further analysis.

**Results:** The study yielded a response rate of 34% with 60.3% male respondents and 38.1% female respondents. The average age range was 31-44 with 44.6% and 59% of them reported they would like to use physical activity the most especially in the corporate fitness center. Further, 41.3% of the respondents preferred the program to be personalized exercise or diet counseling, and 44% preferred the option of one to one which could be due to cultural factors. This was found the most significant factor with p-value (alpha) .001 at .01 %level.

**Recommendation:** The researcher recommends that similar companies should use a comprehensive wellness program that includes physical activities, nutrition, recovery, and psychology and not one which focuses only on one aspect of wellness issues. Further, the company should focus on individual factors (motivations) and culture factors (beliefs) the most to increase employee's participation in a corporate wellness program.

**Originality value:** This research applied a novel model in a novel context that increases the employees' awareness and productivity which directly influences Bahrain economic development and aligns with Bahrain Vision 2030.

**Keywords:** Wellness programs, Employees' participation, Employee and Corporate Wellness benefits, Employee wellbeing, personal and social, environmental, policy, culture, health, obesity, Bahrain, GCC

## الخلاصة

**الغرض من الدراسة:** كان الغرض من هذه الدراسة، هو تحديد العوامل التي ترتبط بمشاركة الموظفين في برامج الصحة و العافية للشركات حيث تشرح هذه الدراسة أن المشاركة في هذه البرامج في موقع العمل يدعم أسلوب حياة صحية أكثر، مما يؤدي إلى موظفين يتمتعون بحياة صحية أكثر تمكنهم من المساهمة بإنتاجية أكبر في مؤسساتهم.

**منهجية الدراسة:** بحثت هذه الدراسة المشاركة في برامج الصحة والعافية في موقع العمل عن طريق موظفي شركة XYZ في مملكة البحرين حيث تم تصميم الاستبيان على أساس الدراسات والأبحاث السابقة المتعلقة بنفس الموضوع وذلك لجمع بيانات وافية عن الدراسة. تم ارسال الاستبيان من خلال البرامج المتخصصة على شبكة الانترنت مثل البريد الالكتروني وبرنامج التواصل الاجتماعي الواتس اب الي جميع الموظفين في الشركة. تتكون عينة الدراسة من (900) موظف، حيث تم مسح جميع افراد العينة وذلك نظراً لصغر حجمها وقد تمكن الباحث من الحصول على 307 استبيانات كاملة من أصل (900) والتي تمثل ما نسبته (34%) من معدل الاستجابة. والعينة تمثل جميع مستويات الشركة، و من ثم تم التحقق من البيانات التي تم جمعها بحثاً عن أي بيانات مفقودة أو عدم وجود أي خطأ ، ثم تم إدخالها إلى برنامج SPSS (الإصدار 23.0) لمزيد من التحليل.

**نتائج الدراسة:** كشفت نتائج هذه الدراسة أن نسبة (34%) من القوى العاملة الذين استجابوا للاستبيان يتوزعون على (60.3%) من الذكور و (38.1%) من الإناث، متوسط اعمارهم ما بين 31- 44 سنة (44.6%) ذكروا أنهم يرغبون في استخدام النشاط البدني أكثر (59%) في مركز اللياقة البدنية المتصل بمكان العمل.(41%) فضلوا أن يكون البرنامج ممارسة شخصية أو برنامج واستشارات متعلقة بالنظام الغذائي. (44%) من الدراسة فضلوا ان يكون البرنامج شخصيا (وجها لوجه) وذلك يرجع إلى العادات والتقاليد المجتمعية و التي وجدنا إنها كانت من أبرز العوامل المشاركة مع قيمة p (ألفا) 001 , عند مستوى 1% في اختبارنا.

**توصيات الدراسة:** يوصي الباحث بأن تستخدم الشركات المماثلة برنامجاً شاملاً للصحة و العافية يشمل الأنشطة البدنية، التغذية، الاستشفاء وعلم النفس، وان لا تركز فقط على جانب واحد من جوانب الصحة و العافية. واهتمام اكثر الى جانب العامل الشخصي (الدوافع)وعامل العادات والتقاليد المجتمعية(المعتقدات) اكثر لزيادة المشاركين في البرنامج.

**أهمية الدراسة:** طبقت هذه الدراسة نموذجاً جديداً في سياق جديد مما يزيد من وعي الموظفين وإنتاجيتهم مما يؤثر

بشكل مباشر على التنمية الاقتصادية في البحرين ويتمشى مع رؤية البحرين 2030.

**الكلمات الأساسية:** العوامل المرتبطة ببرامج الصحة و العافية، مشاركة الموظفين، وفوائد برنامج العافية للشركات، مملكة البحرين.

## **Dedication**

Dedicated to the wonderful people in my life

### **My family**

I can never thank you enough for all that you have done for me

### **My friends**

You have been my constant companions and more than friends

### **My teachers**

I could not have done it without you

# Declaration

Name: Mohamed Bakhsh Baloshi

ID Number: 20094585

This entitled dissertation “**Factors Associated with Participation in Corporate Wellness Program: The Case of XYZ Company in the Kingdom of Bahrain**” is submitted for obtaining the Degree of Master of Business Administration from the University of Bahrain.

I hereby declare that this thesis is the result of my own work except for quotations, which have been duly acknowledged.

Signature:

Date: 22 April 2019

## **Acknowledgment**

I would first like to thank my thesis advisor Prof. Adel Ismail Al-Alawi, Professor, Faculty of Business Administration, University of Bahrain, for his continuous efforts, valuable guidance, and encouragement throughout this study. It is a great honor to work under his supervision.

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# Table of content

|                                    |   |
|------------------------------------|---|
| DEFENSE COMMITTEE'S APPROVAL ..... | A |
| ABSTRACT .....                     | B |
| الخلاصة.....                       | D |
| DEDICATION .....                   | E |
| DECLARATION.....                   | F |
| ACKNOWLEDGMENT .....               | G |
| TABLE OF CONTENT .....             | H |
| LIST OF TABLES .....               | M |
| LIST OF FIGURES .....              | N |

## CHAPTER ONE: INTRODUCTION TO THE STUDY

|                                    |   |
|------------------------------------|---|
| 1.1 INTRODUCTION.....              | 1 |
| 1.2 RESEARCH PROBLEM .....         | 3 |
| 1.3 PURPOSE OF THE STUDY .....     | 3 |
| 1.4 SIGNIFICANCE OF THE STUDY..... | 4 |
| 1.5 SCOPE OF THE STUDY .....       | 5 |
| 1.6 LIMITATIONS.....               | 5 |
| 1.7 DELIMITATIONS .....            | 5 |
| 1.8 RESEARCH QUESTIONS.....        | 6 |
| 1.9 OBJECTIVES .....               | 6 |
| 1.10 SUMMARY .....                 | 7 |

## CHAPTER TWO: REVIEW OF LITERATURE AND THEORETICAL FRAMEWORK

|                       |   |
|-----------------------|---|
| 2.1 INTRODUCTION..... | 8 |
|-----------------------|---|

|          |                                                               |    |
|----------|---------------------------------------------------------------|----|
| 2.2      | GENERAL REVIEW .....                                          | 9  |
| 2.3      | EMPLOYEE WELLNESS PROGRAMS .....                              | 13 |
| 2.3.1    | <i>Health Education Programs</i> .....                        | 14 |
| 2.3.2    | <i>Physical Fitness Programs</i> .....                        | 14 |
| 2.3.3    | <i>Smoking Cessation Programs</i> .....                       | 15 |
| 2.3.4    | <i>Alcohol and Substance Abuse Programs</i> .....             | 15 |
| 2.3.5    | <i>Employee Assistance Programs</i> .....                     | 15 |
| 2.3.6    | <i>Disease Prevention Programs</i> .....                      | 16 |
| 2.4      | BENEFITS OF WORKFORCE WELLNESS PROGRAMS .....                 | 17 |
| 2.4.1    | <i>Advantages to the Employer</i> .....                       | 17 |
| 2.4.2    | <i>Advantages to the Employees</i> .....                      | 18 |
| 2.5      | ROLE OF INCENTIVES IN CORPORATE WELLNESS PROGRAMS .....       | 18 |
| 2.6      | DEMOGRAPHICS/FACTORS AFFECTING EMPLOYEE’S PARTICIPATION ..... | 19 |
| 2.7      | BARRIERS THAT PREVENT EMPLOYEE PARTICIPATION .....            | 21 |
| 2.8      | COST-BENEFIT ANALYSIS .....                                   | 23 |
| 2.9      | THEORETICAL FRAMEWORK.....                                    | 24 |
| 2.9.1    | <i>Individual</i> .....                                       | 25 |
| 2.9.2    | <i>Social environment</i> .....                               | 26 |
| 2.9.3    | <i>Physical environment</i> .....                             | 27 |
| 2.9.4    | <i>Organization Policy</i> .....                              | 28 |
| 2.9.5    | <i>Culture</i> .....                                          | 30 |
| 2.10     | WELLNESS PROGRAAMS IN ARAB COUNTRIES .....                    | 31 |
| 2.11     | HEALTH IN THE KINGDOM OF BAHRAIN .....                        | 32 |
| 2.11.1   | <i>Future direction of health strategy in Bahrain</i> .....   | 33 |
| 2.11.2   | <i>Challenges in the Ministry of Health</i> .....             | 33 |
| 2.11.2.1 | Demographic changes .....                                     | 33 |
| 2.11.2.2 | Escalating rate of NCDs .....                                 | 34 |

|                                                                 |    |
|-----------------------------------------------------------------|----|
| 2.11.2.3 Sustainability of Health Financing .....               | 34 |
| 2.11.3 <i>Definition of Terms</i> .....                         | 34 |
| 2.12 GAPS IN PREVIOUS RESEARCH .....                            | 36 |
| 2.13 WHAT DISCRIMINATES THIS STUDY FROM PREVIOUS STUDIES? ..... | 37 |
| 2.14 SUMMARY .....                                              | 37 |

### CHAPTER THREE: METHODS AND PROCEDURES

|                                                               |    |
|---------------------------------------------------------------|----|
| 3.1 INTRODUCTION.....                                         | 38 |
| 3.2 RESEARCH DESIGN.....                                      | 38 |
| 3.3 OPERATIONAL AND CONCEPTUAL DEFINITIONS OF VARIABLES ..... | 39 |
| 3.4 POPULATION OF THE STUDY (PARTICIPANTS) .....              | 40 |
| 3.5 SAMPLING PROCEDURE AND SAMPLE SIZE.....                   | 40 |
| 3.6 INSTRUMENT AND QUESTION STRUCTURE .....                   | 41 |
| 3.7 DATA COLLECTION PROCEDURE .....                           | 42 |
| 3.7.1 <i>Date preparation</i> .....                           | 42 |
| 3.7.2 <i>Data editing</i> .....                               | 43 |
| 3.7.3 <i>Data coding structure</i> .....                      | 43 |
| 3.7.4 <i>Factor Analysis and Normality Test</i> .....         | 44 |
| 3.8 PILOT TEST .....                                          | 44 |
| 3.9 SCALE RELIABILITY .....                                   | 44 |
| 3.10 DATA ANALYSIS .....                                      | 45 |
| 3.11 HYPOTHESES .....                                         | 46 |
| 3.12 SUMMARY .....                                            | 47 |

### CHAPTER FOUR: RESULTS AND ANALYSIS

|                                                       |    |
|-------------------------------------------------------|----|
| 4.1 INTRODUCTION.....                                 | 48 |
| 4.2 DESCRIPTIVE STATISTICS OF RESEARCH VARIABLES..... | 51 |
| 4.2.1 <i>Individual factors</i> .....                 | 51 |

|         |                                                                                          |    |
|---------|------------------------------------------------------------------------------------------|----|
| 4.2.2   | <i>Social Environment Factors</i> .....                                                  | 52 |
| 4.2.3   | <i>Physical Environment Factors</i> .....                                                | 53 |
| 4.2.4   | <i>Policy Factors</i> .....                                                              | 54 |
| 4.2.5   | <i>Culture Factors</i> .....                                                             | 55 |
| 4.3     | HYPOTHESES TESTING .....                                                                 | 55 |
| 4.3.1   | <i>Engagement factors</i> .....                                                          | 56 |
| 4.3.1.1 | Individual factors .....                                                                 | 56 |
| 4.3.1.2 | Social environment factors .....                                                         | 57 |
| 4.3.1.3 | Physical environment .....                                                               | 58 |
| 4.3.1.4 | Policy .....                                                                             | 59 |
| 4.3.1.5 | Culture.....                                                                             | 60 |
| 4.3.2   | <i>Barriers that prevent employee to participate in corporate wellness program</i> ..... | 61 |
| 4.3.3   | <i>Elements preferred by employees</i> .....                                             | 63 |
| 4.3.4   | <i>The area/point of interest in corporate wellness program</i> .....                    | 64 |
| 4.4     | SUMMARY .....                                                                            | 66 |

## **CHAPTER FIVE: DISCUSSION, CONCLUSION, RECOMMENDATION AND FUTURE**

### **WORK**

|         |                                          |    |
|---------|------------------------------------------|----|
| 5.1     | INTRODUCTION.....                        | 67 |
| 5.2     | THE RESEARCH QUESTIONS DISCUSSIONS ..... | 67 |
| 5.2.1   | <i>Question 1</i> .....                  | 67 |
| 5.2.1.1 | Individual factors .....                 | 68 |
| 5.2.1.2 | Social environment factors .....         | 69 |
| 5.2.1.3 | Physical environment factors .....       | 70 |
| 5.2.1.4 | Organizational policy factors .....      | 71 |
| 5.2.1.5 | Culture factors.....                     | 71 |
| 5.2.2   | <i>Question 2</i> .....                  | 73 |
| 5.2.3   | <i>Question 3</i> .....                  | 74 |

|                        |                         |           |
|------------------------|-------------------------|-----------|
| 5.2.4                  | <i>Question 4</i> ..... | 74        |
| 5.3                    | CONCLUSIONS .....       | 75        |
| 5.4                    | RECOMMENDATION .....    | 75        |
| 5.5                    | SUMMARY .....           | 78        |
| <b>REFERENCES.....</b> |                         | <b>79</b> |

## **APPENDIX**

APPENDIX A – BODY MASS INDEX

APPENDIX B - QUESTIONNAIRE

APPENDIX C ADAPTED QUESTIONS FROM PORTER NOVELLI HEALTH STYLES QUESTIONNAIRE

PORTER NOVELLI: STYLES 2004

APPENDIX D - LIST OF QUESTIONNAIRE FIGURES

APPENDIX E SOCIO-ECOLOGICAL MODEL

APPENDIX F MODIFIED QUESTIONNAIRE

APPENDIX G SAMPLE SIZE

## List of tables

|                                                                                                                                                 |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----|
| TABLE 2.1: <i>SMEs DEFINITIONS IN OTHER COUNTRIES</i> .....                                                                                     | 35 |
| TABLE 2.2: <i>SMEs DEFINITION IN THE KINGDOM OF BAHRAIN</i> .....                                                                               | 36 |
| TABLE 3.1: <i>DEFINITIONS OF VARIABLES – OPERATIONAL AND CONCEPTUAL</i> .....                                                                   | 39 |
| TABLE 3.2: <i>RATE OF RESPONSES</i> .....                                                                                                       | 40 |
| TABLE 3.3: <i>CRONBACH’S ALPHA TEST FOR ALL THE RESEARCH VARIABLES</i> .....                                                                    | 44 |
| TABLE 3.4: <i>SCALE LEVEL INTERPRETATION</i> .....                                                                                              | 46 |
| TABLE 4.1: <i>RESPONDENTS DEMOGRAPHIC PROFILE</i> .....                                                                                         | 49 |
| TABLE 4.2: <i>INDIVIDUAL FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS</i> .....                                                             | 51 |
| TABLE 4.3: <i>SOCIAL ENVIRONMENT FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS</i>                                                           | 52 |
| TABLE 4.4: <i>PHYSICAL ENVIRONMENT FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS</i><br>.....                                                | 53 |
| TABLE 4.5: <i>POLICY FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS</i> .....                                                                 | 54 |
| TABLE 4.6: <i>CULTURE FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS</i> .....                                                                | 55 |
| TABLE 4.7: <i>CHI-SQUARE TEST: ASSOCIATION BETWEEN INDIVIDUALS’ FACTORS AND<br/>PARTICIPATION IN CORPORATE WELLNESS PROGRAM</i> .....           | 56 |
| TABLE 4.8: <i>CHI-SQUARE TEST: ASSOCIATION BETWEEN SOCIAL FACTORS AND PARTICIPATION IN<br/>CORPORATE WELLNESS PROGRAM</i> .....                 | 57 |
| TABLE 4.9: <i>CHI-SQUARE TEST: ASSOCIATION BETWEEN PHYSICAL ENVIRONMENTAL FACTORS<br/>AND PARTICIPATION IN CORPORATE WELLNESS PROGRAM</i> ..... | 58 |
| TABLE 4.10: <i>CHI-SQUARE TEST: ASSOCIATION BETWEEN POLICY FACTORS AND PARTICIPATION<br/>IN CORPORATE WELLNESS PROGRAM</i> .....                | 59 |
| TABLE 4.11: <i>CHI-SQUARE TEST: ASSOCIATION BETWEEN CULTURE FACTORS AND PARTICIPATION<br/>IN CORPORATE WELLNESS PROGRAM</i> .....               | 60 |
| TABLE 4.12: <i>BARRIERS TO CORPORATE WELLNESS PROGRAMS</i> .....                                                                                | 61 |
| TABLE 4.13: <i>ELEMENTS OF CORPORATE WELLNESS PROGRAMS PREFERRED BY EMPLOYEES</i> ..                                                            | 63 |
| TABLE 4.14: <i>AREAS/POINTS OF INTEREST IN THE CORPORATE WELLNESS PROGRAMS</i> .....                                                            | 64 |

## List of Figures

|                                                                                                                                                                                                         |    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| <i>FIGURE 2.1: THE RESEARCH MODEL IS DEVELOPED BY THE RESEARCHER BASED ON THE FOLLOWING LITERATURE (RICHARD, 2011; BENJAMIN, 2013; HAYMAN, 2016; MCLEROY, BIBEAU, STECKLER, AND GLANZ, 1988).</i> ..... | 24 |
| <i>FIGURE 4.1: INDIVIDUAL FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS (%)</i> .....                                                                                                                | 51 |
| <b><i>FIGURE 4.2: SOCIAL ENVIRONMENT FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS (%)</i></b> .....                                                                                                 | 52 |
| <i>FIGURE 4.3: PHYSICAL ENVIRONMENT FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS (%)</i> .....                                                                                                      | 53 |
| <i>FIGURE 4.4: POLICY FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS (%)</i> .....                                                                                                                    | 54 |
| <i>FIGURE 4.5: CULTURE FACTORS AS PERCEIVED BY THE SURVEYED RESPONDENTS (%)</i> .....                                                                                                                   | 55 |
| <i>FIGURE 4.6: BARRIERS TO CORPORATE WELLNESS PROGRAMS (%)</i> .....                                                                                                                                    | 62 |
| <i>FIGURE 4.7: TYPES OF ELEMENTS CORPORATE WELLNESS PROGRAMS PREFERRED BY EMPLOYEES</i> .....                                                                                                           | 64 |

# **Chapter One**

## **Introduction to the Study**

### **1.1 Introduction**

Good health of employees combined with their education, skills, knowledge, and attitude have a positive effect on the company's productivity (Grawitch, Gottschalk, and Munz, 2006). With increasing focus on employee health, corporate wellness programs have become a worldwide trend (Grawitch et al., 2006). In today's business world, employees' health and wellbeing programs are not only important to employees but also to employers.

Given the importance of corporate wellness programs, it has been recently studied extensively. Effective wellness programs have several aspects, including corporate health and safety (a multi-discipline aimed at ensuring a safe work environment), lifestyle management programs (designed to promote change in behavior) and corporate stress management (techniques and therapies to mitigate stress). More often, corporate wellness programs are usually initiated by employers to encourage employees to live a healthy lifestyle by implementing major changes in their daily routine life (Goetzel, Henke, Tabrizi, Pelletier, Loeppke, Ballard, and Serxner, 2014).

Employers have realized the benefits of having healthy employees. Nowadays, companies offer different benefits to convince employees ("what is in it for me?") that there is something for everyone regardless of their positions, such as agile working practices (flexi timing and work from outside the office), 24 x 7 Helpline (on-call doctors, nurses, nutritionists), access to the gym, paternity leave. In some cases, Nursery at the workplace have already been put into place. A wide range of benefits both employees and employers can gain are healthier and happier employees who are productive at work, rarely absent from office and committed to their work. This, in turn, increases profitability which is the ultimate goal of any business to be successful (Sears, Coberley, and Pope, 2013). Worldwide, Non-Communicable Diseases (hereafter NCDs) such as coronary heart diseases, type2 diabetes, overweight, lung disease, back pain, and cancers, shorten life

expectancy. NCDs are expected to cost \$47 trillion over the next 20 years (Takala, Hamalainen, Saarela, Yun, Manickam, Jin and Lin 2014). NCDs are also used by some organizations as an indicator of their employees' productivity.

Integrated Benefits Institute (IBI) study in 2007 suggested that the main cause of productivity loss is the frequent illness of employees. The authors reported that the average employee loses 8 days annually to health-related productivity loss. Based on United States labor costs, this equates to an annual cost of \$2,598 per person (Schultz & Edington, 2007). For Aramco, a company in Saudi Arabia that has over 56,000 employees, this would equate to \$145 million in lost revenue (Hayman, 2016) due to health-related issues.

Such NCDs present a global challenge not only to developed countries, but even much more for the Middle Eastern countries, and the Gulf Cooperation Council countries are not an exception. Bahrain, in particular, has a shortage of data relating to the lifestyle of the citizens and residents. The factors behind the NCDs are over-consumption and misuse of tobacco and/or alcohol; lack of physical activity, and poor eating habits (Hayman, 2016). The link between genetics, unhealthy diet and diseases are being regularly investigated along with economic, social and personal contributing factors.

