

UNIVERSITY OF KWAZULU-NATAL

**Employee Health and Wellness: A Case of Public Health in
ILembe District**

By
Rosemary Van Heerden
Student Number: 201510560

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Supervisor: Professor M. Subban

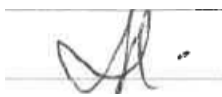
2018

DECLARATION

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DEDICATION

I dedicate this research to two very special people, my late mother Mrs Sonia Green, and my late husband Mr Jonathan Van Heerden.

Mom thank you for instilling a rich culture of discipline in me, and for teaching me that hard work and education remains the only key to realise any dream.

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	African National Congress
BSEC	Black Sea Economic Cooperation
CDC	Centre for Disease Control
CEO	Chief Executive Officer
CoGTA	Cooperative Governance and Traditional Affairs
EAP	Employee Assistance Program
GDP	Gross Domestic Product
HDL	High definition lipoprotein
HR	Human Resource
HSRC	Human Sciences Research Council
HIV	Human Immune Virus
IDP	Integrated Development Plan
KMO	Kaiser Myer Olkin
KZN	KwaZulu-Natal
MDGs	Millennium Development Goals
NCD	Non-communicable Disease
NDP	National Development Plan
NHA	National Health Act
NHI	National Health Insurance
NPO	No-Profit Organization
OECD	The Organization for Economic Co-operation and Development
OHSA	Occupational Health and Safety Act
OSS	Operation Sukuma Sakhe
PCA	Principal Component Analysis
PSC	Public Service Commission
PSR	Public Service Regulation
RSA	Republic of South Africa
SHEQ	Safety Health Environment and Quality
SPSS	Statistical Package for Social Sciences
SDGs	Sustainable Development Goals
TB	Tuberculosis
UCLA	University of California at Los Angeles
USA	United States of America
WHO	World Health Organization
WPTPS	White Paper on the Transformation of the Public Service

ABSTRACT

This study was undertaken in ILembe Health District, which is located in the Province of KwaZulu-Natal, South Africa. A district sponsored workplace health and wellness program was implemented in 2012. Gymnasium equipment was procured and a 2 hour weekly concessional physical fitness allowance was afforded to enrolling employees. Majority of employees were envisaged to enrol given that private institutions charged for such services. Despite the district's investments in the programs, the 2012/13 quarterly report recorded a diminutive 12% enrolment in the physical fitness programs. Further exploration was crucial since employee wellness was an integral component of the District's strategic intent, and insufficient literature existed to comprehend this phenomenon. Managers concerns about low staff utilization of the programs stimulated interest in studying this phenomenon. The objectives of this study, was to examine ILembe Health District employee's perceptions of the workplace health and wellness fitness program. Furthermore, this study aimed to identify factors that have a bearing on employee enrolment trends. A survey was conducted which applied a quantitative cross sectional survey design. Respondents rated their interests and perceptions of the health and wellness fitness program over a period of 3 months using a four point Likert-Scale measurement tool. All respondents completed consent forms which stated that their details and responses would be confidential. Respondents were also informed that they reserve the right to withdraw from the study at any time, if they so desired. The data was analysed utilizing SPSS version 21.0 statistical procedures. There was an approximate overall 50:50 split in terms of respondents travelling less or more than the 5 km distance to work. This is useful as the even groupings allowed for direct comparison of the factors under section analysis. The response rate was deemed sufficient in that, of the 170 questionnaires despatched, 150 (88%) was returned rendering the statistics useful for generalization of results to the target population. The study findings confirms that ILembe Health District employees believe that the lack of consultation, absence of rewards, poor levels of privacy during exercise, insufficient equipment to exercise, the lack of group and outdoor sport codes, voluntary participation in programs, the incorrect placement of health and wellness program in the health promotion section, coupled with the firm belief that the inadequacy of time to exercise due to the insufficient concession hour offered are factors that are propelling poor utilisation of programs and low levels of enrolment in the health and physical fitness program. Furthermore, findings of the study revealed that employees in ILembe Health District are vulnerable to non-communicable diseases due to poor health-seeking habits.

CHAPTER ONE

INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction

Organizations that operate with employees who adopt a sedentary lifestyle and choose not to participate in employee physical fitness programs are at risk of losing their skilled and talented staff to ill-health and disability. Furthermore, employees who expose themselves to unhealthy lifestyles place themselves at risk of contracting non-communicable diseases that have a potential of silently killing and debilitating them. This may result in an altered quality of life for employees, since they may become more prone to illness, death or disability, which in turn results in loss of income and increased medical costs.

For employers and employees, it is necessary to give due consideration to preventative measures that improve the health status of employees, thereby contributing to worksite wellness programs. Studies relating to employee wellness are crucial in South Africa in that it is a contemporary focus area in the management of human resources. Both the employer and employee can demonstratively enjoy benefits that such programs have to offer. By actively participating in employee health and wellness programs, employees are afforded an opportunity at improving the quality and longevity of their lives. Physical fitness through active engagement in physical exercise provides the ability to boost the efficacy of the cardiovascular, endocrine and the musculoskeletal system. Furthermore, it assists in simultaneously controlling weight and reducing stress levels. The employer can reap the benefits derived from employing a fit worker who is understood to be more productive, content with his/her job and not expected to be absent from work. This view is upheld by Feroze (2016:8-9); Swanepoel, Botha & Mangonyane (2014:1-14).

The prevention of obesity and chronic diseases has become a major focus area for employers due to its related negative economic and work performance effects. Organizations must aver their support for the promotion of wellness in the workplace, cites Goettler, Grosse & Sonntag (2017:12-21). The World Health Organization (WHO) Collaboration Centres in Occupational Health, attest to the fact that adults spend one third of their lives at work, which contributes to the necessity for awareness of wellness programs, according to Lahdenpera (2017:4-7) & Nader (2017:n.p.). In South Africa, 85% of workers spend an average of 43.3 hours a week working, which is higher than the legal hours stipulated in South African labour law. This renders South Africans the fifth hardest working employees in the world, submits Adams (2016:n.p.). With the many hours worked by employees, the notion that the workplace remains a perfect setting

to support adult population health and well-being is supported, argues Grabovac & Mustajbegovic (2015:1-8).

Health awareness and the necessity for fitness is increasing amongst South Africans, yet acting on it appears to be very slow. This view is supported by Goedecke (2017:n.p), whose writings highlight the fact that South Africans are rated third in the world's most overweight population, followed by the British, then the Americans. Mchiza, Parker & Labadarios (2015:10) highlight that women are more obese than men in South Africa, in that 56% of women are classified as being overweight or obese while men are rated at 29%. It is predictable that such a high rate of obesity in a country becomes a major national concern, given that it postures heavily toward a serious public health threat. Overweight and obese citizens become susceptible to chronic cardiovascular and endocrinal conditions like diabetes mellitus, hypertension and other cardiac conditions.

This research explored employee perceptions of the health and wellness programs in ILembe District, where reports revealed that enrolment on the program is low. It is a known fact that employed adults spend one third of their lives at work. Since employee lives are spent more at work than anywhere else, the necessity for awareness of wellness programs is vital, states the World Health Organization (1994:1). The New Zealand census held in 2006, confirmed that 22% of employees work no less than 50 hours a week. These long shifts have the potential of influencing an increase in the number of drowsy driver accident incidents, Caruso, 2014:n.p, citing the American Nursing Association, 2011). This renders the workplace an ideal *milieu* to promote adult health and well-being and further influences healthy life choices.

The prevention of obesity and chronic diseases has become a major focus area for employers due to their potentially harmful and negative impact on economic performance and work performance, therefore organizations are strongly urged to accelerate their support in promoting wellness in the workplace.

1.2 Statement of the Problem

ILEmbe Health District adopted provincial policies, procured gymnasium equipment and permitted 2 concessional hours for employees to participate in physical fitness programs. One would expect that employees would take up the opportunity in light of the fact that private institutions and gymnasiums offer costly services. However, the ILEmbe health district 2012/13 quarterly report recorded a diminutive 12% enrolment in the physical fitness programs with employees utilizing the wellness clinical services primarily for pre-employment screening.

Concerns have been raised in management forums regarding existing trends in staff utilization of the employee wellness programs, which stimulated the need for further investigations.

Having a workforce that is fit for purpose and practice is vital if the world is to attain universal health coverage. Employees of any organization are its most valuable asset. Therefore, a healthy workforce is what every employer strives to achieve, since the success of an organization is reliant on the quality of its workforce. This is linked to the belief that the manner in which employees perform their work, coupled with their productivity, propel an organization towards success. The context for this research study is a public institution, hence the expressed need for improved health status of employees through health and wellness programs, physical fitness and heightened health awareness to improve public service.

Both the employer and the employee are able to enjoy the benefits of fitness programs. Employees who participate in the programs benefit in that they are afforded the opportunity to improve the quality and longevity of their lives through living healthy lives and making healthy choices. The employer gets to reap the benefits derived from employing a fit and healthy employee, who is more productive, content with his job and less likely to be absent from work, cites Hagelstam (2017:1).

Public institutions (like ILembe Health District) invest public funds in resources that promote employee health and well-being, only to discover that not all employees are willing to participate in such programs. Over and above this, the reasons for low or poor participation are not evident, (Mattke, Kapinos, Caloyeras, Taylor, Batorsky, Liu & Newberry, 2015:n.p), and Mujtaba and Carico (2013:n.p). In 2012, ILembe Health District implemented Provincial Employee Health and Wellness policies. This resulted in the procurement of gymnasium equipment and the sponsoring of two weekly concessional hours for participating employees. Only 12% of the employees were recorded as actively participating in the fitness program, which concerned managers. This phenomenon is not fully comprehended in light of the inadequate literature that exists, states Rouse (2016:1), citing the National Institute for Health Management (2011). Exploring reasons for poor participation in the employer sponsored programs is crucial especially because health and fitness private service providers charge a fee for such services and in South Africa, gym clubs make R12.5 billion in revenue annually, according to *City Press* (2017:n.p.). It is therefore, vital that studies of this nature are undertaken in ILembe Health District. This aligns well with the purpose of the study, which aimed to better understand employees' perceptions and participation challenges, through exploration of factors that place barriers in employee participation in such programs.

ILEmbe Health District Services is funded by the State, and measuring the impact and effectiveness of such programs is a mandatory Constitutional imperative. Managers deployed in the District should try to understand challenges linked to this phenomenon, in that it has

serious accountability implications. Managers given resources for the program will have to justify the allocation and use of all resources deployed in the program. All interventions and decisions made by managers regarding the outcomes and outputs of the programs to ensure value-for-money would also have to be justified.

1.3 Back ground and need for the study

ILembe Health District can be located on the East Coast of KwaZulu-Natal and is home to approximately 606, 809 people. The district lies along the primary economic development corridor of the Province, and is beleaguered with elevated levels of poverty amongst its population and joblessness, according to the ILembe District Municipality's 2013-2014 Integrated Development Plan review (see the Department of Cooperative Governance and Traditional Affairs, CoGTA, 2013:122). Furthermore, the ILembe District's health profile relating to the burden of diseases identifies the top ten foremost causes of loss of life as being preventable. The identified medical conditions include infectious diseases like tuberculosis (TB), cerebrovascular conditions, hypertension, diabetes, cardiac conditions, viral conditions inclusive of human immune virus (HIV) and other respiratory tract conditions (Statistics SA: Mortality and causes of death in SA P0309.0.). The district profile is indicative of a population that is at risk of contracting and succumbing to non-communicable diseases. Therefore, it is crucial that organizations like ILembe Health District implement and sustain employee health and wellness programs in their organization.

The actions that drive and direct organizational goals and objectives are heavily dependent on policies that exist in that organization: policy clarifies and guides implementers of the policy to reach prescribed guideposts. Policies inherently are designed at a political level to ensure consistency of purpose, and therefore aim to enact long-sighted rather than short-sighted decisions to address organizational needs. The legislature and executive structure of the political arm of government may pass a plethora of laws. However, those laws remain ineffective unless they are implemented effectively by officials in government submits, according to Ngwenya (2016:1-11). In this study, employee perceptions of the health and wellness program offered in the workplace were explored to identify and understand the possible reasons for poor enrolment and participation in the program. Since the Employee health and wellness program is a policy-related matter, it is vital to trace the origins and need for such policy, as well as the systems put in place to get employees' input and buy-in into such policies. Such information is deemed relevant together with quantifiable, rational calculations that make policy decisions relevant, state Otenyo & Smith (2017:3-24).

The KwaZulu-Natal Provincial Administration adopted the Provincial Wellness Management Policy in August 2011, and the KwaZulu-Natal Department of Health in turn adopted and

implemented Employee Health and Wellness Policies in May 2012. ILembe Health District Management responded swiftly to the call for the application of a health and wellness fitness program in the place of work, by procuring gymnasium equipment for all institutions. It adopted a two-hour on-duty concessional physical fitness allowance for participating employees. Despite all the above, low employee enrolment was recorded in the district. Further exploration of the reasons for this phenomenon is crucial in that employee wellness is an integral component of the strategic intent of the District. The emphasis of this study was to identify and understand challenges that hinder enrolment on the program, as enrolment would make both employee and employer better equipped to fulfill their responsibilities in creating a vibrant health and work life balance program.

Measuring the effectiveness of employee wellness programs is crucial in any organization and an elevated level of importance is placed on the public sector, where state resources are invested in such activities. According to Constitutional imperatives, each State Department is held accountable for the management of its resources (the Constitution of the Republic of South Africa: Chapter 10 section 195). In October 2010, in South Africa, the Department of Health signed an agreement with the Cabinet Lekgotla to implement “Outcome 2” of the Government’s Program of Action, which envisions “a long and healthy life for every South African” is cited by Gray, Vawda & Jack (2011:10). Furthermore, Hymel, Loeppke, Baase, Burton, Hartenbaum, Hudson, McLellan, Mueller, Roberts, Yarborough, Konicki, Larson (2011:695) state that a country’s vision of creating a healthy nation can be advanced through employee wellness programs, because the primary aim of introducing such programs is to primarily to advance the health and well-being of the workforce who belong to the citizenry of the country. Promotion of health and protection of health in the workplace used to operate independently of each other previously. The boundaries that were placed by the division resulted in separate sections dealing with employee health needs. Advances in the field have resulted in the call for the integration of health and wellness programs, offered in the workplace. In so doing, employee health and safety aspects are catered for and delivered in an integrated manner. Throughout the years, organizations have realized the value of employee wellness programs and have taken a stand to mainstream it as a vital aspect of the management of human resources, which remains a focal point of this research study.

A human being’s living and working conditions play a major role in determining his/her health status. The Whitehall studies conducted in 1967 support this fact, in that the study revealed that the lifespan of workers in lower grades was lower than those in the higher grades. Therefore, it is vital that organizations take heed of this fact and strongly promote employee health and wellness programs, which encourage participation by employees in their organizations for all

employees, but for lower grade employees in particular. Where employees reside does affect their health status because social and economic dynamics influence decision-making concerning healthy choices. Employees that live in and travel through dangerous neighbourhoods avoid outdoor activity in fear of being a victim of crime. Employees who have to do not have reliable and safe transport do not enrol in after-hour programs; this view is supported by Litchfield, Cooper, Hancock and Watt (2016:3-11). Thus, access to amenities, safe spaces, and healthy role models do affect employees' choices to participate in health and wellness programs and managers should take cognisance of this fact when planning healthy living programs.

1.4 Purpose of the study

The purpose of this study was to examine ILembe Health District employees' perceptions of the workplace health and wellness fitness program, which could have a bearing on employee enrolment trends. A survey of 150 employees was conducted to:

- Understand employee perceptions of the ILembe Health District Employee Health and Wellness Physical Fitness Programs;
- Determine trends in employees' health-seeking habits;
- Identify potential employee health risk factors to preventable chronic conditions;
- Identify factors that impact on staff utilization of the health and wellness physical fitness programs, and
- Develop appropriate and sustainable solutions to address challenges facing the wellness programs.

Data was collected from questionnaires that were completed and returned using a 4-point Likert measurement tool. The scale comprised of a battery of multiple Likert items that were summated. The Likert scale was best suited for this study, since it is one of the most popular scales used in questionnaires. Furthermore, the Likert measurement tool is rendered useful in gauging opinion in surveys with multiple items to measure, as is the case in this study (Subedi, 2016:2-3) and (Sullivan & Artino, 2013:1-7).

1.5 Research questions

The research study focuses on the following key questions:

- What perceptions do ILembe Health District employees hold of the health and wellness fitness program?

The literature review chiefly encapsulates answers to this question it further links relevant international, national and local perspectives, taking into account historical and policy developments. The perspective captured and discussed in the literature review gives credence to the significance of employee wellness in the workplace, with particular focus on employee wellness strategies and policies in the public sector.

- What health-seeking habits do ILembe Health District employees have?

Challenges facing the ILembe Health District in improving enrolment in programs aimed at employee health and wellness is influenced by health-seeking habits that employees possess. It is vital that strategies that address such gaps influence employee health-seeking habits positively. The principal theories of public governance discussed in Chapter Two advance a firm foundation upon which perspectives relating to employee health and wellness programs were deliberated upon. Programs addressing employee health and wellness produce benefits for the employer and employees. Therefore, such programs assist in promoting individual and organizational goals for a healthy workplace. Employee health and wellness in South Africa is enshrined in a plethora of legislation and relevant policies which includes the Occupational, Health and Safety Act (OHSA) of 1993, supported by Chapter 10 of the Constitution of the Republic of South Africa, the Public Service Regulations of 2016, the KwaZulu-Natal Provincial Administration Wellness Management Policy of 2011, and the South African White Paper on Transformation of 1997, to name a few.

- How susceptible are ILembe Health District employees to preventable chronic health conditions?

The post-1994 era in South Africa called for a transformed Public Administration with progressive internal administration systems, capable of delivering a transformed service package to the population served. Legislative reviews that ensued, conceived a progressive legislative and policy framework where all public employees were acknowledged as a valuable public sector resource. Over and above this, the White Paper on Human Resource Management in the Public Sector of 1997, declared the managing of people a significant task of management (Department of Public Service and Administration, 2016:9). Public sector managers are charged with the responsibility of creating an environment that prioritises the needs of the employer and employee alike. It is vital from a public administration perspective for managers to ascertain health risks that employees face and develop policies and programs that address their susceptibility to chronic medical conditions. This will drive efforts in the organization to promote employee health and wellness, including the prevention of chronic medical conditions.

