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**IMPLEMENTATION OF WORKPLACE
HEALTH PROMOTION PROGRAMS: A
QUALITATIVE STUDY ON EMPLOYERS'
PERSPECTIVES USING ESTONIAN AND
NIGERIAN ORGANISATIONS**

Master's thesis

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PhD

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Tallinn 2020

TALLINNA TEHNIKAÜLIKOOL

Infotehnoloogia teaduskond
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**TERVISEEDENDUSE PROGRAMMIDE
RAKENDAMINE TÖÖKOHAL: EESTI JA
NIGEERIA TÖÖANDJATE KOGEMUSTE
VÕRDLUS**

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Tallinn 2020

Author's declaration of originality

I hereby certify that I am the sole author of this thesis. All the used materials, references to the literature and the work of others have been referred to. This thesis has not been presented for examination anywhere else.

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20.05.2020

Abstract

The aim of this master thesis is to explore workplace health promotion programs (WHPP), how they are implemented, and the benefits associated with it.

An average adult spends a considerable time at work, meaning that health promotion at the workplace has the potential to reach a large part of the adult population from different social backgrounds as over 3.4 billion people make up the global labour force. Studies have shown that having a healthier workforce has the potential of increasing productivity and decreasing the burden on health care resources. Employers have increasingly invested in workplace health promotion programs to improve employee health and decrease health care costs. However, there is little experimental evidence on the effects of these programs.

In order to fulfil the research gap defined above and the aim of this study, semi-structured, in-depth interviews (N=10) were conducted by using purposive sampling method. Data was collected through semi-structured interviews with five managers from organisations in Estonia and five managers from organisation in Nigeria through Skype.

Findings from this study show that the Estonian organisations have a well-structured basis upon which the WHP programs are planned. The choice of planning of WHP programs is mainly driven by employee health risk assessment undertaken annually. However, Nigerian respondents mentioned no strategic basis for planning of those programs. Instead, the choice of planning the programs came largely from the management of the Nigerian organisations, Health Maintenance Organisations and inputs from employees. Planning of WHP programs and dissemination of information via internal communication through email, meetings, in both countries involve teamwork from different departments.

Similar benefits of implemented WHP programs were found in both countries as increased job satisfaction, reduced absenteeism, increased early disease detection rates, improved employees' fitness, high morale of employees, strengthening of employee self-esteem and increased the reputation of the organisation as well as increased productivity in the investigated organisations. However, the last could be a perceived benefit because

WHP programs are not being evaluated using appropriate standard approaches within the organisations in both countries. Reasons why employers are not evaluating the effectiveness of the implemented WHP programs according to standard frameworks and rely on informal feedbacks to assess benefits are time constraints, difficulties in carrying out evaluation and monitoring activities.

In conclusion, it is recommended for organisations that have implemented WHP programs in both countries to adopt a standard framework for evaluating these programs, otherwise it is difficult to ascertain and measure the benefits associated. There is a need for further research on creating employer-friendly frameworks to facilitate the assessment of WHP programs in both countries.

This thesis is written in English and is 42 pages long, including five chapters, eight figures and two tables.

Annotatsioon

Terviseedenduse programmi rakendamine töökohal: Eesti Ja Nigeeria kogemuste võrdlus

Selle magistritöö eesmärk on uurida töökoha tervisedenduse programme (WHPP), nende rakendamist ja eeliseid.

Keskmine täiskasvanu veedab tööl märkimisväärselt palju aega, mis tähendab, et tervise edendamine töökohal võib jõuda suure osa erineva sotsiaalse taustaga täiskasvanud elanikkonnast, kuna üle 3,4 miljardi inimese moodustab ülemaailmne tööjõud. Uuringud on näidanud, et tervislikuma tööjõu olemasolu võib suurendada tootlikkust ja vähendada tervishoiu ressursside koormust. Tööandjad on üha enam investeerinud töökoha tervise parandamise programmidesse, et parandada töötajate tervist ja vähendada tervishoiukulusid. Nende programmide mõju kohta on siiski vähe eksperimentaalseid tõendeid.

Selle uuringu eesmärgi saavutamiseks viidi läbi poolstruktureeritud põhjalikud intervjuud (N=10), kasutades selleks otstarbekat proovivõtumeetodit. Andmeid koguti poolstruktureeritud intervjuude kaudu 5 Eesti organisatsiooni juhiga ja 5 Nigeeria organisatsiooni juhiga telefoniintervjuu kaudu.

Selle uuringu tulemused näitavad, et Eesti organisatsioonidel on programmide kavandamisel hästi struktureeritud alus. WHP programmide kavandamise valikul on peamiselt aluseks töötajate terviseohu hindamine, mida viiakse läbi igal aastal. Nigeeria vastajad ei nimetanud aga strateegilist ülesehitust programmide kavandamiseks. Selle asemel tuli programmide kavandamise valik suuresti organisatsioonide juhtimise, tervisehoolduse organisatsioonide juhtimise ja töötajate panuse põhjal. Programmide kavandamine ja teabe levitamine mõlemas riigis hõlmab erinevate osakondade meeskonnatööd.

WHPP-de sarnased eelised leiti mõlemas riigis suurenenud tööga rahulolu, vähenenud töölt puudumiste arv, suurenenud haiguste varajane avastamine, paranenud töövõime,

töötajate kõrge moraal, töötajate enesehinnangu tugevdamine ja organisatsiooni maine suurendamine. Samuti teatati suurenenud tootlikkusest. See võib siiski olla tajutav eelis, kuna WHPP-sid ei hinnata mõlemas riigis sobivate standardmeetodite abil. Põhjused, miks tööandjad ei hinda standardsete raamistike kohaselt ja tuginevad hüvede hindamisel mitteametlikele tagasisidele, on ajalised piirangud, raskused hindamis- ja monitooringu tegemisel ning andmete puudumine.

Kokkuvõtteks soovitatakse WHPP-sid mõlemas riigis rakendanud organisatsioonidel võtta vastu standardne raamistik nende programmide hindamiseks, vastasel juhul on keeruline kindlaks teha ja mõõta sellega kaasnevat kasu. WHPPde hindamise hõlbustamiseks mõlemas riigis on vaja teha täiendavaid uuringuid tööandjasõbralike raamistike loomiseks.

Lõputöö on kirjutatud Inglise keeles ning sisaldab teksti 42 leheküljel, 5 peatükki, 8 joonist, 2 tabelit.

List of abbreviations and terms

AIDS	Acquired Immune Deficiency Syndrome
CDC	Centers for Disease Control and Prevention
CVD	Cardiovascular Diseases
EAP	Employee Assistance Program
ENWHP	European Network for Workplace Health Promotion
HiAP	Health in All Policy
HPM	Health and Productivity Management
ILO	International Labour Organisation
ISSA	International Social Security Association
OSH	Occupational Safety and Health
TAI	Tervise Arengu Instituut
WHO	World Health Organisation
WHP	Workplace Health Promotion
WHPP	Workplace Health Promotion Program

Definitions

Workplace Health Promotion (WHP)

This study refers to the term “WHP” as combined efforts of employers, employees and society to improve the health and well-being of people at work through improving the work organisation and the working environment; promoting the active participation of employees in health activities and encouraging personal development as defined by the European Network for Workplace Health Promotion (ENWHP).

Workplace Health Promotion Programs (WHPP)

Workplace health promotion programs refer to a coordinated and comprehensive set of strategies which include programs, policies, benefits, environmental supports, and links to the surrounding community designed to meet the health and safety needs of all employees (Centers for Disease Control and Prevention definition for WHPP)

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1 Introduction

Approximately five days in a week is being spent by full-time workers at work, which signifies that more than one-third of their days is being used in the workplace [1]. Since an average adult spends a considerable time at work, health promotion at the workplace has the potential to reach a large part of the adult population from different social backgrounds [2] as over 3.4 billion people make up the global labour force [3]. The problem of unhealthy behaviours such as alcohol abuse, smoking, unhealthy eating habits and low level of physical activity have surpassed infectious disease as the main causes of death in industrialised countries [4] and are great risk components for a large number of serious health conditions and diseases [5]. Risk factors for chronic diseases can be reduced by improving employees' health behaviour, which can be achieved through implementing workplace health promotion program (WHPP) [6].

According to Statistics Estonia, as of year 2019 the employment rate of working-age persons was 68.4%. In Nigeria, the employment rate of working-age persons was 76.9% in 2018. More than half of the population of both countries belong to the working-class population [7,8,9], which means that this amount of the population spends significant part of their lives at work. The World Health Organisation (WHO) considers the workplace as the most important consideration for health promotion given the opportunity to reduce the frequency of both occupational medical conditions and chronic preventable diseases. A large fragment of the population can be targeted and reached this way [10], if the implementation of WHP programs are to be integrated into social and workplace policies country wide. One of the recent approaches of solving public health problems and reducing health care costs in the 21st century is the health in all policy (HiAP) approach. This approach is based on the fact that some health problems are so complex and rather than being tackled by only traditional health policies, they are best tackled holistically by policies and issues concerning the social determinants of health such as workplaces, housing, education, food advertising, public transportation and tax policies [11].

Ischemic heart diseases, diabetes and stroke are among the 10 leading causes of deaths in both Nigeria and Estonia [12]. Cardiovascular diseases (CVD) are the main cause of death in Estonia, accounting for 45% of deaths among men and 60% among women in 2016 [13]. For a country to be competitive in a global economy, it needs a healthy workforce which constitutes of employees with good health that can deliver their scope of work productively at the workplace [14]. A healthy work force leads to increased productivity and less absenteeism from work due to ill-health [15]. At the workplace, unhealthy lifestyles have been shown to reduce productivity and increase absenteeism [2]. Health promotion has the capacity to improve and to influence the future outlook of the health care system. For example, stress and weight management programs which are offered as part of health promotion activities. These programs improve workers' health and reduce the risk of developing chronic illnesses such as diabetes, hypertension, cardiovascular diseases and stroke which have been linked to obesity and stress [16].

1.1 Research aim, objectives and questions

One of the key areas of the author's interest as an occupational health enthusiast with a background in medicine, which is a part of the main motivations for embarking on this research is to identify the benefits associated with the implementation of work health promotion programs (WHPP), using the Nigerian and Estonian context as a case study. While conducting background literature search, it was observed that despite the growing interest in occupational health studies, available studies are mostly limited to countries in Western Europe and North America. Employers have increasingly invested in workplace wellness programs to improve employee health and decrease health care costs. However, there is little experimental evidence on the effects of these programs [17].

Thus, the aim of the Master thesis is to explore workplace health promotion programs, how they are implemented, and the benefits associated with it. In order to achieve this aim, a qualitative study was conducted to explore WHP programs in Estonia and Nigeria and a comparison between both countries was carried out.

The research questions of this Master thesis are as follows:

1. How are the WHP programs implemented in both countries?
2. Are there any similarities and differences in the WHP programs existing in both countries?
3. What are the benefits associated with the implementation of workplace health promotion programs?

2 Literature overview

This chapter provides an overview of WHP programs, WHP activities, the benefits and evaluation of WHP programs based on existing literature.

2.1 Definition and brief history of workplace health promotion

This study refers to the term “Workplace Health Promotion, WHP” as combined efforts of employers, employees and society to improve the health and well-being of people at work through improving the work organisation and the working environment; promoting the active participation of employees in health activities and encouraging personal development. The current study applies WHP definition according to the European Network for Workplace Health Promotion (ENWHP) in the Luxembourg Declaration [18]. Another description of workplace health promotion is defined as those educational, organisational, or economic activities in the workplace that are designed to improve the health of workers and therefore the community at large [19]. The concept of WHP has also been expanded to include not just physical and mental health and well-being but intended to improve overall health status of individual. The purpose of WHP is to create such organisational culture, where both, individual and organisation needs and values will meet in order to improve and promotes employees’ health. WHP complements occupational safety and health (OSH) measures as a part of the combined efforts of employers, employees and national authorities in order to improve the health and well-being of employees at work [20].