Previous studies explored several aspects of wellness program; adoption (Rono, 2011), participation (Maletzky, 2017), benefits (Jones, Molitor, and Reife, 2018), physical activity (Gontarev, Kalac, Ameti, and Redjepi, 2016), health risk and Corporate productivity (Hayman, 2016), incentive to participation and motivations (Henry, 2015), non-participation (Kolacz, 2015). However, none of the previous studies explored the wellness program in the hospitality sector. Although previous studies suggested that future studies should explore employee participation in wellness programs in other cultures, they did not investigate wellness program in Arab Culture in general and the Kingdom of Bahrain in particular. Thus, the current study aims to fill this void in the literature by investigating the wellness program in a large company in the hospitality sector in Bahrain (hereafter XYZ).

XYZ Convention and Spa opened in the late sixties with 361 rooms. It is undoubtedly Bahrain's largest hotel given the choice of facilities and services for both business and leisure travelers and it boasts a stylish and cosmopolitan atmosphere with a superb choice of award-winning restaurants and lounges with 16 restaurants and bars, which boast a selection of diverse cuisines. The XYZ always delivers one of the finest dining experiences in the region.

## **1.2 Research Problem**

The importance of Employees' Health is increasing as it highly affects the performance of the overall organization. There is an increasing interest in organizations where they tend to invest more in wellness programs. However, there seems to be low participation from the employees' side. The problem of this research lies in the insufficient data regarding the efficiency of wellness programs in the organizations and the employees' participation level in the GCC. According to Bahrain 2015 health profile, 32.9% of the population faced eating disorder challenges and either overweight or obese and 40% of students between the ages 13 to 15 were either overweight or obese. Five factors have been chosen in this research to understand this problem. These factors are: personal, social, environmental, policy, and culture. The research problem can be formulated in several questions as it appears in research questions.

## **1.3 Purpose of the Study**

The primary purpose of this study was to identify factors that associate with employees' participation in the wellness programs. Recognizing and working on these deterrent factors would improve employee participation in corporate wellness program.

Another purpose of the study is to enhance the body of knowledge of previous research about the barriers and incentives in Bahrain, especially in XYZ Company to increase participation in wellness programs at work. By finding these factors and barriers, the management can then help the employees by targeting programs that will be beneficial to them which can yield reductions in all indirect and direct costs.

## **1.4 Significance of the Study**

This research is targeting a significant problem of chronic disease and non-chronic disease, also the financial burden of these conditions on businesses in Bahrain. Both employers and government agencies could benefit from this research by offering probable solutions to this rising health care concern. Business and government can design and re-design the wellness program to fit their employees' needs which increase their productivity and overall performance. Corporate wellness initiatives have become quite popular. Healthy People 2020 guidelines encourages more people to take advantage of the such healthy initiatives (Newman, 2015).

The outcome of this study also determined the current employee participation level in wellness programs and tried to identify reasons for not having higher participation rates. This will allow businesses and governmental organizations to take action in order to achieve a higher level of participation, which in turn will increase the profitability, and decrease absenteeism/presenteeism. XYZ Company is a hospitality service company offering many services to their customers. Therefore, this research could help other similar companies trying to implement a new wellness program or simply increase participation on an existing program.

As no study of this nature has been conducted in Bahrain or in the Arabian region, researchers also can benefit from the results of this study by applying or modifying the research model and try to use it on other sectors to test the validity of the current research model. Based on the current research results, future researchers may pay more attention to all aspects of wellness program.

This study will fill the gap in the scholarly literature by addressing an under-researched area of employee participation in employer-sponsored Corporate Wellness Program (CWP). Also, this study provides insights into personal, social, physical environmental policies and organization cultural factors of employee engagement and informed strategies for better corporate productivity attributable to health-related behaviors. These factors may enable researchers to segment employees into several target groups which ease designing

and setting up a comprehensive (physical activity, nutrition, recovery, psychology) corporate wellness program in other organizations and sectors.

## **1.5 Scope of the Study**

This study sought to determine the factors that affect employee participation in wellness programs. The scope of this study was limited by investigating only personal, social, environmental, policy, and culture factors that determine employees' participation in wellness program, but this study did not take into account any mediating or moderating variables.

## **1.6 Limitations**

The research has several limitations that are out of the researcher control:

1. The employees' responses to the questions in the questionnaire is not free of bias.
2. The questionnaire was administered electronically. Hence, the researcher was not able to interact with the participants nor were they able to seek any clarification or check any doubts.

## **1.7 Delimitations**

The delimitations of this study include factors that are in the research control:

1. Place limitations: The questionnaire was distributed only to employees of XYZ Company located in Bahrain.
2. Time limitations: The study was conducted during the year 2017-2018.
3. Subject limitations: This study only focused on personal, social, environmental, policy, and cultural factors that determine employees' participation in the current wellness programs. The study did not include other organizational or personal factors that may determine participating level of employees in the wellness programs.
4. The study depended mainly on the questionnaire as the only way of data collection. This method can be misleading if the questions on the questionnaire were formulated

to direct the respondents to the desirable answer. Therefore, the findings of this study cannot be generalized to the rest of the industries and business sectors in Bahrain.

## **1.8 Research Questions**

Following the arguments in the research problem section, there is a lack of employees' participation in the wellness programs. Therefore, the research problem can be represented by the following questions:

1. What are the factors associated with employees' participation in corporate wellness programs?
2. What are the barriers for employees to participate in corporate wellness programs?
3. What are the elements that employees are most likely use at corporate wellness programs?
4. What are the areas/point of interest in the wellness program for employees to motivate them to participate more in the corporate wellness program?

## **1.9 Objectives**

The objectives of the study were as follows:

1. To investigate the factors associated with participation in corporate wellness programs.
2. To investigate the barriers for employees to participate in corporate wellness programs.
3. To investigate what elements of corporate wellness programs would employees use.
4. To investigate the area/point of interest changes to the corporate wellness program that would motivate employees to participate more in the program.

## **1.10 Summary**

Simply having a wellness program in place does not guarantee participation. Many times, those who need it the most are also the least likely to participate. Once a company understands why employees do not participate in certain wellness programs, it can then address these issues and concentrate on programs in which the employees will want to participate.

## **Chapter Two**

### **Review of Literature and Theoretical Framework**

#### **2.1 Introduction**

This section gives practical and theoretical evidence from other literature reviews related to the topic. It also includes the framework model which covers the research study. An online search threw up more than 300 citations. All these references were refined to include as many articles as possible, related to the research topic over the period of the last 30 years.

The best articles included a problem statement, research questions, hypothesis, a review of the literature, conceptual framework, size of the actual sample size, how data was collected, measured and analyzed, the results of the data analysis, the implications, and recommendations if any. Those articles were then reviewed to check if any of them were relevant to this study and whether they had any significance to add to the body of evidence. Only those articles which comprised of an inclusive corporate wellness program were included in the study. Any research that was more than 30 years old were included only in instances when no other better evidence was available.

This study signifies a comprehensive analysis of corporate wellness programs to date and at the same time evaluates current participation, the effects of such wellness programs, the barriers to participation and the role of incentives. This thesis combines

- literature reviews
- previous studies of corporate wellness programs
- statistical analysis of program data to evaluate employee participation in wellness programs in the Kingdom of Bahrain
- to estimate the influence of these programs on employee health and healthcare cost
- to evaluate the role of associated factors such as demographics (age, gender, education, ethnicity, experience, and position) and engagement factors (individual

factors, social environment, physical environment, organization policies, and culture) in corporate wellness program.

There is a lack of studies and articles that dealt with the research topic in the Gulf Cooperation Council (GCC) countries, particularly in Bahrain. Whilst reviewing the literature, it was noticed that corporate wellness programs varied on many factors such as the support of the employers, the organizational policies, the availability of resources and importantly, funding.

## **2.2 General Review**

According to Hochart & Lang (2011), some organizations started using wellness programs about 20 years ago. However, with the changes in healthcare, more organizations have implemented corporate programs. These programs aim at improving the health of the employees. Another study from Heinen and Darling (2009) revealed that if the cost of unhealthy employees can be carried out to the total expenses, this eventually reduces profitability of the organization. It has been said that about 68% of the organization's operating profit is spent on healthcare expenses for employees especially those who are covered under the company's insurance plan. Most often the unhealthy status of employees will eventually reduce productivity, increase absenteeism and presenteeism, and is an increased risk for injury on the job (Heinen & Darling 2009). As such, a study conducted by Parks and Steelman, (2008) concluded that absenteeism would cost American companies about \$26 million annually.

A study conducted by Heineen and Darling (2009) and Pearson (2010) concluded that a comprehensive corporate wellness program sponsored by the employer can eventually reduce absenteeism. On the other hand, it can definitely improve rates of satisfaction and engagement, reduce insurance premiums and claims, decrease employee's expenditure on health, reduce flexible health hazard factors and decrease the levels of any job-related stress. As stated by Parks and Steelman (2008), corporate wellness programs can be one of the parameters in the recruitment process and used as a motivating factor by the employers to retain their employees. In addition, as suggested by Hochart and Lang (2011), successful

programs could be one of the comprehensive approaches to wellness and in transforming the culture of an organization.

A lot of examples are available of successful corporate wellness programs sponsored by employers. The programs have improved both areas, health, and organizational outcomes and lessened cost for both the organization and individual participant.

In 2013, an investigation was conducted by Kaspin, Gorman, and Miller about the characteristics and outcomes of corporate wellness programs. It also included research in more than 20 organizations to find out why their programs were successful. The results revealed that these organizations had something in common, such as a strong management team, good support for implementation, programs that were well-suited, customized and adapted as per the needs of the employees, educating employees regularly on various aspects and finally, utilization of technology (Kaspin et al. 2013).

From the study mentioned above, most organizations reported a positive return on investment (ROI) which could result in lower absenteeism rates. They found out that the total expenses of the organization on healthcare either decreased over time or the increase was lower than those employees who did not join the wellness program. Majority of the organizations having a corporate wellness program reported that the health insurance premiums were lower for those who joined such corporate wellness programs.

In some studies, reviewed by Kaspin et al. (2013), they found out that insurance premiums, worker compensation costs, and indirect expenses such as absenteeism and lost working days decreased. Employer-sponsored corporate wellness programs in terms of physical outcomes had an increased impact in physical exercise, reduced health risk for participants, and smoking cessation among the participants.

According to Kaspin, creating a very flexible wellness program ensures employee preferences to be successful not because of the corporate wellness program design, but because of the characteristics of the organization. A supportive leadership that encourages participants to improve employee's health without a complete focus on financial issues is considered a successful organization.

Involvement in a corporate wellness program, besides the factors and characteristics that influence participation, were investigated by several researchers. Rebroke, Van Lenthe, Van Empelen, and Burdorf (2009) reviewed 23 studies associated with this issue. They found out that the level of participation increased from 10% to 64% with a median of 33%. The maximum participation was in programs that offered incentives. The highest participation rates among the reviewed studies were educated women and married employees (Robroek et al. 2009)

The findings of this review support the need to develop a comprehensive corporate wellness program that is tailored to fit the needs of the target group. The researchers suggested the use of incentives and other parameters that could increase the rate of participation among employees in any wellness programs set by the organization.

On the contrary, 33 studies were reviewed by Ocilla, Schhnyer, Larkin, Eibner, and Mattke (2012), revealed that the influence of corporate wellness programs have other outcomes because of employee's involvement (Osilla et al. 2012). Of the 63 outcomes in their analysis, it showed that the organizations with wellness programs had the following outcomes:

- 62% increase in exercise and physical levels;
- 50% improvement in diet which included higher fruit and vegetable. consumption with lower fat intake;
- 50% drop in physiological markers (BMI, cholesterol, blood pressure);
- 86% decline in smoking;
- 87% reduction of expenses on healthcare.

According to Baicker, Cutler, and Song (2010), more than 80% of the companies used a Health Risk Assessment (HRA) - a very specific clinical assessment to collect data on the employee population. The study stated that respondents needed 40% self-work, 40% individual counseling, 35% group activities, classes and seminars, 30% incentives to increase participation which included employee bonuses and reimbursement. Obesity and smoking cessation were the most common related programs.

For every dollar spent on wellness, there was an average decrease of costs: \$3.27 for medical and \$2.73 for absenteeism. This was due to the fact that employees are healthier (Baicker et al.2010).

In a meta-analysis conducted by Conn, Hafdahl, Cooper, Brown, and Lusk (2009), they revealed that sponsored corporate program initiatives can improve health and corporate outcomes. 38,231 subjects were under this analysis, where most of them were working in large organizations of approximately 7,000 employees. The most common sectors were education, healthcare, government, and manufacturing. Significant positive effects have been noted for physical activity, fitness, lipid measurements, anthropometric measurements, attendance at work and stress (Conn et al. 2009).

The literature review findings of the present study in this section are more specific. Within the research, many factors have been involved such as individual factors, environmental factors, social factors, health risk data, attitudes regarding health, barriers, incentives, cost of wellness programs and outcomes.

Some related studies revealed the relationship between employees' health and productivity. According to Goetzel, Hawkins, Ozminkowski, and Wang (2003), many employers associate poor health with employee's reduced performance, safety, and morale. The organizational costs of workers in poor health with behavioral risk factors include high medical, disability and workers compensation expenses. The study concluded that nowadays, many employers provide corporate health promotion programs because they believe good healthcare prevention programs increase worker productivity and effectiveness in the organization. They look forward to seeing quality healthcare and corporate health promotion programs and invest in this type of program among their employees.

In the study conducted by Finkelstein, Dacost, Dibonaventura, Burgess, and Hale (2010) of full-time employees, it was revealed that about \$73.1 billion was the cost of obesity in the U.S. alone. They also discovered that the cost of obesity per capita was as high as

\$16,900 for women and \$15,269 for men. However, the largest share of those costs was attributed to absenteeism and presenteeism (Finkelstein et al. 2010).

Ammendolia, Cote, Cancelliere, Cassidy, Hartivgsen, Boyle, and Amick (2016) said that being present at work but having only a limited set of duties due to health problems or any other issues is highly prevalent and costly to employers. Factors that potentially contribute to presenteeism are being overweight, poor diet, lack of exercise, high stress, and poor relations with co-workers and/or the management (Ammendolia et al. 2016).

On the other hand, absenteeism refers to an employee's time away from work due to illness or disability. According to the Bureau of Labor Statistics (2005), among the United States workforce, about 4% to 10% are not at work on any given day due to absenteeism. The rising frequency and duration of leave related to the poor health of employees is the common plague of many employers.

According to Ammendolia and Cancelliere (2016), there is a growing awareness that absent workers create a direct drain on profitability due to reduced productivity and increased expenditure. In the same way, Goetzel et al., (2014) mentioned that more than half of the employer's health and productivity-related expenditure exists in more direct ways such as presenteeism and absenteeism. Though they are not direct medical costs, but they are often a result of related medical conditions.

## **2.3 Employee Wellness Programs**

The interest in Employees Wellness Program (EWP) is rising according to Gie (2017). He concluded that employee wellness program fundamentally contributes to job satisfaction and employee engagement.

According to studies by Archer (2001), and Vafaeenia (2014), wellness programs assist people to adopt positive behaviors leading to healthier lifestyles in all aspects such as social, mental, emotional, spiritual and above all physical wellness. Brewer (2010), pointed out that many of today's major health programs are related to lifestyle and these ailments can only be prevented or minimized by developing a positive behavior.

After careful analysis, Hendrickson (2013), reported five factors that could promote participation in wellness programs:

1. effective communication strategies
2. opportunity for employee engagement
3. leadership engagement at all levels
4. use of existing resources and relationships
5. continuing evaluation.

### **2.3.1 Health Education Programs**

Education is the foundation of preventive care and should be given high priority by any employer. According to Berrone, Cruz, Gomez, and Larraza-Kintana (2010), programs related to health education are designed to assist people or groups, leading them to behave in a manner conducive to the promotion, maintenance, and restoration of health. According to Brewer (2010), when companies are committed to corporate wellness, they make a significant investment in educating their employees.

He also suggested that topics to be covered during the educational sessions include:

- exercise
- nutrition
- stress management
- illness prevention
- injury prevention and ergonomics
- medical self-care.

### **2.3.2 Physical Fitness Programs**

As mentioned by Mayrell (2010), increase in walking paths and use of stairs is an activity that could prompt employees to walk. Sprucing up stairways would make it a more appealing alternative to elevators. Placing parking lots further away from the office is another way to encourage more walking. Walking increases physical fitness and reduces

the risk of sickness and heart diseases. Regular exercise could greatly improve health through getting started is not that easy.

### **2.3.3 Smoking Cessation Programs**

One of the foremost causes of death and disability which is also considered to be the greatest public health problem is smoking. According to Volpp, Troxel, Pauly, Glick, Puig, Asch, and Corbett (2009), smoking is responsible for cancer, cardiovascular and other related respiratory diseases. To some extent, the public health campaigns have successfully alerted the public about the risk of smoking.

### **2.3.4 Alcohol and Substance Abuse Programs**

Alcoholism and drug abuse are extremely serious problems in our world today that lead to approximately 88,000 deaths each year in United States alone (Gossop, 2016).

According to Hersh (2000), abuse of substance is still a big problem in many organizations. It cost organizations over 200 billion dollars annually through the mid-1990's. Though health officials in all government and private agencies, consultants and other stakeholders have encouraged employers to adopt techniques related to substance abuse in the corporate sector, some have responded by detecting the presence of illegal drugs or testing for influence of alcohol and stricter implementation of standards.

### **2.3.5 Employee Assistance Programs**

According to Soeker (2016), employee assistance programs are a set of company policies and procedures for identifying and responding to personal or emotional problems of employees which interfere directly or indirectly with job performance. Benavides and David (2010), stated that it is a reactive program designed to mitigate existing negative circumstances by addressing core problems including personal, medical, and emotional as they affect an employee's productivity. As a result, some employees see an assistance program to only address performance deficiencies and are reluctant to take advantage of the services for fear of being labeled unproductive.

Employee assistance program provides information and referrals to appropriate counseling, treatment, and support services, for which the company may pay in whole or in part. Armstrong (2006), says that there are several external agencies which provide employee assistance services. They offer, on a contractual basis, a 24-hour phone service giving employees and their families access to counseling on a range of problems including stress, alcohol, drug abuse, financial problems, and marital breakdown among others. Most services identify a problem and arrange for relevant specialist to phone back, although face-to-face counseling may also be offered either at local offices or company premises. In addition, employers may refer employees directly to the services. Where long term treatment relating to alcohol and drug addiction problem is needed, employees are referred to state services. Additional services include corporate seminars on problems identified as prevalent, training of managers and personnel to assist employees, and provision of related literature (Soeker, 2016).

### **2.3.6 Disease Prevention Programs**

Screening and intervention for risk factors are the most preventive parameters in enhancing employee's health according to Lande. Ganguly, Frasca, Gregorio,...and Bassett (2011). As such, medical screening includes tests for potential physiological problems and preventive or treatment measures for the presumed problem. As reported by Dworkin and Wachs (2009), medical screening in the corporate sector is highly recommended to easily identify suspected health problems at a pre-symptomatic stage. Thus, maintaining physical fitness, proper nutrition, and weight control are the parameters to be observed by every individual.

Work-life programs are initiatives adopted by organizations to help employees manage the interface between their paid work and other important life activities, including family (Kossek & Lobel, 2006). Conflicts between work and family life may lead to increase in employee turnover and withdrawal. Therefore, initiatives that reduce this conflict can help companies retain valuable workers they have recruited and trained. Work-life initiatives encompass a variety of practices that aid workers in balancing the demands of work and personal life aimed at helping workers to deal with family obligations (Kossek & Lobel,

2006). Some programs provide specific services such as on-site daycare for children or emergency daycare, whereas other programs provide flexibility in work hours, parental leave and vacation. According to Parasuraman (1999), and Beauregard (2009), human resources management review and work-life programs generate performance benefits for firms by enhancing recruitment and reducing absenteeism, turnover, and work-family conflict, and also improving attitudes by providing flexibility.

## **2.4 Benefits of Workforce Wellness Programs**

Hendrickson (2013), reported that employee wellness programs have proven and documented positive returns for both employers and employees. Today, it can mean everything from a company gym membership to a simple smoking cessation program offered to employees, to a full-blown, structured program where employees can choose their areas to track, set and achieve their own goals, or have access to professional health coaches along the way. Adding a bit of exercise has a positive effect on employees suffering from any physical and mental health issues.

Adding a bit of exercise to the workday has a particularly positive effect on employees suffering from anxiety and depression, two conditions that are clearly detrimental to professional performance. But even for those not struggling with any mental health issues, the impact of exercise on mood was profound.

### **2.4.1 Advantages to the Employer**

Whether or not they have made the move to invest in the health of their employees, most company leaders acknowledge that a healthier workforce will benefit them (Sheppard, 2015). According to the Wellness Council of America (2007), results are impressive:

- a.** An average of \$5.81 for every dollar invested in health management programs by the company.
- b.** 26.8% average reduction in sick leave absenteeism
- c.** 26% decrease in healthcare costs
- d.** 32% decline in worker's compensative and disability management claims

## 2.4.2 Advantages to the Employees

Likewise, employees are seeing the benefits of wellness programs. According to the Principal Financial Well-Being Index for American workers, 62% of employees believed that corporate wellness activities were successful in improving health and reducing risks (up from 55 percent in 2011) (Sheppard, 2015). American employees who are healthier approach their work with more energy and motivation. Here are some of the benefits they cite:

- a. 51% said they work harder and perform better
- b. 59% have more energy and are more productive
- c. 45% mentioned that health-related programs encourage them to stay in their current position
- d. 43% confirmed they missed fewer days of work

Employees expect their employers to offer wellness programs. Why, then, do 34% of employees refuse to participate in company-sponsored wellness programs?

## 2.5 Role of Incentives in Corporate Wellness Programs

According to Mattke, Liu, Caloyeras, Huang, Busum, Khodyakoy, and Shier (2013) in their review of the U.S. Corporate Wellness Market, partial participation of employees was regarded as one of the main barriers to the success of the program. Hence employers are now offering incentives so that they can boost employee engagement. An offer of \$50 and above seems to be effective in ensuring that employees complete a health risk assessment (HRA). As per the CCA<sup>1</sup> database, the maximum incentive was up to \$100. According to case studies, one employer had paid \$50 per week to ensure that all staff took part in the Corporate clinical screenings. It has been suggested that that larger incentives can be effective, but the effect of higher incentives has not yet been assessed.