Chapter Three explores the importance of focusing on employee health and wellness and the importance of implementing policies that take into cognisance health promotion and preventative measures that address factors causing ill-health, including the management of employees affected and infected by HIV/AIDs.

- What factors impact on staff utilization of the health and wellness physical fitness programs?

In South Africa, public sector employee health and wellness programs are funded through an equitable share received from the country's public coffers. These funds are further sub-divided and allocated to public health institutions. Clearly then, it is vital that outputs and outcomes linked to the employee health and wellness program are monitored to ascertain its effectiveness from a public governance viewpoint, states Batorsky (2016:14). Further, public sector management is compelled to account for all resources allocated for service delivery as advocated in Chapter 10 of the Constitution of the Republic of South Africa of 1996, where "expectations regarding the use of resources are underpinned by efficiency, effectiveness and economical use and is promoted in public administration".

- What solutions exist in addressing the wellness program participation challenges that exist in ILembe Health District?

Understanding barriers and challenges that negatively affect employee participation in the programs addressing health and wellness is crucial in addressing the management and development of human resources within the public health sector. Chapter 10 of the Constitution of South Africa embodies a public administration that supports and expresses good human resource management practices where human potential thrives in State institutions (Rongen, Robroek, van Ginkel, Lindeboom & Burdof, 2014:9-11). Consequently, a public sector that promotes good human resource management is likely to serve the population better in that the workforce is healthy and better placed to serve the population efficiently and effectively.

1.6 Significance to the field of study

The KwaZulu-Natal Provincial Administration adopted the Provincial Wellness Management Policy in August 2011, and the KwaZulu-Natal Department of Health in turn, adopted and implemented the Employee Health and Wellness Policy in May 2012. ILembe Health District adopted the provincial policy. This was followed by the procuring of gymnasium equipment. Furthermore, employees who enrolled in the employee health and wellness program were permitted two concessional hours a week for employees to participate in physical fitness programs. In the light of the investments made in the program, one would expect that the

majority of employees would engage in the program, given that private health and wellness institutions like gymnasiums offer costly services. On the contrary, the ILembe Health District 2012/13 quarterly report recorded a diminutive 12% enrolment in the physical fitness programs. It was further discovered, that the majority of employees utilized the employee health and wellness clinical services primarily for pre-employment screening. Concerns have been raised in management forums regarding existing trends in staff utilization of the employee wellness programs, hence the need to identify challenges.

The literature reviewed did not reveal adequate studies in South Africa or ILembe Health District in particular, to adequately comprehend this phenomenon. A study of this nature would help in addressing various challenges facing employee health as well as employee well-being, for the District in particular, and the KwaZulu-Natal Department of Health in general.

1.7 Definitions

Terms not defined in the literature review are captured in this section.

Lekgotla

According to the KwaZulu-Natal Provincial Government's Employee Health and Wellness Policy Framework (2011: 4-5), a "Lekgotla" is a South African term utilized when a meeting is called by government to discuss strategy planning. The term is loaned from the Sesotho language where it refers to court, (Collins Free dictionary, 2011).

Employee Assistance Program

Employee Assistance Program (EAP) means a structure within an organization that provides work-based assistance to employees and their dependants who develop personal problems that impair, threaten and or negatively affect work performance (Sandys, 2015:1-3).

Employee Health and wellness

Employee Health and wellness means "the advancement and maintenance of mental, physical, and social well-being amongst all occupations; the prevention of ill-health triggered by working conditions; the safeguarding of employees from risks resulting from factors adverse to health, the employment and maintenance of employees in a work-related environment adopted to propel optimal physiological and psychological capabilities and the adaption of work to employees and each employee to his or her job", (Gcwabe, 2015:3).

Health

Huber (2014:9-15), cites the World Health Organization's definition of "Health" as a state of wellbeing that does not merely mean an absence of disease, but encompasses a state of emotional, physical and social wellbeing.

Wellness

"Wellness means a combination of physical, emotional, spiritual, intellectual, occupational and social health, in that people actively detect and make positive choices toward a more successful way of life...Health promotion is regarded as the means to realise wellness" (Franz & Ngambare, 2013:5 & 12).

Well-being

Well-being at work involves the creation of an environment that aims to promote "a state of satisfaction and which allows an employee to prosper and achieve her full potential for the benefit of both herself as an individual and the organization she works in...", according to Fenton, Roncancio, Sing, Sadhra & Carmichael (2014:5).

Public Health

Public health is "the science of guarding and improving the health of people and their communities. This is achieved by promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing and responding to infectious diseases. When broadly defining public health it concerns the protection of the health of entire populations. Public health professionals strive to prevent health problems from materialising or recurring through implementing educational programs, recommending appropriate policies, governing services and conducting research. This is in contrast to clinical health care professionals like doctors and nurses, who focus predominantly on treating individuals after they become sick or injured. Public health aims and objectives are to limit factors causing health disparities, therefore a large aspect of public health involves the promotion of healthcare that promotes equity, quality and accessibility to health care..." , says Moreno, Harris & Jabukowski (2016:336).

1.8 Research Design

Research designs explain the structure of a study, which can be quantitative or qualitative in nature. Quantitative study designs denote an impartial investigation of an empirical nature where the researcher makes a decision to study phenomena (behaviours, trends, opinions and attitudes) the phenomenon studied is investigated at a specific point through the collection of answers to specific narrow questions. Quantitative studies occur at a specified point in time and

data is collected through surveys, experiments or quasi- experimental methods. Such studies can involve an intervention or not. In intervention research, which is experimental in nature, a researcher aims to establish the relationships in variables following an intervention. In non-intervention research, correlation between variables are sought which assist in explaining trends that exist in a population being studied. Data collected can be enumerated utilizing computed figures. Adopting a quantitative approach in a study makes it possible to study a large sample of a population. Following the collection of data, statistical correlations are made of the population based on the deductive reasoning. The results of the study can therefore, be generalized, to the study population. This generalization is based on outcomes of the study of the sample of that population. In quantitative research, the researcher removes himself or herself from the inquiry which allows for an inquiry that is objective and unbiased, submits Babbie (2016:110-294).

Figure 1.1: Linking characteristics of quantitative methods to steps in research process

Characteristics of Quantitative methods		Steps in the research process
Explains or describes phenomenon	↔	Problem is identified
Justify the Problem to be addressed in the research	↔	Literature review is conducted
Specific can be measured or observed	↔	The purpose of the study is specified
Data is numerical Large numbers can be collected Research instruments (questionnaires)	↔	Data is collected
Describes trends Draws comparisons or makes predications	↔	Collected data is analysed and findings are interpreted
Unbiased and objective study	↔	Report is developed on findings of the study

Adapted from Edmonds and Kennedy (2013)

Qualitative studies, in contrast, are more subjective in nature in that accounts of individual experiences are studied which focus on meaning from which theories are built. Researchers in qualitative studies find theories through the linking of relationships in the account of individual experiences narrated by the study population. Case studies can be utilized in qualitative studies and results can be generalized to unknown populations.

A cross-sectional study consists of the observation of a phenomenon in a population, which occurs at a stipulated time, and is exploratory or descriptive in nature. Some authors have criticized this method and challenged its ability to generalize findings to a population, as conclusions made are based on observation of phenomenon at a precise point in time. One may argue that although this is a significant observation, social research proposes that phenomena should be re-investigated to build on results of earlier research.

A quantitative design was adopted in this study, because the aim of this study was to understand the perceptions employees hold of the employee health and wellness fitness programs implemented in ILembe Health District, by surveying a sample of the employees in the district for a period of 3 months. The survey method is primarily utilized to describe, explore or explain a phenomenon, hence its adoption in this study. This was done to ensure that employee feelings and views, which have a bearing on enrolment can be numerically described and interpreted. The researcher aimed not only to investigate and describe, but to fully investigate the nature of the variables. Moreover, factors that cause poor enrolment in the employee physical fitness wellness programs and the manner in which it manifests, were explored. In so doing, generalizations to the population were illustrated, based on the results of the research study. A structured questionnaire was selected, since it was deemed the most suitable instrument to collect data from the sample population, by the researcher. In this study, the questionnaires were self-administered and respondents individually completed the questionnaire and returned it to the researcher. This method assists in determining the feasibility of the samples in the study, according to Babbie (2016:110-294).

Deductive data was collected in this quantitative research study since it was of a quantitative nature, and variables of interest were identified. This was followed by the development of conceptual frameworks. Thereafter, operational definitions of variables identified was adopted. Following this, data, which is “the actual values of the study variables”, was collected from participants, in numeric form. The data collected was utilised to ascertain relationships and the strength of the relationship between variables. Such relationships within variables may be classified as associative or causal in nature, attests Cuervo-Cazurra, Anderson, Brannen, Nielsen & Reuber (2016:882) and Polit & Beck (2010:68-69).

A Post-Positivist approach was adopted in this study in order to engage participants and extract their knowledge, with an aim to understand the problem being researched. Furthermore, the aim of this research study was to examine ILembe District employees’ perceptions of the workplace health and wellness program implemented, and not to merely obtain solutions to the problem, since factors that influence such perceptions are diverse and unsolidified, state Chung, Shklovski & Manson (2017:4875-86). The aim was to engage in the research study

with an open mind, where questions were answered and the causes thereof linked to the research problems identified. In this approach, the researcher conducts the research study with an idea of what is being investigated and further explores the research problem. Furthermore, the researcher agrees with the notion that conclusions reached in a study are partial, and that these could be revised with further research.

1.9 Limitations

The principal goal of this quantitative study was to gauge the perceptions that employees hold of the health and wellness fitness programs, which could have a bearing on employee enrolment and participation. The researcher recommends that any generalization of results of this study are made with due care since some limitations would apply.

The researcher identified the following limitations:

Sample size

In total, 170 questionnaires were despatched, and 150 (88%) was returned, rendering the statistics useful for generalization of results to the target population. The sample size was small (88% sampled of a total workforces of 1 728), due to limited access to participants who were spread throughout the district. Some employees worked shifts and could not be accessed. This could have potentially affected the study's external validity because of the limited generalizability to other groups. The researcher therefore utilized simple random sampling, which allows for an equal chance for inclusion in the study and reduced the possibility of bias in selection of participants. By implication, generalizability means that the results are transferable, and in this study, the results were specific to ILembe Health District employees, being a defined group. The results was applied to the same group and not the general population (as indicated by Elfil & Negida, 2017:1-4). The researcher defined the population by categorizing participants into male or females, employees travelling within 5 kilometres and those travelling beyond 5 kilometres, in three major groups, consisting of managers, supervisors or general workers.

Table 1.1 Breakdown of Respondents

Target Group	Employees Living	
	Within 5 kilometers from the workplace	Beyond 5 kilometers from the workplace
Middle and senior management	5	5
Supervisory	40	40
General worker	30	30
Sub total	75	75

1.10 Ethical consideration

A written motivation was submitted to ILembe Health District Manager and the KwaZulu-Natal Provincial Department of Health's Research Unit seeking official approval to conduct the study. Approval was received from both the ILembe Health District Office and the Provincial Department of Health, and a gatekeeper's letter was received accordingly.

Assurance was given to the ILembe District Manager and Hospital and Community Health Centre Chief Executive Officers that services would not be disrupted since employees were to be engaged during meal breaks. All managers and participants were given written assurance that all information and data collected in the study would be treated confidentially. Participants were informed in writing that they had the option of withdrawing from the study whenever they so desired, since partaking in this study was voluntary. All participants completed individual informed consent forms, agreeing to participate in this study, prior to participating in the study.

A copy of the results of the study including recommendations, would be submitted to ILembe Health District through the KwaZulu-Natal Provincial Department of Health Head Office.

1.11 Overview of Chapters

Chapter One outlined the entire research by capturing the statement of the problem, the background, need, purpose, ethical considerations and limitation of the study. It encapsulated provisions of the KwaZulu-Natal Provincial Wellness Management Policy, which is a framework from which all public sector departments plan, execute, monitor and evaluate their health and wellness programs. Constitutional imperatives that were briefly discussed are contained in Chapter 10 of the Constitution of the Republic of South Africa, in that it advances the employee health and wellness program from a good governance perspective.

Chapter Two locates the study within the public administration domain. Definitions, theories and concepts are further interrogated through discussions based on documented literature and views of researchers in the field of study. Discussion includes reforms and their impact on governance in the public sector from the old public administration era to the New Public Management era. The Chapter culminates with a perspective on factors that relate to employee health and wellness in general, but specific to the public sector.

Chapter Three captures the background information whilst synthesising significant relevant literature that relates to the research problem and advocates the reasons for this study. Broad areas captured included international and local perspectives on the significance of employee wellness, the history of employee wellness and barriers to participation.

Chapter Four features the research design utilised in this study. It describes the research setting, sample size, the composition, validity and reliability of instruments utilised to collect data. The methodology for data collection and analysis of the respondents' biographical data are explicated. This Chapter concludes with significant findings of this study.

Chapter Five details the study's findings that were reported in a statistical and graphic format, which linked to the research question. The chapter summarizes findings, and captures the limitations that include implications for this study. Recommendations for further research in the field of public administration are also presented.

In Chapter Six, the emphasis was on highlighting factors that assisted, and factors that hindered enrolment in health and wellness programs situated in ILembe District worksites.

1.12 Conclusion

Chapter Two of the Constitution of the Republic of South Africa, 1996 and the White Paper on Transforming Public Service Delivery, 1997 underpins the theoretical background, research methodology, measurement tools, and presentation of findings, conclusions and recommendations of this study. The South African public health system adopts policies and programs that are anchored in the basic human right approach, thus assuring access to health care by all citizens. Public servants employed in public health facilities enjoy this right and receive employee health and wellness services from public health institutions. They therefore, expect service delivery of a high quality, which embodies Batho-Pele Principles, thus encompassing a culture of consideration, accountability, effectiveness and efficient service delivery to them. The chapter that ensues highlights factors that assist and hinder enrolment in health and wellness programs at work in the ILembe Health District.

CHAPTER TWO

PUBLIC GOVERNANCE PERSPECTIVES OF EMPLOYEE HEALTH AND WELLNESS

2.1 Introduction

In order to contextualise public governance perspectives of employee health and wellness in South African public sector institutions and ILembe Health District in particular, discussions in this chapter includes the Constitutional framework and related public institutional policies from a public administration perspective.

Public administration involves the execution of public policies in public sector facilities. Jordan (2013:35) cites (Bourgon:2007), who states that public servants are employed in public institutions to implement those policies, whilst public administrators are tasked with the responsibility of formulating policies that address the needs of the public served, states Ologbenla (2007:36-44). Woodrow Wilson advocated for a principles of public administration to improve the way government institutions run and strengthen their business. As far back as 1990, countries like the United States of America, adopted multi-dimensional approaches in mainstreaming human governance and adopting New Public Management principles, which resulted in the strengthening of links between the various public sector departments and the rest of society. Normative approaches to public administration basically encompasses the reason for the existence of a public administration in society. This approach embraces an ethical component of openness transparency, honesty and most importantly accountability, cites Smith (2016:3-10).

The public health sector in South Africa has evolved from a divided, unjust and unresponsive sector to one that has embraced change and has implemented progressive policies that link it to the broader society it serves. The existence of progressive legislative and policy framework that advanced the right to health care in South Africa, assists the country to meet its vision of a long and healthy life for the population served, states Whitford (2016:5), citing the National Department of Health (2016). Public sector departments in South Africa are compelled to improve service delivery in order to effectively and efficiently deliver on the government's objectives to fulfil its mandate to the citizens of the country. South Africa, in the Pre-1994 era, which is also referred to as the "Apartheid era", operated in a divided public sector that promoted the implementation of government policy that aimed to keep the nation divided on racial lines. Such policies propagated inequity and bias where the majority of the citizenry was excluded from participating in governance. The minority population, which consisted of the "White" population benefitted from services offered by the State, since public service needs of

the minority population was prioritised, resulting in quality service delivery being directed to the minority, excluding the vast majority population.

In 1994, following the first democratic elections in the country, the new democratically elected government was sworn in, led by the African National Congress (ANC). The (ANC) was charged with the responsibility of leading the government of South Africa out of an ineffective, inefficient and biased governance system, into a democratic and transformed country. One of the key priorities of the government was to transform service delivery in the public health sector, states Isaacs (2016:13-16). The emergence of democracy, stimulated a need for the repeal of discriminatory policies to pave the way for a non-discriminatory, progressive and transformative public administration system. That new system of governance, adopted government policies that promoted democracy, upheld the Rule of Law and justice, protected human dignity and the right to life.

In 2011, an average of 80% of the population was dependent on public health care, which the public health sector as one of the main drivers of service delivery in the country, cites The African National Congress' General Council on National Health Insurance (NHI) (2010):11. The National Department of Health has developed a progressive legal and policy framework as part of the public governance approach in the public health arena in South Africa. A new public government system was adopted where public sector managers were guided and capacitated to lead and drive the public sector effectively, thus enhancing accountability for public service delivery, cites Gumede & Dipholo (2014:43-47). A New Public Management system was adopted that advocated efficiency that propagated the streamlining of service delivery, effectiveness, which ensured that objectives were specified and address the needs of the public. This approach also included the efficient and economic use of resources, as well as the reduction in waste of allocated state resources. During this period human resource management and development was prioritised which focused on performance appraisal, management autonomy, competence and investment in training and development. Furthermore, improved financial management was promoted, as well as accountability where predetermined targets were determined to achieve set outputs to improve quality of services delivered, state Phillip & Daganda (2013:9).

Since 1994, the South African Government developed and implemented Legislation, policies and strategies to address inequities of the past and adopted systems that align with the New Public Management approach in the public service. Relevant pieces of legislation and policy includes the Constitution of the Republic of South Africa of 1996 with particular emphasis to Chapter 1 and 10, the White Paper on Transformation of the Public Service of 1995, Occupational Health and Safety Act of 1993, Adoption of Bath-Pele Principles in 1997, The

National Health Act (NHA) of 2003, Public Service Regulation of 2009. The Country subsequently adopted the National Development Plan (NDP) in support of the Millennium Development Goals (MDGs), Sustainable Development Goals (SDGs) and Africa 2063.

Contextualising Chapter One of the Constitution of the Republic of South Africa

Chapter One, of the Constitution of the Republic of South Africa, captures the founding provisions, which aim to address the divisions of the past in order to develop a society that is grounded in fundamental human rights. Of utmost importance, is the founding principle that states that the Constitution adopted in 1996 aimed to “improve the quality of life of all South African citizens which assists in liberating the potential of each person...” The Public health sector edifice is therefore, compelled to abide by the principles of the Constitution and free the potential of its workforce through adopting programs that aim to improve the health and wellbeing of its employees, Republic of South Africa, 1996. In so doing, state institutions that implement effective employee health and wellness programs are giving effect to the Constitutional mandate, which this study embodies.