In the 1970’s, WHP programs started to emerge as an adjunct to OSH initiatives. Workers were encouraged to participate in these programs designed to encourage physical activity, healthy eating, and smoke-free living. The workplace was deemed an appropriate setting for delivering these behaviour change messages as it was a captive audience and because the programs were generally well accepted by both Trade Unions and employers [19]. In 1986, the first international conference on Health promotion in Ottawa, held by World Health Organisation described WHP as the “the process of enabling people to increase control over and to improve their health” [21]. The Ottawa advocated that health

promotions engagements should include social and environmental conditions, reinforcing communities' actions, appropriate and understandable health information, and health care reorientation. In August 2005, the Bangkok Charter emphasized on the importance of environmental conditions on effective health promotion by involving governments, civil society, private and international organisations and public health advocates.

2.1.1 Importance of workplace health promotion

The workplace, alongside school, hospital, city and marketplace, has been established as one of the priority settings for health promotion in the 21st century, as it directly influences the physical, mental, economic and social well-being of workers and in turn the health of their families, communities and society at large [22].

Unfortunately, the concept of the workplace being a vital arena for health campaigns of many kinds, as well as basic occupational health and safety programs is not yet widely accepted. As reported by the WHO, an example is one country where there were ill-advised cuts in occupational health services to support Acquired Immune Deficiency Syndrome (AIDS) prevention work, due to lack of comprehension that the workplace is an important arena for AIDS prevention.

Nevertheless, health promotion in the workplace is becoming increasingly relevant as more private and public organisations recognize that the future success in a globalizing marketplace can only be achieved with a healthy, qualified and motivated workforce. The development of a health promoting workplace will be a pre-requisite for sustainable social and economic growth of nations [22].

2.2 Workplace health promotion programs (WHPP)

Workplace Health Promotion programs (WHPPs) are organised and integrated set of schemes, which include program, policies, benefits, environmental supports and links to the surrounding environments aimed to meet the health and safety needs of all employees [23]. Workplace health promotion programs are employer initiatives designed to help employees improve their health and well-being. They include activities designed to facilitate lifestyle management practices, behavioural changes techniques, and health management strategies [60]. Employers introduce these programs to encourage employees to adopt healthier lifestyles and encourage them in changing poor lifestyle

behaviours [16]. WHP programs have been referred to as wellness, health promotion, health management, health enhancement, and health and productivity management (HPM) programs. HPM programs encompasses initiatives that incorporate health promotion which consist of health management or wellness programs; disease management (e.g. care management, or case management programs or screening), demand management; and similar efforts to increase productivity of workers by improving health of employees [24].

WHP programs have changed considerably from its early start. Programs initially started with the focus on identifying and targeting specific illnesses and were more concerned with employees who had the greater risk of developing those ailments [25]. Decades ago, the programs were designed to improve the health of vital employees, mainly in execution positions and they were limited in range [26]. Modern programs have been become more holistic in nature, enclosing a vast range of health promotion initiatives, as well as a comprehensive scope of activities. Irrespective of their hierarchy within the organisation, programs are now almost uniformed at all members of organisations.

The aim of a comprehensive WHP program is to create a healthy organisation and to develop healthy workers. Employers are taking health promotion and disease prevention approaches out of concern about the effect of chronic disease on employee health and well-being, health care coverage costs and productivity. Health promotion is similar to disease prevention in that it seeks to promote better health through changes in behaviour [27]. The incidence of chronic diseases such as diabetes, heart diseases and chronic pulmonary conditions is influenced by unhealthy lifestyles, such as inactivity, poor nutrition, tobacco use and excessive alcohol consumption. Such chronic conditions have become a major burden, leading to a decline in quality of life, premature death and disability and a rise in health care costs. The physical, mental, economic and social wellbeing of workers can be resulted from the workplace thereby affecting the health of their families, communities and society. The concept of health promoting workplace has become more useful as more private and public organisations recognized that future achievement in a globalizing marketplace could only be possible with a healthy, qualified and motivated workforce [28].

2.2.1 Best practice guidelines for the implementation of workplace health promotion programs

In order to establish a common theme of best practice guidelines for WHP programs, Berry with colleagues (2010) and Mattke with colleagues (2013) examined ten organisations across a range of industries whose WHP programs had systematically achieved measurable results, analysed empirical studies, surveyed 50 employers within the public and private sector and conducted 5 case studies among organisations with established health promotion programs. Berry et al., 2010 found six important pillars to successful programs which includes: 1) multi-level leadership 2) alignment 3) scope, relevance and quality 4) partnerships 5) accessibility and 6) communications [61]. While Mattke 2013, also concluded from the research findings that the effectiveness of WHPP is determined by five factors and these factors include: 1) effectual communication strategies 2) employees' engagement 3) management engagement 4) use of existing resources and existing relationships 5) continuous evaluations [27].

The convergence of these two research studies established best practices for employers to develop, implement, and evaluate a successful WHPP. The guidelines include five strategic factors needed to be incorporated in order to achieve the greatest return on investment in the health promotion programs [62].

- 1) effective and efficient communication strategies
- 2) leadership engagement and commitment
- 3) relationships and partnerships to leverage resources
- 4) accessible and involved employees
- 5) relevance as well as continuous improvement which include evaluation.

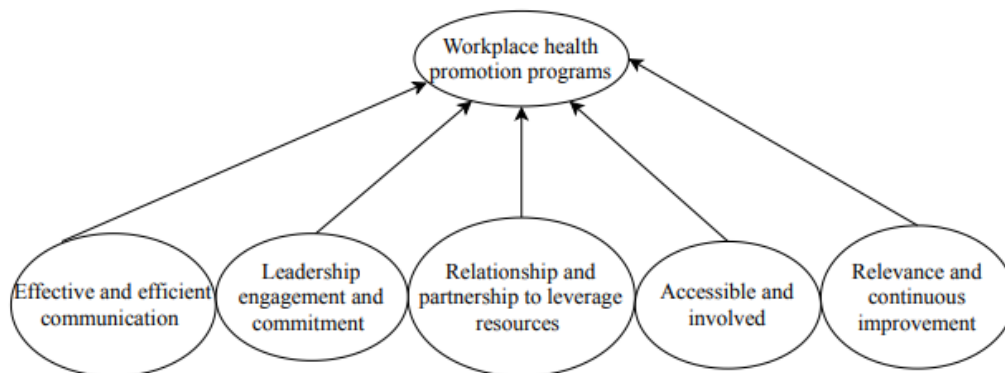


Figure 1. Best practice guidelines to implement workplace health promotion programs (Adapted from [61] and [27]).

Figure 1. illustrates the five strategic factors found among best practice guidelines for implementing workplace health promotion programs. These factors were critical for the success of the organisations that participated in the studies used.

For effective and efficient communication, multiple modalities of communication were utilised to inform their employees about the WHPP which includes posters/flyers, newsletter, intranet, health fairs, emails and meetings. The commitment of leadership is a critical component of successful WHPP. Management should be involved in the programs in order to encourage employee engagement and participation in health promotion activities. When the leadership of the organization demonstrates a commitment to WHPP, employees are more likely to participate [62].

2.2.2 Workplace Health Promotion activities

Work health promotion activities are ranging from providing employees with general health information, to systematic programs involving health risks assessment, strategies, nutritional and exercise activities and rigorous services for disease management [29]. This research explores different activities, which will give an in depth of the workplace health promotion programs. Below are some of the ranges of activities included in the WHPP which includes [16]

- Stress management programs
- Weight management programs
- Health seminars
- Alcohol and drug assistance programs
- Fitness testing
- Smoking cessation programs
- Exercise/ physical activities
- Counselling services
- Health screening assessments
- Healthy eating
- Nutrition seminars and workshops
- Psychological evaluation and assistance
- Hypertension screenings and management

The extensive range of workplace health promotion activities was evaluated by Goetzel and these activities were divided into primary, secondary and tertiary levels. Primary prevention efforts are aimed at employees who are generally healthy, also offering interventions aimed at employees with unhealthy lifestyle habits that are vulnerable to future health issues. These types of programs include weight and stress management programs, healthy eating, exercise activities. Secondary interventions are targeted at individuals who are linked with high-risk health conditions due to poor lifestyle behaviours, such examples are smoking, excessive consumption of alcohol, abnormal biometric levels such as high blood pressure, high blood glucose and cholesterol levels. These interventions include smoking cessation programs, health screening assessments. Tertiary interventions target existing health issues, such as cardiovascular diseases, asthma, cancers, diabetes, musculoskeletal disorders. These initiatives include adherence to evidence-based clinical practice guidelines and often involve collaboration between the employer and the employee's physician, their families and other health care providers [16].

Stress management programs

In workplace environments, stress is known to be widespread as a result becoming potentially dangerous. For stress to be managed adequately, the organisations and persons needs to pay special attention to it. Stress management can be carried out by orientating

the personnel to encounter the conditions, which gives stress, or in form of avoiding stress factor. Stress leads to mental, physical and behavioural issues. A person with stress is unable to concentrate to their duties therefore, it can be dangerous to them and others in the organisation. Workplace conditions have a major role in building stress for personnel, but ignorance in this field can result if personal factors are not considered [30]. Stress management programs as part of an effort to improve wellness at work, usually include seminar and workshops crafted to enlighten employees on physical and psychological risk of prolonged stress. However, stress management programs can also be an aspect of both of occupational health and safety, and workplace health promotion.

Weight management programs

Weight management intervention can be sponsored by employers, which can be seminars about weight loss education, and providing employees with weight management information through pamphlet, brochures, posters and videos. Self-monitoring can be a technique to encourage weight control, walking to work should be encouraged among staffs, scheduling exercised activities, programs tailored for weight loss and reducing the cost of gym membership [25]. The potential to offer weight control initiatives to the same population on multiple occasions over time is the uniqueness of workplace weight management program. The use of incentives, competitions and peer support to assist employees succeed in reducing weight is a way of promoting and encouraging weight management at work. Accumulation of points and working in teams has been suggested to be an effective weight loss incentive.

Health seminars

Health seminars are organized to create awareness to educate employees. Health status baseline is designed from health screening assessment, this assessment can also be used to identify health issues for specific health risk and benefits of adopting healthy lifestyle behaviours. Health seminars can also be defined as a campaign to enlighten the workforce irrespective of their health danger status. In the workplace, educational seminars educating workers about potential health risks are considered a successful tool for encouraging positive health habits [25].

Alcohol and drug assistance programs

A major concern for employers is substance abuse among their workers. However, the problem of substance abuse can be entirely addressed uniquely at the workplace. The workplace gives a rare opportunity to tackle entire spectrum of substance use problems, both diagnosable abuse or dependence and other questionable use. Many adults with substance use issues are employed and are approximately 29% of fulltime workers involved in binge, drinking and 8% involve in heavy drinking; and 8% have taken illicit drugs in recent month. Substance use issues gives room to low productivity, absenteeism, occupational injuries, more health costs, destruction of worksites, likely liabilities as well as other personal societal injuries [31]. Alcohol and drug assistance program have dramatically changed into a more integrated behavioural health resource that is available widely. Looking at the recent level of concern relating to healthcare cost and productivity and the awareness that substance use issues have low recognition and less treated. Alcohol and drug assistance program mainly include employees getting short term counselling sections to help with these types of problems. Supervisors usually refer these programs to employees or more likely employee refer themselves. Family members sometimes benefit from these programs. Organisations with frequent potential hazards caused by employee substance abuse more frequently carry out drug testing. Also, organisations that are mostly dominated by males, where the notion that male has the tendency to use drugs [25].

Fitness testing and exercise activities

Physical inactivity (lack of physical activity) has been identified as the fourth leading risk factor for global mortality [32]. According to WHO, physical inactivity is estimated to be the main cause for approximately 21–25% of breast and colon cancers, 27% of diabetes and approximately 30% of ischaemic heart disease burden [33]. Physical activities include exercise, as well as other activities which involve bodily movements. The term physical activities, exercise and physical activities are usually used interchangeably. However, there are elusive differences; physical activities can be defined as the contraction of physical muscles which leads to bodily movement, whereas exercise is more correctly defined as a sub-aspect of physical activity in that it is usually planned, structured and repetitive with the aim of increasing or maintaining physical fitness [33]. Encouraging employees to partake in physical activities can reduce risk of chronic diseases.

The introductory part of workplace exercise program engages employees with fitness test. In order to examine employee fitness baseline, coordinated exercise activities are provided to employee and health professionals. They also give a method of fashioning future exercise programs to meet employees need. Physical fitness testing program have been used greatly throughout the world and serves purposes of different types for promoting fitness [25]. Implementing physical activity programs at the workplace can be an efficient way to enhance adults' levels of activity, fitness and health. The physical and psychological impact of getting involved in some form of physical activities include reduced resting heart rate, resting blood pressure, increased cardiovascular endurance and improved weight control [34].