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<sup>1</sup> CCA : Libraries

“Incentives can dramatically increase participation, as well as results” Hendrickson, (2013). Incentives lead to active participation in the following areas:

1. Prevention – this could include participation in health fairs, health management education, completion of HRAs, etc.
2. Lifestyle changes - Smoking cessation, weight loss, exercise, and nutrition.
3. Management of health conditions – providing facilities such as helplines, seminars, support groups.
4. Education - employees are educated on various ways in which they can stay healthy, avoid risk of injuries, interact with subject matter experts, etc.

Also, incentives need not be in cash only. To encourage participation in their wellness programs employers are being innovative. Gift coupons, lower premiums on health insurance, branded gifts and employer sponsoring or contributing to HSAs<sup>2</sup> are all good examples of non-cash incentives. However, there are other incentives that do not cost anything but would mean a lot to the employees, such as formal recognition by the management, one-to-one meeting with the CEO, adding extra leave to annual leave allowance, etc.

The RAND Employer Survey in the US showed that among all employers who had 50 or more employees and had a corporate wellness program in place, only 10% had offered any incentives.

## **2.6 Demographics/Factors affecting Employee’s participation**

Haynes & Helms (2001) scrutinized demographic differences between corporate wellness program participants and non-participants. They also looked at ways to motivate participation. The participants were derived from Tennessee, Georgia, and Alabama through membership in 14 Wellness Council organizations. They divided the 245

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<sup>2</sup> HSAs: Health Screening Assessments

contributors into participants, non-participants and unaware. In all three groups, majority of the respondents were female.

Haynes and Helms (2001) concluded that the participant group was more likely to hold management roles and were most likely to work for manufacturing, service, or nonprofit sectors. When it came to exercise, 80% of the participants group and unaware group exercised frequently whereas only 65% of the non-participants group exercised. Even the benefits were viewed quite differently by the groups. While the participant groups regarded a healthy diet as the main benefit, the non-participant group regarded stress management as the primary benefit. Those who participated in the study mentioned that financial incentives were the best way to encourage participation. Participants also reported that wellness programs increased their productivity and profitability.

Both, the participant and nonparticipant groups in this study were familiar with their organization's wellness programs. However, the study did not reveal any significant variance in terms of attitudes towards a healthier lifestyle. Haynes and Helms (2001) report found that 57.1% lacked time and 23.5% were already involved with wellness programs outside their corporate. Time was a barrier for most of the non-participants. However, allowing time during work hours to participate in wellness program did not increase participation rates.

Haynes and Helms (2001) found another reason for the lack of participation – lack of communication. A wellness program must not be implemented just for the sake of ticking a box. When employers develop a wellness program they must truly understand the varying needs of their employees and customize the program to meet these needs. Then the program must be communicated to all employees in such a way to employees so that they are motivated to join. Consequently, these programs may increase the levels of participation resulting in weight loss, improved health, and reduced stress levels to name a few (Middlestadt, Sheats, Geshnizjani, Sullivan, and Arvin 2011).

Joslin, Lowe, and Peterson (2006) examined employee participation in a wellness program in a Midwestern United States county government workplace. 329 government employees

who were selected at random received emails. Of these, 135 were participants and 195 were non-participants. However, only 145 surveys were returned. They studied the relationship between demographic data and quality of life (QOL)<sup>3</sup> characteristics of employees, as well as which programs they took part in. Their aim was to find out if employees who had high health-risks were participating in wellness programs. Their research found some interesting facts. There were significant correlations between demographic (.64) and QOL (.57) ( $p = < .001$ ) variables and participation in wellness programs.

- Respondents tended to be older ( $p < .001$ ), work full time, and female ( $p < .05$ ).
- Health educational offering participants were more likely to be female, married, >44 years old, and have lower QOL functioning;
- Non-participants were likely to be male, <44 years old, unmarried, and have higher QOL functioning.
- Medical screening & vaccination participants were more likely to be female, chronically ill, not satisfied at work, income <\$60,000, and have lower QOL functioning
- Non-participants were male, satisfied with their job, free from chronic illness, income >\$60,000, and have higher QOL functioning.

## **2.7 Barriers that prevent employee participation**

Employee attitudes and barriers related to participation in wellness programs were examined by many researchers. 303 participants participated at a survey by Bright (2012) at Ohio Northern University (Kolacz, 2015) The participants stated many barriers to participate in this program. These barriers included work schedule (63.7%), being too busy (40.2%), and not feeling like they could leave work to participate (18.2%). Furthermore,

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<sup>3</sup> QOL : Quality Of Life

lack of motivation was considered as a barrier by 14.2% of respondents. Those who stated work schedules and being very busy as barriers were the respondents under the age of 50.

To find out barriers that stop employees from participating in corporate wellness program, Person, Colby, Bulove, and Eubanks (2010) conducted a qualitative review in a university. The interviews with the 50 participants were conducted when they had participated in the 10-week wellness program. The participants were asked their responses in two different categories – one, using a broad approach and the other was more specific.

Pearson et al., (2010) reported various barriers for non-participation. 20% mentioned insufficient initiations, 20% thought the locations were inconvenient and only 15% mentioned that time was the main constraint. He ensured “creative approaches must be used to not only meet the needs of the employees but also to encourage employee participation in wellness programs. Employee health and wellbeing can be improved by reducing barriers to participation and addressing employee preferences” (Person et al., 2010).

Many researchers have investigated the incentives for participation of employees and barriers that prevent employee participation in corporate wellness programs. Kruger, Yore, Bauer, and Kohl (2007) were some of them. They took their data from a survey to evaluate perceptions. Not having enough time was the most reported barrier to participation (42.5%).

Theories and surveys suggest there are several reasons why an employee might not choose to participate in an employer-sponsored wellness program. Employers that address these head-on can encourage greater participation:

- a.** Employees think that the employer is trying to learn about their health issues and will somehow use that information against them.
- b.** They do not believe that Health Risk Assessments are reported in the aggregate and that their name will not be associated with their individual results.
- c.** They are not interested in improving their health (most smokers understand that it is unhealthy, yet they are not ready to make the effort to quit).

- d. The company sends mixed messages: It encourages participation in the wellness program, yet still offers high-fat 'junk' foods in the cafeteria and vending machines.
- e. The company leaders don't participate, so employees don't believe it is important.
- f. Employees believe the company saves money, but "what's in it for me?"
- g. Some employees do not need help and are already living a healthy lifestyle.

## 2.8 Cost-Benefit Analysis

Corporate wellness programs need not be expensive or complicated. They must be a more proactive, cost-effective method of delivering what employers are already providing or willing to provide.

Johnson & Johnson<sup>4</sup> wanted to know how its health and wellness program for the employees affected their company expenditure. Goetzel, Ozminkowski, Sedrer, and Mark (2002) showed that Johnson & Johnson's 'Live for Life' program had successfully improved the health of its at-risk employees. Employees were followed for up to 5 years before and 4 years after program implementation. The program had reduced health care costs by decreasing utilization. Small increases in emergency room visits were largely offset by savings in the other types of care for an overall average savings of \$224.66 per employee per year. These benefits came from reduced use of inpatient admissions, fewer outpatient visits compared with the period before the program was implemented. The overall savings increased in each year of the study.

Blue Cross and Blue Shield (a healthcare group in USA) designed a comprehensive wellness program which provided wellness initiatives to 9,637 employees at 15 companies (manufacturing, legal, insurance, municipalities, and school district) in Kansas, USA, over a 3-year time span (Hochart & Lang, 2011). The program, A Healthier You (AHY), included a health risk assessment (HRA) component and biometric screenings to

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<sup>4</sup> **Johnson & Johnson** is an American multinational medical devices, pharmaceutical and consumer packaged goods manufacturing company founded in 1886

participants. Those who participated in all 3 years of the program improved the level of their health risk, and those enrolled in the program saw significant improvements. They also found that participants in the program saw a statistically significant savings in healthcare costs.

The bottom line is that wellness programs do work—but not only, and not primarily, as a tool for reducing health-related expenses. Recruitment, retention, and productivity should be part of how businesses evaluate the effectiveness of their benefits offerings. In cost savings, better disease management and positive behaviors help employees achieve improved health, resulting in lowering costs over time.

## 2.9 Theoretical Framework

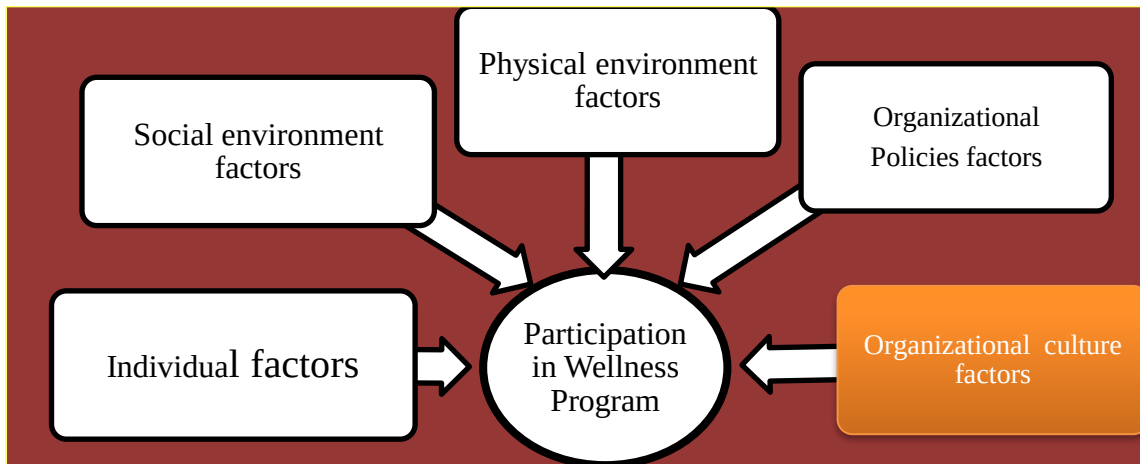


**Figure 2.1:** *The research model is developed by the researcher based on the following literature (Richard, 2011; Benjamin, 2013; Hayman, 2016; McLeroy, Bibeau, Steckler, and Glanz, 1988).*

Review of many previous researches that investigated the five key engagement factors that affect the participation of employees in corporate wellness programs has convinced the researcher for the need to create a theoretical framework which can integrate the factors or determinants to participation in corporate wellness programs (Richard, 2011). Although previous studies reviewed many factors, the researcher stated the following factors as the most effective especially in the Gulf area (Hayman, 2016): personal factors, social

environment, physical environment, physical, organizational policies and culture (McLeroy et al., 1988).

Several studies have been reviewed until we reached the idea that employees' participation in corporate wellness programs can present effective solutions to improve the health of employees and decrease healthcare and medical costs. These studies proved that any efforts will be effective only when programs address more focused goals. For example, decreasing obesity among employees, improving cardiac health or implementing other beneficial comprehensive programs. Once again, the study iterated that any corporate wellness programs for employees must research their needs and customize it to ensure them that it will improve a specific aspect of their health.

The studied programs also refer to the fact that making an intervention with a particular focus is the most effective as it offers a wide range of opportunities for engagement throughout the program. It also increases the chances of success to reach the targeted goal of the program. Ultimately, designing a program specifically for the needs of the employees could increase the general participation in the program, which could then increase effectiveness of the overall program. Reviews also stated the importance of incentives whenever possible, to increase participation.

### **2.9.1 Individual**

The individual is at the meeting point of the social-natural model (Hayman, 2016; McLeroy et al., 1988). This level joins factors that lessen the likelihood of individuals being physically and mentally powerful. Components which affect physical development collaboration include:

- knowledge, means, feelings, motivation, etc.
- skills (focal motor aptitudes and specific capacities), limits,
- ineptitudes or wounds
- age
- gender
- level of training

- socioeconomic status
- employment status

An individual may influence a group to achieve some common goals, and this is leadership (Northouse, 2007). Leadership style is a combination of attitude and behavior. It leads to certain patterns in dealing with those who follow (Dubrin, 2010). Motivation provides impetus for performance. Any workforce that has poor motivation will be expensive to an organization in terms of staff turnover, negative morale, increase in demands on management's time and may incur higher expenses (Jobber, 1994). Managers must know what exactly motivates their employees to participate in corporate wellness programs (Jobber, 1994). Darmon (1974) was of the opinion that employees must be kept motivated to be able to channel their efforts to increase their performance.

According to Green (2000), when dealing with high performing employees, motivation to be proactive is essential. Otherwise, performance will decline, or they may find a different job. Motivation is a prerequisite for low performers too or else their productivity and results would be low. They may not leave the organization as they will have nowhere to go. A highly motivated workforce is important as their productivity drives profitability of the organization (Carlson, 2003). Denton (1991) stated that a highly motivated workforce will lead to better understanding of the objectives, acceptance, commitment and decision making. Motivational drivers include rewards, pay, profit sharing, promotion, recognition and job enrichment.

### **2.9.2 Social environment**

The social condition contains the associations, the lifestyle and the overall population with whom the individual participates or interacts. The social condition influences physical development directly. For example, having another person, for instance, a partner, relative or work accomplice to be physically progressive with can influence physical development lead.

There are two types of working environment; physical and behavioral. The physical environment refers to elements that relate to the employee's ability to physically connect

with the office environment. Numerous studies have proved that physical environment can significantly affect employee productivity and behavior. Haynes, (2017) reported that the physical environment encompasses the office layout and office comfort. Temperature, air quality, lights, and noise affect concentration and productivity.

On the other hand, the behavioral environment relates to how well the employees connect with each other, and the impact the corporate environment has on the behavior of individuals. Haynes, (2017) reported that the behavioral environment represents the two main components namely interaction and distraction. The social condition consolidates include:

- family; for instance, the effect of parental and kinfolk physical activity levels and family reinforcement
- institutions; for instance, schools, corporates and gathering affiliations
- access to social support frameworks versus social detachment
- influence of specialists; for instance, experts, instructors, and tutors
- Community benchmarks
- Cultural establishment
- Socioeconomic status of the gathering

### **2.9.3 Physical environment**

Physical environments are where physical activities take place. Physical circumstances are most likely going to affect the amount of time spent on corporate wellness programs and the kind of physical activity that takes place. The environment can significantly impact participation in physical activity either positively or negatively. For example, sports fields, bicycle paths, swimming pools, and entertainment are planned for physical activity. Other physical environments, for instance, working situations, schools, family homes or theaters may weaken, keep [maintain] or limit physical activity. The physical environment includes:

- natural parts; for instance, atmosphere (weather) or geography
- access to parks; play zones, gym, walking or cycling paths
- Safety; for instance, crime rates.

- Public transport

Modifying the physical environment to encourage participation is a positive change which motivates employees. Anderson and Kilduff (2009) gave some examples of this:

- addition of healthy food options in office cafeterias and in vending machines.
- implementing an on-site fitness Centre which enables easy access employees.
- some even offer signage for healthy choices. For example, using a heart icon to choose a “heart healthy choice”
- by being able to calculate calories

In the Romney study in 2011, the environment offered both, on-site cafeterias with healthy food options and on-site fitness centers. Walking trails in and around the office also encouraged employees to participate in physical activities. Long and Sheehan (2010) investigated similar approaches where environmental changes were made to offer employees with healthy choices in the on-site cafeteria and access to on-site gym facilities. The most important environmental approach in this study was to limit the availability of designated smoking areas to employees.

#### **2.9.4 Organization Policy**

Positive changes in policies and procedures that affect employees within an organization are important. Anderson et al. (2009) conducted a systematic review to assess the effectiveness of corporate wellness programs that specifically focused on improving nutrition and physical activity behaviors to promote employee health. In this study, organizations were flexible with meal times and break times so that employees could participate in physical activities during lunchtime. They had the option going to the onsite gyms use or use the nearby walking paths (Anderson et al., 2009). These companies also changed the company policy wherein they would pay back the cost of gym membership to employees to mitigate barriers for employees who did not engage in physical activity (Anderson et al., 2009).

Romney, Thomson, and Kash (2011) used the same approach to explore the effectiveness of obesity management programs that were offered to employees. The companies in this study subsidized the cost of gym membership in the absence of on-site fitness center (Romney et al., 2011).

Long and Sheehan (2010) studied the effectiveness of employee wellness program at a Midwest Hospital in USA with approximately 4,269 employees, over a four-year period. The hospital reimbursed gym membership costs to encourage their employees. The hospital also offered flexible working hours whenever possible to encourage employees to use the gym or walking trails.

These programs made changes to company policy by implementing a Health Risk Assessment (HRA). Employees had the opportunity to participate in the corporate wellness program only on completion of the HRA. In both models, the health risk assessment (HRA) gathered data on nutrition, physical activity, health history, and well-being of the employee. In return, they offered, personalized wellness reports that provided action plans for addressing any areas of concern (Long and Sheehan, 2010) and education on various health-related issues. Employees were offered a cash incentive or a reduction in insurance premium to motivate them to complete the HRA (Long and Sheehan, 2010). The HRA was considered as a change to their corporate policy as participation was restricted only to employees' who completed the HRA.

This suggests authorization, managerial or game plan making exercises that can impact physical activity. These are consistently formal authentic moves made by organizations, local, state or national governments. Furthermore, this can be easygoing close-by policies or rules in settings, for instance, schools or Corporates. Approaches such as:

- urban organizing procedures
- active transport procedures
- education procedures
- health procedures
- environmental procedures.

### 2.9.5 Culture

According to Lemon, Zapka, Estabrook, Magner, and Rosal (2009) “employee behavior is influenced by worker health-related values and norms”. This means that the culture within an organization is important in order to encourage health and wellness among employees. Organizational Culture is “common values and behaviors of the people that is considered as a tool to lead to the successful achievement of organizational goals” (Schein, 1990). The culture of an organization is its dominant pattern of shared beliefs and values. An individual’s behavior may be affected by the values, attitudes, and behaviors of a co-worker. Peers may tend to accept being inactive because of work schedules, conflicts, less flexibility, and fatigue. (Lemon et al., 2009).

The globalization of business creates a business culture characterized by worldly morals and values (Decker, Yao, and Calo 2011). Senior leaders must consider the cultural diversity of the organization when developing any strategic roadmap for success and increasing profitability. When employees interact with customers and business partners, they create a perception of the company’s ethics and values (Grandey, Goldberg, and Pugh 2011). Policies and procedures, respect, social cohesiveness, and other cultural influences play critical roles in shaping employee behavior. Inside or outside the organization, employees are distinguished according to their organizational culture. This includes values, beliefs, and behaviors of the employee difference (Hofstede, 1991).

According to Schein (1994) “value is a set of social norms that define the rules or framework for social interaction and communication of society’s members”. A positive culture in an organization is helpful to enhance employee performance which increases the overall performance of the organization (Deal and Kennedy, 1982). Stewart (2010) reported that organizational culture greatly affects others who are either directly or indirectly involved with the organization. Despite being invisible, organizational culture has a great influence on the performance, productivity, and profitability of employees.

Motivating employees toward a common objective develops their performance and moves their behavior to the top of operational and functional strategies (Jones, Molitor, and Reif

2018 ). Shared values of employees are basic components of organizational culture (Smit & Cronje 1992). Performance of organizations depends on the degree to which the values are shared (Peters & Waterman, 1982). Shared values enable management to predict employee reactions to certain strategic options and consequences can be undesirable if these values are reduced (Ogbonna, 2000).

The researcher found that it is difficult to escape from the influence of ‘organizational culture’ when dealing with an organization. This was also stated by Covey (2013), who pointed out that employees who spent time with different kinds of organizations would be affected by differing atmospheres, varying ways of doing things, variable levels of energy, diverse levels of individual freedom and of many different kinds of personalities. According to Hofstede (2001), it is difficult to discuss employee involvement in decision making without involving cultural context. Thus, Sagie and Aycan, (2003) proposed a framework to link employee participation in decision making to the cultural context.

## **2.10 Wellness prograams in Arab countries**

A review of the literature revealed factors influencing wellness program especially physical activity of Arabic-speaking adults generally. At individual level, the presence of health conditions, lack of time at workplace, lack of experience with exercise and nutrition were reported by (AlQuaiz, and Tayel, 2009; Donnelly, Al Suwaidi, Al Bulushi, Al Enazi, Yassin, Rehman, and Idris, 2011). At social level women need to wear traditional dress and to accompanied by a male family member when going outdoor, social milieu that deemphasize the important of wellness program specially physical activities this was reported as barrier to participate in wellness program specially in physical activity by (AlQuaiz, and Tayel, 2009; Al-Kaabi, Al-Maskari, Afandi, Parka, and Nagelkerke, 2009; Kahan, 2011; Donnelly et at., 2011).

At environmental level lack of outdoor walking trails and affordable exercise venues, hot desert climate at it is above 40C, these were identified as barriers to participate in wellness program especially in physical activity by (AlQuaiz, and Tayel, 2009; Kahan, 2011; Donnelly et at., 2011). At an organizational and political level cost of gym memberships

are high, lack of information about exercise, nutrition, and recovery, allocation of funding for sport, especially for women, limited access and funding for women to join any wellness programs, also living in suburban or villages where there are less or no funding for sports programs these were reported as barriers factors by (Ali, Baynouna, and Bernsen, 2010; Kahan, 2011; Donnelly et al., 2011 ).

A study by Haddad et. al. (2009) surveyed the wellness appraisal of Jordanian youngsters and stated that School-based health campaign and wellness programs should be initiated in Jordan to inspire the health behaviors of teenagers and their family. Today's teenagers are the future employees of organizations. Belwal and Belwal (2014) study aims to secure managers' perception of Work-Life Balance and Quality of Work-Life related issues to the benefits of working women in Oman. They indicated that most organizations in Oman did not have "on-site wellness programs" and they added that wellness programs initiatives can be taken by Omani organizations in the future. Furthermore, Eldrazi, et, al. (2017) studied the level of burnout among health professionals in the Arab countries and stating that there is a need for future research in these countries to measure the high level of burnout among health care professionals and to determine the profile of the professional that are usually at-risk of burnout by developing wellness programs.