White Paper on Transformation of the Public Service

In 1995, the country took a bold and necessary step to adopt the White Paper on Transformation of the Public Service (WPTPS), (Notice 1227 of 1995), in that it set the pace in government placing people first in its efforts to transform the public sector and developed a framework for health care delivery in a transformed health care delivery system. This required public institution transference to a renewed style of operations that embraces mainstreaming of public needs, where swift services are delivered. Such services are also improved and constantly promoted to adequately respond to community needs, states Ssekibuule (2012:105). The White Paper contains 8 pillars aimed at transforming the public service. Following the adoption of (WPTPS), a legal framework was developed including multiple policies that aim to improve public service delivery in the entire country.

Linking Chapter Ten of the Constitution of the Republic of South Africa

Chapter Ten of the Constitution of the Republic of South Africa (1996), section (195:a-i), The Batho Pele Principles (1997), The White Paper on Human Resource Management in the Public Service (1998) and the Public Service Regulations 2016, which have a bearing on this study, formed part of the plethora of policies driving the process of public service transformation. These two policies together with Chapter Ten of the Constitution of the Republic of South Africa section (a-d) was discussed further in this study, whilst linking them to the purpose of the study that aimed to examine employee perceptions of the employee health and wellness program and

its bearing on enrolment trends. Employee well-being is not merely a matter of interest of employees, but also for employers and communities at large, taking into consideration the fact that employees expend volumes of their waking hours at work, state Brown (2017:3 &14-18) and Naber (2017:n.p.). It has been documented that up to one third of a person's waking hours can be spent at work; which validates the need for wellness during their time spent at work, states the WHO collaborating Centres in occupational Health. Campbell, Converse & Rogers are cited by Harter, Schmidt, Franklin & Mills (2004:4) in ascertaining that a human being's life satisfaction is influenced by their satisfaction with their work. Since work envelopes a major part of people's lives and has a direct influence on the quality of life of individuals (who form part of families), that ultimately form part of communities. If a work environment results in the deterioration or advances in the quality of life of individuals, then the community in which that individual lives, is affected directly. Consequently, any factor in life that has a potential of affecting an individual's mental and or physical well-being, does have a direct impact on communities and should be prioritised in governments programs of service delivery since the welfare of people remains the driving force behind every government. The keen interest in employee wellness in the workplace, is therefore necessary, and validated as an area that deserves further attention through research. Workplace wellness programs can also be likened to "*the hand that rocks the cradle of health*" in that it promotes health and wellness for people who spend most of their days at work, asserts Kirsten & Karch (2012:7).

2.2 Role of Government and Governance of Employee Wellness

Employees are a vital resource in public service delivery and require the need of a government that promotes, protects and advances employee health and wellness in the workplace. It therefore, inherently forms part of public affairs, state (Sieberhagen, Pienaar & Els (2011:1-13). The government of South Africa translates the citizen's needs for a workforce that is fit for purpose, through implementing policies and programs that promote , advance and protect employee health and wellness in public sector departments. Government exercises control over people to bring about order in a particular society where a distinct group of people are allocated the duty to govern that particular society and execute the function of running its public affairs, within the prescribed Constitutional and legal framework. It is at this level of government that the citizen's wishes, needs, preferences and demands are translated through policy and government programs, submits the Department of Provincial and Local Government (2016:29).

In South Africa, employee occupational health and safety in the workplace is protected by a plethora of legislation. Of the many policies and legislation that exists, the Occupational Health and Safety Act of 1993, compels employers to sustain and promote an environment that is for people in the workplace. Therefore, the work environment should be free of risks that

compromise or threaten the health of the workers. Any employer including the public health sector, employing more than 20 workers has to institute a health and safety committee. This labour Act further affords the Minister of Labour access to a council established through the Act to advise on issues pertaining to occupational health and safety matters, quotes Sieberhagen *et al.*, (2011:1-13).

On the other hand, employee health and wellness in the workplace in South Africa is not entirely protected by legislation since certain conditions, like stress caused by work-related factors is not classified a direct hazard in the workplace, although it does affect employee performance and their general state of health. This is purported to negatively influenced the pace depth and scope of employee health and wellness programs in some organization that have not yet adopted robust programs to deal with employee health and wellness in the workplace. The South African workforce enjoys the right to a healthy environment since it is recognised as a human right in the country. These rights that are also enshrined in the Bill of Rights have to be promoted, protected and respected in every workplace, states Sieberhagen *et al.*, (2011:1-13).

To be competitive in the global economy, countries like South Africa and the public sector in particular have to strive to have a healthy workforce. Having a healthy workforce gives a country the competitive edge to survive and dominate in the global arena. A country that adopts good governance principles favourably poises itself to compete in global markets. By adopting good governance principles, a country is empowered to effectively and efficiently execute its political, economic administrative and environmental objectives, states Ladi (2008:7&38). It is undeniable that the public sector continues to dominate in the health society as a major role player that employs large numbers of health workers. Accountability in the public sector is hence elevated in the country's agenda, since the countries taxes are dispensed in the delivery of services. Therefore, it is the political mandate of a country that drives intervention aimed at planned outcomes and impacts through legislation that propels public goods and services delivery to do so effectively and efficiently

The dawn of democracy in South Africa, propelled the country's vision to create a "better life for all". Effective governance remains the most valuable means to give effect to that vision, quotes Van Straaten (2017:21). Responsible decision-making promotes focused, efficient and effective use and deployment of resources that assures accountability. Close examination of administrative practices is inherent in good governance practices, which compel a culture of improved management, performance and addresses corrupt practices. Citizens living in a country governed by good governance practices tend to have a keen interest in knowing how well the public sector achieved its set performance targets, the quality of services delivered (efficiency, equity, economical, effectiveness) and the financial situation of the public sector.

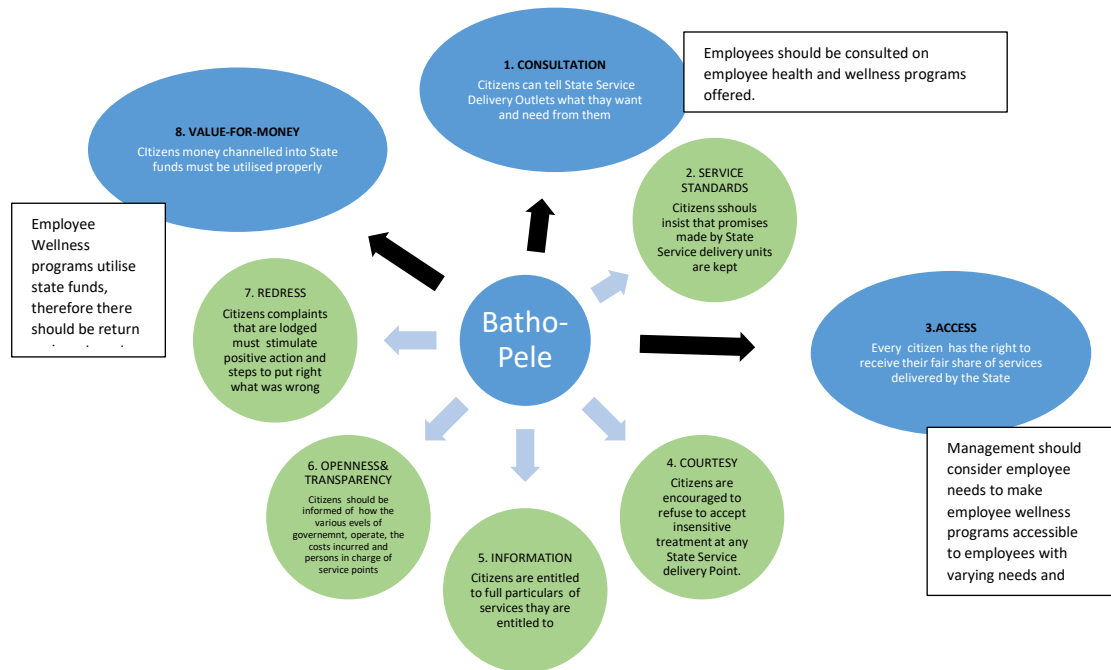
Therefore, the public sector is compelled to be open, transparent, honest and accountable in the administering of its affairs. The provision of information to citizens that depicts the state of affairs in the administration of public affairs is vital in a democratic state. In 1997, the Batho Pele Principles was launched in South Africa to inculcate a culture of consideration and accountability, whilst improving service delivery effectiveness and efficiency in the public sector, states the Department of Public Service and Administration (1997). A discussion on the Principles of Batho Pele follows.

2.3 The role of Batho Pele in promoting good governance in public health

South Africa's history, prior 1994 depicts a legacy of a State that promoted inequality, which reserved good quality service delivery for the white population. A "new" Constitution was adopted in 1996 within the new dispensation, which aimed to transform the government through addressing the imbalances of the past and promoting a responsive government. In 1997, the White Paper on Transformation of Public Service Delivery was adopted, which endorsed the Constitutional ideals to promote professional ethics, responsible, effective and efficient deployment and use of resources, a responsive government, service delivery that is fair, equitable, non-biased and impartial and a public administration that is results-driven whilst promoting and protecting the culture of accountability, transparency and development. Eight Batho Pele Principles were adopted during this period. The term "Batho Pele" is a Sesotho word that means "People First. Placing people first in every aspect of public administration directs the public sector to take into consideration the needs of its internal and external customers in order to respond adequately to their needs. The public served, and various service providers are the external customer whilst the employees are the internal customer. The eight Batho Pele Principles adopted include consultation, service standards, redress, access, courtesy, information, transparency and value-for-money, states the Department of Public Service and Administration (1997).

To demonstrate the link between the Batho Pele Principles and governance in the public sector, 3 of the 8 principles (consultation, access, value-for-money) were discussed in-depth in relation to this study.

Figure 2. 1 Illustration of the 8 Batho Pele Principles in relation to Employee Health and Wellness



Adapted from the South African White Paper on Transforming Public Service Delivery, 1997.

The Batho Pele Principles are contextualised for the study in the discussion that follows:

Consultation

Consultation can be described as a system and process whereby customers are afforded an opportunity to be listened to by public service officials through constant interaction via various forums. State Departments and service outlets utilise various methods of consultation to interact and consult with their users. Some methods implored are through surveys, interviewing of groups, and or individual users, through the hosting of meetings with users of the services offered. During interactions between Public Health service providers and clients, the community served is engaged to discuss standards, packages, avenues and methods of service delivery and quality improvement. Responses are considered and lessons learnt are used to improve service delivery.

It follows that, consultation with employees, employee representatives, supervisors and managers in the delivery of employee health and wellness programs is vital to ensure that the various packages, system and processes involved in the delivery of such programs are influenced by the needs of the employees, states Sieberhagen *et al.*, (2011:305).

Access

Government departments are obliged to improve access to services and remove barriers that decrease access and ultimately contribute to perceptions and alleged denial of access to services offered by government service centres. The Bill of Rights compels the state to adopt measures to provide access to basic services like housing, water, social security and most importantly health care. The Constitution of the country also provides for the implementation of standards to assure equal access to public services. Public Service Regulation 2009 (111:C.1) directs executive authorities to establish and put measures in place to sustain and improve service delivery in their various departments. It guides departments to specify the delivery of services to its prime and potential customers. The Department's service delivery improvement programs must contain arrangements for consultation with identified customers. Of prime importance, is access whereby departments have to identify their customer's means of access and the identification of barriers that hinder their access to services. Furthermore, mechanisms and strategies to remove mitigate or decrease identified barriers to access have to be clearly captured in plans that aim to improve access. The development and marketing of standards, dissemination of information on the services offered to customers and the proviso of a complaints mechanism is promoted, states the Department of Public Service and Administration (2011:11-13).

The promotion of access in the delivery of employee health and wellness programs is therefore, vital to ensure that barriers identified in the delivery of the programs is addressed and removed, thus encouraging employees to enrol, participate and engage in employee wellness programs, state Sieberhagen *et al.*, (2011). In so doing, the public sector is ensuring that the workforce that forms the coalface of service delivery is health and fit to deliver services to the public as and when they are required to do so

Value-for-money

The White Paper on Transformation in South Africa (1997), declares that services should be provided efficiently, effectively and economically so that citizens enjoy the benefits of the highest returns in accordance with the value of state resources both financial and non-financial that are invested or spent in activities that state departments engage in. In order to deliver on this declaration, all state departments should ensure that all procedures engaged in to deliver services are simplified, but at the same time, dissipation of resources caused by wasteful and inefficient practices. (South Africa.1997:15-22.) From a Public Administration point of view, this principle is encouraging managers and accounting officers to meticulously plan for

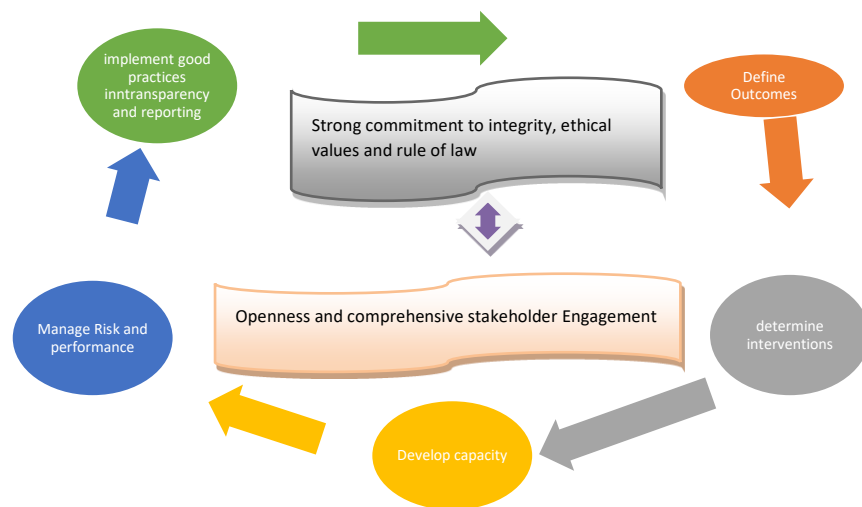
resources. The resources received must be organised and strictly controlled in order to prevent excessive deployment or inadequate deployment of resources.

In delivering employee health and wellness programs, managers should ensure that the value reaped from such programs equate to or exceed the value of the investment channelled into such programs to ensure value-for-money in delivering the program.

2.4 Good Governance Principles

The prime aim of good governance principles in the public sector, is to make certain that public entities act in the best interest of the public, thereby compelling a stringent culture of commitment to integrity, openness and transparency, stakeholder engagement and strong culture of ethics which espouses the prevalence of Rule of Law in describing governance as the exercise of good government, state Walter, Du Randt & Venter (2011:1-6). In the broad sense of the word, it is the mission of running a government which however, remains a fragile process that is reliant on how well the ruler practices self-discipline and the forbearance of those ruled.

Figure 2.2: Principles of Good Governance in the Public Sector



Author's perspective

Employee health and wellness programs utilize public sector allocated state resources therefore, measuring the effectiveness of employee wellness programs is crucial for organizations due to the fact that resources are invested in activities related to employee wellness which should yield a return on investment. Studies relating to employee wellness are crucial in the South African public sector in that it is a contemporary focus area in human resource management. Employers and employees enjoy the benefits that such programs have to offer since it affords employees the opportunity to improve the quality and longevity of their lives.

2.5 Locating employee wellness in public administration

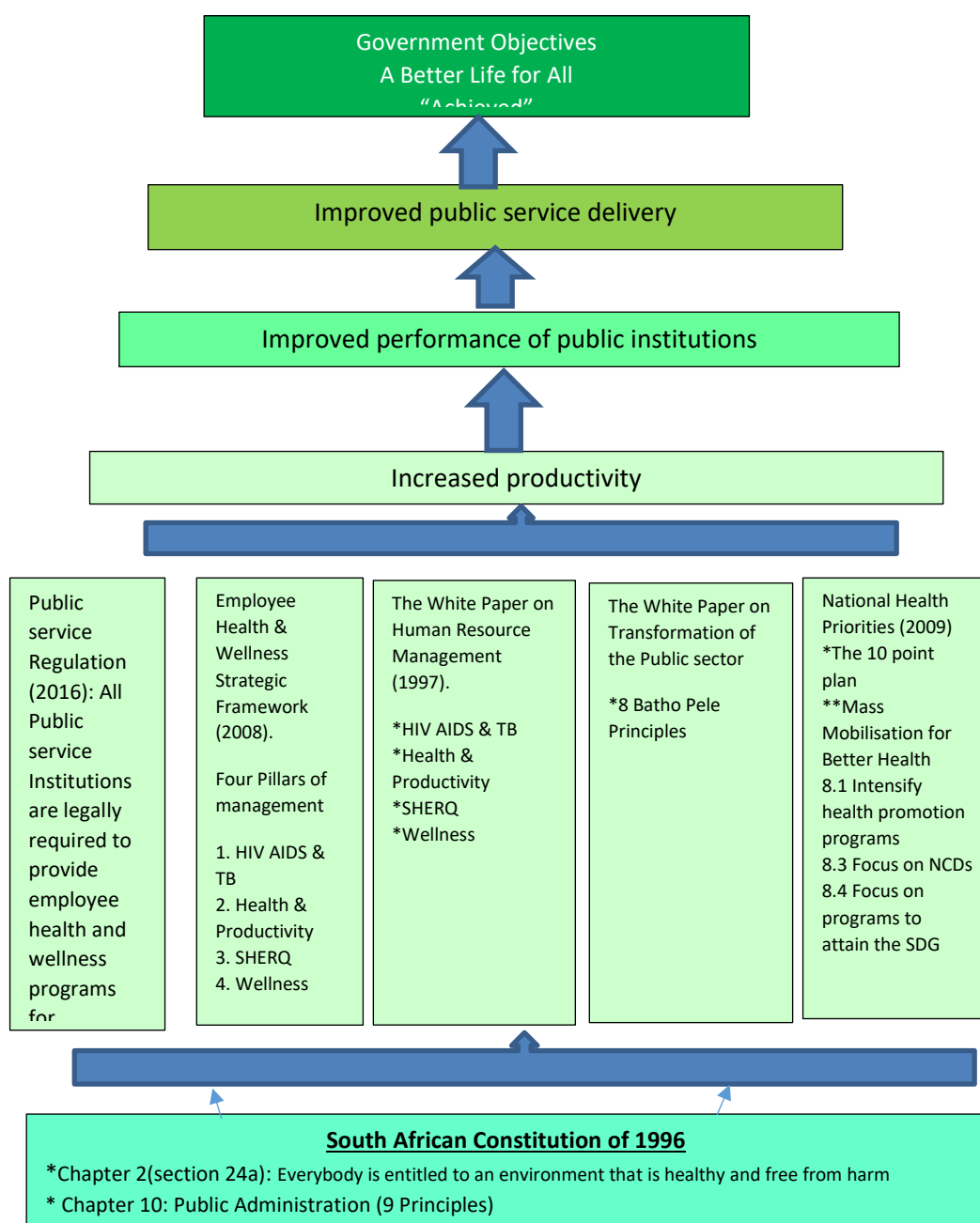
Various definitions and interpretations of public administration exist in literature. However, in this study, public administration was defined as “the governing and administration of public sector human resources toward the rendering of services, with an ultimate objective of improving the quality of life of people served, by formulating and enforcing public policies”. The activities of government engaged is delivered to people through effective and efficient public administration, Morenikeji & Oluwafemi, (2014:69).