Smoking cessation programs

Most of the world smokers resides in just 10 countries, which includes, India China, Russia, Turkey, Indonesia, Germany, Bangladesh, US, Japan and Brazil. The amount spent on tobacco increased greatly from US\$7.2 billion to US\$28.9 billion between 2000 and 2009 in China and direct cost of smoking was estimated at US\$386 million in Bangladesh. Between 2003 and 2008, tobacco related illness was 11.3% of Egypt's total health expenditure. Smoking also causes a large and increasing number of premature deaths in developing countries such as India [35].

WHP investigators clearly shows the workplace as an advantageous setting for individuals to quit smoking by the means of occupational support, peer pressure and peer support [36]. The program is usually beneficial when introduced at work as it gives the room to participate with friends and co-workers at convenience [37]. In order to eliminate smoking at the workplace, smoking cessation programs was initiated, which includes national smoke-free policies, workplace-based incentives and competitions combined with additional interventions, health education on smoking cessation, anti-smoking health campaigns [38].

Counselling Services

Employee counselling has emerged an effective HR tool used to boost the quality and productivity of the workforce and to maintain the best employees. In today's fast-paced corporate world, there is virtually no organisation without stress or stress-prone

employees. The term workplace counselling can also be any intervention in which the provision of counselling/psychotherapy is linked in some fashion to an employee in distress from work-related psychological issues or where therapy has an impact on work functioning. Two broad aspects of workplace counselling intervention have been identified. The first aspect which includes situations where counselling is catered for by the employer, either through in-house (internal) or externally contracted counselling services. Externally delivered services are typically described as Employee Assistance Programs (EAPs). A second aspect of workplace counselling includes situations in which a person consults a counsellor or psychotherapist, independently, for an issue that includes a work attribute, or where the result of the therapy has a primary impact on their work functioning [39].

Health Screening Assessment

Health screening in the workplace differs greatly from visiting the health professional for treatment when sick. One of the main aims of health screening is to detect non-symptomatic diseases in individuals that think they are healthy or alternatively possess lifestyle risk factors that may lead to disease and to interfere early so that the outcome can eventually be improved or further progression can be avoided. Screening is also usually practised within workplace health promotion programs. Screening tests are not meant to be diagnostic. Instead, their purpose is to group individuals with either low or high probability to develop a certain disease [40].

Health screening benefits both the employers and employees, for the employers the benefit can be financially. Sick leave days can be avoided if the employee health issue is noted before it gets worse. This prevent the employers looking for replacement or pay for sick leave, this promotes the culture of less sick days in an organisation. For employees, health screening usually comes with peace of mind. An overall check of fitness does not only give individual the awareness of any issues surrounding his or her health but also provides an opportunity to reflect on lifestyle choices and both work and non-work-related health issues. Giving insight about employee's health status provide guarantee that their health issues and wellbeing is duly been consider by their employer. In addition to detecting health issues, health screening shows participant willingness to change, embrace self-efficacy, or other psychosocial factors affecting their capacity to change unhealthy behaviour [16].

2.3 Benefits of workplace health promotion programs

Employers are continually focused on mitigation as a means of reducing their medical expenses, enhancing efficiency and improving profitability. When healthcare costs are steadily increasing, so is corporate interest in improving wellness at the workplace. Usually, workers spend half their waking hours at work and since most employees spend a considerable time at work, a significant number of working-age adults are been reached through the workplace setting. [1,2].

Most employers have been convinced that their companies may play a significant role in reducing employee health risk factors thereby leading to reduced health care costs, reduced absenteeism and increased productivity [24]. There is a vast array of literature that shows that there are benefits linked with the health promotion programs at the workplace when properly designed [16]. However, it is rather conflicting due to the fact several studies have also shown that when clinically measured there were no significant benefits associated with WHPP in relation to health care spending, utilizations and employments outcomes [17]. Common benefits of WHPPs to employees found in literature ranges from increased job satisfaction, improved health and fitness, strengthened self-esteem, decreased stress, enhanced sense of well-being while benefits to employers include increased productivity, decreased medical and insurance costs, reduced absenteeism, boosting the company image, increased morale of the staff, staff retention and recruitment.

Goetzel et al., 2008 reviewed the state of the art in workplace health promotion, focusing on the factors that influence the health and productivity of workers. The study reviewed the literature that addresses the business rationale for it, and the barriers that may prevent major investment in WHP. It was found that despite methodological limitations in many available studies, the results in literature suggest that, when properly designed, WHP can increase employees' health and productivity [16]. Based on the findings from previous studies [16],[60],[62],[66] discussions with experts, and observations from site visits to several exemplary programs, the authors identified the following as effective WHP practices: a) integrating WHP programs into the organisation's central operations; b) addressing individual, environmental, policy, and cultural factors affecting health and productivity; c) targeting several health issues simultaneously; d) tailoring programs to

address specific needs of the population; e) attaining high participation rates; f) rigorously evaluating outcomes; and g) effectively communicating these outcomes to key stakeholders.

Watson and Gauthier (2003) examined participant and program participant characteristics in two organisations that offered extensive health promotion activities. One organisation found their program to be successful and had been in service for ten years, while the program for the other organisation lasted for two years and ended due to lack of funding. The result of the study of the successful program showed that there was a relationship between the health promotion programs and lower absenteeism, more productivity, improved fitness compared to employees with the unsuccessful programs [41].

Contrarily, Song with colleagues (2019), sought to find the effect of a multicomponent workplace wellness program on health and economic outcomes using a cluster randomized trial involving 32, 974 employees at a large United States' warehouse retail company and found no significant differences in clinical markers of health; health care spending or utilization; or absenteeism, tenure, or job performance after 18 months. Employees exposed to a workplace wellness program reported significantly greater rates of some positive health behaviours compared to those who were not exposed, however there were no significant effects on clinical measures of health, healthcare spending and utilization or employment outcomes at the end of the study [17].

2.3.1 Evaluation of workplace health promotion program benefits

The evaluation of the implementation of WHP programs is key to understanding the benefits and the factors which facilitate or inhibit their effectiveness and sustainability. It is also important to improve program delivery and uptake and to ensure greater scalability [42]. Most evaluation research on WHP programs has focused on measuring program outcomes, Melanie with colleagues (2019) in agreement with previous literature recommends that comprehensive evaluation should also capture the implementation process [43, 44]. The reason being that WHPPs are often complex, having multiple components, targeting multiple health behaviours, involving multiple levels of influence within an organisation or addressing multiple determinants. The mechanisms for success of such programs depend on context and so evaluations need to examine contextual factors influencing implementation.

Effective program evaluation systematically examines the implementation and results of strategies and interventions with the aim of using findings to improve those actions. Therefore, it is important that the evaluation approach be useful, feasible, ethical, and accurate [45]. Once the assessment and planning phases have been conducted, and interventions have been selected for implementation, the final stage of designing a workplace health program involves decisions concerning the monitoring and evaluation of program activities. Evaluation to ascertain that workplace health interventions are effective for continuing them are just as important as data are critical for evidence-based programs and implementation [45].

2.3.2 Framework for evaluating workplace health promotion programs

The United States' Centers for Disease Control and Prevention (CDC) developed a framework to guide professionals through a series of steps that are intended to ensure their program evaluations meet these standards and are most likely to yield results that will be used for program improvement. This framework consists of six steps and four standards for effective program evaluation. Step 1: Engage stakeholders; Step 2: Describe the program; Step 3: Focus the evaluation design; Step 4: Gather credible evidence; Step 5: Justify conclusions; Step 6: Ensure use and share lessons learned.



Figure 2. CDC framework for program evaluation (Adapted from [46]).

This framework encourages an approach aimed to integrate evaluation program planning and routine program operations. The early steps of engaging stakeholders and describing the program yield insights for planners and implementers as well as evaluators. By involving diverse program stakeholders such as business leaders, managers, and employees, not just evaluation experts, the evaluation design can be a driving force for planning health strategies, improving existing programs, and demonstrating the results of resource investments [45]. This framework has been successfully used to evaluate the effectiveness of the WHPs in several organisations [46].

2.4 Occupation Health and WHPP in Nigeria and in Estonia

In Estonia, mandatory occupational safety and health legislation focuses on protecting employees against occupational hazard. Physical, chemical, biological, physiological and psychosocial risk factors available in the workplace shall not put the life or health of an employee or that of another person in the working environment at risk. Legislative requirements are established in order to ascertain the working environment is fit to the physiological and psychological capabilities of workers [47]. Occupational health is the promotion and preservation of the highest degree of physical, mental and social well-being of workers in all professions by preventing health exits, managing risks and adapting work to individuals and individuals to their jobs [48]. In the occupational health and safety system of Estonia, the Ministry of Social Affairs, Health Care Board and Labour Inspectorate are the state authorities in charge of regulating health and safety-related matters.

The National Institute for Health Development (Tervise Arengu Instituut) manages and coordinates the activities of the Estonian Network for workplace health promotion. Since its establishment, more organisations are embracing the network. The aim of the network is for exchange of information, adoption of best practices and supporting organisation in the development process of healthy lifestyle. It also supports companies for building and regular development of health-promoting work environments and help notify employee about health issues [49].

In Nigeria, Laws of the Federation of Nigeria under factory Act Cap 126, provide implementation of the safety and health requirements in Nigerian workplaces. Standards

of safety and health rules and regulations are provided by occupational safety and health officers in the Inspectorate Department of the Federal Ministry of labour and Productivity. (ILO, 2006). However, in Nigeria, there is no network for workplace health promotion at the national level.

3 Methodology

This chapter explains the method used which define the parameters of the study. In order to conduct a proper a scientific investigation, a combination of several research methods was used. Firstly, relevant literature was studied in order to have a wider knowledge about how health promotion works and studied in different organisations across different countries, to investigate the benefits associated with WHP program implementation.

To fulfil the overall aim of the thesis, semi-structured, in-depth interviews (N=10) were conducted with employers' representatives in both countries, which are a form of qualitative research. A qualitative approach allows participants to express their own thoughts and experiences in their words [50]. In-depth interviews are a useful data collection technique that can be used for a variety of purposes, including needs assessment, program refinement, issue identification, and strategic planning. In-depth interviews are most appropriate for situations where open-ended questions that elicit depth of information from relatively few people are asked [51]. This approach was employed as it is most suitable for the purpose of this research, because the study focused specifically on the perceptions of employers' representatives, exploring their opinions about WHP programs. The objective was to build up a picture that would take into account how WHP programs is organised, implemented and maintained.

3.1 Sampling method

In qualitative research, sample selection is very important and has a profound effect on the ultimate quality of the research [52]. The study adopted purposive and simple random sampling technique in selecting the participants.

The purposive sampling technique, also called judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses. It is a non-random technique that does not need underlying theories or a set number of participants. Simply put, the researcher decides what needs to be known and sets out to find people who can

and are willing to provide the information by virtue of knowledge or experience. It is typically used in qualitative research to identify and select the information-rich cases for the most proper utilization of available resources. This involves identification and selection of individuals or groups of individuals that are proficient and well-informed with a phenomenon of interest [53].

For this study, organisations that already implement workplace health promotion programs were selected and out of the list of organisations that offer health promotion in both countries, a random sampling technique was used. The participants selected were professionals in charge of the health programs at their respective workplaces.

3.2 Interview participants

Data was collected through semi-structured interviews carried out with ten employers' representatives, five from Estonian organisations and five from Nigerian organisations through Skype calls. Those included in this study were managers in charge of health promotion at the workplace, and in a position to influence changes at the workplace in terms of WHP. For the purpose of this study, the managers are referred to as employers because they were acting as workplace representatives. To obtain a wide range of responses, participants were men and women selected from different large organisation ranging from the finance industry, manufacturing, health, telecommunication and public sector in both countries.

The organisation selection for this study was through the health promoting workplace (TET) network in Estonia, the networking list contains organisations involved in health promotion [54]. Several managers from the list were invited through email to participate in the study. The invitation was accepted by some while five organisations outrightly rejected to be a part of the study due to wrong timing. The interview was scheduled based on the participants time convenience. For the Estonian organisations, two participants conducted their interviews in Estonian language (they felt more comfortable to speak in Estonian language) and a translator was available to translate the responses of the participants. The language of communication for the Nigerian participants was in English language.