## **2.11 Health in the Kingdom of Bahrain**

Bahrain is an island in the Arabian Gulf with total population of 1,604,993. 89.3% of the population is urban, the median age in kingdom is 31.4, Bahrain ranks number 152 in the list of countries by population, the total land area is 760 Km<sup>2</sup> (293 sq. Miles), and the population density in Bahrain is 2155 per Km<sup>2</sup> (Worldmeters, 2019).

According to Central information Organization (CIO) the number is made up of 722,247 Bahrainis, or 45% of the population, and 882,746 foreigners, who make up the remaining 55%.

### **2.11.1 Future direction of health strategy in Bahrain**

The Government of Bahrain and World Health Organization (WHO) are working on the same side and direction to effectively improve the public health situation in the kingdom with special emphasis on the five key regional priorities:

1. health security and prevention control of communicable diseases.
2. non-communicable diseases, mental health, nutrition, heart disease, violence, and injuries. NCDs are caused by tobacco usage, alcohol abuse, poor eating habits, and physical inactivity.
3. promoting health through the life-course.
4. health system strengthening.
5. preparedness, surveillance, and response.

In order to achieve and maintain any level of health improvement, the ministry of health should be in line with Bahrain Economical vision 2030, preparing and taking major challenge faced by all health sectors, focusing on preventive services and Corporate promotion programs, through encouraging workforce and community partnership and self-care principle.

### **2.11.2 Challenges in the Ministry of Health**

#### **2.11.2.1 Demographic changes**

Population growth: as a result of increasing population in Bahrain and the high proportion of non-citizens, there was an increase in demand for health services and expectation of patients.

Ministry of Health's major hospital (Salmaniya Medical Centre) provides consultation and services to approximately 25% of the total population of the Kingdom.

There is an increase in the life expectancy rate in Bahrain which reached to 75.3 years in 2013 compared to 73.4 years in 2000. Therefore, there is an increase in unhealthy elderly population with healthcare needs.

#### **2.11.2.2 Escalating rate of NCDs**

The Non-Communicable Diseases, as mentioned before are becoming a serious threat to the overall health system and are considered the principal cause of death in the world. In addition, NCDs and their complications pose an economic burden on countries and on healthcare systems as an outcome of high treatment expenditure, negative impact on productivity of the individual which adversely affects the progress of society. The NCDs mortality rate represents 63% of the total causes of death in the Kingdom of Bahrain (Disease of the Circulatory System 34%, Diabetes 24%, Cancer 24%, Respiratory 15%, and other NCDs 3%.)

#### **2.11.2.3 Sustainability of Health Financing**

During 2000-2012 the Kingdom spent BD 1.677 billion on healthcare. The recurrent expenditure of Ministry of Health (MOH) increased by 192% between 2001-2012, reaching approximately BD 249.8 million in 2013 compared to BD 88.4 million in 2004.

Limitation of the partnership between the public and private sectors, and investment in health promotion and integration partnership with key stakeholders in private health sectors are key factors to enhance the quality service level and reduce the economic burdens on MOH.

### **2.11.3 Definition of Terms**

The following terms are defined for the purposes of the research:

#### **1. Physical activity**

“any bodily movement produced by skeletal muscles that requires expenditure of energy” (World Health Organization).

#### **2. Physical inactivity**

“Lack of physical activity has been identified as the fourth leading risk factor for global mortality (6% of deaths globally)” (World Health Organization).

### 3. Corporate Wellness Program

“An employment-activity or employer-sponsored benefit aimed at promoting health-related behaviors (primary prevention or health promotion) and disease management (secondary prevention)”, (Mattke, Schnyer & Busum, 2012).

### 4. Nutrition

“the intake of food considered in relation the body’s dietary needs” (World Health Organization).

### 5. Psychology

“the scientific study of the way the human mind works and how it influences behavior, or the influence of a particular person’s character on their behavior” (Cambridge).

### 6. Recovery

The process of becoming well again after an illness, injury, stress, physical burnout, physical tiredness (Researcher).

### 7. Business Size

The criteria for defining the size of business differs from country to country, with many countries having program of business rate reduction and financial subsidy for small, medium enterprises.

***Table 2.1: SMEs definitions in other countries***

|                     | <b>AUS</b> | <b>US</b> | <b>CAN</b> | <b>EU</b> |
|---------------------|------------|-----------|------------|-----------|
| <b>Minute/Micro</b> | 1-2        | 1-6       | 1-4        | <10       |
| <b>Small</b>        | <15        | <250      | 1-99       | <50       |
| <b>Medium</b>       | <200       | <500      | 100-499    | <250      |
| <b>Large</b>        | <500       | <1000     | >500       | <1000     |
| <b>Enterprise</b>   | >500       | >1000     | N/A        | >1000     |

**Table 2.2: SMEs definition in the Kingdom of Bahrain**

| <b>Micro</b>                | <b>Small</b> | <b>Medium</b>       | <b>Large</b>           |
|-----------------------------|--------------|---------------------|------------------------|
| <b>No. of Employees</b>     | Up to 5      | 6 to 50             | 51 to 100              |
| <b>Annual Turnover (BD)</b> | to 50,000    | 50,001 to 1 Million | 1,000,001 to 3 Million |

## **2.12 Gaps in Previous Research**

By reviewing the previous studies and programs, it was difficult to find related researches on corporate wellness programs conducted on small, medium, and large organizations in the GCC and Bahrain in particular. According to Baicker, Cutler, and Song (2010), most studies were conducted on large organizations that provided and promoted wellness programs in western countries. According to Butcher (2015), he recommended further study to include data from other companies and different geographic location.

As most of the researches had been conducted in larger companies and enterprises in western countries, there was a need to investigate the influence and effectiveness of wellness programs on small, medium, and large organizations in the Middle East.

There is a lack of research that deals with the effect of wellness programs on employees' productivity in the hospitality industry, especially in Bahrain. The organization's culture, employees, and leadership are critical to the success of employer-sponsored corporate wellness programs (Kaspin et al., 2013). Therefore, it is necessary to explore more sectors and fields in small countries and organizations and investigate if the results are similar or different to small medium and large organizations in different geographic location.

Dealing with factors that affect corporate wellness programs development such as personal, social, environmental, policies, and culture, has proved that there is variability among individuals and organizations. It is difficult to develop and implement successful corporate wellness programs without understanding differences among individuals and organizations. The researcher found out that there is a need to design customized wellness programs that contribute to improve employees' health in XYZ company in Bahrain.

### **2.13 What discriminates this study from previous studies?**

The current study focusses on individual, social, environmental, policy, and cultural factors in one hospitality company offering various types of services in Kingdom of Bahrain. The current study differs from previous studies by focusing on novel context that have been ignored by previous studies. In addition, it includes the cultural aspects of high importance for the success or failure of the wellness program. In addition, it has a comprehensive view of the wellness program while previous studies only focus on one of the wellness programs, such as physical aspect.

### **2.14 Summary**

This study focused on some factors associated with participation in wellness programs and its relationship with productivity. Research has shown the link between individual factors, social environment, physical environment, organization policy, and culture, and employees' participation in wellness programs. Studies also proved the importance of corporate wellness programs on employees' wellbeing, productivity, profitability, presenteeism, and absenteeism. This thesis combined a literature review, previous studies of corporate wellness programs, and statistical analysis of data to evaluate employees' participation in wellness programs in the Kingdom of Bahrain, to scrutinize the influence of these programs on employee health and healthcare cost, and to evaluate the role of associated factors.

# **Chapter Three**

## **Methods and Procedures**

### **3.1 Introduction**

The main objective of this research study was to identify the factors that are associated with employees' participation in corporate wellness programs. There have been no previous studies examining this subject in Bahrain and this is the very first time in the Bahraini context that a research covers the subject. The purpose of this chapter is to describe and justify the methodological approach used in this study. This chapter presents the method used to collect primary data. This chapter exhibits research design, operational and conceptual definitions of variables, population of the study, sample and sampling procedure, instrumentation, data collection procedure, scale reliability, and data analysis methods.

### **3.2 Research Design**

The research intended to find out various aspects with regard to participation of employees in corporate wellness programs. There are three types of research approaches: quantitative, qualitative, and mixed approach (Creswell, 2013). For the purpose of this research and compliance with the established phenomena in the literature (wellness programs), the most appropriate approach that fit the current study is the quantitative approach. The quantitative approach or what is called deductive reasoning is a type of valid reasoning. Deductive reasoning, or deduction, starts out with a general statement, or hypothesis, and examines the possibilities to reach a specific, logical conclusion. The scientific method uses deduction to test hypotheses and theories. In deductive inference, we hold a theory, and based on it we make a prediction of its consequences. That is, we predict what the observations should be if the theory was correct. We go from the general the theory to the specific observations. Therefore, the current study followed the deductive approach

because the borders of the phenomena under investigation is clear and determined by previous studies.

### 3.3 Operational and Conceptual Definitions of Variables

This section presents the conceptual and operational definitions of the variables of this study. The existence of many definitions shows that the academic community expresses their opinions or viewpoints in numerous ways. They provide the ground for mapping the different conceptual approaches to define the data, information, and knowledge in the context of information science. While operational definition is the tool or technique which illustrates how the concept will be measured; it is used to define something in terms of a process needed to determine the existence of those concepts. The operational definitions and measures of research variables were adopted from previous research as shown in Table 3.1.

**Table 3.1: Definitions of variables – operational and conceptual**

| Engagement Factors   |             | Definition                                                                            | Sources                    |
|----------------------|-------------|---------------------------------------------------------------------------------------|----------------------------|
| Individual           | Conceptual  | A single person or thing especially when compared with group or set which they belong | Cambridge Dictionary       |
|                      | Operational | Age, gender, level of physical training, motivation                                   | (Hayman, 2016)             |
| Social Environment   | Conceptual  | People like to meet and spend time with other people.                                 | Cambridge Dictionary       |
|                      | Operational | Family, peer, instructors, co-workers                                                 | (Haynes, 2017)             |
| Physical Environment | Conceptual  | The part of human environment that includes purely physical factors.                  | Merriam Webster Dictionary |
|                      | Operational | Safety, atmosphere, parks, public transportation.                                     | (Anderson et al., 2009)    |

|                |             |                                                                                                                                                                             |                        |
|----------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>Policy</b>  | Conceptual  | A set of ideas or plans of what is to be done in a situation, that has been agreed officially by group of people, a business organization, government or a political party. | Cambridge Dictionary   |
|                | Operational | Organizational procedures, transport procedures, health procedures, Environment procedures, HRA                                                                             | (Serxner et al., 2012) |
| <b>Culture</b> | Conceptual  | The way of life, especially the general customs, and beliefs, of a group of people at a particular time.                                                                    | Cambridge Dictionary   |
|                | Operational | Rules or other behavior held in common by a nation, community, or other defined group of people, traditions, languages, beliefs.                                            | (Lemon et al. 2009)    |

### 3.4 Population of the Study (participants)

The research population included all employees of XYZ Company (private hospitality sector in Bahrain). There were 900 employees in XYZ Company according to the Human Resource department.

### 3.5 Sampling Procedure and Sample Size

Based on the total number of employees (900), the minimum sample size needed for this size of population was 269 respondents according to Krejcie and Morgan (1970). However, in order to get reliable results and because all the employees were located at one site, a decision was made to survey all the population. Out of 900 questionnaires distributed to the research population, the researcher was able to collect 307 questionnaires filled completely.

**Table 3.2: Rate of responses**

| <b>Description</b>        | <b>No. of questionnaires</b> |
|---------------------------|------------------------------|
| Questionnaire distributed | 900                          |
| Response received         | 307                          |
| Rate of response          | 34%                          |

### **3.6 Instrument and question structure**

The instrument or research method used in this study was a self-administered questionnaire with close-ended questions. The questionnaire used was a modified version from the Conlon (2013) Questionnaire, using 18 questions. Questions regarding age, gender, ethnicity, position within the company were added to the questionnaire. Furthermore, questions for the five key factors (Individual, Social Environment, Physical Environment, Organization Policy, Culture) were used from the literature review (Hayman, 2016).

The first part of the survey dealt with the respondent's informational background to obtain general information about the respondent, such as age, gender, education, ethnicity, work experience, and position.

The second part was about the benefits of wellness programs the employer can present to employees and to what extent they are used. It was measured by using Competing Value Framework model Conlon (2013). It consisted of 7 items that were used to measure the wellness program benefits:

1. Fitness center
2. Healthy food choices in vending machines/cafeteria
3. Health screening tests such as BMI, Diabetes, Blood pressure, Cholesterol,
4. Paid time to exercise at work
5. Confidential stress/depression screening and management
6. Break time
7. Others

The third section measured the elements the employee would use if offered a free wellness program. There was one statement that measured each element (Conlon, 2013).

The fourth section measured the elements that affect the employee's participation in wellness programs; reasons to participate, barriers and incentives (Conlon, 2013).

The final section measured the five key engagement factors that affect employees' participation in wellness programs. Under each factor, there were a number of items to measure (Hayman, 2016)

1. Individual
2. Social environment
3. Physical environment
4. Organization Policies
5. Culture

The researcher used another question with a five-dimensional Likert-scale to measure the respondent's extent of agreement to the given statements, with a value of 1 which indicated "not all likely" to value of 5 which indicated "very likely". Likert-scale was employed as it is easy to understand; the responses are easily computable, quick, efficient, and inexpensive.

### **3.7 Data Collection Procedure**

On approval from the Director of XYZ Company to conduct this study, the questionnaires were sent via e-mail and WhatsApp to all employees with the assistance of the Human Resource Department, who facilitated contacting and following up with the respondents.

The questionnaire was uploaded on Google Forms. Respondents were asked to fill it online and submit it. The respondents were given a period of one month to respond. Follow up by e-mail and telephone were done during that period. The first page was a letter of introduction that described the purpose of the study, general instructions, and confidentiality assurance.

#### **3.7.1 Data preparation**

The preparation of the questionnaire data was conducted prior to the process of data analysis. The data was edited, coded, and entered into the mathematical computerized software (SPSS version 23.0) for further interpretation and making appropriate

conclusions. This process enabled the investigator to deal with the data by eliminating data errors before the analysis.

### **3.7.2 Data editing**

Subjecting the data to editing before conducting the analysis is important, in order to check the data for reliability, omission, validity, and to identify any data errors. Moreover, the data coding will identify each response with a numerical score for facilitating the subsequent analysis (Rahi, 2017).

### **3.7.3 Data coding structure**

As mentioned above, all the data variables were measured and pre-coded using a value from 1 to 5 and showing the level of agreement for each variable. This pre-coding structure helped in eliminating any overlapping among categories and ensured that each response was placed in only one category (Creswell, 2013).

Categorical to Numerical (Encoding/containerization)

Numerical and categorical:

- Categorical variable can be transformed into numerical counterparts by a process called encoding.
- Numerical variable can be transformed into categorical counterpart by a process called binning.
- Encoding is the transformation of categorical variables to binary or numerical counterparts. An example is to treat male or female for gender as 1 or 0.
- Two main types of encoding are Binary and Target-based
  - Target-based is enumeration of categorical variables via target; In this method, we replace the categorical variable with just one new numerical variable and replace each category of the categorical variable with corresponding probability of the target (if categorical) or average of the target (if numerical).

### 3.7.4 Factor Analysis and Normality Test

A factor analysis and normality test to minimize errors or any possible bias was conducted utilizing SPSS version 23.0. However, Kaiser-Meyer-Olkin (KMO) was above 0.50, Sig 0.000 and Scatter plot graph showed that the data was not normally distributed so that a non-parametric test was used to test the research hypotheses (Creswell, 2013).

### 3.8 Pilot test

A pilot test was conducted to identify any issues regarding the Questionnaire. Three Statistics professionals were selected to complete the pilot test to identify any issues regarding wording and phrasing and to determine the approximate time needed to complete the pilot questionnaire. Time needed to complete the pilot questionnaire was between seven to ten minutes. There were some suggestions and positive feedback about the pilot questionnaire.

### 3.9 Scale Reliability

Reliability in statistics is the overall consistency of a measure. A research instrument is considered reliable only if it generates similar results under consistent conditions. To determine reliability, Cronbach's Alpha was used to test the internal consistency or average correlation of items in the survey instrument. Cronbach's Alpha of 0.707 and above was acceptable for a measurement scale (Creswell, 2013). However, a reliability scale of 0.60 was also considered acceptable only if more questions were added (Creswell, 2013). All returned questionnaires were included in the scale reliability test.

*Table 3.3: Cronbach's Alpha Test for all the research variables*

| Variable                | Number of items | Cronbach Alpha |
|-------------------------|-----------------|----------------|
| Individual              | 4               | 0.84           |
| Social environment      | 4               | 0.78           |
| Physical environment    | 4               | 0.74           |
| Organizational policies | 4               | 0.80           |
| Culture                 | 4               | 0.72           |

Table 3.3 shows that all the Cronbach Alpha values are above 0.70 which indicates that all the research variables measures were reliable, and they measured what they are intended to measure (Tavakol, 2011; and Creswell, 2013).

### **3.10 Data Analysis**

The collected data was statistically analyzed with the use of SPSS version 23.0 software. Both descriptive and inferential statistical methods were used to analyze nominal data using non-parametric test (Pearson's Chi-Square) to understand the association between variables.

The following statistical tests were used to achieve the research objectives:

- Research Objective 1 – Pearson's Chi-square statistical method was conducted to investigate whether there is association between engagement factors and employee's participation in corporate wellness program and if they consequently affect employee's productivity and indirectly affect organizational profitability levels.
- Research Objective 2 - descriptive statistics and graphical representation were used to capture the perceived barriers to participation in Corporate wellness program.
- Research Objective 3 - descriptive statistics and graphical representation were used to describe the elements which the surveyed respondents most likely used in the wellness programs.
- Research Objective 4 - descriptive statistics and graphical representation were used to identify changes to the wellness program employees would like to see and would motivate them to participate more in the program.

Table 3.4 represents the scale used to interpret the values of mean for participation in wellness programs.

**Table 3.4: Scale Level interpretation**

| <b>Description</b>                                   | <b>Verbal Interpretation</b> | <b>Range</b> | <b>Scale</b> |
|------------------------------------------------------|------------------------------|--------------|--------------|
| The respondent perception of dimension is very high. | Very likely                  | 4.50 - 5.00  | 5            |
| The respondent perception of dimension is high.      | Likely                       | 3.50 - 4.49  | 4            |
| The respondent perception of dimension is moderate.  | Somewhat likely              | 2.50 - 3.49  | 3            |
| The respondent perception of dimension is low.       | Not very likely              | 1.50 - 2.49  | 2            |
| The respondent perception of dimension is very low.  | Not at all likely            | 1.00 - 1.49  | 1            |

### **3.11 Hypotheses**

Based on the literature review the research hypotheses can be formulated as follows:

H01: there is no significant statistical association between the factors (individual, social, physical environment, policy, cultural) and employees' participation in corporate wellness programs.

H02: There are no barriers for employees to participate in corporate wellness program.

H03: there are no elements in the corporate wellness program that employees' most likely use.

H04: there are no areas/points of interest in the corporate wellness program that motivate employees to participate more in the wellness program.

### **3.12 Summary**

Quantitative research approaches were used in this study to answer research questions and reach the objectives. Moreover, for the assessment of the relationship between engagement factors associated with employee's participation in corporate wellness programs, an online questionnaire was developed. Its hyperlink was sent to all employees of XYZ and 307 duly completed responses were received. The Cronbach's Alpha coefficients was computed by using SPSS version 23.0 software, to determine the reliability of the instrument. To accomplish the objectives of the study descriptive and inferential statistical methods were used to answer the research questions.

# **Chapter Four**

## **Results and Analysis**

### **4.1 Introduction**

The main purpose of this study was to identify factors that affect employees' participation in wellness programs. Recognizing and working on these deterrent factors would improve employee participation in the corporate wellness program. Based on review of the literature, it appears this research is the first of its kind in the Kingdom Bahrain.

In this chapter, the Researcher presents the findings of the study based on the responses of the 307 respondents to the online questionnaire used in this study. The results obtained were put to statistical analysis and are presented in this chapter. Specifically, this chapter reports the demographic profile of the respondents, as the wellness programs they prefer to participate in, their responses to questions about the barriers to participation in wellness programs, selected incentives, and type of wellness programs they prefer (physical activity, nutrition, psychology, or recovery).

Furthermore, this chapter tested the hypotheses of this study by using the Pearson's Chi-square. Specifically, it determined the association between the 'factors of engagement' (individual, social environment, physical environment, policy, and culture), barriers, elements, an area of motivations and the 'employees' participation in corporate wellness programs.