New Public Management came into being between the 1980s and 1990s in an attempt to address challenges facing the traditional model of public administration. A renewed focus of managing service delivery in the public sector which places emphasis on results, management responsibility, flexibility in human resource management, monitoring and evaluation of organizational goals and objectives through performance indicators. Accountability and Human resource management are crucial, particularly in the public sector in that the quality and pace at which public services are delivered is dependent on the employees charged with the responsibility to execute duties that deliver public services to citizens, cites Lufunyo (2013:28). This aspect of New Public Management ties in very well with Chapter 10 of the Constitution, which promotes public administration that propels accountability and endorses good human resource management, thus maximising human potential. Having public service employees whose human potential is maximised promotes quality service delivery in that such employees remain effective. Effective employees in an organization are capable of producing work of a high standard, thus benefitting the public served.

2.6 Legislative framework governing employee wellness in South Africa

The legislative framework underpinning this study is delineated in the discussions that follows which is also captured in the illustration in Figure 2.4.

Figure: 2.4 Linking government objectives and public policy in improving employee wellness



Author's perspective

2.6.1 Constitutional focus

The health and well-being of the citizens of South Africa is enshrined in the Bill of Rights contained in the Constitution of RSA 1996: Section 24 & 27(a), that states that "Everyone has the basic right to an environment that is not impairing their health or well-being... everyone

has the right to have access to health care services, as well as reproductive health care, states the (Department of Public Service Administration).

The general duties of the employer to the employee is to provide and maintain, as far as is reasonably practicable, a working environment that is safe and excludes risk to the health of employees...” claims the (Occupational Health and Safety Act, 1993: Section 8).

Accountability, which involves the process of ensuring that resources in the public sector is effectively and efficiently deployed to secure the highest return on investment is encompassed in South Africa’s legal framework. Chapter Ten of the Constitution of South Africa (1996: section 2 a-c) attests to the fact in that it is dedicated to Public Administration enshrining principles that govern public administration. These principles apply to every sphere of government in South Africa and therefore, have a bearing on ILembe Health District, since it is a state institution.

The promotion of efficient and effective use of resources is driven by section 195(1: b) of the Constitution of South Africa (1996). The rendering of accountability in public administration is a legal requirement, that is captured in section 195 (1: f) of the Constitution of the Republic of South Africa (RSA). Consequently, all resources deployed toward fulfilling the mandate of employee health and wellness programs is expected to yield the highest return on the investment made. Resources expended in the employment of staff in the public sector are also expected to yield results that are acceptable and managers have to account for such resources. Henceforth human resource management and performance management in the public sector remains a priority area that is critical for service delivery, alludes Sieberhagen *et al.*, (2011).

The Public Service Regulation (PSR) (2009: sections a & d) and emphasis on the more recent Regulations of 2016 guides the establishment and maintenance of a safe and healthy work environment, and further mandates all Heads of government Departments, to optimally utilize human and other resources to deliver services to the people. The main insertion of this regulation is to enhance the capabilities of the workforce to assist the public institution they serve, to deliver services of a high standard to the community served.

In addition to the above principles, good human resource management is advanced by section 195(1: h) of the Constitution of the Republic of South Africa, which renders effective and efficient human resource management a vital strategic imperative of the country. Managers in the public sector are therefore, compelled to mainstream and prioritize human resource management in South Africa to focus and deliver on this legislative imperative. Embracing objectives of human resource management that is drawn from philosophies that combine the emergence and growth of human resource management as a profession and as a discipline,

assists in realising the organizational vision, mission, goals and objectives of an organization. In so doing, organizations are driven to recognise employees as valuable resources that influence the power of the organizations. This enables the organization to strategically deploy employees to not only realise the organizations strategic intent, but also most make them feel important. Other objectives of human resource management development include the utilisation of staff potential, capacity, commitment and rewards. Benefits of the employee performance management systems are “for the good of the organization and employees alike”. Synergy is created through outdoor training programs, teamwork and quality management to further enhance effective human resource management, submits Gie (2017:2) & Itika (2011:24-34).

The Constitution of RSA (1996: Section 41.1a-b) compels all spheres of government to secure the well-being of people and proclaims the right that people have the right to an environment that is not harmful to their health and well-being. In South Africa, the health and well-being of citizens, is enshrined in the Bill of Rights, contained in the Constitution of RSA 1996: section 24 and 27(a), where it is stated that “Everyone has the right to an environment that is not harmful to their health or well-being... everyone has the right to have access to health care services, including reproductive health care, submits the (Department of Public Service and Administration). The general duties of the employer to the employee is to provide and maintain, as far as is reasonably practical, a working environment that is safe and without risk to the health of employees...” states the (Occupational Health and Safety Act 1993: section 8).

As a result of the above stated Constitutional imperatives, public sector institutions like ILembe Health District are legally compelled to create and sustain an environment that promotes and protects the health of its clients which includes employees. Investing in employee health and wellness programs is indubitably the most appropriate solution to give effect to legislative directives discussed.

According to the chairperson of the Public Service Commission (PSC) of South Africa (Dr R Mgijima), the ability of the South African government to effectively and efficiently deliver on its directive to the citizens of the country lies heavily on the quality of public human resources, which consume most of the State budget. Good human resource management ensures that issues relating to human resources are effectively and efficiently managed through effective systems that address safety, employee wellness inclusive of the management of HIV AIDs and employee motivation, submits the Public Service Commission (2010:ii).

The South African public sector has taken cognisance of the above, and has developed the Employee Health and Wellness Strategic Framework of 2008, encompassing multiple pieces of relevant legislation. This framework aims to improve the quality of work-life of employees,

which ultimately aims to protect employee human dignity by securing employees right to health.

Over and above the policies adopted to advance employee health, South Africa developed and implemented the country's strategic plan for the prevention and control of non-communicable diseases for the period 2013 to 2017. This plan aims to address and strengthen the country's goal of creating a longer and healthier life for its citizens through culminated efforts in preventing non-communicable diseases and the promotion of health and wellness at all levels in society. This includes population-wide, community and individual levels of health promotion. It also supports improvements in the control of non-communicable diseases through the reform and strengthening of the health system. The plan promotes the monitoring of non-communicable diseases (NCD) through the identification of major risk NCD factors and the promotion of related research in the field of public health, submits the Department of Health (2013:7-13).

2.6.2 The Millennium Development Goals

The Millennium Development Goals (MDGs), which set the stage for Sustainable Development Goals (SDGs), embodied human rights such as the right of every human being in South Africa to security, shelter, health and education. To monitor progress linked to outputs and outcomes of programs addressing factors that affect the welfare of the nation, key indicators have been developed which are monitored regularly. Environmental sustainability, health, and education were actively promoted through (MDG targets). Goal Three of the MDGs was dedicated to health issues. The goals enshrined in the SDGs are expected to be met by the year 2030 where healthy lives are ensured and the well-being of all persons is promoted. From a public administration perspective, goal 16 has set a target for all institutions to be operated efficiently effectively accountably and in a transparent manner. The 2015 world public sector report confirmed that the two main principles in public governance is responsiveness and accountability in order to deliver on the social contract that exists between the citizenry and the State and to strengthen collaboration between the two. It gives credence for public health institutions to invest in employee health and wellness programs since the public health sector that provides health care to approximately 80% of the population is dependent on the workforce it employs.

2.6.3 The Sustainable Development Goals

Through the shortcomings of the Millennium Development Goals in realising health-related targets, the Sustainable Development Goals (SDGs) were adopted. The SDGs is a roadmap that countries like South Africa adopted as a strategic pathway for the country and the health sector

in particular. Health is a crucial aspect of human development owing to the fact that it remains an unassailable human right. Economic growth and development of a country leans heavily on a healthy nation. The South African Public health sector caters for approximately 80% of the population health care needs which requires a health system that is performing well. In order to be recognised as a public sector that is performing well, financial and human resource management and good governance must be prioritised. The main aim health care goals of the (MDGs) and the (SDGs) is the realisation of universal health care for all which requires an adequate number of public servants who are fit for purpose. This supports the business case to prioritise the health and wellness of employees in the public health sector through the development of policies that support the (SDG) agenda since government is expected to be the guarantor and enabler that mobilizes resources to deliver quality health care to the public, as reflected in the Sustainable Development Solutions Network (2014:8-12).

2.6.4 Agenda 2063

In 2015, Leaders in the African continent adopted the continents long-term vision (Agenda 2063). This is the 50 year strategic framework adopted by African countries to mainstream and accelerate socio economic transformation and sustainable development in Africa. The key focus of this framework is directed to the citizens of Africa who need to be supported and capacitated to drive prosperity, peace and integration in Africa. A healthy nation is vital to deliver on the seven aspirations. The aspirations adopted were adopted to with an aim to ensure a focussed approach that not only nurtures transformative leadership but drives the agenda and defends Africa's interests. According to the African Union Commission (2015:1-24), the 7 aspirations are

- Shared prosperity and well-being that is grounded in sustainable growth and development. (From a public health perspective, this aspiration embraces a goal of envisioning African enjoying heightened standards of living, good quality of life and sound health and well-being. Employee wellness plays a vital role in delivering on this vision by ensuring that the public sector workforce is healthy, and able to enjoy a god quality of life.)
- Unity and integration for a continent where citizens live and enjoy freedom, expanded horizons, where the full potential of women , youth , boys and girls are attained , without the fear of disease and want.
- A different and better Africa: a prominent partner on the global stage , which makes its contribution to human progress and welfare the top most priority of a country, cites the United Nations Regional Coordination Mechanism (RCM) for Africa (2016:n.p). (A workforce that is able to live free of disease is able to reach their

potential. Employee health and wellness programs that include women's health, contributes to this goal. Workers govern their families' access to health and health-care services. Workers that are healthy, are more than likely to have their families that are healthy and healthy families produce healthy communities, states the (World Health Organization, 2016:4).

- An Africa of good governance, democracy, respect for human rights, justice and the Rule of Law. (Access to health in South Africa is a human right, by promoting employee health and wellness, in the public sector, public institutions are assisting the country to deliver on this goal. Workers represent an easily reached target for health services delivery that is integrated and includes prevention and health promotion, disease detection and disease management in the workplace, states the World Health Organization (2016:5-9).
- A peaceful and secure Africa. The upsurge of violence and conflict has a potential of undermining future development in a country since it overturns hard won economic gains of a country and renders its people vulnerable to illness disability and death, state Marc ,Verjee, Mogaka, (2015:1-9).
- An Africa with strong cultural comprehensibility, shared heritage, values and Rule of Law. (Employee health and wellness programs aim to empower workers to become healthier. Country's that focus on getting workers to be healthy assist the process of reducing social disparity, states to the World Health Organization (2016:4).
- An Africa where the development of the continent is driven by its people, where Africa relies on the potential of its people, especially its women, youth and children. (Healthy people have the potential of driving a country's development since 60% of the world population are workers. Workers in a country support those that are incapable of actively getting involved in work to boost the country's economy, like children, infants and older persons. Therefore workers support the country's entire population, states to the World Health Organization (2016:3), citing International Labour Organization (2015). Therefore, investing in employee health and wellness programs, that aim to improve the health status of workers and public servants in particular, contributes to reaching this goal.
- Africa is a strong, united and influential global player and partner. A country that promotes employee wellness is better placed as a global player and partner, since Healthy economies is dependent on healthy workers. Therefore investments in workers' health is pivotal to enhance productivity and driving of economic progress, states the World Health Organization (2016:4).

For South Africa and the Public health Sector in particular, the Agenda 2063 aligns well with the Department of Health's vision of "a long and healthy life for all" in that:

- The Agenda 2063, assure South Africans of a high standard of living and quality of life, suggests Gray and Vawda (2016:36). In order for South Africa to fulfil this aspiration, it needs to invest in initiatives that ensure sound health and wellbeing for South Africans.
- The expected outcome of such initiatives is a South Africa that is deemed the best performers in global quality of life measures. This can be attained through strengthening public health service delivery that include health and nutrition to state a few.
- This requires highly developed human capital and the recognition that public health employees are a precious resource in fulfilling the above mentioned aspirations. This supports the need for the public health sector to invest in and prioritise employee health and wellness in the workplace, since the country relies on public health human resources to deliver government health services with the aim to improve citizen's quality of life.
- Good governance will have to be driven and prioritised and this is dependent on capable public institutions with transformational leadership at all levels. The vision of having a workforce that is competent and capable of delivering efficient services that delivers the desired results to the citizens must be highlighted.

It stands to reason that agenda 2063 affirms the need for employee health and wellness in the public sector in that Chapter 10 of the Constitution of RSA prescribes a public administration that is effective and efficient and accountable which is one of the 7 aspirations of Africa 2063. Investing in employee health and wellness programs will assist South Africa to increase the pace of realising goals of the agenda through a workforce that is capable and healthy enough to deliver public health services to citizens , attests the African Union Commission (2015:1-24).

2.7 Principal theories upon which the research project was constructed

The following discussion provides clarity on the theoretical and conceptual aspects relating to the study.

2.7.1 Self-Determination Theory and Physical activity

According to in applying Self-Determination Theory to physical activity, one must acknowledge the fact that it is motivated both intrinsically and extrinsically, states Rhodes, Quinlan, Chetan & Mistry (2016:403-406) & Sullivan & Lachman (2016:1-3). In this study this theory, both intrinsic and extrinsic motivation is explored.

Intrinsic Motivation

When a person is motivated to participate in any form of physical activity because of the innate pleasure and enjoyment it affords them, then that is regarded as intrinsic motivation. Merely participating in physical activity is a motivator on its own and may not necessarily require any incentive since the act is pleasurable on its own. Human beings are active living organisms who need to move survive and thrive. Some authors argue that this description stood true during pre-modern times when man had to physically track, identify, find, kill or extract food to survive. In the pre-modernist era, man hunted for food which requires stamina, agility and physical activity. In the modern era, man does not have to be engaged in strenuous activities to feed himself. Food is planted, hunted, slaughtered, prepared and sold to people who do not need to get involved in major physical activity to get food. In modern times, where technology has taken over and food is mostly processed and man need not hunt for food. Services and amenities are being brought closer to people therefore, there is no need to physically walk or run to a food outlet or supermarket to get food. Technology has taken over workspaces rendering them less labour-intensive. People seeking entertainment need not leave the comfort of their couch, because they are entertained by televisions, computers, and other electronic devices that bring entertainment to them, cites by Rhodes *et al.*, (2016:108). In 2006, in context, the World Health Organization confirmed that the fact that fitness levels of the general population in most western countries have declined. In America, approximately one third of American children are overweight and leaning heavily toward obesity. The poor dietary habits adopted by people coupled with the lack of engaging in physical exercise, is threatening the health of most European and Sub-Saharan African countries, state Malan (2014:n.p) & Jensen (2011:184-192). From a health perspective, it is vital to understand the phenomenon linked to poor physical activity and motivating factors that can address this situation.

Extrinsic Motivation

People, who participate in physical activity to be recognised, rewarded or to avoid penalties and punishment, are extrinsically motivated to participate. The wellness movement was adopted after the Second World War, due to the changes recorded in the health of the populace. With advances in the field of medical sciences, morbidity and mortality associated with infectious conditions declined. On the other hand, preventable conditions linked to stressors at work and in life in general increased the burden of chronic and lifestyle illnesses. Therefore, people were living longer, but sustaining their lives became more and more expensive for the state. Efforts to improve life expectancy through health programs that aim at improving the well-being of people was adopted, maintains Maattanen, Vork, Piirits, Gal, Jarocinska, Ruzik-

Sierdzinska & Netspar (2014:1-2); Segue Technologies (2015:n.p) & Miller & Foster (2010:50).

The challenges facing ILembe Health Wellness Programs requires a reasoned enquiry and Vroom's Expectancy Theory of motivation, the role behaviour theory of human resource management and the New Public Governance theories were theorised to contextualise the study.

2.7.2 Vroom's Expectancy Theory

Vroom's Expectancy Theory of motivation assists in understanding ILembe Health District employees' motivation relating to the Workplace Health and Wellness Program. Vroom's Theory suggests that the way an individual acts depends highly on the strength of the expectation that the act was followed by a desirable, given outcome and is based on the degree to which that person desires that outcome", is the view put forward by authors Zabouj & Antoniadis (2015:13-14).

With this in mind one, may extrapolate that if ILembe Health District Employees do not desire the outcomes offered by the programs, then the strength of motivation is very low and if employees' expectations of the outcomes or benefits of the program is low, it has negative effects on the motivation of employees.

Therefore, it is vital that management takes this aspect into consideration, and actively promotes the benefits of the workplace health and wellness program. The intention is to promote wellness programs that are desirable, so as to increase employee motivation levels. In so doing, the program becomes more attractive because employees will regard participation in such programs, as significant for their mental and physical well-being. Additionally, the belief that reward is linked to performance is emphasised whilst increasing motivation levels. The performance links can also motivate employees to participate in weight reduction and physical and mental well-being.

It has implications for management in that they must set attainable performance standards, link rewards to performance support employees and identify and appropriately link personal goals to the organizational goals. For example, targets that are set for enrolment onto the program must be realistic so that it can be attained; supporting employees by allowing a 2 hourly weekly time concession to participate in programs on-duty time. The workforce comprises of young and old persons who are physically and emotionally fit and unfit employees. Therefore, strategically aligning programs to address employee health and wellness and aligning it to the institution's vision and mission, is crucial in any organization.