Table 1 Demographic profile of the interview participants

Gender	Male	5
	Female	5
Age	21-30 years old	1
	31-40 years old	5
	41-50 years old	3
	51-60 years old	1
Industry	Banking	2
	Hospital	2
	Manufacturing	2
	Telecommunication	2
	Public sector	2

The purpose of this part of the data collection was to gather narrative data and ten participants provided this information.

3.3 Interview guide

The interview guide was developed based on the theory and information gathered from the literature review. The interview guide for both countries was constructed in English. The interview guide was structured around three themes, and subsequently divided into three main sections: program characteristics; program implementation; and benefits and evaluation. Topics that were discussed during the interviews as follow: understanding and definition of WHP; objective and mechanism for implementing WHP; types of WHP activities carried within the organisation; benefits associated with the program implementation and assessment of effectiveness and the outcome of the implemented WHP programs. During the interviews, the interviewees were encouraged to share their perceptions, opinion regarding the themes and good practices.

3.4 Interview procedure

The interviews were scheduled and held via Skype meeting over a two-month period between March and April 2020. The interviews were conducted in English and Estonian languages. The duration of each interview was between 40 and 80 minutes. This was considered an appropriate length of time to discuss the interview themes about WHP. Each of the ten interviews started with an introduction and explanation of the scope and research objectives of the study. The interview participants were asked for consent to be interviewed and kept anonymous. Each participant was asked for permission for the interviews to be recorded, and all participants gave this permission. Participants were guaranteed that no personal information or statements, which could identify them would be used in this thesis. To secure their identity, each participant from both countries was given a codename and identified by a number R01 to R05 for Estonian organisations and R06 to R10 for Nigerian organisations.

3.5 Analysis of interview transcript

The data collected from the recorded interviews were fully transcribed and analysed by the author. The transcripts were thoroughly read in their entirety, then transcribing the text into a coded form providing the summary of the opinions, perception and activities explained by each interview participant. Content analysis followed by a thematic approach was applied to the interview transcripts to relate to the main themes outlined in the interview guide. Content analysis, which is the first stage of the thematic approach, includes recognising codes to categorise data.

4 Results, analysis and discussion

This chapter presents the results, analysis and discussion of in-depth interviews carried out with five employers from different Estonian organisations and five from different Nigerian organisations. The collected responses are grouped in three different sections according to analysed themes by the author as shown in Figure 3 below. Grouping and analysis of themes is based on existing literature and frameworks. The first section reports the results and discussion of interview questions regarding program characteristics, while the second section reports and discusses responses about program implementation and the third section about benefits and evaluation of the program.

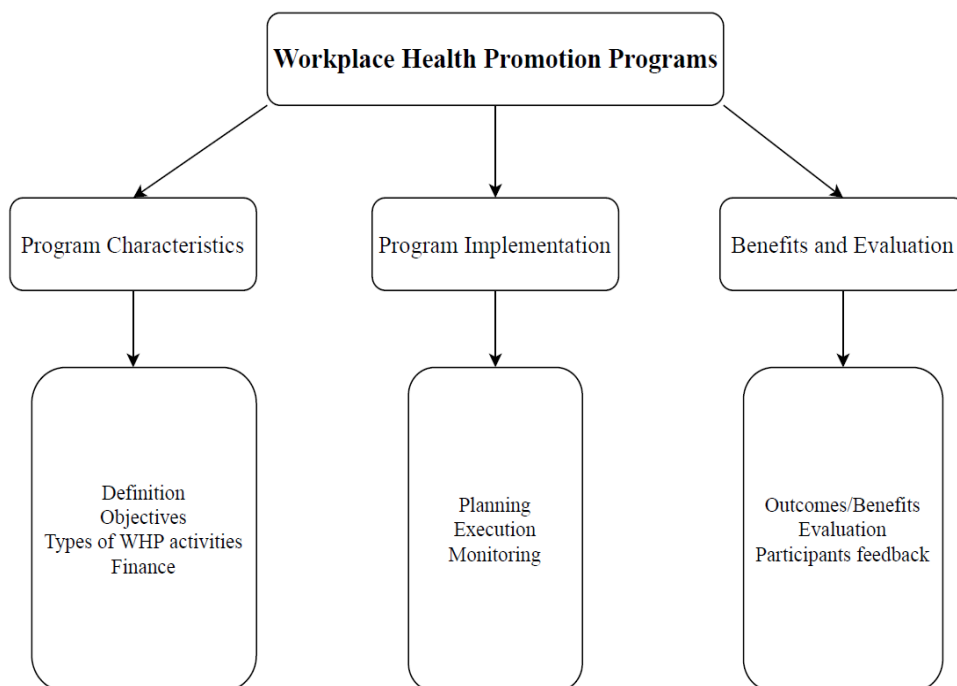


Figure 3. Thematic grouping of interview questions

4.1 Program characteristics

This section contains responses to questions concerning the respondents' understanding of the definition of workplace health promotion, employers' purpose of implementing the program, the type of WHP activities being carried out and how it is being funded.

Definition of workplace health promotion

Firstly, the respondents were asked what is their understanding about WHP. This is deemed necessary to avoid misconceptions about the research purpose. All the respondents from the Estonian organisations gave a similar definition of workplace health promotion. An example of WHP description by one of the respondents was:

“Workplace health promotion to me is improving the health and well-being, promoting healthy lifestyles of our workers by creating environment that value health.” (R02, Estonian company).

Similarly, another definition of WHP given by a different respondent from Estonian organisation was:

“Workplace health promotion is everything that is doable from the employer side to support their employees to adopt healthy lifestyle and improve the health and well-being of their employees.” (R03, Estonian company).

All the responses from Nigerian organisations were also similar to the responses given by the Estonian respondents, because they also defined WHP as a program set up to promote healthy lifestyle and improve the health and well-being of their workers. The examples are as follows:

“My understanding of WHP is that it is a well-coordinated program, put together by the organisation to strategically enhance health promoting lifestyles and well-being and health of their employees.” (R09, Nigerian company)

“WHP is a series of program put in place to propagate health-promoting behaviour among employees at work.” (R07, Nigerian company)

Their responses about WHP agree with the definition of WHP as defined in the beginning of this study. It also showed that all participants from both countries had similar views

about WHP which is about improving the health and well-being of their employees. This is expected because the respondents are all professionals who oversee WHPs in their respective organisations.

Table 2. Comparison of workplace health promotion definitions in study with both countries

Definition of WHP in Study	<i>Estonian Respondents</i>	<i>Nigerian Respondents</i>
This study refers to the term “WHP” as combined efforts of employers, employees and society to improve the health and well-being of people at work through: <ul style="list-style-type: none"> • improving the work organisation and the working environment; • promoting the active participation of employees in health activities, and; • encouraging personal development. 	<i>Support employees to adopt healthy lifestyle</i>	<i>enhance health promoting lifestyles</i>
	<i>Improve health and well-being of the employees</i>	<i>Improving the health and well-being of the employees at work.</i>
	<i>Creating environment that values health,</i>	<i>enhancing safety and well-being of their employees at work</i>
	<i>Improve physical activities at work</i>	<i>promoting fitness at work, to be in top shape</i>

The Table 2 shows the similarities in responses given by the respondents from both countries.

Employer objective for implementing

Employers’ objective for the implementation of WHPP found in both countries were quite different. For Estonian organisations, their objectives were to retain their best staff and

improve the overall health of their employees. Several respondents emphasized the contribution to workability and employees' retention:

“To retain our capable hands, it is a big contribution to workability” (R03, Estonian company)

“It is big contribution to workability, when you develop your physical activity, you also develop the workability of the employees and we want our employees to stay longer with us.” (R04, Estonian company)

“The reason for implementing it is we want our employees to see that we care about their well-being and health at work, in turn the employees appreciate the company and see us as corporate responsible citizen, thereby boosting the image of our company” (R01, Estonian company)

Contrarily, the objectives for the implementation of the program in Nigerian organisations was to drive increased productivity and cater for their well-being at work.

“It is one of the ways to drive productivity, when you put all measures to make sure your staffs are healthy and fit, you have a healthy workforce and we need healthy workforce to stay competitive and when they are healthy and motivated they have high morale to work. So, putting all the measures in place to make sure staff are at their best is key so that you can best drive productivity and that's what we want.” (R08, Nigerian company)

Similar objective for the implementation of the program given by another respondent from Nigeria:

“The reason for implementing is that we just want to drive increased productivity, that's it.” (R10, Nigerian company)

However, another respondent from Nigeria had a different objective for implementing the program:

“To serve as a dynamic balance between work and health needs, adults spend most of their times at work, it is very important to put a scheme at work that cater for their well-being.” (R09, Nigerian company)

Both countries had different objectives for implementing health promotion programs at the workplace.

Workplace health promotion activities carried out in the organisation

Besides the fact that this study found that Estonian organisations has more WHPP activities when compared to Nigerian organisations, the country also has a more organized system and well-structured basis upon which WHP activities are planned. It is interesting to find that activities are planned based on background information obtained from TAI (a government owned institution) and done by analysing their yearly health statistics that is kept with their occupational doctors. WHPPs in Estonia are structured based on this analysis. This agrees with recommendations from previous literatures and guidelines [55], [60], for WHP activities to be tailored to the country and organisations' needs.

The type of activities mentioned in Estonian organisations covered a range of activities. It covers physical activities and fitness programs, supportive social and physical environment, implementing policies that promotes healthy behaviour, screening programs and activities towards psychosocial environment in the workplace.

Extensively the types of activities carried out in Estonian organisations are:

- Health education: Health education, which includes seminars about different topics relating to health, nutrition, safety, infection control, mental well-being topics predominantly, newsletter about health topics, health information and links to additional resources made available on intranet.
- Activities promoting healthy eating: Activities towards healthy eating such as provision of free fruits in the canteen, fit club menus in the canteen, healthy snacks in the vending machine and healthy meals provided at training events.
- Physical activities: Inbuilt gyms are made available in some organisations. In others, SportID is available to workers to have access to gyms outside the organisation. Other examples include yoga classes, sport challenges like “Let’s move” campaign, Stamina event, Global health challenge, Step counting competition, pink-ribbon running, SEB marathon, Tartu bicycle marathon, Iron man competition and Orienteering competitions.

- Health screening and measurements: These include health check-ups which are done every 3 years with occupational health doctors, lung cancer screening, Prostate specific antigen test primarily to screen for prostate cancer in male workers, vitamin D measurement and narcotic testing.
- Smoking cessation programs: Individual, group or telephone counselling, anti-smoking campaigns, no smoking policy (no smoking in the workplace premises).
- Employee assistance program: Counselling assistance program
- Activities towards ergonomical work conditions and environment: Ergonomic consultations focusing on the importance of moving around, not sitting for too long, using light hand weights to exercise.
- Activities towards psychosocial and physical environment
- Stress management programs: Availability of massage services, massage chairs to ease off stress at work premises.

An Estonian interviewee described the planning stage as follows:

“Each year we plan our programs and the type of activities selected are based on yearly statistics from TAI calendar, putting into consideration the main health issues that affect Estonia for example, cardiovascular diseases, chronic diseases and we compare with our organisation health yearly statistics that is kept with occupational doctors, looking at the health needs of the organisation. Based on the information, we are putting together our yearly programs. We have several activities that is being offered, ranging from policies to promote health, physical activities, activities towards lifestyles to promoting healthy eating, health seminars, smoking cessation programs, stress management program” (R01, Estonian company)

However, the Nigerian organisations on the other hand have WHPP outsourced by employers to Health Maintenance Organisations (HMOs) which are private, for-profit organisations. The interests of employees might not be paramount to them (HMOs) thereby affecting the quality of programs offered, even though employers claim to uphold employees’ best interest.