**Table 4.1: Respondents demographic profile**

| <b>Demographic Characteristics</b>            | <b>Categories</b>       | <b>Count</b> | <b>%</b>    |
|-----------------------------------------------|-------------------------|--------------|-------------|
| Age (years)                                   | 18- 30                  | 84           | 0.27        |
|                                               | 31-40                   | 137          | 0.45        |
|                                               | 41-50                   | 69           | 0.23        |
|                                               | 51 and above            | 17           | 0.06        |
|                                               | <b>Total</b>            | <b>307</b>   | <b>1.00</b> |
| Gender                                        | Female                  | 117          | 0.38        |
|                                               | Male                    | 185          | 0.60        |
|                                               | Prefer not to say       | 5            | 0.02        |
|                                               | <b>Total</b>            | <b>307</b>   | <b>1.00</b> |
| Education level                               | High school             | 66           | 0.22        |
|                                               | Diploma                 | 75           | 0.24        |
|                                               | BA (under graduation)   | 117          | 0.38        |
|                                               | Master(post-graduation) | 44           | 0.14        |
|                                               | PhD                     | 5            | 0.02        |
|                                               | <b>Total</b>            | <b>307</b>   | <b>1.00</b> |
| Respondents' ethnicity                        | Bahraini                | 169          | 0.55        |
|                                               | GCC                     | 27           | 0.09        |
|                                               | Asian                   | 60           | 0.20        |
|                                               | African                 | 12           | 0.04        |
|                                               | American                | 7            | 0.02        |
|                                               | European                | 24           | 0.08        |
|                                               | Other                   | 8            | 0.03        |
|                                               | <b>Total</b>            | <b>307</b>   | <b>1.00</b> |
| Years of experience in XYZ Corporation        | 0 - 5                   | 102          | 0.33        |
|                                               | 6--10                   | 108          | 0.35        |
|                                               | 11--15                  | 59           | 0.19        |
|                                               | 16 and above            | 38           | 0.12        |
|                                               | <b>Total</b>            | <b>307</b>   | <b>1.00</b> |
| What position do you hold at XYZ corporation? | Top managerial level    | 27           | 0.09        |
|                                               | Managerial level        | 76           | 0.25        |
|                                               | Supervisory level       | 90           | 0.29        |
|                                               | First line              | 109          | 0.36        |

|  |              |            |             |
|--|--------------|------------|-------------|
|  | Other        | 5          | 0.02        |
|  | <b>Total</b> | <b>307</b> | <b>1.00</b> |

Table 4.1 shows the demographic profile of the respondents. Majority (44.6%) of the respondents belonged to the 31 – 44 age range. The 18 to 30-year-old group comprised 27.4% of the total respondents. The lowest percentage was the 51-years old and above which comprised only 17%. Out of the 307 respondents surveyed, majority were males, with a frequency of 185 or a 60.3%; while the female respondents comprised a frequency of 117 or 38.1%. In terms of educational level, majority (38.1%) were undergraduates; followed by Diploma holders (24.4%). The least percentage are the Ph.D. graduates which comprised only 5 respondents or 1.6% of the total respondents.

A clear majority (55%) of respondents were Bahraini locals; followed by Asians, which comprised 19.5%. Other GCC nationals came next which comprised 8.8%, and the least number of respondents were American nationals which comprised only 7%. In terms of number of years of experience in the company, majority (35.2%) of the respondents had worked in the company for 6 – 10 years. The respondents who have been in the company for 0 – 5 years came next which comprised 33.2%; followed by those who have worked in the company for 11 – 15 years, which comprised 19.2%. Those who have served the company for 16 years and above comprised 12.4%, the lowest percentage.

In terms of position in the company, majority (35.5%) of the respondents were first-line employees; supervisors came next comprising 29.3%; while 24.8% were managerial level positions, and the least percentage (8.8%) were the top management positions. Lastly, the table shows that out of the total respondents, a frequency of 184 or 59.9% said that they had not participated in any wellness program in the last 6 months; while a frequency of 107 or 34.9% claimed that they had participated.

## 4.2 Descriptive statistics of research variables.

What are the factors associated with employees' participation in corporate wellness programs?

*Table 4.2: Individual Factors as perceived by the surveyed respondents*

| Which one of these individual factors, you think would mostly affect your participation in wellness program? | Frequency  | %          |
|--------------------------------------------------------------------------------------------------------------|------------|------------|
| Age                                                                                                          | 34         | 11.1       |
| Gender                                                                                                       | 45         | 14.7       |
| Level of physical training                                                                                   | 85         | 27.7       |
| Motivation                                                                                                   | 143        | 46.6       |
| <b>Total</b>                                                                                                 | <b>307</b> | <b>100</b> |

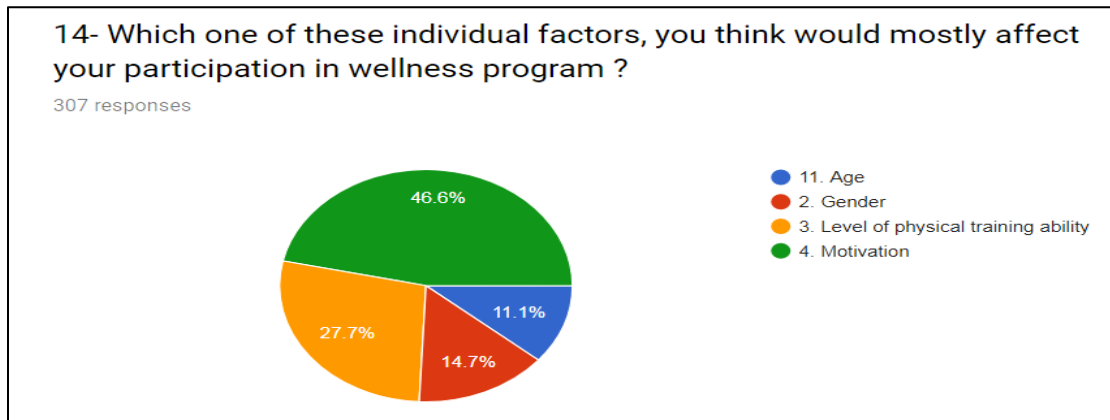


*Figure 4.1: Individual Factors as perceived by the surveyed respondents (%)*

### 4.2.1 Individual factors

Table 4.2 and Figure 4.1 below shows the individual factors that would mostly affect employees' participation in wellness programs. Out of the total respondents, majority (46.6%) reported that 'motivation' affected them. Next to this is the 'level of physical training' which comprised 27.7%, followed by 'gender' which comprised 14.7%. The factor that can affect the employees the least is the age, which comprises only 11.1%.

#### 4.2.2 Social Environment Factors

**Table 4.3: Social Environment Factors as perceived by the surveyed respondents**

| Which one of these Social environment factors, you think would mostly affect your participation in wellness program? | Frequency  | %          |
|----------------------------------------------------------------------------------------------------------------------|------------|------------|
| Family                                                                                                               | 96         | 31.3       |
| Peers                                                                                                                | 22         | 7.2        |
| Instructors                                                                                                          | 97         | 31.6       |
| Co-workers                                                                                                           | 91         | 29.6       |
| Others                                                                                                               | 1          | 0.3        |
| <b>Total</b>                                                                                                         | <b>307</b> | <b>100</b> |

Table 4.3 and Figure 4.2 show the social environment factors that would mostly affect employees' participation in wellness programs. The social environment factor that was mostly reported is 'instructors', which comprised of 31.6%, followed by 'family', which comprised of 31.3%. Next was 'co-workers', which comprised of 29.6%; the least reported was 'peers', which comprised only 7.2% and the last 'others' with percent of 0.3%.

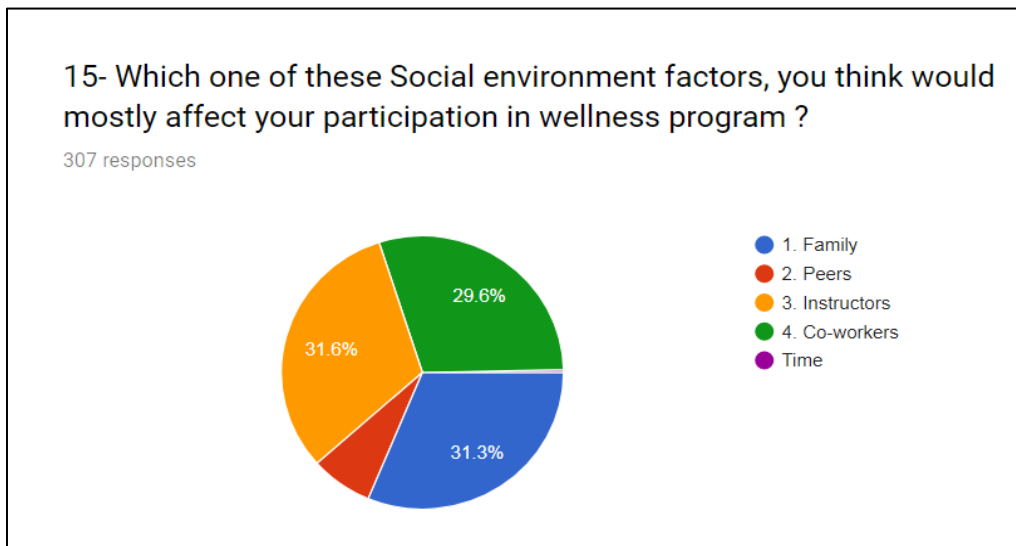


**Figure 4.2: Social Environment Factors as perceived by the surveyed respondents (%)**

### 4.2.3 Physical Environment Factors

**Table 4.4: Physical Environment Factors as perceived by the surveyed respondents**

| Which one of these Physical environment factors, you think would mostly affect your participation in wellness program? | Frequency  | %          |
|------------------------------------------------------------------------------------------------------------------------|------------|------------|
| Safety                                                                                                                 | 34         | 11.1       |
| Atmosphere                                                                                                             | 206        | 67.1       |
| Parks                                                                                                                  | 19         | 6.2        |
| Public transport                                                                                                       | 47         | 15.3       |
| Others                                                                                                                 | 1          | 0.3        |
| <b>Total</b>                                                                                                           | <b>307</b> | <b>100</b> |

Table 4.4 and Figure 4.3 show the physical environment factors that would mostly affect employee's participation in wellness programs. The physical environment factor mostly reported was 'atmosphere', which comprised of 67.1%, followed by 'public transport', which comprised 15.3%. 'Safety', 'parks' and 'others', came next with 11.1%, 6.2%, and 0.3% respectively.

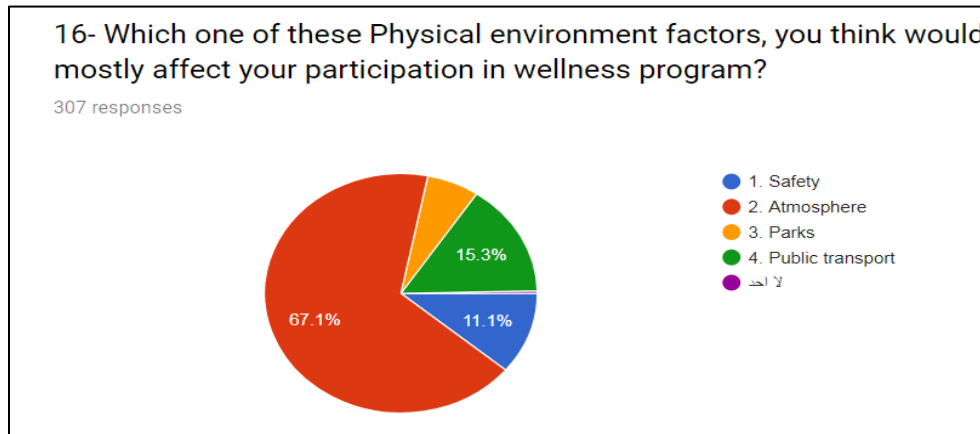


**Figure 4.3: Physical Environment Factors as perceived by the surveyed respondents (%)**

#### 4.2.4 Policy Factors

**Table 4.5: Policy Factors as perceived by the surveyed respondents**

| Which one of these Policy factors, you think would mostly affect your participation in wellness program? | Frequency  | %          |
|----------------------------------------------------------------------------------------------------------|------------|------------|
| Organizational procedures                                                                                | 101        | 32.9       |
| Transport procedures                                                                                     | 40         | 13         |
| Health procedures                                                                                        | 75         | 24.4       |
| Environmental procedures                                                                                 | 91         | 29.6       |
| <b>Total</b>                                                                                             | <b>307</b> | <b>100</b> |

Table 4.5 and Figure 4.4 show the policy factors that would mostly affect employee's participation in corporate wellness programs. The policy factor mostly reported was 'organizational procedures', which comprised 32.9%, followed by 'environmental procedures', which comprised 29.6%. 'Health procedures' and 'transport procedures' came next comprising of 24.4%, and 13% of the respondents, respectively.

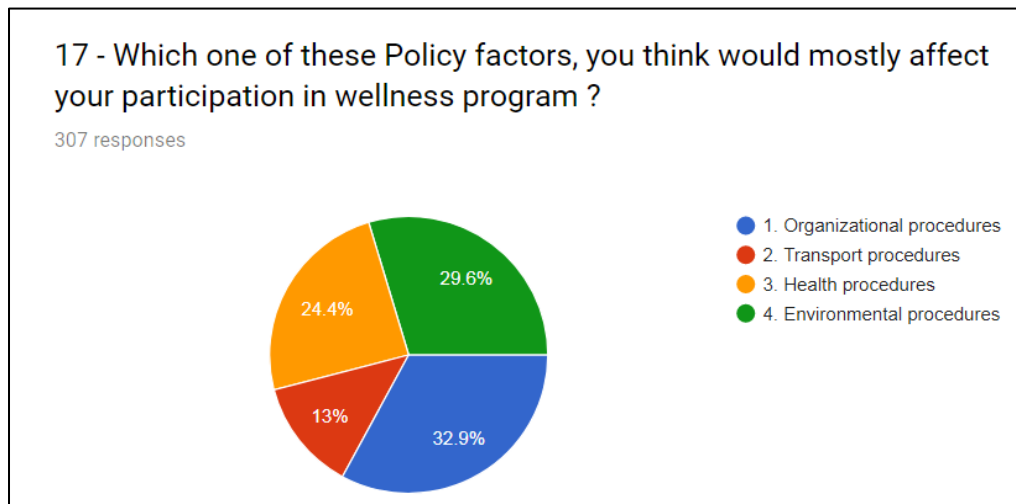


**Figure 4.4: Policy Factors as perceived by the surveyed respondents (%)**

#### 4.2.5 Culture Factors

*Table 4.6: Culture Factors as perceived by the surveyed respondents*

| Which one of these Culture factors, you think would mostly affect your participation in wellness program? | Frequency  | %          |
|-----------------------------------------------------------------------------------------------------------|------------|------------|
| Rules of behavior held in common by a nation, a community, or other defined group of people               | 94         | 30.6       |
| Traditions                                                                                                | 67         | 21.8       |
| Language                                                                                                  | 36         | 11.7       |
| Beliefs                                                                                                   | 107        | 34.9       |
| Others                                                                                                    | 3          | 1          |
| <b>Total</b>                                                                                              | <b>307</b> | <b>100</b> |

Table 4.6 and Figure 4.5 show the cultural factors that would mostly affect employees' participation in corporate wellness programs. The cultural factor mostly reported was 'beliefs', which comprised 34.9%, followed by 'rules of behavior held in common by a nation, a community, or other defined group of people', which comprised 30.6%. 'Traditions', 'language', and others came next with 26.9%, 10.5%, and 1% respectively.

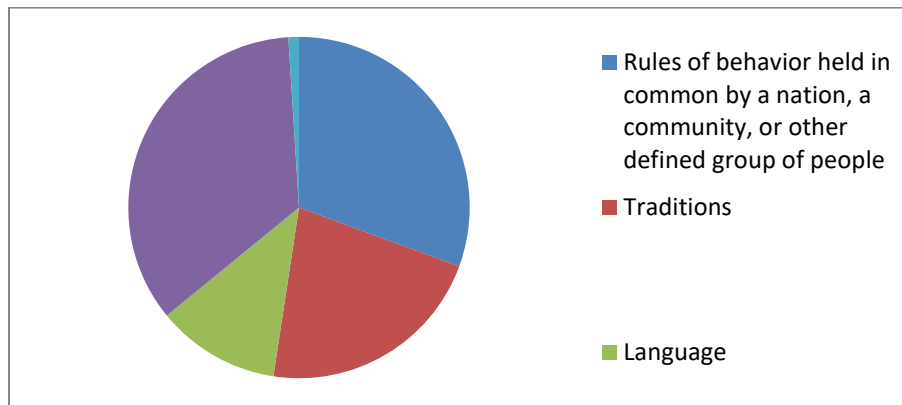


*Figure 4.5: Culture Factors as perceived by the surveyed respondents (%)*

### 4.3 Hypotheses testing

To test the research hypotheses, Pearson's Chi-square test was used and performed. Chi-Square tests was used to test the association between two qualitative variables. The current

research variables are nominals which means that Chi-Square is the most appropriate to test the research hypotheses as follows:

#### 4.3.1 Engagement factors

**H01: There is no statistical association between factors of engagement (individual, policy, social environment, culture, and physical environment) with participation in a corporate wellness program.**

Table 4.7 shows the details of chi-square test for hypotheses.

##### 4.3.1.1 Individual factors

**Table 4.7: Chi-Square Test: Association between individuals' factors and participation in corporate wellness program.**

| Cross tabulation                                                                                                 |                   |        |                                                                   |     |       |         |      |
|------------------------------------------------------------------------------------------------------------------|-------------------|--------|-------------------------------------------------------------------|-----|-------|---------|------|
| Association between individuals' factors and participation in corporate wellness program.                        |                   |        | 7- Did you participate in wellbeing program in the past 6 months? |     |       | Total   |      |
|                                                                                                                  |                   |        | Yes                                                               | No  | Maybe |         |      |
| 14- Which one of these individual factors, you think would mostly affect your participation in wellness program? | Age               | Number | 13                                                                | 18  | 3     | 34      |      |
|                                                                                                                  |                   | %      | 38%                                                               | 53% | 9%    | 100%    |      |
|                                                                                                                  | Gender            | Number | 11                                                                | 29  | 5     | 45      |      |
|                                                                                                                  |                   | %      | 24%                                                               | 64% | 11%   | 100%    |      |
|                                                                                                                  | Level of physical | Number | 24                                                                | 57  | 4     | 85      |      |
|                                                                                                                  |                   | %      | 28%                                                               | 67% | 5%    | 100%    |      |
|                                                                                                                  | Motivations       | Number | 59                                                                | 80  | 4     | 143     |      |
|                                                                                                                  |                   | %      | 41%                                                               | 56% | 3%    | 100%    |      |
|                                                                                                                  | Total             |        | Number                                                            | 107 | 184   | 16      | 307  |
|                                                                                                                  |                   |        | %                                                                 | 35% | 60%   | 5%      | 100% |
|                                                                                                                  |                   |        | x <sup>2</sup> Value                                              |     | df    | p-value |      |
| Pearson's Chi-squrare                                                                                            |                   |        | 11.289 <sup>a</sup>                                               |     | 6     | 0.08    |      |

Table 4.7 shows Chi-square value ( $\chi^2=11.289$ ),  $p$ -value= 0.08 which is greater than  $\alpha \leq 0.05$ . Thus, we cannot reject the null hypothesis that state there is no statistical association between individual factors (age, gender, level of physical, and motivation) with participation in a corporate wellness program. This result is unexpected and counterproductive which indicates that individual factors have no association with participation in the corporate wellness program.

#### 4.3.1.2 Social environment factors

**Table 4.8: Chi-Square Test: Association between social factors and participation in corporate wellness program.**

| Cross tabulation                                                                                                         |             |        |                                                                   |     |       |         |
|--------------------------------------------------------------------------------------------------------------------------|-------------|--------|-------------------------------------------------------------------|-----|-------|---------|
| Association between social factors and participation in corporate wellness program.                                      |             |        | 7- Did you participate in wellbeing program in the past 6 months? |     |       | Total   |
|                                                                                                                          |             |        | Yes                                                               | No  | maybe |         |
| 15- Which one of these Social environment factors, you think would mostly affect your participation in wellness program? | Family      | Number | 35                                                                | 52  | 9     | 96      |
|                                                                                                                          |             | %      | 37%                                                               | 54% | 9%    | 100%    |
|                                                                                                                          | Peers       | Number | 7                                                                 | 14  | 1     | 22      |
|                                                                                                                          |             | %      | 32%                                                               | 64% | 5%    | 100%    |
|                                                                                                                          | Instructors | Number | 27                                                                | 67  | 3     | 97      |
|                                                                                                                          |             | %      | 28%                                                               | 69% | 3%    | 100%    |
|                                                                                                                          | Co-workers  | Number | 37                                                                | 51  | 3     | 91      |
|                                                                                                                          |             | %      | 41%                                                               | 56% | 3%    | 100%    |
| Total                                                                                                                    |             | Number | 107                                                               | 184 | 16    | 307     |
|                                                                                                                          |             | %      | 35%                                                               | 60% | 5%    | 100%    |
|                                                                                                                          |             |        | x <sup>2</sup> value                                              |     | df    | p-value |
| Pearson’s Chi-squarre                                                                                                    |             |        | 11.101 <sup>a</sup>                                               |     | 8     | 0.196   |

Table 4.8 shows Chi-square value ( $\chi^2=11.10$ ),  $p$ -value= 0.196 which is greater than  $\alpha \leq 0.05$ . Thus, we cannot reject the null hypothesis that state there is no statistical association between social environment factors (family, peers, instructors, and co-workers) with participation in a corporate wellness program. This result is unexpected and counterproductive as it indicates that social environment factors have no association with participation in the corporate wellness program.

#### 4.3.1.3 Physical environment

**Table 4.9: Chi-Square Test: Association between physical environmental factors and participation in corporate wellness program.**

| Cross-tabulation                                                                                                           |                  |        |                                                                   |     |       |         |
|----------------------------------------------------------------------------------------------------------------------------|------------------|--------|-------------------------------------------------------------------|-----|-------|---------|
| Association between physical environmental factors and participation in corporate wellness program.                        |                  |        | 7- Did you participate in wellbeing program in the past 6 months? |     |       | Total   |
|                                                                                                                            |                  |        | Yes                                                               | No  | Maybe |         |
| 16- Which one of these Physical environment factors, you think would mostly affect your participation in wellness program? | Safety           | Number | 13                                                                | 17  | 4     | 34      |
|                                                                                                                            |                  | %      | 38%                                                               | 50% | 12%   | 100%    |
|                                                                                                                            | Atmosphere       | Number | 72                                                                | 127 | 7     | 206     |
|                                                                                                                            |                  | %      | 35%                                                               | 62% | 3%    | 100%    |
|                                                                                                                            | Parks            | Number | 6                                                                 | 11  | 2     | 19      |
|                                                                                                                            |                  | %      | 32%                                                               | 58% | 11%   | 100%    |
|                                                                                                                            | Public transport | Number | 16                                                                | 28  | 3     | 47      |
|                                                                                                                            |                  | %      | 34%                                                               | 60% | 6%    | 100%    |
| Total                                                                                                                      |                  | Number | 107                                                               | 184 | 16    | 307     |
|                                                                                                                            |                  | %      | 35%                                                               | 60% | 5%    | 100%    |
|                                                                                                                            |                  |        | x <sup>2</sup> Value                                              |     | df    | P-Value |
| Pearson’s Chi-square                                                                                                       |                  |        | 6.778 <sup>a</sup>                                                |     | 8     | 0.561   |

Table 4.9 shows Chi-square value ( $x^2=6.77$ ), p-value= 0.561 which is greater than  $\alpha \leq 0.05$ . Thus, we cannot reject the null hypothesis that state there is no statistical association between physical environment factors (safety, atmosphere, parks, and public transport) and participation in a corporate wellness program. This result is unexpected and counterproductive as it indicates that physical environment factors have no association with participation in the corporate wellness program.