2.7.3 Role Behaviour Theory of human resource management

“The objective of Role Behaviour Theory is to explicate and predict the behaviour of individuals and teams in organizations. When managers are able to explain and gauge individual and team behaviour related to choices and needs in employee health and wellness programs, they in turn are better placed to make informed decisions about the program design. Over and above this, such knowledge can be utilised to further influence action plans that influence expected outcomes of improving the working environment. The plans developed should include resources needed for employee health and wellness programs. In order to stimulate new behaviour in employees, it’s important to look at employee’s ability to cope with new demands. Program plans should include the use of rewards to induce and promote positive work behaviour, cites Batorsky (2016:2) & (Itika, 2011:20). The application of this Theory is vital in ensuring improved outcomes of the health and wellness programs in ILembe District in those managers who develop policies and plans to address worksite health wellness programs would make informed decisions in that they would have a better understanding of employees’ behaviour regarding health and wellness. Managers would also use this theory to plan for rewards that may influence employees to participate in the health and wellness programs. For example, managers may budget for tokens in the form of t-shirts, caps and water bottles or certificates, for employees participating in the program.

2.7.4 The internal marketing concept

Three intertwined phases exist in the internal marketing concept, which focuses on the employee satisfaction, the customer and the strategy implementation or change management phase to appropriate the study.

Employee satisfaction phase

Firstly, the key assumption that exists in the internal marketing view is that if an organization aims to have satisfied customers, then that organization must ensure that it has satisfied employees. Employees are the first market of an organization that exists to deliver services to people therefore, employees must be viewed as internal customers. It is therefore imperative that managers recognised that achieving a state of human resource management where employees are motivated, health and focus on customer care is critical. In so doing, public administrators who aim to improve employee satisfaction would invest in health and wellness programs that satisfy employees are subscribing with the internal marketing concept of motivating employees. Bojarskyte (2017:12). Employees should be treated as customers. Customers in general, purchase goods and or services. Organizations that aim to please customers deploy the best employees to be in contact with customers to improve sales and

improve service delivery. In the public sector, employees serve clients and if they are satisfied then client satisfaction improves.

When an organization treats employees as customers a different approach from Human Resources Management is needed. The use of internal marketing techniques can also be used to attract and retain customer-orientated employees whilst improving co-ordination between contact (employees) and support staff (Human resource officials), especially employee wellness champions, cites Vershinina (2017:5).

Therefore, from an employee health and wellness perspective, it is vital for managers to focus on initiatives aimed at employee satisfaction with the in-house health and wellness program.

Customer-orientation phase

Secondly, contact employees are inherently involved in internal marketing and should be responsive to customer needs. Customer conscious and motivated employees are therefore vital in implementing the internal marketing concept, cites Vershinina (2017:5).

Strategy implementation and change management

Lastly, the internal marketing strategy can be used to motivate non-contact employees to behave in a manner that improves the service for end-customers. It therefore, implies that there should be more emphasis on the responsibilities and actions that need to be undertaken for the effective implementation of marketing and other programs to achieve customer satisfaction. In other words, focus less on the principle of the employee as a customer but recognise the central role of employees,” states Vershinina (2017:5).

Friedman (2003:1-11), states that “central intellectual issues come into focus as the field and discipline on which it rests shifts from a rough, ambiguous territory to an arena of reasoned inquiry”. Employee health and wellness in the public sector in South Africa forms part of the public administration field which requires studies like these to mainstream it as a priority program in promoting public health in the public sector.

Implementation of the organizations strategy involves a process of transformation of the strategic plan (“dead aspect”) to actions (“alive aspects”). Furthermore, to realise the set goals of employee health and wellness, management must be confident in the activities adopted in the plan. The new strategies to be adopted by the organization, must be accompanied by changes in the structure and processes within the organizations health and wellness programs, state Markiewicz (2011:262-266); & Sieberhagen *et al.*, (2011).

In ILembe Health District, managers should recognise the central role played by employees in the service delivery aspects and should treat them like customers. It is crucial to effectively and efficiently implement the organizations strategies for improving employee health and wellness programs. Capitalising on the internal marketing strategy can also assist in implementing appropriate initiatives that satisfy employee health and wellness needs in ILembe Health District.

2.8 Conclusion

This chapter highlights the association between employee health and wellness, constitutional imperatives and public health, within a public governance perspective. The government of South Africa plays a pivotal role in the governance of employee health and wellness in general and in the public health sector in particular. Government policies aim to advance the Constitutional right of health to citizens in South Africa. Furthermore, transformation of service delivery in the public health sector remains a priority. The New Public Management system adopted in the public health sector advocates for the efficient and effective delivery of public health service delivery to citizens. The effective and efficient delivery of public health service delivery is reliant on employees who are physically and emotional fit to execute their duties.

An Association is drawn between the principles of New Public Management, Chapter 10 of the Constitution, and the Batho-Pele Principles. Public administration that is propelled by accountability and good human resource management that maximises the true potential of human capital ensures that services offered are of the highest quality and that the public health sector acts in the best interest of the citizens it serves. Improvement of the health of citizens and employees remains a focal area of concern in the Africa 2063 Agenda, the MDGs and SDGs framework. The main health care goals of the (MDGs) and the (SDGs) is the accomplishment of universal health care for citizens. Public health sector employees remain an important vehicle to deliver on the vision of universal health care for all. Therefore, public health departments like ILembe health district requires adequate employees who are fit to deliver services to the public. It is therefore important that public health departments develop policies that support the (SDGs), (MDGs) and Africa 2063 agenda. This advances the government's role as guarantor, enabler and mobilizer of resources aimed at quality public service delivery. It is therefore, undeniable that employee wellness programs are not only beneficial to employees, but also the employer. Therefore, participation in the program must be supported, monitored and promoted to stimulate the individual and organizational goals for a healthy workplace.

It is also vital to concentrate on the employee's cognition that affects their responses to a program like the workplace health and wellness program. Consequently, the chapter that follows focuses on employee health in the public sector.

CHAPTER THREE

EMPLOYEE HEALTH IN THE PUBLIC SECTOR: NATIONAL AND INTERNATIONAL PERSPECTIVES

3.1 Introduction

This chapter encompasses a review of literature having a bearing on this study. It includes reviews of related research studies, published articles and books, which highlight the importance of the study. The literature reviewed also assisted in comparing results of previous studies, and further expanded the exploration of various angles to address the research problem of this study.

3.2 A Global history of employee health and well-being

Harlin (2013:1-5), finds that minimal research has been conducted to ascertain employee perspectives on workplace health and wellness programs. It has been discovered that less than 10% of employers in America offer a comprehensive package of employee wellness programs. It must be acknowledged that in the USA, employee wellness programs evolved from occupational safety programs in 1970 as a tactic to create a culture of health care that also assists in decreasing health costs, states Harlin (2013:1-5).

Kirsten & Karch cite Bucks consultants (2009) that Europe did not embrace employee wellness programs as rapidly as the American nation, which contradicts most beliefs that Europe trailed ahead of most countries in implementing employee health and wellness programs. The literature reviewed revealed that European countries identified this practice as off-limits, in that they believed that an individual's health status was personal and had nothing to do with the employer. This stance insinuated that employers had no business enquiring about, assessing and planning for their workforce health needs, which hampered efforts to improve employee health and wellness programs. In the 1970s, America opened its first wellness centre in Mill Valley, California, where people were taught to be well rather than be treated for illnesses.

In the United States of America, employee health and wellness has been prioritised by the government and it has yielded results. The country adopted the Healthy People 2020 Goals, which prioritised health promotion aspects of employee health and wellness. A goal of 85% was set for organisations employing 50 or more workers to implement health promotion activities. This goal was exceeded in that approximately 95% of organisations employing 50 or more workers, were discovered to be implementing one health promotion activity at the least. In crafting these goals, the country recognised the findings of the 2006 surgeon general report on the involuntary exposure to smoke and incorporated strategies to address secondary and

primary smoking in the workplace. The Healthy People 2020 Goals includes resolute strategies to improve access to workplace wellness centres, influenza injectable (flu-shot) clinics and programs aimed at the cessation of smoking (Jones, 2016:15-16).

In addition to adopting the Healthy People 2020 Goals, the government of the United states of America, has committed funding for wellness programs and resources aimed at research initiatives on the implementation of the program. Results of such research is utilised to improve the state's response to needs in the health and wellness program guidelines, framework, and the monitoring and evaluation of outputs outcomes and impact. Currently in the United States of America, smoking is prohibited in workplaces to protect workers from secondary smoking and also to address the cessation of primary smoking amongst workers. In public sector organisations (federal agencies), employee health programs are mandatory for employers. The agencies were also granted approval to develop and erect fitness buildings on the premises to improve access to health and fitness centres (Jones, 2016:15-16).

In South Africa, literature reviewed revealed inadequate studies in the KwaZulu-Natal Province or ILembe Health District in particular, on this phenomenon. Most documented studies were conducted in American and European countries. This situation prevails because of the discovery of documented evidence that can be tracked to the end of the 19th century in the United States. American Employee assistance programs in the work environment were implemented with the aim of targeting social and personnel betterment, counselling for occupational and mental health, and management of alcoholism, according to Sonnestuhl and Trice (1986:3). Sieberhagen. (2011:2) finds that there is documented evidence of South Africa's employee wellness programs emerging in the 1980s. Furthermore, it was discovered that employee wellness programs in South Africa was initiated by the Chamber of Mines of South Africa after a feasibility study was conducted. There is evidence that the program did not record immediate gains due to employee suspicions and lack of trust regarding confidentiality in the program. Employees also regarded the program as a further demand by management. This slow pace of adopting employee wellness was evident in the 1992 Terblanche survey, which revealed that only 69% of surveyed employers offered direct assistance to employees to access employee wellness programs. Furthermore, approximately half of those companies that were offering direct assistance had formal programs in place. It is the researcher's view that South African organizations were "late bloomers" who did not heed to the call and procrastinated in implementing well-structured employee wellness programs.

Organizations like ILembe Health District could draw from the Canadian experience which documented the main reasons for poor staff retention as being due to increased sick leave

directly linked to work induced stress, burnout and musculoskeletal injury (World Health Organization, (2006:106). The need for wellness programs cannot be over-emphasised.

3.3 Defining Employee Wellness

It is important for this study to provide a definition of employee wellness since it remains a vague and ill-defined term, which many authors define differently. This could be attributed to its close relations to corporate health care programs that focus primarily on employee assistance and health insurance. However, for purposes of this study, employee wellness program is defined as “promoting healthy behaviours and correcting employees’ poor health by utilising methods that also enhance the operations and productivity of the organization. Worksite wellness programs can include a wide-ranging of activities from smoking cessation to physical fitness centres...” (Call, Gerder & Robinson, 2009:3).

Health promotion and wellness programs have the potential of awarding organizations the competitive edge in that the human capital perspective classifies expenditure on such programs as investments in human capital, which also reassures employees that their work time contributes to their development and improves their levels of commitment state Harbin (2016:1-10); American Psychological Association (2007: n.p.) and Ginn & Henry (2001:1).

Workplace wellness can also be defined as a structured program that is funded by the employer with the principal aim of engaging and supporting employees to adopt and sustain a lifestyle that promotes healthy behaviour. The program may be extended to include the employees’ family members which helps sustain healthy choices beyond the workplace. Benefits of the program include the reduction of health-related risks, the improvement of personal effectiveness at work and at home, and financial benefits to the employer. In adopting a wellness program, employers directly and indirectly advance benefits to the employer, employee and their families. Therefore, employers hold a key position in employee wellness programs, submits Berry, Mirabito & Baun (2010:12).

3.4 Tracking the roots of wellness

Human beings have supported efforts to stay healthy throughout the generations. This trend can be traced back 3000 years ago to ancient cultures, in the United States of America, Asia and Greece. Pre-historic cultures adopted a system of ancient medicinal practices that promoted and maintained health, health promotion and well-being. The system of health adopted during that era acknowledged the fact that health is not merely the absence of disease, but a synchronised balance between the body, mind and spirit, state Amzat & Razum (2014:21), who also cite the World Health Organization (1948). Priority was placed on lifestyle where a human being strives to strike a balance between, diet, exercise, adequate sleep, self-restraint, prayer

and meditation through the promotion of positive healthy thoughts and emotions. This definition of health that was adopted in 1948 by the World Health Organization has transcended many generations and is still valid in this modern era. Health is still defined as “a state of complete physical, mental and social well-being, and not simply the absence of diseases and infirmity” World Health Organization (2006:1). A holistic approach to health care was promoted then and remains a priority in health care service delivery.

Hippocrates, who was hailed the Father of Western medicine in Greece, promoted fundamental principles of healthy living when he stated that the importance of understanding the type of person presenting with a disease rather than understanding what sort of disease a person has contracted, according to Kleisiaris Sfanianaius & Papathanassiou (2014:6-8). In this era, this approach to health is still valid as in the South African approach, primary health care is being promoted which is primarily family, household, ward, and community-based. Health care approaches in the primary health care setting, are practised taking in cognisance community and household profiles which have a bearing on health outcomes. Community-based structures like “Operation Sukuma Sakhe (OSS)”, a Zulu term for *Rise Up and Build*, is adopted, where all stakeholders are engaged at municipal ward level to address health, social and other community challenges using a multi-level, multi-spectral approach. The five critical areas of the OSS approach is community partnerships, behaviour change, and integration of government services, economic activities and environmental care. The top five priorities aim at rural development, agrarian reform, the creation of decent work and fiscal growth, managing of crime, education and health (Department of Human Settlements, Province of KwaZulu-Natal, 2013:1-5). These priorities affirm the Hippocrates principle discussed previously.

The history of wellness in India encompasses “the science of living in a quest for longevity... where the use of yoga, meditation and Ayurveda (a system of medicine), is promoted...” The practice of yoga and meditation for fitness combined with a vegetarian diet, the management of stress and improving human potential, still forms part of many wellness programs in many countries.

China has a rich ancient history of health and wellness, which promoted a holistic system which embraces herbal medicine, diet, acupuncture and *qigong*, which is aimed at managing internal energy. This practice has survived the generations and is still practised in this era through Tai Chi, which is a form of martial arts (Strohecker, 2015:1-6).

Strohecker (2015: 6) supports Dunn’s definition of wellness which is an “an integrated method of functioning, which is orientated toward the maximisation of a person’s capability, within the environment where he is functioning”. This definition affirms the aim of employee wellness,

as it seeks to improve and promote the health of employees in the environment where they are found, which is the workplace for employees.

The aim of introducing worksite wellness programs has always been to improve the health and well-being of employees and reducing absenteeism, while lowering health insurance premiums. Studies undertaken on the relationship between ill-health and absenteeism reveal a significant link in that employees whose health status is poor have higher absenteeism rates than those with better health status, submits Singh, Chetty & Karodia (2016:107-109). This notion is supported by Mudge-Riley McCarthy & Persicheti, (2013:30), who state that employers who invest in employee health and promoting are confirming the organization's commitment to promoting and advance improvements in employee health. Such organizations tend to have employees on their pay roll who are "eight times more likely to be engaged and 1.5% more likely remain employed by that organization. Employees are fervently seeking employment in organizations that care for their needs and are genuinely interested in their health needs" Mudge-Riley McCarthy & Persicheti, (2013:30). In such an environment, an added altruistic benefit of the creation of a healthier workforce, in turn translates into a country with a healthier population. This statement is supported by Quintiliani, Sattelmair & Sorensen (2009:7), who state that "Workplaces are noteworthy settings for health promotion and disease prevention. Therefore, workers need to be given the opportunity to make healthy choices in the workplace in order to moderate their exposure to risks, whilst at work."

In the 1980s, South African Employee wellness programs were plagued with employee resistance as it was perceived as a program for alcoholics, which was being forced upon employees despite it being tainted with high levels of confidentiality, as asserted by Sieberhagen (2011:2). This has changed somewhat over the years, though ILembe does not exemplify drastically changed ideas.

However, there is a renewed focus within the South African dimension on improving employee wellness programs after it remained on the agenda of human resource management in organizations for several years, which can be tracked as far back as the Agrarian era in the 1800s. During this era, society relied primarily on cultivating crops through ploughing of fields for their subsistence, suggests Edelman (2013:10).

Thus, Employee Assistance Programs (EAP) emerged in the 1980s in South Africa, with the aim of dealing with various employee problems that hindered productivity in the workplace. The KwaZulu-Natal Provincial Administration Wellness Management policy (2011:15) states that the principle of wellness management involves striking a balance between employer and employee responsibilities in work-life balance programs.

Studies relating to employee wellness are crucial in South Africa, since it is a contemporary focus area in human resource development. Physical fitness through exercise enhance the ability to boost the cardiovascular, endocrine and musculo-skeletal system whilst also controlling weight and reducing stress.

The South African Public Sector 2008 Employee Health and Wellness Strategic Framework encompasses multiple pieces of relevant legislation. This framework aims to improve the quality of work-life of employees, which ultimately protects employee human dignity through securing employees' right to health. Priority areas of the framework included integrated, needs-driven, participative and holistic management of HIV and AIDS, tuberculosis, health productivity, safety, health, environment, risk, quality and wellness (Department of Public Service and Administration, 2008:4-7). The KwaZulu-Natal Provincial Administration adopted the Provincial Wellness Management Policy in August 2011, and the KwaZulu-Natal Department of Health in turn adopted and implemented Employee Health and Wellness Policies in May 2012. ILembe Health District adopted, Provincial policies in 2012. Furthermore, gymnasium equipment was procured and permitted 2 concessional hours were permitted for employees to participate in physical fitness programs. One would expect that employees would take up the opportunity, given that private institutions and gymnasiums offer costly services. However, the ILembe Health District 2012/13 quarterly report recorded a diminutive 12% enrolment in the physical fitness programs with employees utilizing the wellness clinical services primarily for pre-employment screening. Concerns have been raised in management forums regarding existing trends in staff utilization of the employee wellness programs.

The objectives of the first pillar that deals with HIV/AIDS and Tuberculosis program is to prevent new infections, support HIV/AIDS infected and affected employees, and increase access to medical care and support in the workplace. Reports show that there is compelling evidence that communicable conditions exacerbate chronic diseases and *vice versa*. Diabetic clients have a 1 in 3 chance to contract tuberculosis and HIV positive clients receiving antiretroviral therapy are more prone to contract diabetes and cancer. Therefore it is vital in South Africa that the pillars of the employee wellness program specifically target the management of Tuberculosis and HIV/AIDS, state Harries, Kumar and Zachariah (2015:1-4).