“We have a premium health insurance for all our employees, we work with a lot of health care worker who serves as vendors...we call them HMO here. The HMOs are companies that provide health insurance coverage to organisations and there are

vendors in charge of health benefit programs. We have aerobic and fitness centres for physical activities in the company and also part of their medical plan they have access to the physiotherapist, health seminars which is delivered by HMOs, health screening assessment which is also covered under the health insurance handled by the HMOs ”

(R09, Nigerian company)

Other list of activities offered by the employers in Nigerian organisations includes:

- Health education: Health seminars which are delivered by HMO. Different health topics are delivered also through links to additional resources made available on office webpages.
- Physical exercise and fitness activities: Aerobic and fitness centre for fitness and physical activities, yoga, encourage the use of stairs and walkways rather than lifts, special events like Fit Feb, every worker is to leave their work desk at 12 and walk around for an hour to exercise.
- Health screening and measurements: Compulsory annual medical check-up, which is confidential, body mass index ratio, mammogram, blood pressure.
- Employee assistance program: The mental well-being of staffs is being checked, Counselling assistance program for staffs in terms of mental well-being.
- Mental first-aid certification for managers: This is to enable managers to see mental challenges that staff might be going through and for them to be able to manage them.

WHPP can take several forms and there is no one-size fit all approach, a successful program must be tailored to the health needs of the employee and the organisations culture and environment. Effective programs need to contain a combination of elements and comprehensive WHPP [64]. According to Healthy People 2010 [63], for WHPP to be considered comprehensive, it must include all of the following five key elements:

- 1) Health education focused on skill development and lifestyle behaviour change along with information dissemination and awareness building, preferably tailored to employees' interest and needs;
- 2) Supportive social and physical environments, reflecting the organisation's expectations of healthy behaviours supported by health promoting policies,
- 3) Integration of WHPP into the organisation's structure,

- 4) linkage to related programs such as employee assistance program like counselling and
- 5) Screening programs ideally linked to medical care to ensure follow-up treatment as necessary.

Findings from this present research, shows that Estonian organisations offer a comprehensive WHPP containing the above five elements. However, the Nigerian organisations do not integrate WHPP into the organisations culture. For example, not offering healthy food options in cafeterias, vending machines. WHP activities which were common between both countries include health seminars, physical exercise and fitness activities, health screening assessment, employee assistance program (EAP). The EAP in both countries also have a similar content in that it focuses on mental health care issues and management of stress disorders.

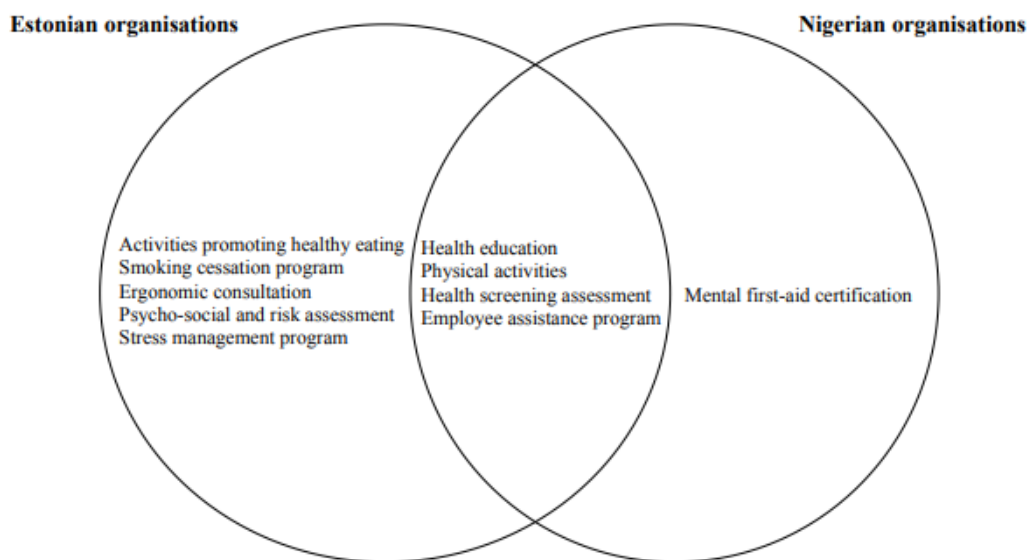


Figure 4. Similarities and differences in workplace health promotion activities in organisations in both countries (Source: author's own creation).

The Figure 4 above shows the similar activities offered by both countries which are health education, physical activities, health screening assessment and employee assistance program. Programs listed by the respondents in Estonian organisation that are not offered in Nigerian organisations are activities towards ergonomic consultation, activities towards psycho-social and risk assessment, activities promoting healthy eating, smoking cessation programs and stress management program. Mental first-aid certification was

mentioned as an activity carried out in Nigerian organisations which is absent in Estonian organisations.

Funding of the program

According to respondents from Estonia, most of the WHP programs are funded by the employer. However, one of the respondents mentioned an exception of the massage therapy for stress management, which is funded as a co-payment by the employee and the employer equally.

In Nigeria, funding of WHPP has a mixed payment mechanism system. In some cases, deductible fees are taken mostly on a monthly basis from the employees' salaries which are allocated towards a total health insurance coverage provided by HMOs and the employers pay the remaining fees. This coverage already includes WHPPs and is usually offered in different categories, for example basic and premium packages which are capped. This can affect the quality and number of services which are accessible to employees. In other cases, employers are fully responsible funding.

4.2 Program implementation

This section contains responses from interview questions concerning the implementation of the program from planning to execution and monitoring the WHP activities.

Planning, Executing and Monitoring of WHP Activities

According to International Social Security Association (ISSA) Guidelines on WHP [55], the success of any WHP program is achieved by careful planning and should be based on the needs of the organisations, identified priorities for action and should also involve different stakeholders [60], [62],[66].

Findings from this study showed that planning of WHPP in Estonia organisations is largely done by teamwork which involves several departments with minimal inputs from employees. Departments listed by respondents include; health and safety, human resource, communications team, and a small committee of health board within the organisation. This is also similar with Nigeria as respondents also mentioned that it is planned by the combined effort of different teams which include; the health and safety

dept, human resource dept, and corporate communication department. Additionally, sustainability, finance and operations teams are also involved in Nigeria.

In Estonia planning and inputs into the program as reported by respondents is on yearly basis. It is important to note that program planning are related to the health needs of the organisations by surveying their health statistics records yearly kept with occupational doctors, and also compare with topics from TAI calendar and this is consistent with other studies and guidelines as recommended by the ISSA guideline [55]. The choice of planning of programs was largely driven by employee health risk appraisals undertaken annually:

“We compare our health statistics yearly which is kept with our occupational doctors with that of TAI yearly topics for example, leading cause of chronic diseases, or trends of causes of deaths in Estonia. On that basis we select our yearly activities.” (R01, Estonian company)

Additionally, one of the respondents gave a similar response

“We plan the program on yearly basis. We plan the topics related to occupational health risk related to our work” (R05, Estonian company)

In contrast, Nigerian organisations mentioned no strategic basis for planning of programs such as tailoring the program to meet the health needs of the organisations. Instead, the choice of planning the programs came largely from the management of the organisations, HMO and inputs from employees.

Communication and awareness

When planning to introduce a new program, it is important that information is well communicated to stakeholders involved because effective communications helps desired change. Communication has been identified as a significant element in the success of organisational change, and is deemed vital in developing change readiness, reducing uncertainty, and as a key consideration in gaining commitment [56]. A communication strategy is important to decrease resistance to change and reduce the occurrence of misconceptions about the change. The term ‘resistance’ has been defined as adherence to any attitudes or behaviours that frustrate organisational change goals. [57].

In both countries, the common form of communicating WHP activities with employees was email. In Estonia, newsletters, office webpages, calendar invitation to events were also mentioned by respondents. One other form mentioned, was information packages being prepared by the communication teams and delivered to the employees through the managers in other departments. In Nigeria, one of the respondents said that text messages are being sent to every member of staff informing them about any new programs, placing adverts, prints and leaflets in strategic places. Other common responses were the use of notice boards, meetings, pop-up screen savers and fliers. Face-to-face, direct communication from management to employees as seen in one of the Estonian organisations, ensures that the right information is passed across and reduces the chances of misconception and resistance compared to the use of indirect communication.

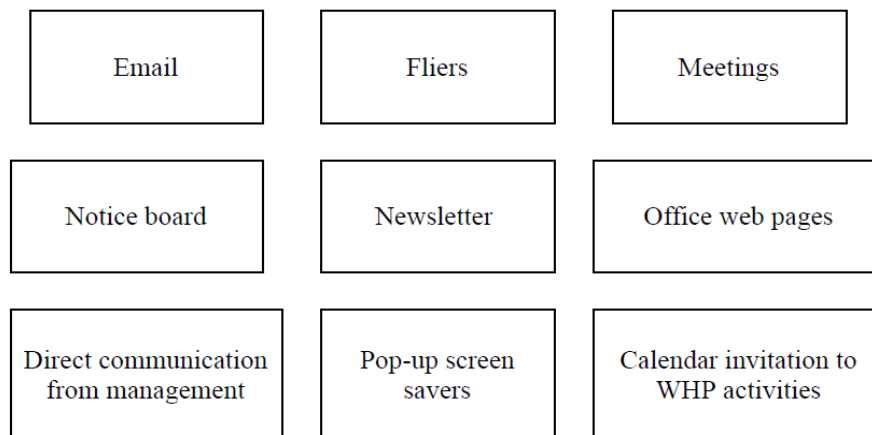


Figure 5. Common forms of communication mentioned for both countries

Effective communication is one of the key criteria for implementing WHP program. How you deliver the message can make all the difference. Sensitivity, creativity, and media diversity are the cornerstones [61]. Strategic communications are vital for successfully conveying culture of health messages, promoting specific WHP programs, and inspiring employees to engage in health promoting activities. To achieve high reach, employers are advised to tailor communications to employee demographics, employ multiple channels of communication including newer forms of social media, make the communications

simple, meaningful, and fun for the employees, and establish a feedback loop to discern how well communications are received [64].

4.3 Benefits and Evaluation of WHPP

There have been conflicting reports and publications as to whether there are measurable benefits associated with WHP. According to a recent study by Crane with colleagues (2019) on WHP in Australia, one of the main challenges to the dissemination of health promotion programmes in the workplace is the lack of evidence on the effectiveness of interventions within the real-world implementation context [42]. Another study in the United States, a randomized control trial by Song with colleagues (2019) was conducted to address concerns about a lack of experimental evidence on the effects of these programmes. The research evaluated a multicomponent WHP program resembling program offered by United States employers and only found significantly greater rates of positive effects in self-reported health behaviours among those exposed compared to employees who were not exposed. There were no significant differences in clinical measures of health, health care spending, utilization and employment outcomes after 18 months [17]

However, another research by Goetzel with colleagues (2008) reported that despite methodological limitations in many available studies, the results in the literature suggest that when properly designed, WHP can increase employees' health and productivity. It was recommended that "for WHP programs to be deemed successful, they will need to engage large segments of the population. They will also need to document enduring health improvements for their targeted population and related cost impacts which should involve periodically measuring the health risks of their workers and evaluating changes in health behaviours, biometric measures and utilization of health care services" [16].

One of the new approaches of solving public health problems and reducing health care costs in the 21st century is the health in all policy (HiAP) approach. This approach is based on the fact that some health problems are so complex and rather than being tackled by only traditional health policies, they are best tackled holistically by policies and issues concerning the social determinants of health such as workplaces, housing, education, food advertising, public transportation and tax policies[11]. Such policies must have real measurable benefits which are cost-effective. The World Health Organisation (WHO)

considers the workplace as the most important consideration for health promotion given the opportunity to reduce the frequency of both occupational medical conditions and chronic preventable diseases [10]. A large fragment of the population can be reached in this way. If the implementation of WHP programs are to be integrated into social and workplace policies country-wide, a large segment of the population can be targeted and reached. However, the impacts and benefits must be measurable and evident. Evaluation of health promotion interventions is essential in order to collect evidence about the efficacy of a program, identify ways to improve practice, justify the use of resources, and identify unexpected outcomes [58].

Benefits reported by respondents

Although four out of ten respondents said that they were not assessing the program, however all ten respondents from both countries reported some form of benefits and positive impacts associated with the implementation of WHPP. These could be perceived benefits (individual's perception of the benefits that will accrue by engaging in a specific health action [59]), since their evaluation methods are mostly self-reported rather than employing standard clinical assessments. One respondent who said that one of the benefits observed is decreasing ill-health rates further explained that this is being observed through the trends of health statistics in the company. It was also said that this statistical analysis excludes maternity leave and working accidents. Other notable quotes from the Estonian respondents' responses are as follows:

“I haven't measured objectively, I can only say subjective assessment based on how I feel, I want to emphasize on how it fosters the relationship among the staff, when they have to do sport activities and competition together, also from the feedback I get about the activities there is improved health fitness.” (R02, Estonian company)

Additionally, the perceived benefits associated with the program implementation mentioned by other respondents were:

“At the moment I might not see the benefits at large, but I can say there is improved health fitness among the workers, they feel good with themselves as a result there is strengthened self-esteem and also reduced health risk.” (R05, Estonian company)

“Besides that, employee satisfaction is quite high, we have decreased ill-health rate, we also have good reputation that boost the company image” (R01, Estonian company).