#### 4.3.1.4 Policy

**Table 4.10: Chi-Square Test: Association between policy factors and participation in corporate wellness program**

| Cross-tabulation                                                                                              |                          |        |                                                                   |     |         |       |
|---------------------------------------------------------------------------------------------------------------|--------------------------|--------|-------------------------------------------------------------------|-----|---------|-------|
| Association between policy factors and participation in corporate wellness program.                           |                          |        | 7- Did you participate in wellbeing program in the past 6 months? |     |         | Total |
|                                                                                                               |                          |        | Yes                                                               | No  | Maybe   |       |
| 17 - Which one of these Policy factors, you think would mostly affect your participation in wellness program? | Organizational procedure | Number | 30                                                                | 67  | 4       | 101   |
|                                                                                                               |                          | %      | 30%                                                               | 66% | 4%      | 100%  |
|                                                                                                               | Transportation procedure | Number | 19                                                                | 18  | 3       | 40    |
|                                                                                                               |                          |        | 48%                                                               | 45% | 8%      | 100%  |
|                                                                                                               | Health procedure         | Number | 23                                                                | 48  | 4       | 75    |
|                                                                                                               |                          | %      | 31%                                                               | 64% | 5%      | 100%  |
|                                                                                                               | Environmental procedure  | Number | 35                                                                | 51  | 5       | 91    |
|                                                                                                               |                          |        | 39%                                                               | 56% | 6%      | 100%  |
| Total                                                                                                         |                          | Number | 107                                                               | 184 | 16      | 307   |
|                                                                                                               |                          | %      | 35%                                                               | 60% | 5%      | 100%  |
|                                                                                                               |                          |        | x <sup>2</sup> Value                                              | df  | p-value |       |
| Pearson’s Chi-squrare                                                                                         |                          |        | 6.659 <sup>a</sup>                                                | 6   | 0.354   |       |

Table 4.10 shows Chi-square value ( $x^2=6.65$ ),  $p\text{-value}= 0.354$  which is greater than  $\alpha \leq 0.05$ . Thus, we cannot reject the null hypothesis that state there is no statistical association between policy factors (organizational procedure, transportation procedure, health procedure, and environment) with participation in a corporate wellness program. This result is unexpected and counterproductive which indicates that policy factors have no association with participation in the corporate wellness program.

#### 4.3.1.5 Culture

**Table 4.11: Chi-Square Test: Association between Culture factors and participation in corporate wellness program.**

| Cross tabulation                                                                                               |                   |                      |                                                                   |        |         |       |
|----------------------------------------------------------------------------------------------------------------|-------------------|----------------------|-------------------------------------------------------------------|--------|---------|-------|
| Association between Culture factors and participation in corporate wellness program.                           |                   |                      | 7- Did you participate in wellbeing program in the past 6 months? |        |         | Total |
|                                                                                                                |                   |                      | Yes                                                               | No     | Maybe   |       |
| 18 - Which one of these Culture factors, you think would mostly affect your participation in wellness program? | Beliefs           | Number               | 28                                                                | 73     | 6       | 107   |
|                                                                                                                |                   | %                    | 26.20%                                                            | 68.20% | 5.60%   | 100%  |
|                                                                                                                | Tradition         | Number               | 16                                                                | 47     | 4       | 67    |
|                                                                                                                |                   | %                    | 24%                                                               | 70%    | 6%      | 100%  |
|                                                                                                                | Language          | Number               | 12                                                                | 20     | 4       | 36    |
|                                                                                                                |                   | %                    | 33%                                                               | 56%    | 11%     | 100%  |
|                                                                                                                | Rules of behavior | Number               | 48                                                                | 44     | 2       | 94    |
|                                                                                                                |                   | %                    | 51%                                                               | 47%    | 2%      | 100%  |
| Total                                                                                                          |                   | Number               | 107                                                               | 184    | 16      | 307   |
|                                                                                                                |                   | %                    | 35%                                                               | 60%    | 5%      | 100%  |
|                                                                                                                |                   | x <sup>2</sup> Value |                                                                   | df     | p-value |       |
| Pearson’s Chi-squarre                                                                                          |                   | 26.785 <sup>a</sup>  |                                                                   | 8      | .001**  |       |

Table 4.11 shows Chi-square value ( $\chi^2=26.78$ ), p-value= 0.001 which is less than  $\alpha \leq 0.05$ . Thus, we reject the null hypothesis that state there is strong statistical association between culture factors (rules of behavior, tradition, language, and beliefs) with participation in a corporate wellness program. This result was expected, and it indicates that cultural factors have significant association with participation in the corporate wellness program. The above analysis answered the research question number one.

#### 4.3.2 Barriers that prevent employee to participate in corporate wellness program

**H02: There are no barriers for employees to participate in a corporate wellness program.**

Descriptive statistics were used to test this hypothesis, Table 4.12 shows the key barriers that prevent employees from participation in the corporate wellness program.

***Table 4.12: Barriers to Corporate Wellness Programs***

| <b>Which, if any, of the following reasons, would prevent you from participating in a free work wellness program?</b> | <b>Responses</b> |                  |
|-----------------------------------------------------------------------------------------------------------------------|------------------|------------------|
|                                                                                                                       | <b>N</b>         | <b>Percent %</b> |
| I am fit                                                                                                              | 32               | 0.06             |
| Too Tired                                                                                                             | 55               | 0.11             |
| No interest                                                                                                           | 81               | 0.16             |
| No time during work                                                                                                   | 120              | 0.24             |
| No time before or after work                                                                                          | 89               | 0.18             |
| Already involved in other programs                                                                                    | 36               | 0.07             |
| I do not want to interact with Male co-workers                                                                        | 15               | 0.03             |
| I do not want to interact with female co-workers                                                                      | 12               | 0.02             |
| I do not want to interact with co-workers                                                                             | 19               | 0.04             |
| Cultural issues                                                                                                       | 47               | 0.09             |
| <b>Total</b>                                                                                                          | <b>506</b>       | <b>1.00</b>      |

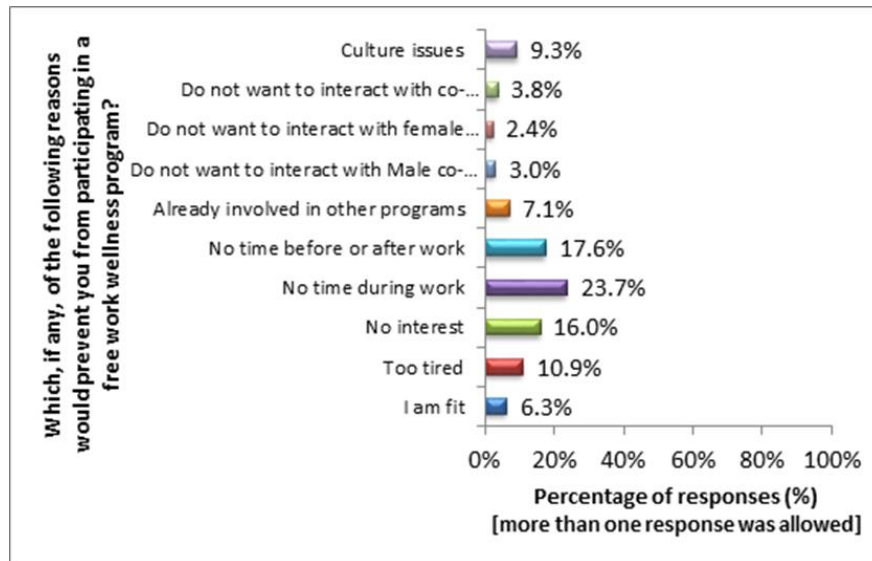


**Figure 4.6: Barriers to Corporate Wellness Programs (%)**

Table 4.12 and Figure 4.6 present the perceived barriers to corporate wellness program identified by employees in the hospitality sector, where respondents could report more than one response. The most commonly reported barriers to using corporate wellness program was ‘no time during work’ at 23.7% of the total respondents. This was followed by ‘no time before/after work’ (17.6%). Third in rank was ‘no interest’ at 16% and ‘too tired’ (10.9%). ‘Cultural issues’ ranked fifth comprising 9.3%; while ‘already involved in other program’ came next comprising of 7.1%. The least considered barriers were: ‘I am fit’ at 6.3% and ‘I do not want to interact with co-workers’ at 3.8%. ‘I do not want to interact with male co-workers’ at 3%, and the least was, ‘do not want to interact with female co-workers’ which comprised only 2.4%. As a result, the second hypothesis can be rejected, and the alternative hypothesis can be accepted which indicates that employees encounter various types of barriers that prevent them from participation in the corporate wellness program which answers the second research question.

### 4.3.3 Elements preferred by employees

**H03: There are no elements in the corporate wellness program that employees' most likely use.**

Descriptive statistics was used to test this hypothesis. Table 4.13 shows the key elements that employees most likely would use for participation in corporate wellness program.

***Table 4.13: Elements of corporate Wellness Programs preferred by Employees***

| <b>If your employer offered free work wellness programs, which of the following elements if any, would you be likely to use?</b> | <b>Responses</b> |                  |
|----------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
|                                                                                                                                  | <b>N</b>         | <b>Percent %</b> |
| On-site exercise classes (such as aerobics, dance, yoga, physical activity)                                                      | 116              | 0.23             |
| Personalized diet or exercise counseling                                                                                         | 133              | 0.26             |
| Healthy eating or healthy cooking classes                                                                                        | 110              | 0.22             |
| Sports leagues (such as softball, basketball, football)                                                                          | 97               | 0.19             |
| Weight loss support group                                                                                                        | 52               | 0.10             |
| <b>Total</b>                                                                                                                     | <b>508</b>       | <b>1.00</b>      |

Table 4.13 and Figure 4.7 present the types of wellness programs preferred by employees. Multiple responses were allowed for the type of corporate wellness program that respondents would prefer. Majority (26.2%) of the respondents preferred 'personal diet or exercise counseling' program, followed by 'onsite exercise program' such as physical activity, aerobic, yoga, and dance, which comprised 22.8% of the respondents. 'Healthy eating/cooking classes' came next comprising 21.7%, while 'sports league' such as softball, basketball, football comprised 19.1%. The least preferred program was the 'weight loss support group' which comprises only 10.2% of the total respondents.

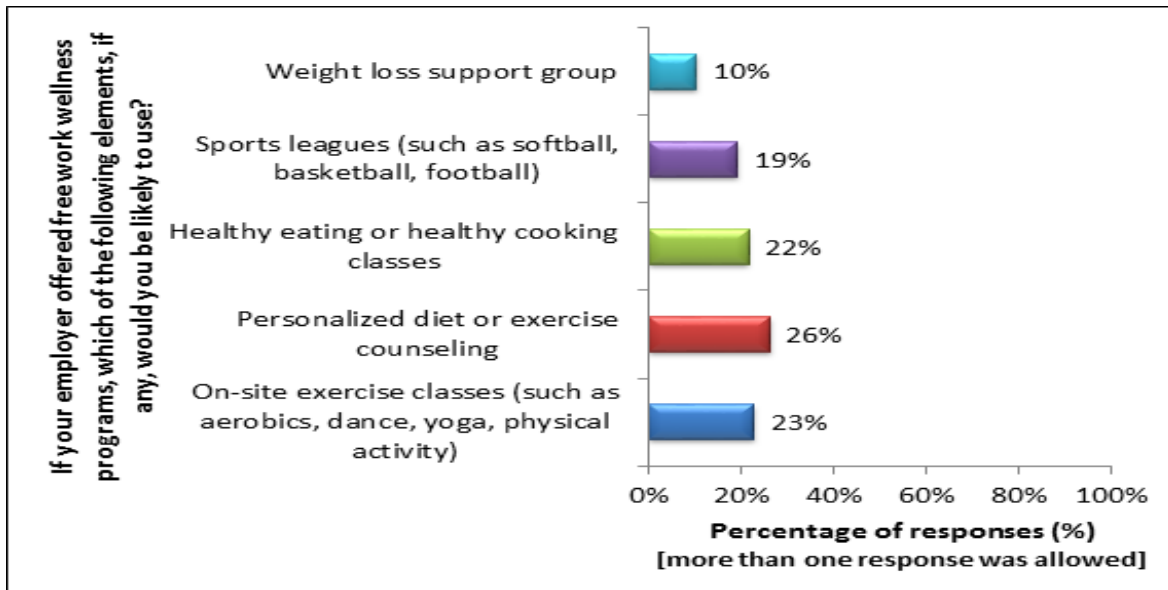


*Figure 4.7: Types of Elements Corporate Wellness Programs preferred by Employees*

#### 4.3.4 The area/point of interest in corporate wellness program

**H04: There are no areas/points of interest in the corporate wellness program that motivate employees participate more in the wellness program.**

Descriptive statistics was used to test this hypothesis. Table 4.14 shows the area/points of interest in corporate wellness program.

*Table 4.14: Areas/points of interest in the Corporate Wellness Programs*

| Which, if any, of the following, would make you interested in participating in a free work wellness program? | Responses  |             |
|--------------------------------------------------------------------------------------------------------------|------------|-------------|
|                                                                                                              | N          | Percent     |
| Employer encouragement                                                                                       | 93         | 0.16        |
| Employer gave paid time off to go                                                                            | 88         | 0.15        |
| Good physical environment                                                                                    | 150        | 0.26        |
| Convenient time                                                                                              | 133        | 0.23        |
| Convenient location                                                                                          | 82         | 0.14        |
| My co-workers joined in                                                                                      | 36         | 0.06        |
| <b>Total</b>                                                                                                 | <b>582</b> | <b>1.00</b> |

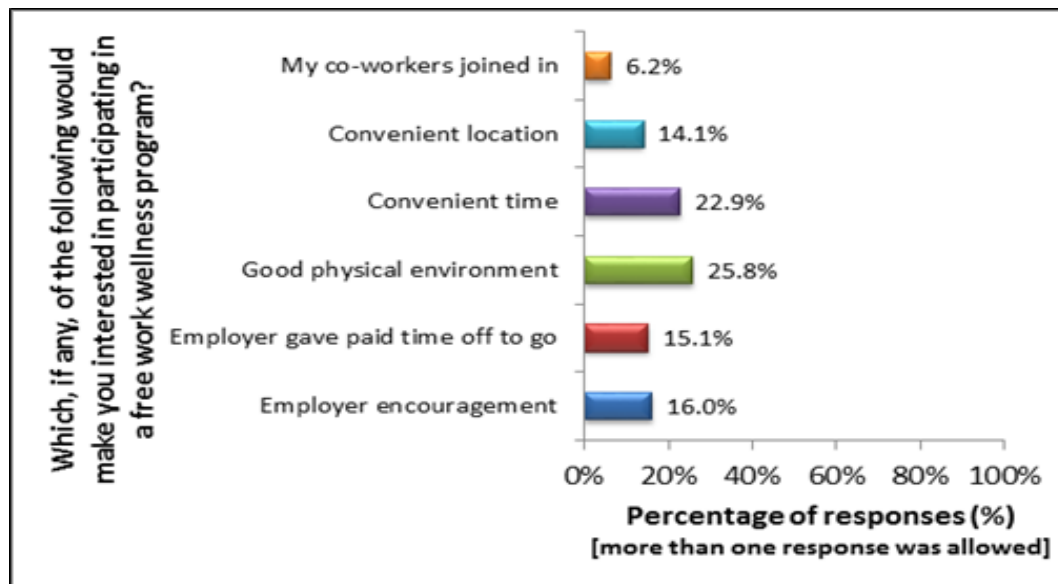


**Figure 4.8 :Areas/point of interest in the Corporate Wellness Programs(%)**

Table 4.14 and Figure 4.10 displays the preferred incentives by respondents to participate in corporate wellness program, where more than one response was allowed. Majority (25.8%) of the respondents preferred ‘good physical environment’ for utilizing employee wellness services. This was followed by ‘convenient time’, which comprised 22.9%; and ‘employer encouragement’ came next at 16%. Third in rank was ‘employer gave paid time off to go’ which comprised 15.1%, while ‘convenient location’ came next with 14.1%. The least preferred incentive was ‘my co-workers joined in’ which comprised only 6.2%. These results reflect that the employees choose the incentives based on their own personal convenience with more consideration on the physical environment and time availability, rather than be influenced by their co-workers personal choices.

As result, the third hypothesis can be rejected, and the alternative hypothesis can be accepted which indicates that there are different types of areas/points that motivate employees to participate in corporate wellness program.

## 4.4 Summary

The results present several opportunities to further explore best practices of a wellbeing program among the XYZ Company in Bahrain. By combining knowledge of workforce preference for engagement factors, barriers, and incentives it may be possible to build innovative and attractive health initiatives preferences and personal interaction between XYZ workforce in Kingdom of Bahrain.

# **Chapter Five**

## **Discussion, Conclusion, Recommendation and Future work**

### **5.1 Introduction**

In our survey, certain participant demographic factors may encourage participation in corporate wellness programs. The survey asked certain questions that described certain individual characteristics of the participants such as the age, gender, education level, ethnicity, years of experience and position in the corporate. These queries, besides showcasing the demographic structure of the sample, also can give insight into potential linkages with participation in corporate wellness program.

Hypotheses were performed to ascertain the nature and significance of the association between engagement factors and participation in corporate wellness program in XYZ Company in Bahrain. The research problem has been studied using four key research questions. Defining the hypotheses helped to determine whether there was association between engagement factors and participation in corporate wellness program.

As per expectations, almost 65% of the participants did not partake in any corporate wellness program in the last six months. The participants who did participate in any such program mostly partook in a physical program (59%). Similarly, most participants also preferred a fitness center at the workplace.

### **5.2 The Research Questions Discussions**

#### **5.2.1 Question 1**

**What are the factors associated with participation in corporate wellness programs?**

To investigate which engagement factors determine an individual's decision to join a corporate wellness program, we divided the factors into primarily five categories which included the individual, social environment, physical environment, organization policies,

and cultural factors. Interestingly, the results show that almost all these categories of factors were not statistically significant at the level of 5% except for cultural factors. The results of each are discussed below:

#### **5.2.1.1 Individual factors**

Although these factors are not significant at a level of 5%, they are significant at 10% level if we allow the level of confidence to go down to 90%. The most important factor that was chosen by the participants was motivation to participate in such a program followed by physical training. The factor was tested using Chi-square to see whether the participants' view on this factor had any impact on their decision to participate in any corporate wellness program. The results showed that it was not a statistically significant factor for this study. First of all, it can be clearly seen that age, gender, and level of physical fitness were not important factors to most of the participants, but motivation was significant. However, it is worth mentioning that 14% of the people said that gender was an important factor for them and from among them 64% of the people did not participate in a corporate wellness program.

As mentioned in the demographic factors, the research has concluded that gender is not an important factor for most of the participants. However, it is still useful to note that there is a subset of the population that might consider non-gender specific fitness facilities as a hindrance to their participation. Similar results were found by Hunter Roy (2011) in his study that examined the association of wellness program participation and selected health risk factors with medical claims. Subjects (471) were male and female in the Midwestern portion of the United States. However, the results showed that significant association existed between individual category, age, gender, exercise motivation, and wellness participation.

However, undeniably, the most important factor that impacts people's decision is motivation to join a corporate wellness program (Person et al, 2010). The results showed that 56% of the participants who said motivation was an important factor did not participate in corporate wellness program. Also, out of the total 65% of the people who did not

participate, 43% were those who chose this factor as the most important for their decision. It was also interesting to note that 55% of the people out of the 35% of the sample who did participate that in such a program said that motivation was important. All of this suggests that the reason for most people's joining of such a program is motivation of some sort.

These will be explained in detail in the recommendation section. Similar results were found by Jasphy, and Laura (2017). Her study aimed to uncover the factors and conditions that influence employee engagement in corporate wellness activities. The study sample consisted of thirty employees in an urban specialty hospital. However, she concluded that enhancing incentives and introduction of intrinsic motivators could stimulate participation (Jasphy, 2017).

The next factor that requires some explanation is that how almost 30% of the participants considered level of physical training as their most important factor. It is also worth noting that 67% of these people did not participate in a corporate wellness program. This means many of these people see their current fitness levels as too low to partake in any physical training program. This could partly be explained by the embarrassment or intimidation beginners feel when entering an environment where they are surrounded by much fitter people who display much higher levels of athletic abilities. To quell such fears, a corporate wellness program must have a beginner orientation program where the participants are surrounded by similar level of people and/or create a healthy cooperative environment where participants feel encouraged rather than discouraged to train.

#### **5.2.1.2 Social environment factors**

As mentioned above, the social environment was not an important factor in determining the decision of participants to join in corporate wellness program. However, it is still useful to discuss the insights of the responses. The results also showed that there was no major difference in the number of people who chose a particular important factor from among the social factors whether they participated or not. The most important factor according to the participants were instructors. This shows the importance of having good instructors that can mold a corporate wellness program to the needs and characteristics of individuals and

is able to keep them motivated through the corporate wellness program. The next important factors were family and co-workers i.e. their moral support and encouragement will help them to continue such a program. On the other hand, these people can be bad influences who discourage them to eat healthy or workout. Similar results were found by Jasphy, and Laura Gail, published in 2017. However, the results were not in accordance with current research. She mentioned that potential facilitators for non- participation were leadership support, group support, and peer support, (Jasphy, et al. 2017). In another study done by Anne, (2014) the result showed that 195 employees had positive intentions toward participation in corporate health programs. During a follow-up period of six months, 11% actually participated, due to social factors, and facilitators.