Health and Productivity Management is part of the second pillar of the framework and deals with the integrated management of non-communicable conditions, chronic diseases, occupational injuries and disease and disability in the workplace. The aim thereof, is to promote and uphold the general health of employees through preventing ill-health. The methods and interventions implored to promote employee health are expected to be timeous, appropriate and targeted in order to, increase awareness. Additionally, a need exists to improve education and

support that assists in mitigating the effects of communicable and non-communicable conditions including the productivity and quality of life of individuals. Coffeng, Boot, Dujits, Twisk, van Mechelen & Hendriksen (2014:1-9), support this notion by explaining workplace health promotion programs as combining educational and environmental support for actions and conditions of living that benefit health.

The KwaZulu-Natal Provincial Administration adopted the Provincial Wellness Management Policy in August 2011, and the KwaZulu-Natal Department of Health in turn adopted and implemented Employee Health and Wellness Policies in May 2012. ILembe Health District adopted provincial policies, procured gymnasium equipment and permitted 2 concessional hours for employees to participate in physical fitness programs. By introducing these changes, an expectation was created by managers that employees would take up the opportunity of joining the program, in light of the fact that private institutions and gymnasiums offer costly services. However, district quarterly reports in the 2012/13 financial year revealed low enrolment in the ILembe Health District physical fitness programs. Further analysis of the trend revealed that employees were primarily utilising the employee wellness clinical services linked to conditions of service that prescribe pre-employment medical assessments. Managers in the health institutions raised concerns of the existing trends of staff utilization of the in-house employee wellness programs, which required further investigation.

3.5 Importance of Employee wellness

The aim of introducing worksite wellness programs is to improve the health and well-being of employees and reduce absenteeism, while at the same time, lowering health insurance premiums. There also exists an added altruistic benefit of the creation of a healthier workforce, whereby it has a potential of translating into a healthier population, states the Department of Labour (1993). People need to be given the opportunity to make healthy choices in the workplace in order to reduce their susceptibility to health risks. Asif (2014: 1-5) confirms that exercise does reduce the risk of contracting preventable conditions like heart attacks as it stimulates one's body to develop secure arteries that assist the heart to bypass unhealthy arteries. The author, Asif 'further states that a person who exercises assists the body to effectively remove bacteria, toxins and waste much faster because exercise improves the flow of the lymphatic system.

Life choices early in life have the potential of affecting a person's health status. In some schools in America, the Choice Control and Change (C3) science curriculum is taught in schools to improve weight-related behaviours of high risk young people, attest Akabas, Lederman & Moore (2012: 419). This view is supported by the OECD (2010:13-68), which states that there

is a rapid increase in the choice of sedentary lifestyle and diets, which is increasing the prevalence of diabetes in 20 to 79 year old people. People who chose to miss breakfast are exposing themselves to lower energy intake which has a potential of destabilising his/her whole day energy intake requirements state Schusdzjarra, Hausmann, Wittke, Mittermeier, Kellner, Naumann, Wagenpfeil & Erdmann (2011:2-5). The omission of traditional meals (breakfast, lunch or supper), in a day results in reduced consumption of energy generating food, vitamins and essential minerals, which increases the collection of adipose tissue. The increase in adipose tissue predisposes a person to insulin resistance and cardio- metabolic health risks state Pendergast, Livingstone, McNaughton (2016:2). People who are sedentary consume very little to no fruit and vegetables, and are prone to nutritional deficiencies, since nutrition is a vital determinant of health. In the United Kingdom, the prevalence of diabetes in 2009 was recorded at 4%, with 10% thereof being diagnosed as type 1 and 90% as Type 2 diabetes, submits the Diabetes U.K. (2010:4).

Williams (2011: 13-14) cites the Centre for Disease Control (CDC) identifying health risk behaviours linked to lack of adequate exercise, balanced nutrition, and the intake of habit forming substances like alcohol and cigarettes as the 4 major health risk behaviours that can be altered through prevention strategies.

Evidence of a positive relationship between the benefits of mental health and physical activity is found in the results of several studies and clinical trials. Results of clinical trials confirm that benefits that can be derived from physical activity incorporate improvements in a person's mood, reduction in stress, anger and depression and the assurgency of anxiety. There is also documented evidence that exercise has the potential of reducing the risks and symptoms of Alzheimer's and Parkinson's disease, although the direct cognitive processes have not been established. The recommended amount of physical activity in adults below 65 years of age is 30 minutes moderate intensity exercise for 5 days a week, and 20 minutes of vigorous intensity exercises 3 days a week. For adults with chronic skeletal or muscular conditions like arthritis, the above exercise recommendation applies together with balance exercises.

Coffeng *et al.*, (2014:9) state that there are three types of worksite interventions that adopt informal, environmental, policy, behavioural and social approaches. The literacy approach aims to change knowledge and attitudes regarding the benefits and opportunities existing for physical activity and healthy nutrition. If the aim is to teach people the behavioural skill that necessitates adapting their behaviour to enhance physical activity and fitness, then the behavioural and social approach is needed. The environmental approach deals with the changes needed in the physical environment. Adoption of this approach would address needs related to the creation and sustenance of an organizational environment that provides safe, attractive, convenient

spaces for physical activity. These spaces may include safe attractive staircases, walking, jogging or running tracks and physical fitness facilities and equipment. This information is crucial for management to consider when planning suitable exercise programs for people in the workplace, so that it yields the highest return and takes into account safe exercise thresholds.

Lowe (2014) promotes the notion that healthy behaviour reduces the risk of health problems, where wellness is promoted and ill-health is prevented. Twenty years after the 1967 Whitehall study, trends relating to smoking showed a decline, which attests to the fact that if a person understands the dangers and benefits of unhealthy behaviour, they intentionally chose a health option. The study revealed that the decline was less significant in lower level workers and women. This fact is crucial to take into account when developing programs to address smoking amongst workers. The study did confirm that the consumption of small amounts of alcohol (wines and beer) was proven to be beneficial for the coronary system. An interesting phenomenon was discovered, where alcohol intake amongst higher level workers was recorded as being higher than lower level workers. It was, however, discovered that lower level workers consumed alcohol less frequently, but consumed larger quantities when engaging in alcohol intake. The health concerns around frequent intake of alcohol were linked to stress at work and related absence from work. Dietary habits were also researched and it was discovered that higher level workers were found to be more likely to choose and adopt health diets which resulted in higher levels of protective High Density Lipoprotein (HDL) cholesterol found in blood results of higher level workers. Regular moderate exercise was found to prevent non-communicable conditions, states Lowe (2014:1-8).

It is undeniable that a healthy workforce is a productive workforce; therefore many successful organizations are investing in employee health and physical fitness programs. Employees who adopt a sedentary lifestyle and chose not to participate in employee physical fitness programs expose themselves to contracting non-communicable diseases that silently kill and debilitate them. Physical activity has been scientifically proven to be the most potent and reliable antidote to prevent the occurrence of life threatening conditions preventable conditions linked to inactivity, suggest Chung *et al.*, (2017).

People who live sedentary lifestyles, eat unhealthy meals, adopt unhealthy habits and consume tobacco and alcohol products are becoming increasingly vulnerable to chronic non-communicable diseases (NCD). Chronic NCDs are featuring high on the world's agenda due to their debilitating effects that are known to cause premature disabilities and death. The effects of preventable NCDs is proving to be economically and socially devastating to many countries, organizations, communities and families. It has the potential of increasing the need for early retirement and disability, reducing household income, diminishing workforce productivity,

participation and stability. Health experts and policy makers recommend that the prevention and management of NCDs be handled collaboratively through government, civil society, business and non-governmental organizations. In so doing, opportunities would be created for people to live and remain healthy wherever they are, suggests Busse, Blumel, Scheller-Kreinsen & Zetner (2010:16).

Countries, communities and families are built and thrive off its people's labour skills, talents and strengths. The Gross Domestic Product (GDP) of a country is crafted purely from its natural resources, industrial production and the delivery of services by State, Private and Non-Governmental organizations. An organization's profitability and global market status are key to its survival. The people that these organizations employ are its 'life-blood' and the more productive they are, the more successful and resilient the organization becomes in the global market arena. A workforce beleaguered with employees suffering from NCDs affects the organization's ability to get the highest return on investment: it loses hours, money and time when employees are ill. People who work, spend one third of their lives at work, therefore the prevention of chronic diseases has become a major focus area for employers throughout the world. This positions the workplace as an ideal environment to contribute towards the promotion of good health and well-being of the adult population. At the same time, it is vital that employees fully participate in programs offered to attain the highest return on workplace health and wellness investments.

Hence, organizations possessing a vision to succeed choose to invest in the health and well-being of their employees through strategically designed employee health and wellness initiatives. Such organizations reap the benefits of functioning with employees who are fit for purpose. On the contrary, organizations that operate with employees who are unhealthy and chronically ill, run the risk of enduring the related negative economic and work performance effects that seriously threaten the organizations ability to compete and survive in the global economy.

Health care costs in America were projected to rise by 7.5% in 2013, which was reported as three times higher than the inflation rate. More than half of employers surveyed, planned to expand health and wellness programs since it was believed that it could reduce the need for medical services, submits Morgan (2013:1). This perception is supported by many authors and researchers. However, it has been discovered that long-term effects on some organizations may result in financial challenges in sustaining the programs (Isaac, 2016:13-16).

Burton (2008:3-17), states that employers continuously hire employees who enter the workplace and bring multiple, diverse factors of a hereditary or personal nature. Sieberhagen

(2011:3-13) supports the notion that these factors include health practices, beliefs attitudes and values that may promote or hinder employee health and wellness efforts. It is vital for employers to take cognisance of these factors when planning programs for employee health and wellness. The workplace can also affect employee wellness as it has the potential of affecting employee psychological, physical and social well-being. It is documented that the employer has total control over factors in the workplace, and can influence those factors that employees bring into the workplace. Although employee representative believe that employers have a moral obligation in ensuring that employees who leave their workplaces leave as healthy as they entered, it is also the employee's responsibility to improve and maintain a healthy lifestyle. Since employers have a social responsibility to improve and maintain the health of their workforce, they are encouraged to promote a healthy workforce. This can be achieved through creating and maintain an organizational culture that values employees, protects their health and ensures a physical work environment that is free of health hazards.

Studies conducted on the impact of employee participation attest to the fact that employees spend majority of their waking hours at work, therefore workplace wellness programs are well placed in improving the health status of individuals. Some organizations are faced with challenges of low participation levels that are attributed to multiple factors.

America adopted the Healthy People 2020 Program, which outlined five key elements that all employers must implement in order to qualify as an employer that provides a comprehensive employee wellness program. The elements included health education aimed at health behaviour change; a work environment that was supportive; an employee wellness program that is reflected in the organizational structure; health screening and employee assistance programs, according to Harlin (2013:6). Therefore, it is vital that this study acknowledges the role of incentives, availability of resources, organizational policies, field experiments and corporate culture.

3.6 The role of Incentives

An organization's policies may also act as motivators to employees to participate, for example, if employees are allowed to cash sick days or convert it to vacational leave days. Such policies may also assist in improving absenteeism rates. Harlin (2013:28) states that incentives may not necessarily mean rewards, it can also include punishment. Employers that adopt this method can increase levies for unhealthy lifestyles like smokers, and employees not enrolled in physical activity programs.

Organizations that implement health and wellness programs in the workplace and assume that all employees will participate are misguided. Tangible or intangible financial or non-financial

incentives have a direct effect on motivation to participate in programs. The organization's policies may act as motivators for employees to participate by facilitating financial rewards and wellness benefits. Money motivates employees and policies that promote health and wellness afford employees the opportunity to take home more money through the cashing of unused sick days, or increased take-home pay. Some organizations allow for the conversion of unused sick leave to vacation leave days, which also assist in improving absenteeism rates. Perez-Calhoon (2017:2) and Harlin (2013:28) state that incentives may not necessarily mean rewards, it can also include punishment.

3.7 Availability of resources

The lack of resources may result in employees being disillusioned, which in turn affects levels of participation and the rate of enrolment. The study conducted by Harlin (2013:5) bears testament to this, as participants revealed that internal factors including the lack of funding, and dedicated staff to manage and promote wellness programs. Participants also reported the short time that was made available for them to participate in such programs. The wellness coordinator also attested to the many challenges that existed in servicing many units at the same time.

3.8 Organizational policies

Ferrie (2004:19) states that policies developed should take into cognizance the fact that people's behaviour is influenced by their working and living conditions. Health promotion should include strategies and tactics to prevent and reduce smoking and alcohol intake to prevent workplace hazards, accidents and poor work performance. Vending machines should contain healthy snacks and soft drink dispensers be replaced by water dispensers. Exercise should be encouraged through workplace gymnasiums, provision of racks for workers and bicycle tracks for those opting to cycle.

3.9 Field experiments

Well-defined field experiments are important to gauge the outcomes and effects of the program on employee health status. Positive outcomes of employees enrolled can also act as a stimulant to others to enrol, but the opposite may also result in slow or reduced enrolment in programs. For example, a cleaner who does physical labour may have different health needs than an office worker, who sits for the majority of the day.

3.10 Corporate culture

Corporate culture may also affect employee participation positively or negatively. Management structure that invests in workplace employee health and wellness programs and creates a

corporate culture that values the promotion and maintenance of good health, lays a firm foundation for wellness in the organization, submits Benavides & David (2010: 291-306) and Kaspin, Gorman & Miller (2013:n.p.). Organizations can make use of social media, internal and external marketing of programs and successful outcomes, as well as competitions to encourage enrolment to improve outcomes, increase enrolment and sustain programs. In designing programs to address employee health and wellness, it is important to customise incentives into such programs, suggests Batorsky (2016:13-14).

3.11 Monitoring and evaluation of the wellness program

It is vital that organizations monitor implementation of programs it invests in to gauge the return on investment. Evaluation of the program assists both the employer and employee to measure successes and failures of the program. Evaluation of the programs has proven to be a strong influence for healthy behaviour in those improvements in employee health status recorded, which motivate both parties, maintains Williams (2011:39).

3.12 Increasing employee enrolment

3.12.1 Health Belief Model

It is vital to understand an individual's health-seeking behaviour if one is to plan interventions to improve an individual's state of well-being.

Many theories exist to explain human behaviour in relation to their state of health. Many models exist; however, the health belief model is the most reviewed. The model is deeply rooted in the public health arena. Social psychologists Hochbaum, Rosenstock & Kegels developed the theory in response to a failed initiative of providing free tuberculosis screening. The theory aimed to predict the likelihood of people using vaccines and screening tests to prevent ill-health. This theory advocates the belief that if a person perceives that they are personally vulnerable to a condition, they will take action to prevent it. It further states that if the person perceives that that particular illness bears consequences that are serious, then too will they take action against illness. This theory argues that if an individual believes that precautionary measures will effectively prevent illnesses then they will take all the necessary precautions to prevent ill-health. Finally, it explains that an individual will analyse the cost of taking action versus the benefit of preventing illness and they will weigh the benefits. Therefore, factors linked to a person's belief in vulnerability to ill-health 'the consequences of precautionary measures prevent ill-health and the cost benefit analysis of taking action 'versus the prevention of ill-health will influence an individual's probability of undertaking any preventive measures aimed at improving their health-seeking behaviour, suggests Jones, Jensen & Weaver (2015:1-6). Some benefits of physical activity and exercises include a 50% decline in the risk of getting

certain cancers through engaging in physical activity at work or during a person's free time (The Sedentary Behaviour and Obesity Expert Working Group, 2010:1-11).

Jones *et al.*, (2015:1-9) further state that an inactive and sedentary lifestyle has been understood and utilised interchangeably by many researchers, whilst further clarification of these terms is vital. Some authors argue that a sedentary lifestyle is not purely the deficiency of physical exercise, but may also refer to people who are insufficiently active. They cite Pate *et al.*, (2007) in defining sedentary behaviour as behaviour that depicts very low energy expenditure and the foremost posture that is adopted by them as predominantly sitting and lying down.

It is undeniable that physical exercise is vital. Colbert & Colbert (2010) support this notion by stating that the movement of water stimulates growth, and dead things are associated with stagnant waters. Exercise gets the waters of life in a human body moving. Therefore, by exercising, a person is keeping their blood flowing, which in turn promotes life to blossom in their human bodies. Colbert *et al.*, (2010) further states that the 2005 Cancer Institute report revealed a correlation between cancers related diets and sedentary lifestyles.

The Sedentary Behavior and Obesity Expert Working Group (2010:11) documented the historical context of obesity and physical activity, noting that the environment that hosts many factors that make it difficult to maintain a healthy body was referred to as the "obesogenic" environment. It is further stated, that the environment does harbour factors that also make it exigent to shed excess weight and obesity. It is a known fact that man has evolved from the ancient hunter and food gathering lifestyle, where putting food on the table involved physical activity through hunting, skinning, cleaning, and preparing food from prey that was hunted. In a highly industrialized, commercialized, technologically-driven society, food is pre-packed and can be sourced and served with little to no need for physical activity. Tasks like cleaning offices that needed the excessive use of physical energy have been replaced by multifunctional cleaning devices that require minimal expenditure of energy. This lack of physical activity becomes fertile ground for "hypo kinetic" diseases to breed. This can result in chronic conditions, obesity, musculo-skeletal and cardiovascular conditions and cancer. Therefore, many countries confirm that there is a need for physical activity being advocated as a national public health priority.

Health behaviour is affected by many factors (environment, individual socio-economic status and life stages). Evidence exists that the environment can contribute as a hindrance to people's efforts to adopt a healthy lifestyle. Food that is regarded as cheap is processed and contains saturated fats and excessive salt and sugar. This is further compounded by the fact that the price of fresh fruit and vegetables is much higher than processed foods. The size of cheaper

food servings has also increased and appears to be more economical, “paying less for a larger serving of food”. It is also documented that dietary habits have changed as highly saturated foods are consumed as well as alcohol at home, work and during leisure. Advances in urban design have resulted in the mode of transport being faster more accessible and convenient, which reduces the need to walk. The family structure has changed due to the need for both parents to work in order to increase the household income. Quick and easy meals are being served at meals times, given the lack of time to prepare fresh, healthy meals. Over and above this, the working environment demands longer work hours that affect sleep patterns and diminish hours available for sleep. The lack of sleep also disrupts metabolism and has the potential to render people susceptible to weight gain due to altered control of appetite, states the Royal Society for Public Health (n.d. :7-12).