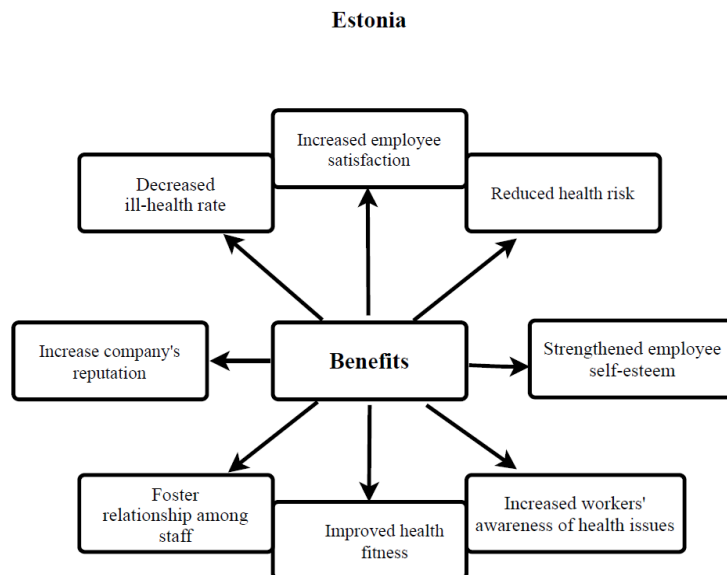


Figure 6. Benefits associated with program implementation in Estonian organisations (Source: author’s own creation)

Similarly, responses related to WHP programs boosting company reputation, improved health fitness and increased workers’ awareness of health issues were common in both countries. They also mentioned increased productivity; however, this is unclear as there are no objective ways of assessing this outcome. Other responses from the Nigerian organisations are shown in Figure 7.

“I have seen a number of staffs who were very overweight, and they lost so much of weight over time, as a result of the access to the subsidized gym facilities and the fitness activities we provided for them, there is improved health fitness which in turns ‘strengthens their self-esteem’ another benefit I can say is we have a good image out there because of these activities we offer. (R07, Nigerian company)

“Let me pick one activity to give you an example of the benefits: since we started annual medical checks, we have been able to point out several things, some things were hidden, and it came to light, and we tackled it in earnest. These annual medical check-ups are done confidentially except where the staff decides to involve us then we get involved, so

in the process of having these annual medical checks our staff has been able to detect chronic health issues on time, so when they find out on time they are able to sort it on time. There has also been reduced absenteeism, we can see that immediately after these annual medical checks' deployment was done. The rate at which medical reports for sick-leave have been tendered has dropped significantly” (R08, Nigerian company)

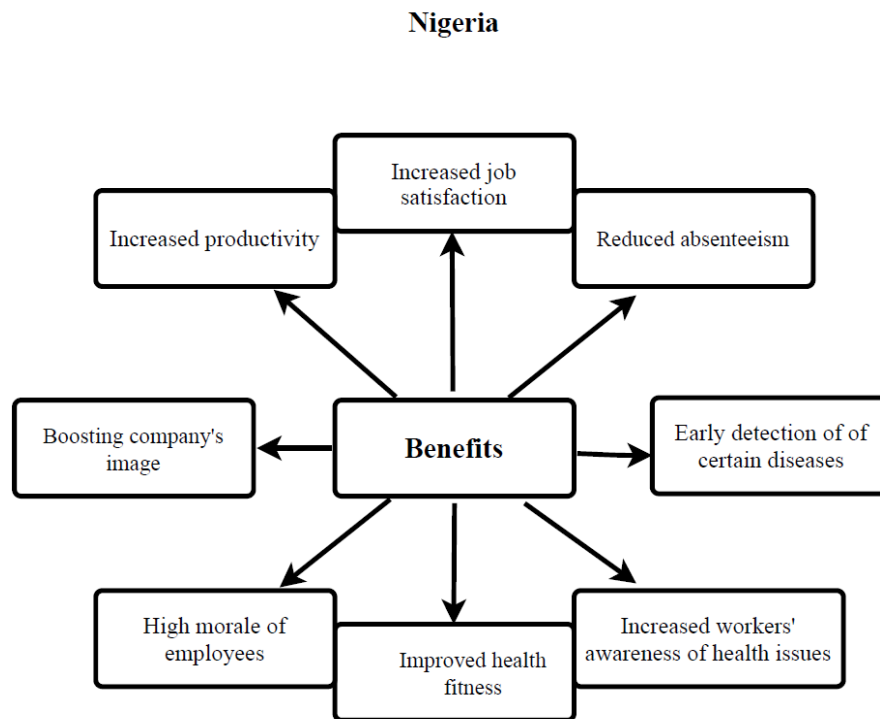


Figure 7. Benefits associated with program implementation in Nigerian organisations (Source: author’s own creation)

The benefits listed by organisations in both countries includes boosting company reputation, improved health fitness, increased workers’ awareness of health issues, increased productivity, reduced absenteeism, reduced health risk, foster relationships among staffs, strengthened employee self-esteem and high morale of employees.

WHP program participants’ feedback

Most of the respondents reported collecting feedback from participants at different intervals. Some of them, quarterly, while others were collecting annually or once in two years. Feedbacks are collected in form of satisfaction surveys, post-health surveys, questionnaires, through help desk, emails and suggestion or idea boxes. Only one of the respondents from Estonia said that feedback collection is voluntary and is only received

from participants who have suggestions or comments. The type of information collected via these questionnaires are suggestions, comments and recommendations. Results from the analysed feedbacks are used to improve the program. Findings from feedback showed that not all WHP programs are always successful or beneficial. An example of such programs as stated by one respondent is the anti-smoking campaigns. The reason was that it is impossible to force their workers to quit smoking, unless they are willing to.

How WHPPs are being evaluated

To identify and gain more insight on benefits associated with WHP programs which is a part of the research questions in this study, respondents were asked about the benefits observed in their respective organisations, and how the employers measure these benefits. As seen in other studies and literature from other parts of the world, respondents from both countries, Nigeria and Estonia said that standard metrics/frameworks were not applied for measuring the impact of these programs which is a major concern. Most of the benefits reported were self-reported, perceived benefits, informal feedbacks rather than being measured clinically or employing standard methodology. Amongst the Estonian respondents, four out of five answered in the negative when asked if WHPP is being evaluated in their respective organisations. All five respondents from Nigeria answered in the affirmative. However, when asked how evaluation is done, they responded saying by self-reported questionnaires, surveys, informal feedbacks from participants and participation rates. Some of the responses given by the Nigerian respondents are reported below:

“...how we assess is by post-surveys (post-health forum surveys) it contains questions like “how did you find the program, what did you learn about the program, what could we have done better.” They respond accordingly, we do the analysis and then we take the feedback from them and we use it to plan the next one coming.” (R09, Nigerian company)

Additionally, another respondent mentioned how they assess the program:

“...we assess it through what is called health road show, asking feedbacks from the staffs. The road show is like a meeting where you have representatives from different departments come together” (R06, Nigerian company)

Responses given by respondents above shows that employers do not conduct evaluations via formal assessment, rather they rely on informal feedback, surveys and participants satisfactions. This is consistent with other previous evaluation of WHP program studies [62]. Zula with colleagues (2013) suggests that employers can evaluate programs through a variety of mechanism which include continuous monitoring of health claims, health risk appraisals and absenteeism due to ill-health [65]. The CDC also developed a framework for evaluating WHPP. This is to ensure program evaluation meets set standard and are most likely to yield results.

However, respondents gave reasons for not conducting evaluation; the respondents who said they were not evaluating WHPP at their organisation when asked the reason for this mentioned that evaluations and assessments are very time consuming and that the process is difficult due to the fact many activities are involved. The responses from Estonian organisations are stated:

“It is too time consuming and stressful to assess the success of the programs because we have lots of activities” (R01, Estonian company)

Representative from another organisation said:

It is an extra work (nobody wants to take additional responsibility), we have lots of activities and it is a difficult task to assess all the activities, we don't have a separate health personnel in charge of it” (R04, Estonian company)

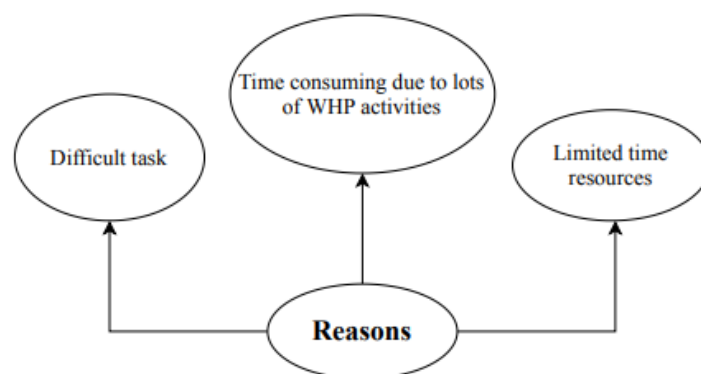


Figure 8. Reasons given by respondents for not conducting evaluation of WHPP

Despite the popularity of workplace health promotion programs and activities amongst employers, few organisations are conducting formal assessments of impact or evaluation to determine effectiveness. Those employers that do conduct formal assessments or evaluations are heavily relying on employee or participant satisfaction to determine effectiveness [62].

Monitoring

Responses about monitoring of the program was generally low in both countries. However, some respondents in Estonian organisations said that participation rates were high even though participation in the activities was optional. In some organisations in both countries, incentives were also mentioned as ways of motivating employees to increase participation rates. Study found that in Estonia, employee involvement is generally optional while it is compulsory in Nigeria.

4.4 Study limitations

The sample method used in this study cannot be used to generalise the population in the countries used because of the sample size. It is impossible to represent the whole industry based on certain number of investigated organisations. Although, the author has no intention to generalise the results to Estonian and Nigerian organisations, but the insights generated could form the basis for further research for interested employers on WHP implementation within organisations.

The primary research methodology used for this study was the in-depth interview , and the interviewees time constraint restricted the length of interview, also the interviews were carried out through Skype call which might have hindered the flow of communication between the participants and the interviewer, the participants might feel hesitant to speaking freely and openly compared to if it was a face-to-face interview. Also, some participants experienced connection problems, which was restored by reconnecting back. A limited number of interviews may represent a small sample, therefore, further research with a large number of people, must be conducted.

The study focused the research on employers' perspective on workplace health promotion, future study should make findings from both employers and employee's perspectives, using case study approach with different methods (questionnaire, interview,

observation, document analyses). Despite these limitations, the current study revealed findings that have both theoretical and practical significance. Of particular importance are the implications that these findings have for both health and safety management and organisational science research.

4.5 Recommendations

As demonstrated by the results of the study, employers from Nigerian organisations do not have structured basis for planning. It is recommended that the employers should adopt needs-based program planning, which includes using health assessment to tailor the health needs of the organisation.

For employers to implement WHP programs, they need to have access to relevant information to inform them about how to establish WHP program. There is a need for national information system to disseminate knowledge and information about WHP in Nigerian organisations. Also, there should be grass-root support for WHP from the government. Therefore, future studies should develop tool and resources to support employer effort in WHP in Nigeria.

It is recommended for organisations that have implemented WHPPs in both countries to adopt a standard framework for evaluating these programs, otherwise it is difficult to ascertain and measure the benefits associated. There is a need for further research on creating employer-friendly frameworks to facilitate the assessment of WHPPs in both countries.

5 Summary

The aim of this study was to explore workplace health promotion programs (WHPPs), how they are implemented, and the benefits associated with it. In order to achieve this aim, a qualitative study was conducted to explore WHP programs in Estonia and in Nigeria and a comparison between both countries was carried out.

Findings from this study shows the Estonian organisations have a well-structured basis upon which the programs are planned. The choice of planning of programs is mainly driven by employee health risk appraisals undertaken annually and tailored to the health needs of the organisations. This is consistent with recommendations with guidelines as regard considering employee health needs while implementing WHPPs. However, Nigerian respondents mentioned no strategic basis for planning of programs. Instead, the choice of planning the programs came largely from the management of the organisations, HMOs and inputs from employees.