#### **5.2.1.3 Physical environment factors**

This is one of the factors that was not statistically significant in explaining the reason for people to partake in a corporate wellness program This was perhaps mainly due to the fact that many factors in this category were not seen as relevant by most people. For example, parks were not an important factor because due to the hot weather in this region people do not mostly workout in open spaces. Public transport was not a concern either as most people in the survey were white-collar workers who could afford their own vehicles. Safety was also not an important factor because of lack of awareness among the population in this region. Atmosphere was chosen as an environmental factor by the participants which reiterates the importance of having a supportive and friendly environment for a corporate wellness program with proper instructors and peers as mentioned above. Similar results were found by Thompson (2011). His objective was to compare the effects on mental and physical wellbeing, health-related quality of life and long-term adherence to physical activity by participation in corporate wellness program in natural environments compared with corporate wellness program indoors. But the participants reported greater enjoyment and satisfaction with outdoor activity, for example, parks and different physical environment which may be due to better weather conditions and culture.

#### **5.2.1.4 Organizational policy factors**

This is another factor which was not statistically significant at 5% in explaining the decision of participants to join a corporate wellness program. The most important factor chosen by them was organizational procedures which refers to all the procedures that affect work and employee participation in corporate wellness programs such as: is the program during work hours or after, will it affect their compensation structure, any incentives that they may get for participating etc. Similar results were found by Conlon (2013) and Young (2006). However, the results were that organizational policies and procedures that were linked to the participating health outcomes yielded greater return on investment than those designed only for healthcare cost control.

#### **5.2.1.5 Culture factors**

Among all the factors that may impact the decision of an individual to participate in a corporate wellness program, the most statistically significant associated factor is the cultural factor with p-value (0.001) which was less than alpha value 0.05. Therefore, we look at each aspect of this factor in depth. The highest number of participants chose 'beliefs' as the most important factor that affects their participation. It is interesting note that majority of the people that chose this factor, participated in a corporate wellness program in the last 6 months. Beliefs here could refer to set of beliefs that may encourage or discourage them to partake in such a program. Firstly, on the positive side, a belief that in order to live a healthy and happy life nutrition and exercise are necessary would encourage people to participate in such programs. However, there can be myriad of beliefs such as:

- For me to be successful I should appear healthy and fit. Appearance can significantly impact my chances of success, for example in a job interview or in a business deal.
- Religious factors can be impactful here, such as the Muslim belief that the body has a right over an individual which involves keeping it healthy and fit.

- Corporate wellness program can significantly reduce my stress levels and improve my performance and my happiness levels
- Being part of a corporate wellness program can prevent several health problems and therefore save me from physical pain, psychological stress, and financial impact.

However, the opposite of the above is also true. There are many who believe that there is no need to exercise and/or care too much about nutrition for a healthy life. They may, for example, believe that they do not need to partake in such programs to be healthy and perhaps much simpler things like walks a couple times a week are sufficient. For a corporate wellness program to be successful the participants need to be made aware of the health, psychological and financial benefits of a corporate wellness program in order for them to truly be serious in such an endeavor.

Rules of behavior was the other most important factor chosen by the participants and the results show that majority of the people who considered this an important factor did not participate in a corporate wellness program. This factor refers to the generally accepted norms prevalent in a society for an individual's behavior. It is interesting that this meant 44% of the people who did not take part in a corporate wellness programs considered this a barrier. This factor primarily relates to the expectation that the society and/or family of an individual that may restrict their time to participate in such programs. For example, many individuals in this region spend a lot of time with their families and relatives for various occasions. They have become accustomed to spending evenings in public places with their families or friends. This can restrict an individual's availability and/or the energy levels after completing all such chores. Another aspect of such rules for a small subset of people are religious and cultural factors that make people uncomfortable to spend time in such places due to either mixing of both genders, music and such items.

Traditions refer to beliefs or behaviors passed down within a group or society that become ingrained in people's daily lives. In this context, the only difference between the above two factors is with regard to rituals that consumes people's time and/or customs that prevent people from partaking in such activities. Another important factor is related to food where

several traditional foods may contradict with the recommendations of a nutritionist. Therefore, for a corporate wellness program to be successful, it should probably address the above concerns one by one.

### 5.2.2 Question 2

#### **What are the barriers for employees to participate in corporate wellness program?**

For this question, only options with 10% or more participant selection were considered significant.

The most selected barrier to participating in such a program chosen by the participants was no time during work. This refers to two problems at the corporate level - the lack of any formal program offered by organizations for wellbeing, and work stress due to several responsibilities on individuals which forces them to use their time for work only. The next barrier is no time before and after work which refers to social responsibilities which prevent people from joining such activities or other individual factors all of which have been mentioned above.

Another barrier is 'too tired' which does not motivate anymore to partake in such activities due to low energy levels. The solution of these kinds of problems is in designing a flexible on-work program for individuals that addresses their physical and psychological health requirements. Similar results were found by Person, (2010), and Conlon, (2013), Minnesota State University. From the 437 participants in her study there were more female (n=308, 71.3%) than male participants (n=124, 28.7%). The most commonly reported barriers to using corporate wellness program were no time during the workday (67%), followed by no time before or after work (51.1%), already involved in other programs (17%), too tired (13%), don't want to do this with co-workers (9%), and no interest (65%). However, the results were almost the same in accordance with this research.

The only other significant issue here is the assertion of no interest which can only be solved by awareness programs by the organization to explain the benefits of exercise and nutrition, and dangers to not doing so.

### 5.2.3 Question 3

**What are the elements that employees are most likely use at corporate wellness programs?**

The overwhelming majority of participants gave a positive response to most of the features on the list. The most important among them was fitness center (46.8%), second was health food choices in vending machine and/or cafeteria (41.6%), third was health screening tests (41.6%), fourth was break time (67%), followed by paid exercise at work (66%), and finally confidential stress, depression, screening and management sessions. The same was also shown by another question on questionnaire where participants gave favorable responses to on-site exercise classes, personalized diet, exercise counseling, and healthy eating. All the above solves the barriers to partaking in corporate wellness program as it offers people dedicated time at work for exercise and makes their lives easier for healthy eating. The recommendations detail how such activities can be incorporated at the workplace. Similar results were found by Sheppard, (2015). Most employees refuse to participate in corporate-sponsored wellness programs because the company sends mixed messages; it encourages participation in the wellness program, yet still offers high-fat foods in the cafeteria and vending machine. However, similar results were found by Conlon,(2011) wherein she mentioned that participant most likely want to use fitness center and want to attend health screening.

### 5.2.4 Question 4

**What are the areas/point of interest in the corporate wellness program for employees to motivate them to participate more in the wellness program?**

Results showed that a good physical environment (to exercise) is an important area to motivate employees. This was followed by convenient time which could mean different things to different people. For example, some people would prefer to work-out early morning before work, some during working hours and some at the end of the workday. But based on the previous questions and good results for paid time off, it can be assumed that majority of the employees would be encouraged to work-out if they could do so during

their paid time. The next important point relates to employer encouragement, which could take several forms such as involvement of top management in the activities, employee competitions and prizes, incorporating participation in such programs in the employee assessment, etc. However, similar results were found by Conlon, (2013), Minnesota State University. Among the 437 participants in her study there more female (n=308, 71.3%) than male participants (n=124,28.7%). The most common reported elements were having programs held at a convenient time (82%), convenient location (78%), paid time off to exercise (71%), employers' encouragement (31%), ability to invite family/friends (29%) and if co-worker joined in (20%).

### **5.3 Conclusions**

This study aimed to find out factors associated with participation in corporate wellness program, barriers, elements, and areas of interests. The results showed that 307 (34%) out of 900 employees ranged between male (60.3%) and (38.1) female, aged between 31-44 (44.6%) who responded to the survey. They (59%) prefer that physical activity be the most important aspect of wellness corporate program, especially in the Corporate fitness center (127, 41.3%). However, the most common barrier to participating in such a program was no time during working hours and they preferred the program to be personalized exercise or diet counseling, one-to-one sessions (135, 44%) due to the Middle Eastern culture which considers any health problem is a taboo to disclose in public place like fitness center. The result confirmed this concern and culture appeared as the only engagement factor that affected employees' participation in corporate wellness program.

### **5.4 Recommendation**

Based on the study results, a set of recommendations can be formulated as follows: Any successful corporate wellness program requires employees' participation because they are core of any business. Therefore, a lot of consideration should be given to the perceptions of the XYZ workforce to improve participation rate and improve business outcomes.

- 1. To create and implement a positive culture towards participation in the corporate wellness program:** Through communication at all levels and leadership, support to deal with the belief factor. To make corporate wellness program successful, it is important that the organizational culture must support the individual. Management must develop a clear vision for a healthy corporate workforce with measurable goals that will be evaluated over time. Leadership must also determine it as a cost within the budget for the corporate wellness program.
- 2. Motivation:** Motivation for any action depends on the barriers an individual has to overcome to do it versus the incentives he/she has for doing it. The first step should be to make people aware of the benefits of corporate wellness program, especially nutrition and exercise, and the harm of not partaking in them. But one of the main objectives of corporate wellness program is to remove the barriers and provide internal inspiration and external incentives for such a program.
- 3. Hire an instructor and a coordinator:** The XYZ Company should hire an instructor and a coordinator. The instructor should have at least second level certificate in wellness program NCCP (National Certificate Coaching Program) in Bahrain. The coordinator will work with employees and facilitators in designing, marketing, implementing and evaluating the corporate wellness program. Researcher also suggests that XYZ Company recruits its own instructor and coordinator rather than hire external candidates. The main reason is that with unique culture, behaviors, and attitudes, the company will best know how to design programs to attract, engage, and sustain employees' participation
- 4. Company family day:** Family, peer, and co-workers were not shown to be significant factors. However, the Researcher suggests having an annual family outing or "bring a member of your family (spouse/ child) to work" could have a positive impact in the belief system. This could, in turn, improve participation in corporate wellness program.

5. **Finding an atmosphere:** The Researcher suggests employers must avoid parks and external environment due to the culture and hot weather in summer especially, to maintain participants' rate.
6. **Changes or add new policies:** To implement corporate wellness program during working hours so that employees can spend more time with their family after working hours. This will encourage healthy work-life balance for employees. Researcher recommends that all policies and procedures should be reviewed to make sure they are promoting a healthy work environment for the XYZ workforce.
7. **Shorter workout classes:** To introduce short classes (30 minutes) through various times and days of the week in order to increase participation rate in corporate wellness program.
8. **Setting a reminder:** Another recommendation is to create a habit in XYZ Company to remind the workforce to get up and move every 50 minutes.
9. **Better options in vending machines:** Researcher suggests vending machine options should also be evaluated for nutritional content and those lower health options removed from vending machines and cafeteria.
10. **Offering optional nutrition classes:** Researcher also recommends offering classes for employees on how to shop for the right ingredients and cook with them. Any in-house meetings with catered meals should include nutritious food.
11. **Customizing the corporate wellness program:** The researcher suggests that the corporate wellness program should be customized to meet the need of the XYZ Company. The wellness facilitator should have a good understanding of company's demographics and cultural needs in order to develop an excellent comprehensive program, as there is no 'one-size fits all' formula that is applicable.
12. **Evaluation of the program:** The Researcher recommends that the program must be evaluated every quarter with well-known tools like scorecards, dashboards, and with key metrics. These metrics could include BMI, corporate injuries, absenteeism rate, workforce stress level, weight loss, cost of insurance claims, compensation claims, and return on investment (ROI).

**13. Customized exercise programs:** The exercise program must contain both individual and group programs and should include traditional exercise with modern exercise.

**14. Stress management programs:** Stress is not always caused by work-related issues; home and social life may also cause of stress among workforce. The Researcher suggests that stress reduction or stress management programs (psychology) should be developed and implemented to help workforce deal with stress and may include prevention, recovery and cognitive behavior therapy.

## 5.5 Summary

In summary, the Researcher explored workforce preferences regarding corporate health program participation, to discover a significant cultural influence among the engagement factors (individual, social environment, physical environment, organizational policies, and culture) towards barriers and incentives in corporate wellness programs.

Tackling cultural influence in wellness promotion program is quite complex. But important demographic factors and these aforementioned cultural elements could be taken into consideration in designing a good comprehensive health promotion program, especially in Bahrain and particularly in XYZ Company. This can improve overall individual wellness and thereby productivity at the corporate level. Earlier research and review of literature have shown considerable reduction of cost for the company and increase in productivity, by looking into different factors. However, this data has been explored in other countries. We need to explore in detail how cultural beliefs could affect the scenario in Bahrain as a part of future research.

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<http://www.worldometers.info/world-population/bahrain-population/>

# Appendix

## 7.1 Appendix A – Body Mass Index

### *Appendix 1. 1 Body Mass Index*

| <i>Body mass index classifications</i> |             |
|----------------------------------------|-------------|
| <b>BMI Weight Status</b>               |             |
| Below 18.5                             | Underweight |
| 18.5 – 24.9                            | Normal      |
| 25.0 – 29.9                            | Overweight  |
| 30.0 and above                         | Obese       |

|                        |                                                                                                                                                                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Source:</i>         | <i>From U.S. Department of Health and Human Services (2015)</i>                                                                                                                                                                                              |
| <i>Retrieved from:</i> | <i><a href="http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/english_bmi_calculator/bmi_calculator.html">http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/english_bmi_calculator/bmi_calculator.html</a>.<br/>Reprinted with permission.</i> |

## 7.2 Appendix B - Questionnaire

**This questionnaire is designed to explore the significant factors affecting employee participation in corporate wellness program in Kingdom of Bahrain.**

*The information provided by you will be used for research (MBA), and not for any commercial activity. Please spare few minutes from your valuable schedule and share your true feeling. Confidentiality of the information will be ensured. (your opinion is very important to us).*

### **Appendix 1. 2 Questionnaire**

- 1      What is your age? (years)
  - a.      ☐ 18- 30
  - b.      ☐ 31-40
  - c.      ☐ 41-50
  - d.      ☐ 51 and above
  
- 2      What is your gender?
  - a.      ☐ Female
  - b.      ☐ Male
  - c.      ☐ Prefer not to say
  
- 3      Education level?
  - a.      High school
  - b.      ☐ Diploma
  - c.      ☐ BA (under graduation)
  - d.      ☐ Master(post-graduation)
  - e.      ☐ PhD
  - f.      ☐ Other:
  
- 4      Please specify your ethnicity.

- a. Bahraini
- b. ☐ GCC
- c. ☐ Asian
- d. ☐ African
- e. ☐ American
- f. ☒ European
- g. ☐ Other:

5 Years of experience in XYZ Company?

- a. ☒ 0 – 5
- b. ☐ 6 - 10
- c. ☐ 11-15
- d. ☐ 16 and above
- e. ☐ Other:

6 What position do you hold at XYZ Company?

- a. ☐ Top managerial level
- b. ☐ Managerial level
- c. ☐ Supervisory level
- d. ☐ First line
- e. ☐ Other:

7 Did you participate in well-being program in the past 6 months?

- a. ☐ Yes

- b. ☐ No
- c. ☐ Maybe

8 Which program you would to participate in?

- a. ☐ Physical activity
- b. ☐ Nutrition
- c. ☐ Psychology
- d. ☐ Recovery

9 If your employer offered the following benefits as part of your job, how likely would you be to use them? (5 Scale: 1-not at all likely, 2-not very likely,3-somewhat likely,4-likely, 5-very likely).

|                                                                                       | not at<br>all<br>likely          | not very<br>likely    | somewhat<br>likely    | likely                           | very<br>likely        |
|---------------------------------------------------------------------------------------|----------------------------------|-----------------------|-----------------------|----------------------------------|-----------------------|
| Fitness center                                                                        | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |
| Healthy food<br>choices in<br>vending machine<br>and cafeteria                        | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |
| Health screening<br>tests such as<br>BMI, Diabetes,<br>Blood pressure,<br>cholesterol | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| Paid time to<br>exercise at work                                                      | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |
| Confidential<br>stress/depression,<br>screening and<br>management                     | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |
| Break time                                                                            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |
| Others                                                                                | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |

10 If your employer offered free work wellness programs, which of the following elements if any, would you be likely to use? (SELECT ALL THAT APPLY).

- a. ☐ - Online tools for tracking food and exercise (Apps)
- b. ☐ - On-site exercise classes (such as aerobics, dance, yoga, physical activity)
- c. ☐ - Personalized diet or exercise counseling
- d. ☐ - Healthy eating or healthy cooking classes

- e. ☐ - Sports leagues (such as softball, basketball, football)
- f. ☐ - Weight loss support group
- g. ☐ Other:

11 Which, if any, of the following reasons, would prevent you from participating in a free work wellness program? (SELECT ALL THAT APPLY).

- a. ☐ - I am fit
- b. ☐ - Too tired
- c. ☐ - No interest
- d. ☐ - No time during work
- e. ☐ - No time before or after work
- f. ☐ - Already involved in other programs
- g. ☐ - Do not want to interact with Male co-workers
- h. ☐ - Do not want to interact with female co-workers
- i. ☐ - Do not want to interact with co-workers
- j. ☐ - Culture issues
- k. ☐ Other:

12 Which, if any, of the following reasons would prevent you from participating in a free work wellness program? (SELECT ALL THAT APPLY).

- a. ☐ - Employer encouragement
- b. ☐ - Employer gave paid time off to go
- c. ☐ - Good physical environment
- d. ☐ - Convenient time

- e. ☐ - Convenient location
- f. ☐ - My co-workers joined in
- g. ☐ Other:

13 Which one of these you think would mostly affect your participation in wellness program.

- a. ☐ Employment status
- b. ☐ Community benchmarks (standards)
- c. ☐ Availability and access to Corporates wellness program
- d. ☐ Organization procedure
- e. ☐ Cultural diversity
- f. ☐ Other:

14 Which one of these individual factors, you think would mostly affect your participation in wellness program?

- a. ☐ Age
- b. ☐ gender
- c. ☐ Level of physical training
- d. ☒ Motivation

15 Which one of these Social environment factors, you think would mostly affect your participation in wellness program?

- a. ☐ Family
- b. ☐ Peers
- c. ☐ Instructors

d. ☐ Co-workers

16 Which one of these Physical environment factors, you think would mostly affect your participation in wellness program?

a. ☐ Co-workers

b. ☐ Safety

c. ☐ Atmosphere

d. ☐ Parks

e. ☐ Public transport

17 Which one of these Policy factors, you think would mostly affect your participation in wellness program?

a. ☐ Organizational procedures

b. ☐ Transport procedures

c. ☐ Health procedures

d. ☐ Environmental procedures

18 Which one of these Culture factors, you think would mostly affect your participation in wellness program?

a. Traditions

b. ☐ Language

c. ☐ Beliefs

d. ☐ Other:

## 7.3 Appendix C Adapted Questions from Porter Novelli Health Styles Questionnaire Porter Novelli: Styles 2004

### *Appendix 1. 3 Porter Noveles Styles 2004*

#### Porter Novelli: Styles 2004

52. Are you currently working full- or part-time outside of your home?

No..... b<sub>1</sub> → PLEASE SKIP TO Q.X

Yes.... b<sub>2</sub> → PLEASE ANSWER THE QUESTIONS IN THE BOX BELOW

53. If your employer offered the following benefits as part of your job, how likely would you be to use them? (CIRCLE ONE NUMBER FOR EACH)

|                                                                   | NOT AT ALL<br>LIKELY | NOT VERY<br>LIKELY | SOMEWHAT<br>LIKELY | VERY<br>LIKELY |
|-------------------------------------------------------------------|----------------------|--------------------|--------------------|----------------|
| Fitness center (gym) .....                                        | 1                    | 2                  | 3                  | 4              |
| Healthy food choices in vending machines and cafeteria            | 1                    | 2                  | 3                  | 4              |
| Health screening tests (e.g. cholesterol, cancer, blood pressure) | 1                    | 2                  | 3                  | 4              |
| Paid time to exercise at work .....                               | 1                    | 2                  | 3                  | 4              |
| Confidential stress/depression screening and management           | 1                    | 2                  | 3                  | 4              |
| Weight loss program                                               | 1                    | 2                  | 3                  | 4              |

54. If your employer offered free work wellness programs, which of the following elements, if any, would you be likely to use? ("X" ALL THAT APPLY)

Online tools for tracking food and exercise..... b<sub>1</sub> Healthy eating or healthy cooking classes b<sub>4</sub>  
 On-site exercise classes (e.g. aerobics, dance) b<sub>2</sub> Sports leagues (e.g., softball, basketball) ... b<sub>5</sub>  
 Personalized diet or exercise counseling b<sub>3</sub> Weight loss support group..... b<sub>6</sub>

55. Which, if any, of the following reasons would keep you from participating in a free work wellness program? ("X" ALL THAT APPLY)

Too tired b<sub>1</sub> No time during the work day b<sub>3</sub> Already involved in other programs b<sub>5</sub>  
 No interest b<sub>2</sub> No time before or after work..... b<sub>4</sub> Don't want to do this with co-workers b<sub>6</sub>

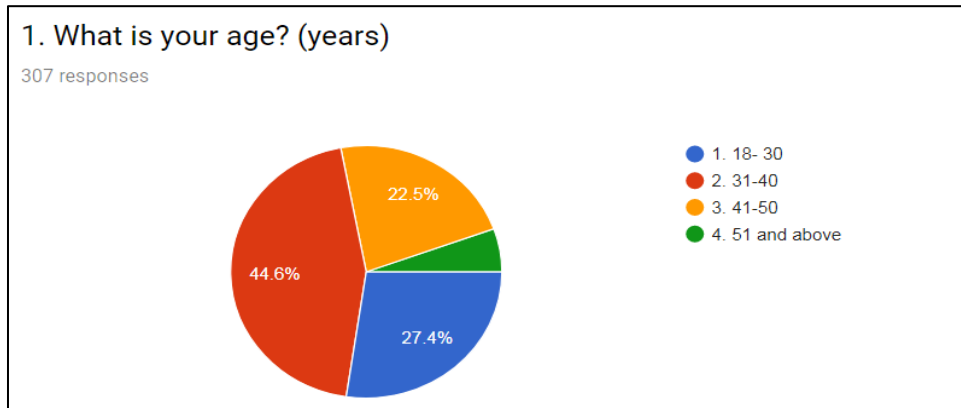
56. Which, if any, of the following would make you interested in participating in a free work wellness program? ("X" ALL THAT APPLY)