The phenomenon of a better health status in employees who utilise public transport in comparison to those who utilise their own private transport to work, is not uncommon. The outcomes of a study conducted by Professor Chris Rissel at the University of Sydney regarding the effect of long trips to work on health on the health status of employees revealed that some people who commute to work are driven by financial constraints. Managers in organizations generally earn higher salaries in relation to supervisors and general workers and may not experience financial constraints that impact on their choice to utilise public transport. Therefore, one may presume that managers and some supervisors utilise private means of transport to work, while more workers utilise public transport to work. People who utilise public transport are also less likely to stay for overtime or to complete tasks, unlike those who drive themselves to work. This exposes them to fatigue and stress, suggests Everett (2013:7). It has been discovered that many people who require mental health treatment do not seek help due to the related stigma attached to mental health issues. Therefore, health education and support is vital to promote access to such services and address barriers experienced by employees in the workplace who require mental health services and support, state Hanisch, Twomey, Szeto, Birner, Nowak, & Sabariego, (2016). The employee health and wellness program relies heavily on managers who can lead by example. The White Paper on Human Resource Management stipulates that human resource management must be based on flexibility and creativity, where both the organizational needs and the needs of employees are prioritised. Programs adopted in addressing health and wellness in ILembe should prioritise strategies that aim to improve health status of employees in general, but managers in particular, in order to improve their health-seeking habits.

Health effects of alcohol include hypoglycaemia, respiratory depression, cardiovascular conditions, dehydration, gastritis, impaired memory, ataxia and acute pancreatitis. Drugs that

have amphetamines cause arrhythmias, hypertension, cardiovascular shock, headaches, tremors, hallucinations, convulsions, amnesia, dysphoria, anxiety and sometimes death. Smoking has the potential to cause dizziness, mood disturbance and increased anxiety and irritability, cardiovascular diseases, cancer, chronic respiratory obstructive conditions, decreased fertility, risk of miscarriage, Alzheimer's and craving, according to the Centre for Public (2011:24-48).

South Africa is making strides in addressing smoking and has recorded a reduction in deaths related to smoking, which is indicative of a reduction in tobacco use amongst South Africans. This reduction can be linked to the visible initiatives linked to government commitment, public health activism and the support recorded from communities. Of the 57 research articles reviewed by Saloojee (2006:48-54), it was discovered that there was a lack of research into tobacco control which could inform the development of tobacco control policy. The author further discovered that the majority of research articles (56%) reviewed leaned more towards descriptive research which was on topics related to the use of tobacco. Research articles relating to health effects of smoking comprised 34% of articles reviewed. Only 10% of the articles concentrated on issues relating to policy and economic effects of smoking. Research on policy should guide interventions and control and can assist in predicting the disease burden related to smoking. A social attitudes survey conducted in South Africa in 2003 revealed that 21.4% of adults smoked, with males being 4.5 times more likely to use tobacco than females. People living in households that earn less than R1400 a month are more likely to quit smoking whereas people from households earning more than R7 000 are more likely to begin smoking. People who smoke are at risk of dying from cancer, with males being more susceptible than females. This is confirmed by a study conducted in Johannesburg South Africa, attests Saloojee (2006:48-54).

Individual factors also play a major role in that repeated behaviour becomes habitual and includes a reduction in major illnesses, according to the Australian Government's Department of Health and Ageing's National Health and Medical Research Council, (2013:7-9) Vandenbroeck corroborates the belief that the longer the existence of habitual poor dietary habits, the more challenging it is to alter it. If an environment promotes poor dietary habits and sedentary lifestyles, then poor dietary habits and inactivity become habitual. Stress being a psychological factor can result in increased food intake due comfort and emotional eating. Restivo, McKinnon, Frey, Hall & Taylor (2016:2-3) claim that depression can cause obesity and *vice versa*. Physical factors like obesity and advanced age that impair mobility can predispose such people to obesity given the limitations in choosing and adopting an appropriate healthy physical lifestyle.

The Australian Government Department of Health (2013:23) states that it is vital to consider individual needs and preferences since obesity is multi-factorial. The study conducted by Harlin (2013:20-22) highlights this aspect, pointing out the importance of ensuring that employees are satisfied with the type of wellness activities the organization offers. In planning programs, managers must always take into cognisance the needs of the workforce so that there is harmony between needs of employees and programs implemented, state Churchill, Gillespie, & Herbold (2014:49). The activities offered by the employer should kindle the employee's eagerness to enrol in employee wellness programs. Employers should also take into consideration that "*the one size fits all*" stance may affect employee enrolment since shift workers, part-time workers and office hour workers' needs are diverse and must be taken into consideration when crafting wellness programs. It is vital to understand the employee profile since social, economic, disability, gender ethnicity and culture do affect the type of programs that satisfy employee needs. It is essential for employers to consult and involve employees in designing and choosing the program that best suits their needs.

In Australia's 2009 National Preventative Health Strategy, the prevention of unhealthy weight gain is placed at the pinnacle of strategies adopted to address obesity by focusing on the nation's dietary habits and physical activity. The five-As approach is being adopted to shape programs that suit the needs of each individual. The shaping of programs takes into account individual physical activity and health needs. Employees are afforded an opportunity to join in the crafting of their own health and employee wellness programs, which increases the sense of ownership. The program is then viewed as being a program for "me" rather than a program that the organization has put in place for employees.

Van Dyne & Pierce (2004:441) support this notion by stating that attitudes are influenced by the psychology of possession that supposes that people generally feel positively about tangible and intangible targets of ownership. Van Dyne & Pierce (2004:441) cite the study conducted by Began (1992) which confirms that when people harbour feelings of ownership for ideas and objects, they evaluate ideas and objects favorably. This theory is supported and extended by Zahid & Ozyapar (2017:9&10) and Burakova-Lorgnier (2009:171), who state that together with a sense of ownership, people with psychological possession also bear a feeling of enhanced self-concept and a sense of responsibility. What this means for employees who are involved and assist in crafting their individual wellness and physical fitness program, is that they will evaluate it positively and will develop positive attitudes towards the program.

Many writers attest to the fact that employee wellness programs do have a positive effect on productivity in an organization as it positively improves the health status of employees. Aston (2011:1) recommends that organizations adopt the Work Well Model in order to realize the

advantages of investing in a healthy workforce and make it form part of their public report cycle. Harlin (2013) supports this notion by confirming that the Work Well Program was a successful wellness program that revealed the correlation between an increase in access to healthy environments and nutrition of participants enrolled on the program.

The employee wellness Canadian reporter (2004:3) states that the focus of many companies on health and wellness, stems from the positive outputs linked to the reduction in absenteeism, workplace injuries, short-term disability and compensation claims. This is done through the recognition of healthy bodies and healthy minds as an investment in their employees and a reflection of the companies' values. Anderson (2011:1) states the importance that wellness programs have taken on: these programs are regarded as not just "feel good" rewards but are proven to be a system that companies can use to save health-care costs. Zula, Yarrish & Lee (2013:660) hold the following view: "On the corporate level, employee wellness programs are usually implemented in an effort to contain employee related healthcare costs and reducing doctor visits, whilst simultaneously lowering the risk of long-term health-related problems. An important aspect of encouraging participation in the wellness program is to show employees that it was not a "management versus employee" situation, but rather an opportunity for everyone to improve their own health. Participation was not mandatory, so it did not appear as though executive management was forcing the program upon employees. It was noted that as soon as some employees commenced participation in the program, health and wellness was viewed as a part of a personal value within the culture of the facility, and increasing number of employees began to voluntarily participate".

Harlin (2013:23) highlights the importance of labour relations when considering changing employee benefits linked to wellness. Buy-in from unions is vital to prevent hurdles in implementation. Since the South African public sector is highly unionised, this factor must be taken seriously when adopting approaches that include employee health benefits.

3.12.2 Design of employee wellness programs

Organizations that prioritise and invest in employee wellness programs are more likely to align their programs to the "Seven Cs of best practice in designing employee wellness programs, which involves 7 recommended strategies to adopt when designing employee wellness programs according to Infinite Wellness Solutions (2010:1-5). These are contextualised as follows:

Strategy 1: Harnessing upper level support

It is vital that top management in ILembe District understands the benefits of employee wellness to fully support such programs; in so doing, the highest benefit for the organization

and employees can be enjoyed by employees and the organization. This strategy supports the notion that top management support becomes evident when outputs of the organization point toward management actively participating and getting involved in employee wellness programs and not merely paying lip service to the programs. Such actions assist in encouraging employees to participate in programs. Managers who genuinely support employee wellness programs are more likely to support initiatives that improve funding of such programs. Monitoring and evaluation of the programs is conducted with ease in that managers comprehend the program, are able to link health benefits, health promotion, organizational priorities and strategic objectives to each other. Since the aim of this study was to understand factors that affect enrolment and participation in the employee health and fitness programs, support from top management is being identified as a key role player in motivating employees and remains a key focus area in this study.

Strategy 2: Establish health promotion team.

The establishment of a team comprising of a mix between various categories of staff is useful in that they can assist in establishing, managing and garnering support for buy-in from the general workforce. The role of the team includes but is not limited to initial establishment of programs. The established programs are also implemented, monitored and evaluated by the team. The team also seeks innovative, stimulating programs that are of interest in the organization. In this study, the knowledge of knowing the wellness champion and assessing the functionality of the wellness committee is explored. Findings of this study will provide insight into the needs related to the establishment and strengthening of this crucial aspect of establishing health promotion teams to strengthen employee wellness in ILembe Health District.

Strategy 3: Collection of data that drives the program

After the team is established and the selected program are in place, baseline data should be collected to assist in monitoring, evaluating and reporting on implementation of programs. Surveys can be conducted to ascertain employee views, participation levels and impact of programs. Results of such surveys will influence developments and selection of appropriate health intervention in the organization. The data collected also assists management to report on progress, challenges interventions whilst accounting for resources invested in programs. Stakeholders are then, afforded an opportunity to measure the return on investment in such programs. During this study, employee interests in sport codes and health promotion topics and their perceptions of the current programs were explored. Findings of this study can be utilised to drive the program and improve its effectiveness.

Strategy 4: Creation of annual operating plans

Wellness programs are best driven strategically; therefore it is crucial that an annual operating plan is developed to capture the programs mission, goals and objectives and most importantly links the program to the organizations strategic plan. The existence of an operational plan will allow for continued support from management, since it will form part of the organizations strategic intent. Continuity within the employee health and wellness program was made possible, even if members of the team change or exit. Having a plan in place will assist ILembe Health District to have a focussed approach, budget adequately for resources and implement programs in line with the districts vision and mission.

Strategy 5: Chose appropriate programs

The data collected aimed to influence choices in selecting the most suitable programs in the organization as it is linked to health risk assessment and survey results. In so doing, programs that are in place are more likely to respond to genuine needs of the workforce as well as the organization. Recommendations of this study were utilised to review current arrangements and introduce new programs in line with employee interests, in order to improve outcomes and impact of the program.

Strategy 6: Create a supportive environment

When employee wellness programs are implemented in an environment that encourages participation in programs, and provides opportunities and rewards, a culture of support of employee well-being is created. Employees enjoy an environment that is supportive as health is promoted through policy, healthy eating choice of meals in cafeterias, flexi-time for exercise and spaces that encourage healthy living. Findings of the study include respondents' perceptions and interests that would improve participation and enrolment in workplace programs. Management support is crucial to ensure that such programs yield the desired results.

Strategy 7: Evaluation of the employee wellness programs.

Employee wellness programs require constant evaluation of outcomes and impact through reviews of the programs. The evaluation process will assist in ascertaining if the program is achieving desired results, and assist in addressing ineffective aspects of the program. Consultation with employees on the current programs offered is a key focus area of this study. Findings of the study were utilised to evaluate the impact of current programs and to influence future arrangements in this regard. This will also ensure that there is value-for-money invested and that the various programs yield the highest return on investment.

3.13 Conclusion

The KwaZulu-Natal Provincial Administration recognises the importance of employee health and wellness in the workplace and adopted the Provincial Wellness Management Policy in 2011. This was followed by the adoption of the KwaZulu-Natal Department of Health and ILembe Health District's adoption and implementation of the Health Departmental Employee Health and Wellness Policy. This integrated policy is characterised by responsiveness and pro-activeness of both employer and employee in promoting and protecting health rights and responsibilities. It further creates a platform for a coordinated approach to implementation, support monitoring and evaluation of impacts of the program, and is based on the belief of recognising health as a priority for public health employees. In so doing, it confirms the Department of Health's commitment to upholding the prescripts of the Constitution of the country and Chapters Ten and Chapter One in particular. By implementing the policy, the legislative and political intent of employee health and wellness in the country is strategically promoted by the Department of Health in a manner that allows for cohesive application in various sections in the Department and in the public health realm.

The impetus of the KwaZulu-Natal Employee Health and Wellness Policy resides in strategic interventions aimed at HIV-AIDS and TB management, health and productivity management, safety, health, environment, risk and quality management (SHERQ) and Wellness Management.

Employee Health and Wellness Programmes in the Public Service are rapidly transforming the nature of holistic support provided to employees by the public health sector. This approach, offers mutualistic benefit for employees and the public sector in that a preventative safety and health culture is promoted whilst protecting the right to a safe and healthy environment espoused in the constitutional legal framework of the country. In so doing, the department of Health is propagating a national preventative safety and health culture where the right to a safe and healthy working environment is respected at all levels. Furthermore, government, as the employer and public servants actively participate in securing a safe and healthy working environment through a distinct system of distinct rights, responsibilities and duties where the principle of prevention is accorded the highest priority.

In capturing the global history of employee health and wellness from an international and African perspective, it was discovered that the approach adopted in South Africa generally includes current internationally adopted approaches where it involves health education, the promotion of a socially and physically supportive environment, cohesive administrative structures, integration of related programs like EAP and wellness in the workplace.

Strengthening employee health and wellness in public health departments like ILembe health district is key in advancing public health within a public administration perspective. However, it must be emphasized that the success of such programs leans heavily on the constant monitoring and evaluation of the programs management support and understanding employee perspectives of the program. Participation of stakeholders in the policy process through consultation of employees, and the involvement of policy implementers further advances good governance and fulfils the intent that was sought through implementation of the policy. Public health policies aim to address gaps in service delivery and strengthen the government's ability to deliver quality public health service delivery to citizens. It is undeniable that stakeholder engagement remains a vital principle on which public health policy is anchored. The ensuing chapter discusses the research design and methodology adopted in this study.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

In science, the term ‘research’ involves a scientific enquiry which defines the questions, the methods to gather information, collection of data, the analysis of the data, the interpretation of results and the drawing of conclusions based on the results. All scientific research has a goal, and the ultimate aim is repeated and refined gradually to reach an answer. The research approach can be qualitative, quantitative or mixed in nature, submits Vosloo (2014:307-313) and Bonney, Jordan, McCallie, Phillips, Shirk & Wilderman (2009:11). It is vital to understand the differences between research design and research methodology. The design of a research study focuses on the end-product, the aims of the research and the type of research adopted. It is driven by the research problem or question and concentrates on the evidence required to effectively address the research question. The focal point of research methodology is the research process, the types of research tools and procedures that were used to gather information, and the steps to be followed in the research process.

This chapter aims at explaining in detail the research design and methodology utilised for this study. It justified the reasons for the choice of research design, and methods and techniques used to collect data for this research. The methods adopted to analyse collected data was also explained further. The sample population used for this research and the ethical considerations adopted was also explained.

4.2 Research Design

The research design provides an outline of the approach that the research is based on, in order to address the aims and objectives of the research and answer the key research questions of the study. The researcher approaches the study with his or her worldview assumptions and chooses the strategy best suited for the enquiry. The design of the study depicts the manner in which the researcher will collect, analyse and interpret the data. The kind of research best suited for a study is also influenced by the nature of the problem being studied, since all research has to be driven by a problem, maintain Ellis & Levy (2010:109). The audience for the study significantly influences the kind of research to be undertaken in that researchers primarily write for audiences that will accept the research. According to Purtle, Lê-Scherban, Shattuck, Proctor, & Brownson (2017: 60-62), such an audience may consist of journal readers or editors, graduate committees and colleagues in the field of study. Research designs are classified as either being qualitative, quantitative or mixed methods.

4.2.1 Qualitative research

Human beings ascribe varying reasons for problems affecting the society or individuals. Researchers who aim to explore and understand the meaning of the reasons human beings attach to problems adopt a qualitative research method. In qualitative methods, the researcher's ultimate aim is to comprehend phenomenon from the participants' perspective. Qualitative methods are recommended when the phenomenon or study area is new or when little evidence of previous study exists. It is also advocated when researchers are faced with a situation where they cannot adequately match existing theory to the phenomenon and the fundamental variables that require examining are not easily found. This type of research is exploratory in nature, where the meaning that human beings ascribe to a problem or phenomenon is explored, writes Creswell (2014:4).

4.2.2 Quantitative research

Quantitative research aims to test objective theories through the exploratory investigation of relationships between variables. The variables identified in such studies are measurable with the use of instruments. Data collected is in the form of numbers, which are statistically analysed to understand the phenomena relating to human behaviour of a sample population. Researchers who conduct quantitative studies have deduced assumptions about testing of theories. In so doing, the researcher addresses aspects of bias. Generalisation about that population's behaviour can then, be made based on the interpretation of the results that are statistically analysed state authors Leung, (2015:324-327); Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, (2015:324-327), and Creswell, (2014:2-12).

4.2.3 Mixed methods research

Mixed methods research is a research approach that combines both quantitative and qualitative methods and provides a realistic link between the two, according to Creswell & Plano Clark (2014:12). Such inquiries involve theoretical assumptions by combining and using both approaches, which allows for enrichment of the study, and broader and more intense insight into the phenomenon being studied. The body of knowledge is increased in a mixed methods approach because it allows for the capturing of information that could have been missed in either of the approaches when used separately. Since this research method involves wider inquiry, the study can generate more questions and highlight areas of concern, which can be further researched, supports (Creswell, 2014:2-12) and (Caruth, 2013:113-120).

The survey method was chosen in this study because respondents were to provide information and feedback on the research area in this enquiry. The survey method is recommended as the best method when information and feedback is required, as it is a consistent way of collecting

data relating to characteristics of a population, state Check and Schutt (2012: 160). Surveys involve a systematic process of gathering information through questioning individuals who belong to a specific population. The result of the inquiry is, then generalized to the study population. The type of survey best suited for a particular inquiry depends on whether the researcher plans to contact potential participants personally or electronically, present written questions and record responses. Over and above this, the researcher has to decide the time period in which the study was concluded, goals of the study and whether the topic is sensitive or complex in nature. The survey process has to be designed with the ultimate aim of getting feedback from a specific group on a phenomenon being studied. According to the University of Wisconsin (2010:4-5), the researcher must identify the goals of the survey through the description of the target population.