The importance of effective communication with stakeholders and creation of awareness cannot be over emphasized when implementing a program because management involvement and direct communication with employees reduces the chances of misconceptions and resistance to change. When the management is involved there is more likely to be employee engagement and participation in programs. Common means of communication found in both countries includes direct communication through managers in meetings, emails and calendar invitations to WHP activities. Planning of programs and dissemination of information involves teamwork from different departments. The departments mostly involved are health and safety, human resource and communication teams in both countries.

Common activities between the two countries were health education, physical activities, health screening assessment and employee assistance programs, although the results showed that Estonian organisations had a wider range of WHP activities when compared with Nigeria. These programs are parts of the key elements of a comprehensive program.

The National Institute of Health development (TAI) promotes good practices by creating a network to support organisations in developing work environment and encouraging WHP. Nigerian organisations on the other hand, do not receive such support from its government.

Similar benefits were found in both countries, these benefits include increased job satisfaction, reduced absenteeism from ill-health related reasons, increased early disease detection rates, improved fitness, high morale of employees, strengthening of employee self-esteem and increasing the reputation of the organisation. Increased productivity was also reported as one of the benefits as seen in previous literature from other parts of the world where WHPPs are being evaluated; however, this could be a perceived benefit because WHPPs are not being evaluated using appropriate standard approaches in both countries.

For a successful implementation of WHPP and assessment of benefits, evaluation is important. Continuous monitoring and systematic evaluation which are recommended according to best practice guidelines is lacking in both countries. Findings from this research showed that reasons why employers are not evaluating according to standard frameworks and rely on informal feedbacks to assess benefits are time constraints, difficulties in carrying out evaluation and monitoring activities. These reasons are consistent with findings from previous researches.

In conclusion, it is recommended for organisations that have implemented WHPPs in both countries to adopt a standard framework for evaluating these programs, otherwise it is difficult to ascertain and measure the benefits associated. There is a need for further research on creating employer-friendly frameworks to facilitate the assessment of WHPPs in both countries.

Acknowledgement

I would like to give my sincere gratitude to my supervisor Karin Reinhold for providing me with direction, and unfailing support, also a big thanks to Marina Jarvis my co-supervisor for her constant encouragement and patience during the whole thesis writing process. I am truly grateful for their assiduous and prolonged support.

I would also like to thank my friend Oyindamola Sipe for her unwavering support rendered during the writing period, I really appreciate your help and support my darling friend.

My final acknowledgements are to my family, for their prayers and support. When the going was tough, they were there to motivate me and these kept me going. Thank you to my support system for your understanding and patience. This is for you all.

References

- [1] National Center for Chronic Disease Prevention and Health Promotion, “Workplace health promotion.” [Online]. Available: <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/workplace-health.htm>. [Accessed: 22-Mar-2020].
- [2] Pescud, M., Teal, R., Shilton, T., Slevin, T., Ledger, M., Waterworth, P., & Rosenberg, M. Employers’ views on the promotion of workplace health and wellbeing: a qualitative study. *BMC public health*, 15(1), pp. 642, 2015.
- [3] The World Bank, “Labour Force, total.” [Online]. Available: <http://data.worldbank.org/indicator/SL.TLF.TOTL.IN?contextual=default>. [Accessed: 22-Mar-2020].
- [4] Paulsson-Do, U., Edlund, B., Stenhammar, C., & Westerling, R. Psychosocial vulnerability underlying four common unhealthy behaviours in 15–16-year-old Swedish adolescents: a cross-sectional study. *BMC psychology*, 5(1), pp. 39, 2017.
- [5] Sorensen, G., Landsbergis, P., Hammer, L., Amick III, B. C., Linnan, L., Yancey, A. Workshop Working Group on Worksite Chronic Disease Prevention. Preventing chronic disease in the workplace: a workshop report and recommendations. *American Journal of Public Health*, 101(S1), pp. S196-S207, 2011.
- [6] Wierenga, D., Engbers, L. H., Van Empelen, P., Duijts, S., Hildebrandt, V. H., & Van Mechelen, W. What is actually measured in process evaluations for worksite health promotion programs: a systematic review. *BMC public health*, 13(1), pp. 1190, 2013.
- [7] Statistics Estonia, “Employment rate.” [Online]. Available: <https://www.stat.ee/news-release-2020-018>. [Accessed: 12-Mar-2020].
- [8] “Nigeria employment rate.” [Online]. Available: <https://tradingeconomics.com/nigeria/employment-rate>. [Accessed: 23-Mar-2020].
- [9] National Bureau of Statistics, “Labour Force Statistics-Volume 1: Unemployment and Underemployment Report.” [Online]. Available: [https://nigerianstat.gov.ng/elibrary?queries\[search\]=labor%20force%20statistics](https://nigerianstat.gov.ng/elibrary?queries[search]=labor%20force%20statistics). [Accessed 12-May-2020].

- [10] World Health Organisation, “Workplace health promotion.” [Online]. Available: https://www.who.int/occupational_health/topics/workplace/en/ [Accessed: 22-Mar-2020].
- [11] Leppo, K., Ollila, E., Pena, S., Wismar, M., & Cook, S. Health in all policies-seizing opportunities, implementing policies. sosiaali-ja terveystoimi. 2013.
- [12] Institute for Health and Metric Evaluation, “Institute for health and metric evaluation.” [Online]. Available: <https://www.healthdata.org/estonia>. [Accessed 05-May-2020].
- [13] Habicht, T., Reinap, M., Kasekamp, K., Sikkut, R., Aaben, L., & Ginneken, E. Estonia: health system review. 2018.
- [14] Cancelliere, C., Cassidy, J. D., Ammendolia, C., & Côté, P. Are workplace health promotion programs effective at improving presenteeism in workers? A systematic review and best evidence synthesis of the literature. *BMC public health*, 11(1), pp. 395, 2011.
- [15] Alavinia, S. M., Molenaar, D., & Burdorf, A. Productivity loss in the workforce: associations with health, work demands, and individual characteristics. *American journal of industrial medicine*, 52(1), pp. 49-56, 2009.
- [16] Goetzel, R. Z., & Ozminkowski, R. J. The health and cost benefits of work site health-promotion programs. *Annu. Rev. Public Health*, 29, pp. 303-323, 2008.
- [17] Song, Z., & Baicker, K. Effect of a workplace wellness program on employee health and economic outcomes: a randomized clinical trial. *Jama*, 321(15), pp. 1491-1501, 2019.
- [18] ENWHP - European Network for Workplace Health Promotion, “The Luxembourg Declaration on Workplace Health Promotion in the European Union, 2007”. [Online]. Available: https://www.enwhp.org/resources/toolip/doc/2018/04/24/questionnaire_01.pdf. [Accessed 12-May-2020].
- [19] Baker, J. L., Coleman, B. L., & Sormin, S. Workplace health promotion: Assessing employees' health-related needs. Southwest Region Health Information Partnership. 2002.
- [20] International labour organisation, “Safe work. Workplace health promotion.” [Online]. Available: <https://www.ilo.org/safework/areasofwork/workplace-health-promotion-and-well-being/lang--en/index.htm/>. [Accessed: 04-May-2020].
- [21] World Health Organization. "Ottawa charter for health promotion, 1986." 1986.
- [22] World Health Organization, “Workplace health promotion. The workplace: A priority setting for health promotion.” [Online]. Available: https://www.who.int/occupational_health/topics/workplace/en/. [Accessed: 05-May-2020].

- [23] Centers for Disease Control and Prevention, “Workplace health promotion.” [Online]. Available: <https://www.cdc.gov/workplacehealthpromotion/index.html>. [Accessed: 23-Mar-2020].
- [24] Goetzel, R. Z., Shechter, D., Ozminkowski, R. J., Marmet, P. F., Tabrizi, M. J., & Roemer, E. C. Promising practices in employer health and productivity management efforts: findings from a benchmarking study. *Journal of Occupational and Environmental Medicine*, 49(2), pp. 111-130, 2007.
- [25] Edwards, J. Understanding the predictors of participation and the barriers to employee involvement in workplace health promotion programmes: a thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Management, Massey University, Albany, Auckland, New Zealand (Doctoral dissertation, Massey University). 2012.
- [26] Chu, C., Driscoll, T., & Dwyer, S. The health-promoting workplace: an integrative perspective. *Australian and New Zealand journal of public health*, 21(4), pp. 377-385, 1997.
- [27] Mattke, S., Liu, H., Caloyeras, J., Huang, C. Y., Van Busum, K. R., Khodyakov, D., & Shier, V. Workplace wellness programs study. *Rand health quarterly*, 3(2), 2013.
- [28] Chu, C., Breucker, G., Harris, N., Stitzel, A., Gan, X., Gu, X., & Dwyer, S. Health-promoting workplaces—international settings development. *Health promotion international*, 15(2), pp. 155-167, 2000.
- [29] Cook, R., Billings, D., Hersch, R., Back, A., & Hendrickson, A. A field test of a web-based workplace health promotion program to improve dietary practices, reduce stress, and increase physical activity: randomized controlled trial. *Journal of medical Internet research*, 9(2), pp. e17, 2007.
- [30] Jahanian, R., Tabatabaei, S. M., & Behdad, B. Stress management in the workplace. *International Journal of Academic Research in Economics and Management Sciences*, 1(6), pp. 1., 2012.
- [31] Merrick, E. S. L., Volpe-Vartanian, J., Horgan, C. M., & McCann, B. Revisiting employee assistance programs and substance use problems in the workplace: key issues and a research agenda. *Psychiatric services (Washington, DC)*, 58(10), pp. 1262, 2007.
- [32] Kohl 3rd, H. W., Craig, C. L., Lambert, E. V., Inoue, S., Alkandari, J. R., Leetongin, G., ... & Lancet Physical Activity Series Working Group. The pandemic of physical inactivity: global action for public health. *The lancet*, 380(9838), pp. 294-305, 2012.
- [33] World Health Organization. “Global Strategy on Diet, Physical Activity and Health.” [Online]. Available: <https://www.who.int/dietphysicalactivity/pa/en/>. [Accessed: 18-May-2020].
- [34] Proper, K. I., Koning, M., Van der Beek, A. J., Hildebrandt, V. H., Bosscher, R. J., & van Mechelen, W. The effectiveness of worksite physical activity programs on

physical activity, physical fitness, and health. *Clinical journal of sport medicine*, 13(2), pp. 106-117, 2003.

- [35] Ghorai, K., Akter, S., Khatun, F., & Ray, P. mHealth for smoking cessation programs: a systematic review. *Journal of personalized medicine*, 4(3), pp. 412-423, 2014.
- [36] Cahill, K., & Perera, R. Competitions and incentives for smoking cessation. *Cochrane Database of Systematic Reviews*, (4), 2011.
- [37] Fagan, P., Eisenberg, M., Frazier, L., Stoddard, A. M., Avrunin, J. S., & Sorensen, G. Employed adolescents and beliefs about self-efficacy to avoid smoking. *Addictive behaviours*, 28(4), pp. 613-626, 2003.
- [38] Fishwick, D., Carroll, C., McGregor, M., Drury, M., Webster, J., Bradshaw, L. & Leaviss, J. Smoking cessation in the workplace. *Occupational medicine*, 63(8), pp. 526-536, 2013.
- [39] McLeod, J. The effectiveness of workplace counselling: A systematic review. *Counselling and Psychotherapy Research*, 10(4), pp. 238-248, 2010.
- [40] Ferenc Kudas and Aranka Hudak, 2018. "Health screening and surveillance." [Online]. Available: https://oshwiki.eu/wiki/Health_screening_and_surveillance. [Accessed: 20-Mar-2020].
- [41] Watson, W., & Gauthier, J. The viability of organizational wellness programs: An examination of promotion and results. *Journal of Applied Social Psychology*, 33(6), pp. 1297-1312, 2003.
- [42] Crane, M., Bohn-Goldbaum, E., Lloyd, B., Rissel, C., Bauman, A., Indig, D., & Grunseit, A. Evaluation of Get Healthy at Work, a state-wide workplace health promotion program in Australia. *BMC public health*, 19(1), pp. 183, 2019.
- [43] Edmunds, S., & Clow, A. The role of peer physical activity champions in the workplace: a qualitative study. *Perspectives in Public Health*, 136(3), pp. 161-170, 2016.
- [44] Linnan, L., & Steckler, A. Process evaluation for public health interventions and research, 2002.
- [45] Centers for Disease Control and Prevention, "Workplace Health Promotion: Evaluation." [Online]. Available: <https://www.cdc.gov/workplacehealthpromotion/model/evaluation/index.html>. [Accessed: 05-May-2020].
- [46] University of Nebraska Medical Center, "Program evaluation; wellness for life." [Online]. Available: https://digitalcommons.unmc.edu/coph_slce/106/. [Accessed: 17-May-2020].
- [47] "Occupational Health and Safety Act." [Online]. Available: <https://www.riigiteataja.ee/en/eli/51112013007/consolide>. [Accessed: 10-Feb-2020].