Employer encouraged me to go b<sub>2</sub> Convenient time..... b<sub>4</sub> My co-workers joined in b<sub>6</sub>  
 Employer gave paid time off to go b<sub>1</sub> Convenient location b<sub>3</sub> I could invite family/friends b<sub>5</sub>

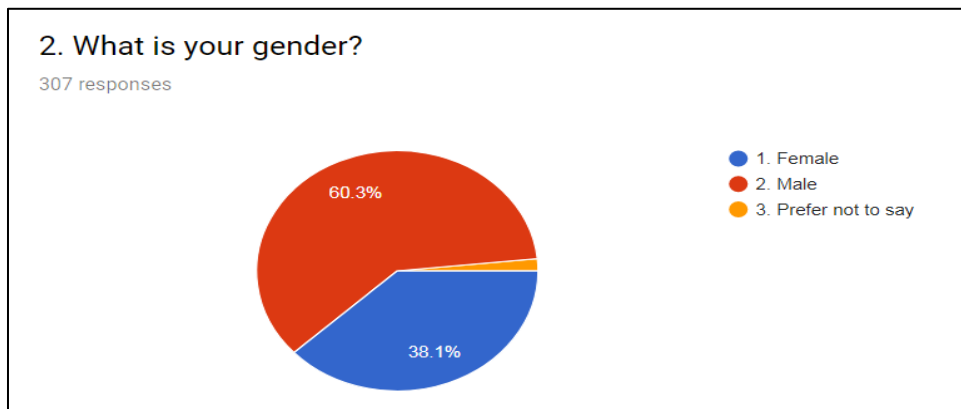
## 7.4 Appendix D - List of Questionnaire Figures

### Question 1

#### appendix 1. 4 all Questionnair figure



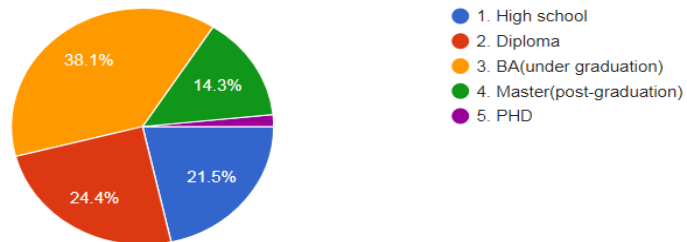
### Question 2



### Question 3

### 3. Education level ?

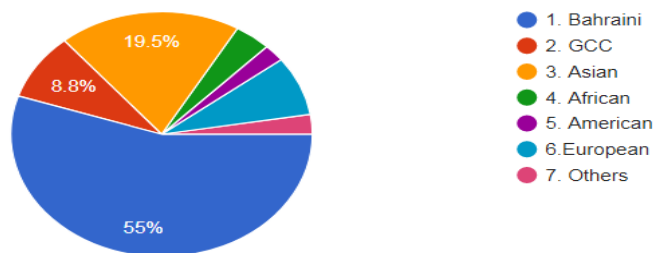
307 responses



### Question 4

### 4. Please specify your ethnicity?

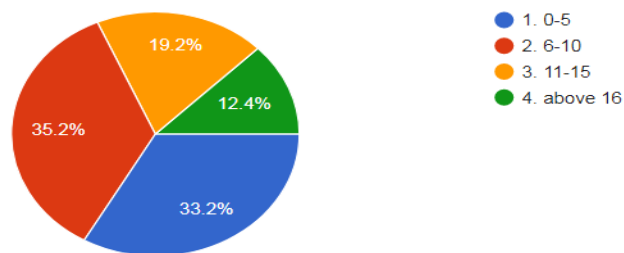
307 responses



### Question 5

### 5. Years of experience in XYZ corporation?

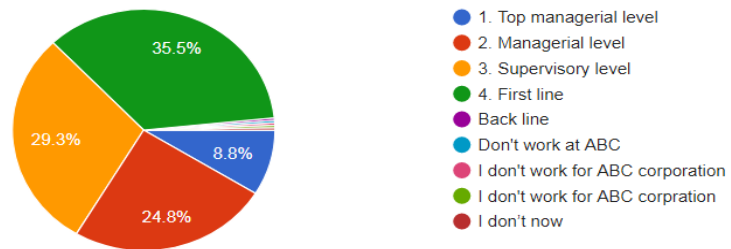
307 responses



### Question 6

## 6. What position do you hold at XYZ corporation?

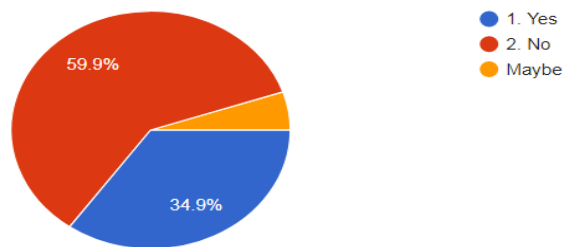
307 responses



## Question 7

## 7- Did you participate in well being program in the past 6 month?

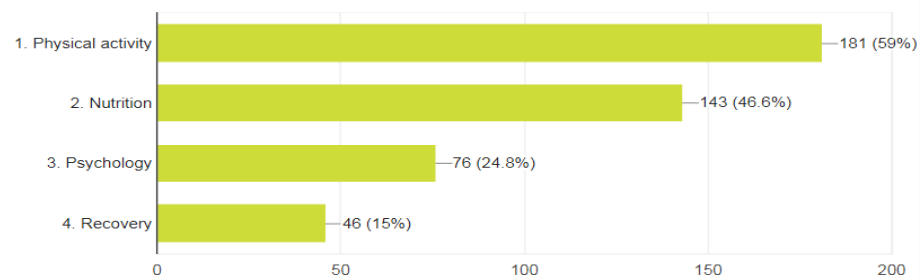
307 responses



## Question 8

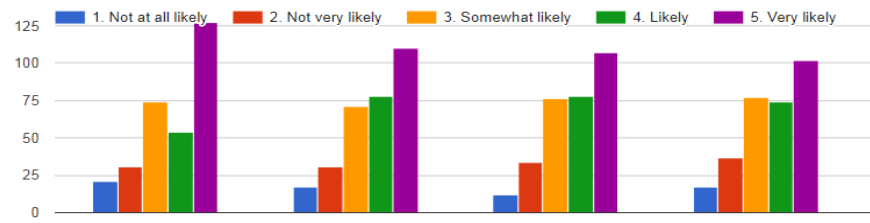
## 8- Which program you would to participate in?

307 responses



## Question 9

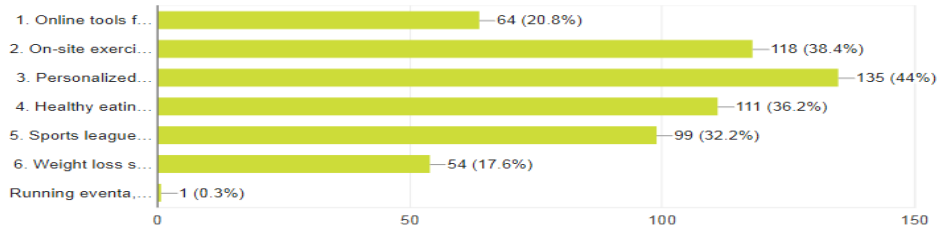
9. If your employer offered the following benefits as part of your job, how likely would you be to use them? (5 Scale : 1-not at all likely, 2-not very likely,3- somewhat likely,4-likely, 5-very likely).



## Question 10

10. If your employer offered free work wellness programs, which of the following elements, if any, would you be likely to use? (SELECT ALL THAT APPLY)

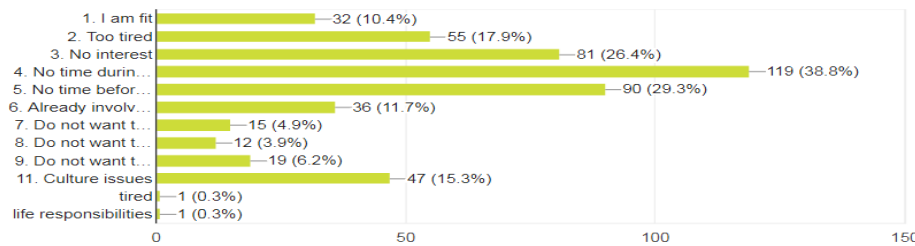
307 responses



## Question 11

11. Which, if any, of the following reasons would prevent you from participating in a free work wellness program? (SELECT ALL THAT APPLY)

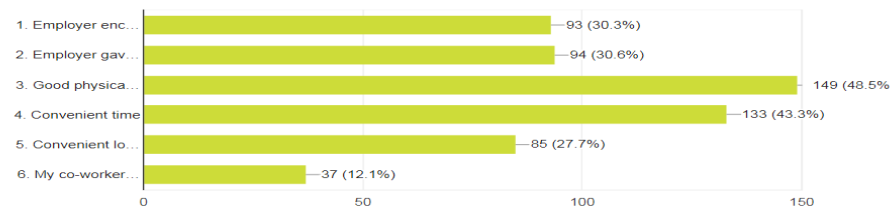
307 responses



## Question 12

12. Which, if any, of the following would make you interested in participating in a free work wellness program? (SELECT ALL THAT APPLY)

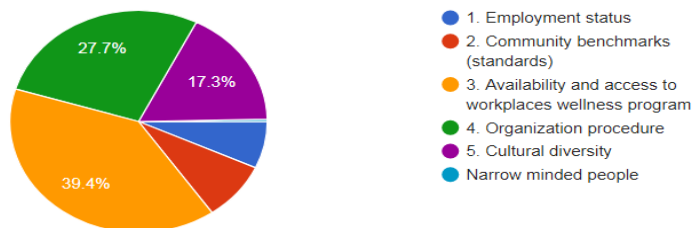
307 responses



### Question 13

13- Which one of these you think would mostly affect your participation in wellness program?

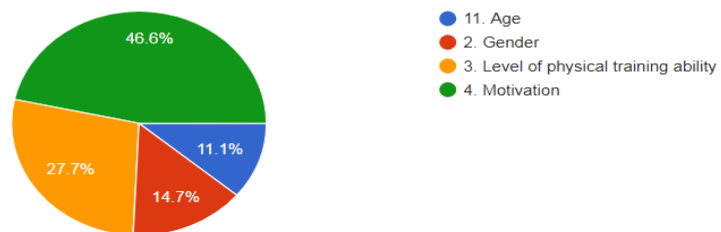
307 responses



### Question 14

14- Which one of these individual factors, you think would mostly affect your participation in wellness program ?

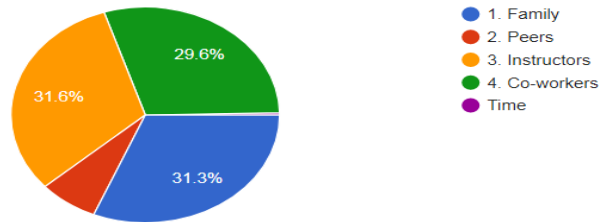
307 responses



### Question 15

15- Which one of these Social environment factors, you think would mostly affect your participation in wellness program ?

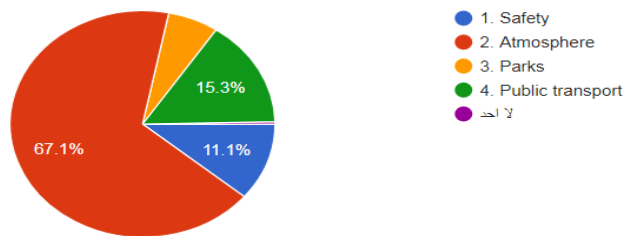
307 responses



Question 16

16- Which one of these Physical environment factors, you think would mostly affect your participation in wellness program?

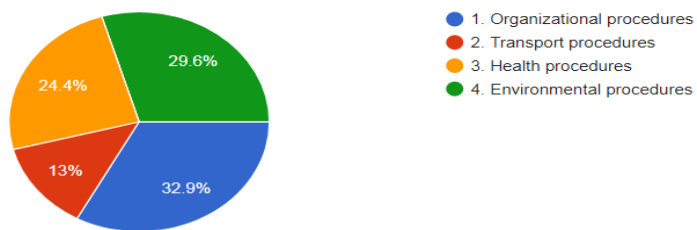
307 responses



Question 17

17 - Which one of these Policy factors, you think would mostly affect your participation in wellness program ?

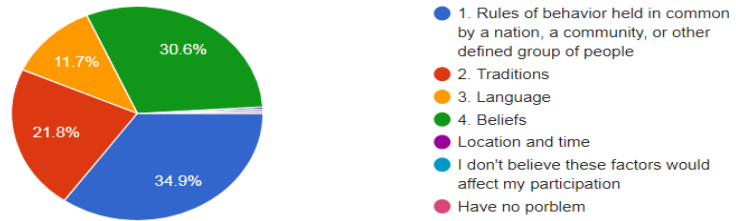
307 responses



Question 18

18 - Which one of these Culture factors, you think would mostly affect your participation in wellness program ?

307 responses



## 7.5 Appendix E Socio-Ecological Model



Socioecological health model demonstrates the five key factors that impact behavior. Reproduced from “Socio-Ecological Model” by *Centers for Disease Control and Prevention*, 2011, retrieved from <http://www.cdc.gov/cancer/crccp/sem.htm>. Reprinted with permission.

## 7.6 Appendix F modified questionnaire

*The questionnaire used is a modified version (Conlon,2013) and from the 2004 Porter (Novelli Health Styles) Questionnaire, using 18 questions. Demographic questions regarding age, gender, ethnicity, employee job position and employee participation factors were added to the questionnaire.*

1. What is your age? (years)

2. What is your gender?

Male

Female

3. Please specify your ethnicity:

Caucasian (non- Hispanic)

Hispanic or Latino

Black or African American (non-Hispanic)

Native American or American Indian

Asian / Pacific Islander

Other (please specify)

4. What position do you hold at Minnesota State University, Mankato?

Faculty

Staff

Adjunct Faculty

Administrator

Other (please specify)

5. If your employer offered the following benefits as part of your job, how likely would you be to use them?

NOT AT

ALL

LIKELY

NOT

VERY

LIKELY

SOMEWHAT

LIKELY

VERY

LIKELY

Fitness center (gym)

Healthy food choices in vending  
machines and cafeteria

Health screening tests (such as  
cholesterol, cancer, blood pressure)

Paid time to exercise at work

Confidential stress/depression  
screening and management  
Weight loss program  
Other (please specify)

50

6. If your employer offered free work wellness programs, which of the following elements, if any, would you be likely to use? (SELECT ALL THAT APPLY)

Online tools for tracking food and exercise  
On-site exercise classes (such as aerobics, dance)  
Personalized diet or exercise counseling  
Healthy eating or healthy cooking classes  
Sports leagues (such as softball, basketball)  
Weight loss support group  
Other (please specify)

7. Which, if any, of the following reasons, would keep you from participating in a free work wellness program? (SELECT ALL THAT APPLY)

Too tired  
No interest  
No time during the work day  
No time before or after work  
Already involved in other programs  
Don't want to do this with co-workers  
Other (please specify)

8. Which, if any, of the following, would make you interested in participating in a free work wellness program? (SELECT ALL THAT APPLY)

Employer encouraged me to go  
Employer gave paid time off to go  
Convenient time  
Convenient location  
My co-workers joined in  
I could invite family/friends  
Other (please specify)

## 7.7 Appendix G sample size

**Determine Sample Size**

Confidence Level:

☒ 95% ☐ 99%

Confidence Interval:

5

Population:

900

Calculate

Clear

Sample size needed:

269

**Find Confidence Interval**

Confidence Level:

☒ 95% ☐ 99%

Sample Size:

269

Population:

900

Percentage:

70

Calculate

Clear

Confidence Interval:

4.59

## Abstract

**Purpose:** The purpose of this study is to identify factors that associate with employees' participation in corporate wellness programs, these factors are: personal, social, environmental, policy, and culture. This study explains that participation in corporate wellness programs endorses a healthier lifestyle which leads to healthier employees who can contribute to their organization by being more productive.

**Approach:** This study investigated participation in corporate wellness programs of employees of XYZ Company in the Kingdom of Bahrain. A questionnaire based on the relevant literature was designed to collect the relevant data. A web-based questionnaire was adopted and sent to the respondents. The population of this study consisted of 900 employees. Due to the small size of the population, a decision was taken to survey all the population. The researcher was able to obtain 307 completed questionnaires out of the 900 which represented a 34% response rate. The respondents represented all the company levels. The collected data were checked for any missing data or miss-filling, then, the data entered to the SPSS version 23.0 software for further analysis.

**Results:** The study yielded a response rate of 34% with 60.3% male respondents and 38.1% female respondents. The average age range was 31-44 with 44.6% and 59% of them reported they would like to use physical activity the most especially in the corporate fitness center. Further, 41.3% of the respondents preferred the program to be personalized exercise or diet counseling, and 44% preferred the option of one to one which could be due to cultural factors. This was found the most significant factor with p-value (alpha) .001 at .01 %level.

**Recommendation:** The researcher recommends that similar companies should use a comprehensive wellness program that includes physical activities, nutrition, recovery, and psychology and not one which focuses only on one aspect of wellness issues. Further, the company should focus on individual factors (motivations) and culture factors (beliefs) the most to increase employee's participation in a corporate wellness program.

**Originality value:** This research applied a novel model in a novel context that increases the employees' awareness and productivity which directly influences Bahrain economic development and aligns with Bahrain Vision 2030.

**Keywords:** Wellness programs, Employees' participation, Employee and Corporate Wellness benefits, Employee wellbeing, personal and social, environmental, policy, culture, health, obesity, Bahrain, GCC

## الخلاصة

**الغرض من الدراسة:** كان الغرض من هذه الدراسة، هو تحديد العوامل التي ترتبط بمشاركة الموظفين في برامج الصحة و العافية للشركات حيث تشرح هذه الدراسة أن المشاركة في هذه البرامج في موقع العمل يدعم أسلوب حياة صحية أكثر، مما يؤدي إلى موظفين يتمتعون بحياة صحية أكثر تمكنهم من المساهمة بإنتاجية أكبر في مؤسساتهم.

**منهجية الدراسة:** بحثت هذه الدراسة المشاركة في برامج الصحة والعافية في موقع العمل عن طريق موظفي شركة XYZ في مملكة البحرين حيث تم تصميم الاستبيان على أساس الدراسات والأبحاث السابقة المتعلقة بنفس الموضوع وذلك لجمع بيانات وافية عن الدراسة. تم ارسال الاستبيان من خلال البرامج المتخصصة على شبكة الانترنت مثل البريد الالكتروني وبرنامج التواصل الاجتماعي الواتس اب الي جميع الموظفين في الشركة. تتكون عينة الدراسة من (900) موظف، حيث تم مسح جميع افراد العينة وذلك نظراً لصغر حجمها وقد تمكن الباحث من الحصول على 307 استبيانات كاملة من أصل (900) والتي تمثل ما نسبته (34%) من معدل الاستجابة. والعينة تمثل جميع مستويات الشركة، و من ثم تم التحقق من البيانات التي تم جمعها بحثاً عن أي بيانات مفقودة أو عدم وجود أي خطأ ، ثم تم إدخالها إلى برنامج SPSS (الإصدار 23.0) لمزيد من التحليل.

**نتائج الدراسة:** كشفت نتائج هذه الدراسة أن نسبة (34%) من القوى العاملة الذين استجابوا للاستبيان يتوزعون على (60.3%) من الذكور و (38.1%) من الإناث، متوسط اعمارهم ما بين 31- 44 سنة (44.6%) ذكروا أنهم يرغبون في استخدام النشاط البدني أكثر (59%) في مركز اللياقة البدنية المتصل بمكان العمل.(41%) فضلوا أن يكون البرنامج ممارسة شخصية أو برنامج واستشارات متعلقة بالنظام الغذائي. (44%) من الدراسة فضلوا ان يكون البرنامج شخصيا (وجها لوجه) وذلك يرجع إلى العادات والتقاليد المجتمعية و التي وجدنا إنها كانت من أبرز العوامل المشاركة مع قيمة p (ألفا) 001 , عند مستوى 1% في اختبارنا.

**توصيات الدراسة:** يوصي الباحث بأن تستخدم الشركات المماثلة برنامجاً شاملاً للصحة و العافية يشمل الأنشطة البدنية، التغذية، الاستشفاء وعلم النفس، وان لا تركز فقط على جانب واحد من جوانب الصحة و العافية. واهتمام اكثر الى جانب العامل الشخصي (الدوافع)وعامل العادات والتقاليد المجتمعية(المعتقدات) اكثر لزيادة المشاركين في البرنامج.

**أهمية الدراسة:** طبقت هذه الدراسة نموذجاً جديداً في سياق جديد مما يزيد من وعي الموظفين وإنتاجيتهم مما يؤثر

بشكل مباشر على التنمية الاقتصادية في البحرين ويتمشى مع رؤية البحرين 2030.

**الكلمات الأساسية:** العوامل المرتبطة ببرامج الصحة و العافية، مشاركة الموظفين، وفوائد برنامج العافية للشركات، مملكة البحرين.

**University of Bahrain**

**College of Business Administration**

**Department of Management and  
Marketing**



**Factors Associated with Participation in  
Corporate Wellness Program: The Case of XYZ  
Company in the Kingdom of Bahrain**

A Thesis Submitted in Partial Fulfilment of the Requirements for the  
Master's Degree in Business Administration

**Submitted by:**

**Mohamed Bakhsh Baloshi**

ID: 20094585

**Supervised by:**

**Professor Adel Ismail Al-Alawi**

Professor

University of Bahrain

**Kingdom of Bahrain**

**April 2019**

جامعة البحرين

قسم الإدارة والتسويق

كلية إدارة الأعمال



العوامل المرتبطة بمشاركة الموظفين في برامج الصحة المثالية

حالة شركة XYZ في مملكة البحرين

اطروحة مقدمة كجزء من متطلبات الحصول على درجة ماجستير في

إدارة الأعمال – جامعة البحرين

إعداد الباحث:

محمد بخش بلوشي

الرقم الجامعي: 20094585

إشراف:

الأستاذ الدكتور عادل إسماعيل العلوي

أستاذ

جامعة البحرين

مملكة البحرين

ابريل 2019