- [48] Dryzek, H. Electronic version of the encyclopaedia of occupational health and safety as a source of definitions. *Journal of safety research*, 33(2), pp. 155-163, 2002.
- [49] Tervise Arengu Instituut, “National Institute for Health Development.” [Online]. Available: <https://www.tai.ee/en/about-us/national-institute-for-health-development>. [Accessed: 12-May-2020].
- [50] Patton, M. Q. Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work*, 1(3), pp. 261-283, 2002.
- [51] Guion, L. A., Diehl, D. C., & McDonald, D. *Conducting an in-depth interview*. McCarty Hall, FL: University of Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, EDIS, 2001.
- [52] Omona, J. Sampling in qualitative research: Improving the quality of research outcomes in higher education. *Makerere Journal of Higher Education*, 4(2), pp. 169-185, 2013.
- [53] Etikan, I., Musa, S. A., & Alkassim, R. S. Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), pp. 1-4, 2016.
- [54] Health promoting jobs, “Tet Network.” [Online]. Available: <https://www.terviseinfo.ee/et/tervise-edendamine/tookohal/tervist-edendavate-tookohtade-tet-vorgustik/vorgustiku-liikmed>. [Accessed: 18-May-2020].
- [55] ISSA Guideline: “Workplace Health Promotion.” [Online]. Available: <https://www.issa.int/guidelines/whp>. [Accessed: 16-May-2020].
- [56] Armenakis, A. A., Harris, S. G., & Mossholder, K. W. Creating readiness for organizational change. *Human relations*, 46(6), pp. 681-703, 1993.
- [57] Chawla, A., & Kelloway, E. K. Predicting openness and commitment to change. *Leadership & Organization Development Journal*, 2004.
- [58] O'Connor-Fleming, M. L., Parker, E., Higgins, H., & Gould, T. A framework for evaluating health promotion programs. *Health Promotion Journal of Australia*, 17(1), pp. 61-66, 2006.
- [59] National Cancer Institute “Perceived benefits.” [Online]. Available: https://cancercontrol.cancer.gov/brp/research/constructs/perceived_benefits.html. [Accessed: 16-May-2020].
- [60] Goetzel, R. Z., Henke, R. M., Tabrizi, M., Pelletier, K. R., Loeppke, R., Ballard, D. W., ... & Serxner, S. Do workplace health promotion (wellness) programs work? *Journal of Occupational and Environmental Medicine*, 56(9), pp. 927-934, 2014.
- [61] Berry, L., Mirabito, A. M., & Baun, W. What's the hard return on employee wellness programs? *Harvard business review*, December, 2012-68, 2010.

- [62] Zula, K. Workplace wellness programs: A comparison between best practice guidelines and implementation. *Journal of Applied Business Research (JABR)*, 30(3), pp. 783-792, 2014.
- [63] US Dep. Health Hum. Serv. Healthy People 2010. With Understanding and Improving Health and Objectives for Improving Health. 2nd ed. Washington, DC: US Dep. Health Hum. Serv, 2000.
- [64] McCleary, K., Goetzel, R. Z., Roemer, E. C., Berko, J., Kent, K., & De La Torre, H. Employer and employee opinions about workplace health promotion (wellness) programs: results of the 2015 Harris Poll Nielsen Survey. *Journal of occupational and environmental medicine*, 59(3), pp. 256-263, 2017.
- [65] Zula, K., Yarrish, K. K., & Lee, S. An evaluation of workplace wellness programs: A perspective from rural organizations. *Journal of Applied Business Research (JABR)*, 29(3), pp. 659-668, 2013.
- [66] Goetzel, R. Z., Roemer, E. C., Liss-Levinson, R. C., & Samoly, D. K. Workplace health promotion: policy recommendations that encourage employers to support health improvement programs for their workers. *Washington, DC: Partnership for Prevention*, 19, 2008.

Appendix 1 – Interview guide

SEMI-STRUCTURED INTERVIEW GUIDE

Introduction for Estonian organisations

Background to this study: Thank you for agreeing to participate in the interview, we are interviewing you to have a better understanding of workplace health promotion, the types of program offered, the planning and how the program works in your organisation.

This research is being conducted to explore workplace health promotion programs in Estonian organisations. Your involvement in this research would be an informal discussion to explore your perceptions about workplace health promotion programs implementation. This interview should take approximately 40minutes or more depending on how much information you would like to share. I would like to record our interview with your permission because I don't want to miss any of your comments.

Please be assured the information you provide will be kept confidential and your name and any identifying features would be removed to ensure your identity is kept anonymous.

May I turn on the digital recorder?

1. What do you understand by workplace health promotion?
2. Why do you think workplace health promotion is needed to be implemented in organisations? What is the objective of implementing work health promotion?
3. Are there any health promotion programs carried out in your organisation? b) What types of health promotion activities are carried out in your company?
4. How does the program work and who pays for the program?
5. Can you explain the planning process of your workplace health promotion programs?
6. When was the health promotion program introduced to your company?
7. How do you make the employees aware of the programs available?
8. What types of employees participate in the health promotion programs? or compulsory? Are there incentives to encourage the workers
9. Since the implementation of the health promotion programs, can you say there are benefits associated with the program implementation?
10. How do you collect feedback from employees? Do you remember any program that has not been successful? Can you also name some successful campaigns?
11. Do you assess/evaluate your health promotion programs afterwards?
12. Why do you think the managers/employers are concerned with the health of their employees?
13. How do you perceive the importance of health promotion in Estonia?
14. What in your opinion are the challenges in implementing workplace health promotion programs?
15. Simple background demographic question?

Those are all of my questions, is there anything you would like to say?

Thank you for your time.

SEMI-STRUCTURED INTERVIEW GUIDE

Introduction for Nigerian organisations

Background to this study: Thank you for agreeing to participate in the interview, we are interviewing you to have a better understanding of workplace health promotion, the types of program offered, the planning and how the program works in your organisation.

This research is being conducted to explore workplace health promotion programs in Nigerian organisations. Your involvement in this research would be an informal discussion to explore your perceptions about workplace health promotion programs implementation. This interview should take approximately 40minutes or more depending on how much information you would like to share. I would like to record our interview with your permission because I don't want to miss any of your comments.

Please be assured the information you provide will be kept confidential and your name and any identifying features would be removed to ensure your identity is kept anonymous.

May I turn on the digital recorder?

1. What do you understand by workplace health promotion?
2. Why do you think workplace health promotion is needed to be implemented in organisations? What is the objective of implementing work health promotion?
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10. How do you collect feedback from employees? Do you remember any program that has not been successful? Can you also name some successful campaigns?
11. Do you assess/evaluate your health promotion programs afterwards?
12. Why do you think the managers/employers are concerned with the health of their employees?
13. How do you perceive the importance of health promotion in Nigeria?
14. What in your opinion are the challenges in implementing workplace health promotion programs?
15. Simple background demographic question?

Those are all of my questions, is there anything you would like to say?

Thank you for your time.

Cross-sectional analysis of organisations in Estonian and Nigerian organisations

Estonian organisations

Question	Organisation 1	Organisation 2	Organisation 3	Organisation 4	Organisation 5
What do you understand by workplace health promotion?	adopt healthy lifestyle	Adopt healthy lifestyle	Adopt healthy lifestyle & Improve Health and well-being	Improve workers health, physical activity at work	Promote healthy lifestyle
Reason for implementing WHP	Boost the image of our company	Improve overall health of our workers	Retain our Capable hands -Staff retention	Employee to stay longer-Staff retention	To achieve better qualities
Types of WHP programs	1)Health seminars 2)Physical activities 3)Activities towards healthy eating 4)Activities towards ergonomics conditions 5)Activities towards psychosocial and physical environment 6)Health screening and assessment 7)Activities towards perseverance and integrity 8)Employee assistance program 9)stress management program 10)smoking cessation program	1) Health seminars 2)Physical activities 3)Activities towards healthy eating 4)Activities towards ergonomics conditions 4)mental health programs 5)counselling program 6)stress management program 7) Health screening and assessment	1) Health seminars 2)Physical activities 3)Activities towards healthy eating 4)Activities towards ergonomics conditions 5) Health screening and assessment 6)employee assistance program	1) Health seminars 2)Physical activities 3)Activities towards healthy eating 4)mental health program 5)health screening assessment 6)activities towards ergonomics conditions	1) health seminar 2)physical activities 3) activities towards healthy eating 4) Activities towards ergonomics consultation 5)activities towards psychosocial environment 6)health screening activities
Who Plans the program?	Teamwork (HS, HR, CMM)	Teamwork (HS, HR, CMM)	Teamwork (SE, CMM)	Teamwork + idea from employee	Health board- top managements
Who funds the program?	Employer except massage therapy 50/50 co-payment	Employer	Employer	Employer	Employer
How do you make employee aware of the WHP program?	Email, webpage, newsletter, communication team	Email, newsletter	Email, posters, calendar invitation	Email, Office webpage	Email, newsletter
What are the benefits associated with the implementation?	1)Employees satisfaction, 2) decreased ill-health rate 3) boosting company's image	1)Improved health fitness 2) foster relationship	1)Improved health fitness	1)Increased health fitness 2) foster relationship	1)Improved health fitness 2) reduced health risk 3)strengthened self-esteem
How do you collect feedback?	Satisfaction survey	Self-feedback from employees	questionnaire	Feedback survey	Satisfaction survey
Do you assess & evaluate your WHP programs	No- too stressful and time consuming	No- limited time	Feedback questionnaires	No-difficult task to assess	No- lack of information on how to evaluate

Nigerian organisations					
Questions	Organisation 6	Organisation 7	Organisation 8	Organisation 9	Organisation 10
What do you understand by workplace health promotion	Promote health and well-being	Propagate health-promoting behaviour	Improve health and well-being	Enhance health promoting lifestyle and well-being	Improve the health and well-being
Reason for implementing WHP	Dynamic balance between work and health	Increase their health knowledge	To drive productivity	To cater for their well-being	Drive increased productivity
Types of WHP programs	1)health seminars 2)physical activities 3)health screening assessment	1)health seminars 2)physical activities 3)health screening assessment	1) physical activities 2)health seminars 3)health screening assessment 4)employee assistance program	1)physical activities 2)health seminars 3)health screening assessment 4)employee assistance program	1)health seminars 2)physical activities 3)health screening assessment
Who Plans the program?	Teamwork– (HR, FD)	Teamwork- (HR, AD)	Teamwork- (HR, ST, CT)	Teamwork- (HR, HSE)	Teamwork –(HR, FD)
Who funds the program?	Employer+ employee	Employer+ employee	Employer+ employee	Employer+ employee	Employer+ employee
How do you make employee aware of the WHP program?	Emails, health road show	Messages, leaflets, prints	EMAILS, fliers, pop-up screen messages	Pop-up messages, internal portals, notice boards	Office emails, newsletter
What are the benefits associated with the implementation?	1)increased job satisfaction 2)good image of the company	1)Improved health fitness 2)strengthened self-esteem 3) boosting company's image	1)early detection of certain diseases 2) reduced absenteeism 3)increase workers overall health 4)increased productivity	1)high morale of the employee 2)increased productivity 3)boosting company's image 4) increased job satisfaction	1) increased productivity 2)improved health fitness
How do you collect feedback?	Suggestion box	Feedback form	Feedback form submitted in the help-desk table	1)360 feedback survey, 2)employee engagement survey 3) baobab meetings	Suggestion box
Do you assess & evaluate your WHP programs?	Health road show	Report like from the questionnaires	Participate rate	Post-health forum surveys	Feedback questionnaire