4.3 Research Methodology

For the purposes of this study, the research strategy adopted was that of a case study, since it required exploration of a phenomenon. Furthermore, an in-depth exploration of issues relating to employee health and wellness in a real life setting was needed, since the research question sought to explain present circumstances that required an in-depth understanding thereof. The case study was selected as the research strategy because it aimed to explore participants' perception of the employee health and wellness programs. Furthermore, this study aimed to understand the phenomenon of low employee participation in the program, which is a contemporary issue in the public sector (see Crowe *et al.*, 2011:1-9), in Vissak, 2010:371) attesting to the fact that case studies promote the expansion and generalisation of theory by coalescing existing theoretical knowledge with new empirical knowledge, which is advantageous when studying topics that do not attract adequate attention. Vissak further cites Eisenhardt (1989), supporting the notion that case studies are appropriate in studies where not much is known about the phenomena due to inadequate current perspectives.

It has been established that very little research has been conducted on employee health and wellness in the Public Health Sector in South Africa and ILembe Health District in particular. This view is supported by Cloete (2016: ii & 7) and Skaal & Pengpid (2012: n.p.). It is therefore, an appropriate choice to adopt a case study approach in this study in that a phenomenon is being further explored.

The phenomenon examined in this study required both statistical correlations and more importantly, the descriptions and explanation of underlying causes thereof. Case studies satisfy this need as they uncover causal relationships between variables and assist in capturing and displaying a richer understanding of reasons and explanations of occurrences, which answers

the how and why of occurrences, according to Harrison, Birks, Franklin & Mills (2017:n.p.). The research process was set in motion by the following research questions:

- 1) What perceptions do ILembe Health District employees hold of the health and wellness physical fitness programs?
- 2) What health-seeking habits does ILembe Health District employee have?
- 3) How susceptible are ILembe Health District employees to preventable chronic health conditions?
- 4) What are the factors that impact on staff utilisation of the health and wellness physical fitness programs?
- 5) What solutions exist in addressing the wellness program participation challenges in ILembe Health District?

These research questions were linked to a problem of low employee participation in ILembe Health District workplace health and wellness fitness programs. The choice of a quantitative research design for this study was also influenced by the research questions. The research journey undertaken to scientifically answer the research questions aimed to address and understand this phenomenon. A survey was undertaken and a quantitative approach was selected as the most suitable approach in finding answers to the questions that arose from the research problem. This fundamentally depicts the research design where the problem was clarified and the questions requiring answers were identified (Jonker & Pennink, 2010:35).

Primary and secondary sources of information and data were used in the research process through literature reviews that gathered relevant information for purposes of the study. Primary data was collected through surveys, utilising questionnaires as the prime tool for data collection. The data was numerically analysed utilising the statistical package Statistical Package for Social Scientists (SPSS, Jonker & Pennink 2010:35).

A quantitative approach was adopted in this study because the researcher aimed to utilise the results of the study to generalise views, opinions and attitudes of employees toward the health and wellness programs. The literature review was conducted to assist in developing a theoretical framework on which the study was based. Challenges facing the implementation of employee wellness programs are complex and the use of a quantitative approach assists in reducing and restructuring the complexities to variables that are limited in number. This study aimed to establish the relationship between variables to ascertain the causes and effects of each on the other. The study population was large (above 1700), therefore a sample of the population

was studied and the results thereof utilised to generalise findings to the target population at large.

4.4 Research setting

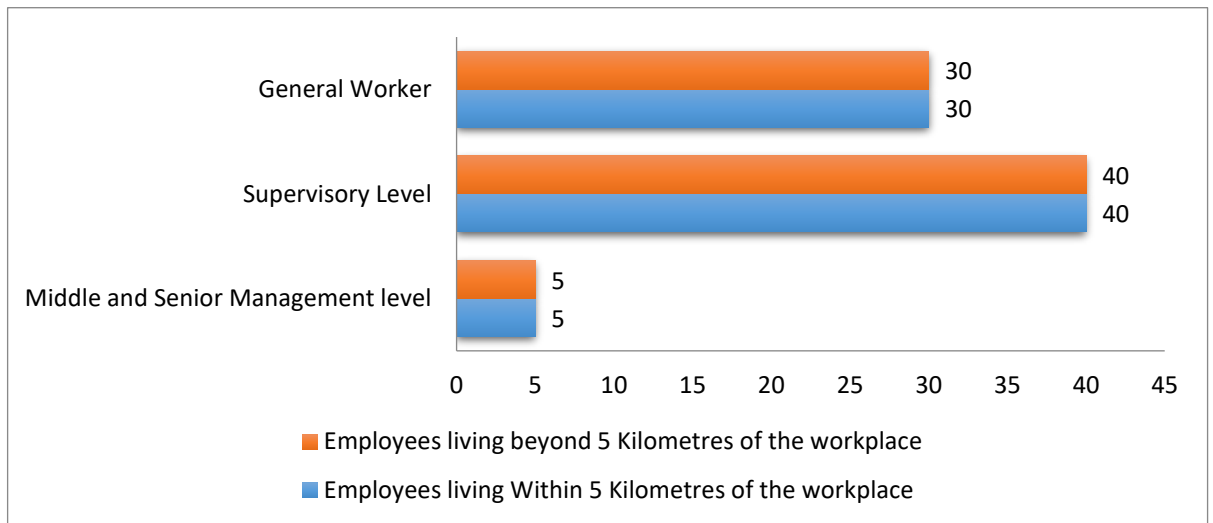
Samples were drawn from current staff and managers at ILembe Health District, which is a public sector organization that provides public health services to approximately 606 809 people who are at risk of contracting and dying of non-communicable diseases, according to the district health profile that places non-communicable diseases as a top ten cause of morbidity and mortality. The District delivers health care services through regional and District hospital levels of care and Primary health care, which include community health care levels. The participants completed the questionnaires and the researcher arranged to collect the completed questionnaires from participants.

4.5 Study Population

The study population are individuals or groups of people in whom the researcher was interested in engaging with in this inquiry. It is vital that the researcher develops criteria for inclusion and exclusion in the target population. It is feasible to sample the entire population if the population size is small. However, if the target population is large or the distance between the locations of participants is widely dispersed, it is advisable to conduct sampling which involves the choice of a sub-set of the target population. A study population can be described as the combination of elements from which a sample is chosen. Sampling is a term utilized to describe the process of choosing participants that will participate in a study. Probability sampling is the process of selecting participants in a study in a manner that represents the total population from which the sample was taken. The benefits of sampling include the possibility of conducting follow-up visits to encourage participants to respond to the survey being conducted. It also assists in promoting participation and improved data quality. Sampling is also more cost effective as the projected costs of tracking and tracing vast numbers of participants or participants who are located far from each other can be exorbitant, state Babbie (2016:207) and University of Wisconsin (2010:5).

In this study, the study population consists of employee of ILembe Health District. A sample of 150 participants from managerial to general worker categories was surveyed over a period of three months. The sample size was deemed large enough and representative of the population at large. The participants were equally divided into those who live within a 5 kilometre radius and those who live beyond a 5 kilometre radius. Further grouping of participants into general worker (60), supervisory (80), middle and senior management groups (10) was undertaken as depicted in Table 3-1.

Figure 4.1: Breakdown of study population



4.6 Research Methods

4.6.1 Measurement Instrument

Researchers who aim to measure things that are not directly observable, like attitudes or perceptions, utilize questionnaires to assist in the measurement. The questionnaires in the study have to be declared useful. The reliability and validity of the questionnaire deem it useful for the study, thus researchers must take heed of this important characteristic. The goal of the study influences the choice of the measurement tool. Researchers should ensure that the participants' perspectives are elevated in the questions posed through the questionnaire.

Validity can be explained as a description of the measurement instrument's ability to measure what it was developed to initially measure, which assists in meaningfully interpreting results of the study. Although standardized achievement tests like the Woodcock Johnson III are recommended, since they have strong validity data, the validity of the measurement instrument chosen by the researcher was assured by submitting the tool to an expert statistician who made necessary adjustment prior the study (Bui, 2014:149-150).

In order to declare a research instrument as being reliable, it should be able to yield similar results if repeated, which would support the accuracy and consistency of information that is generated through the use of an instrument. This is a quantitative study, hence reliability is important in assessing the quality of the study (Polit & Beck, 2010:50).

Self-administered questionnaires with structured questions were utilized in this study, where participants were given questionnaires and they completed the questionnaire on their own in their own private space, to avoid bias. The researcher attached a copy of the motivation for the study to all questionnaires that were distributed, in order to ensure that the participants

understood the context of the study and the benefits of the study to them. The questionnaires were printed in large print and on one side of the page to assist in ease of access and legibility. Clear instructions on the method to be utilized for return of completed questionnaires were given. Contact numbers of the researcher and a caption at the end thanking the participant for participating in the research were included.

The researcher also conducted a field study where she requested 8 colleagues to sample the questionnaire, and provide critique or further input before the final questionnaire was adopted. This was done to obtain maximum co-operation and assure acceptable response rates (University of Wisconsin, 2010:11-13).

A four point Likert- Scale measurement tool was used to measure responses and the significance of the relationship between key variables. The relationship between variables was examined to collect data that assists in gauging the reaction of participants who enrol for the program as opposed to those who are not keen to do so. The researcher chose to develop a tool for this study in order to standardize measures and infuse sensitivity to the area of study.

4.6.2 Data collection

Since the views of participants were surveyed, the survey process focused on collection of all relevant data through the completion of questionnaires distributed to participants during meal breaks at the participants' place of employment. All completed questionnaires were collected by the researcher and assistants. The completed questionnaires were subsequently analysed statistically.

Figure 4.2: The Survey Process



Survey Process: Adapted from (University of Wisconsin, 2010:5)

The advantages of choosing a survey approach in this study includes its ability to gather large volumes of information that sought to understand the ILembe Health District health and wellness program, together with its challenges and possible solutions. The study afforded the researcher an opportunity to ask questions and capture the richness of ILembe Health District's organizational behaviour first hand. Questionnaires are regarded as an essential research method, because it is a crucial aspect of a survey and the results of surveys rely heavily on the questionnaire that captures the participants' responses, suggests Fowler (2014:5) and Krosnick & Presser (2009:2).

Structured surveys of staff and managers' perceptions relating to the workplace health and wellness program were conducted using questionnaires to provide a basis for comparison, and at the same time ensuring that important aspects of employee wellness were also surveyed.

Questionnaires with a 4-point Likert scale rating measurement tool was utilized in this study, as the researcher aimed to collect data from a representative sample of a large population, the findings of which could be generalized to the population targeted. The advantages of using a questionnaire are its ability to perpetuate reliability as the same questions are asked in the same order to all participants, states the Rob Johns University of Strathclyde 2010:2). The questionnaire is documented as being the most highly recommended survey instrument for large samples owing to its flexibility in allowing for a custom designed instrument that met the objectives of this research and cost effectiveness. Other advantages of the use of questionnaires include the ability to collect large volumes of data over a short period of time. Furthermore, results collected in the study can be quantified effortlessly. Disadvantages of questionnaires do exist: it is argued that questionnaires possess inadequacies in measuring emotional and behavioural aspects of a study. People express their feelings and emotions differently at different times in their lives, and questionnaires ask limited questions with no further explanations attached. The researcher is also unable to ascertain whether participants' responses are truthful or not. People interpret questions differently, so answers may vary based on differences in interpretation of participants. Researchers decide which questions to include and which to exclude in their questionnaires, which may result in important areas being left out of the study (McNabb, 2013:140-147). In this study, as mentioned, to overcome any disadvantages, questionnaires were hand delivered to all participants at their work stations during meal breaks.

4.6.3 Data analysis

Once data is collected from a study, the researcher becomes keen to make sense of that data, which requires analysis. By quantitatively analysing data, the researcher is able to organize the

data, summarize findings, analyse and explore reasons for the findings. In quantitative data analysis, the researcher is also afforded an opportunity to graphically present and communicate findings of the research through the use of graphs and tables. Similarities, differences and relationships between responses can also be undertaken. It is advantageous to undertake quantitative data analysis in that a large number of participants can be sampled, which broadens the study and enhances generalization of the results of the phenomenon being studied. Vast sources of information can be recapitulated and comparisons drawn from varying categories of participants.

In this study, data was analysed by a statistician utilizing SPSS (Version 21.0) statistical procedures. This is a 21.0 windows version of the SPSS method that was chosen due to its custom-built statistical function and spreadsheet that allows for quick and easy data entry and descriptive statistics (McNabb, 2013:147).

Deductive data analysis was conducted whereby data collected from participants was collated electronically onto a spread sheet and analysed. Preliminary reports that were run assisted in comparing trends, which enabled generalizations to the population based on the analysis of the responses received.

4.7 Conclusion

This chapter captured the research design and methodology adopted in this case study where a contemporary phenomenon was explored in its real life context. This discussion is vital in research since the central point of the research methodology is the research process and the various types of research tools to be utilised. Furthermore, it was vital to explain the procedures that were used to gather information, and the steps to be followed in the research process.

In interpreting the data, key objectives of the study and questions of the study were considered and linked. Discussions capture in this study included explanations of the research setting, justification of the population and size of the sample studied. Research methods adopted were presented and discussed in order link the information gathered and the data collected. The data analysis methods to be adopted, the organization thereof and the summarisation and methods of interpretation were described and justified.

The manner in which reliability and validity was assured in the statistical procedures implemented during analysis of data, was presented ensure a high quality of the study and to ensure generalizability of the research findings. This chapter precedes an in-depth interrogation of data and the presentation of findings emanating from results of data analysed.

CHAPTER FIVE

DISCUSSION OF DATA AND PRESENTATION OF FINDINGS

5.1 Introduction

This chapter presents and discusses results of the study and the findings extracted from the (150) questionnaires received after distribution to respondents. As this is a quantitative study, questionnaires were utilized as the primary tool to collect data. The questionnaires were distributed to managers, supervisors as well as general employees in the Ilembe Health District. Participants utilised the questionnaire to indicate their perceptions of the employee health and wellness fitness program. The data collected was extracted from the responses of participants and was analysed utilizing SPSS version 21.0. The study results are presented, capturing descriptive statistics in the form of graphs, cross tabulations and other figures for the quantitative data that was collected. The inferential techniques in this study include the use of correlations and Chi-Square test values that were interpreted using the p-values.

The findings of the study links directly with Chapter One, which captured the research problem, thus linking it to the data collected in this study. The aim of the study was fulfilled: the study aimed to examine the Ilembe Health District employees' perceptions of the workplace health and wellness fitness program in relation to employee enrolment trends. This chapter captures results of data analysed from one hundred and fifty respondents (150) questionnaires. The questionnaire was divided into five (5) sections that captured participant information; health-seeking habits of employees; employee health promotion interests; employee physical activity interests and employee perceptions of the wellness program. Data collected was analysed utilizing the Statistical Packages for Social Scientists (SPSS: version 21.0). SPSS is recommended in analysing data emanating from questionnaires. The analysed data is graphically portrayed in graphs and tables, which assist in descriptively portraying findings of the study, in relation to the study population.

5.2 Data Analysis

Sample

A total of 170 questionnaires were dispatched to respondents and 150 were returned, which resulted in an 88% response rate being declared. This renders the statistics useful for generalization of results to the target population. Response rates are mathematical formulas used by survey researchers to calculate the degree of success in acquiring completed interviews from a sample. It is vital to ascertain response rates in order to gauge the non-response rates where respondents failed to complete interviews. This provides an indication to the researcher

as to the existence of threats to internal validity. It also provides an opportunity to gain insight into the proportion of the sample that did not respond and the reason for the non-response. In this study, a high response rate was achieved which was influenced by the fact that the researcher dispatched questionnaires to willing participants and waited on site to collect completed questionnaires (Lavrakas 2008:758).

Research Instrument

The research instrument consisted of 83 items, which contained a level of measurement at a nominal or an ordinal level. Descriptive statistics were utilised whereby numbers were utilised to describe the data. Nominal variables are also called categorical variables as values in the different categories differ. This takes on a discrete number of values or categories with no inherent order or rank to the categories. These are descriptive statistics that are calculated for categorical variables and include proportions, percentages and frequencies in the various variable categories. In this study, gender is an apt example whereby respondents either categorized themselves as male or female, as well as the category of staff being a manager, supervisor or general worker. Ordinal measures, in contrast, are variables that can be ranked and placed in order and which possess a discrete number of values, which have an inherent order to them. The Likert scale utilised in this study had ordinal variables that ranged from *strongly agree, disagree, and agree to strongly agree*. The intervals between categories are not defined and there exists an inherent knowledge that *strongly disagree* is worse than *agree*.

The questionnaire utilised in this study was divided into 5 sections that measured various themes as illustrated below:

- ✓ Section A: Participant Information
- ✓ Section B: Health-seeking habits
- ✓ Section C: Employee interests (Health education)
- ✓ Section D: Employee interests (Physical activity)
- ✓ Section E: Employee Perceptions of the Wellness Program

Reliability Statistics

In order for research data to be of value and rendered fit for use, it must be both reliable and valid. Validity and reliability remain the two most vital aspects of precision of a measurement tool. Reliability is the degree to which the measurement tool utilised in a study, possesses the potential to repeatedly produce consistent results. Therefore, a reliability measure informs the

researcher whether a respondent would provide the same score on a variable even if it was administered time and time again to the same respondent. One of the approaches to measure reliability is that of internal consistency which is able to indicate that all the variables vary in the same direction and have a statistically significant meaningful level of correlation with each other. Reliability is computed by taking several measurements of the same subjects and ascertaining the reliability coefficient. If it is determined that the reliability coefficient is 0.70 or higher, then it is considered as “acceptable”.

Cronbach’s Alpha is the measure of internal reliability or consistency of the items in instruments. Validity measures the extent to which a test, measures what it purports to measure. Although reliability of a test in research is important, validity of a test, however, remains just as important (UCLA, 2010:2).

When examining data for differences, associations and associations to answer a hypothesis, inferential statistics are utilised. These tests may consist of Chi-Square tests of homogeneity or independence or the 1 and 2 sample T-tests which examine differences in means. The tables below reflect the Cronbach’s alpha score for all items that constituted the questionnaire.

The Cronbach’s Alpha for Sections A, B, C, D & E are shown in Tables 4.1 (a-e).

Section B: Health-seeking habits

Table 5.1(a): Reliability Statistics: health-seeking habits

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.697
Approx. Chi-Square		421.672
Bartlett's Test of Sphericity	df	91
	Sig.	0

Section C: Employee Interest (Health Education Topics)

Table 5.1(b): Reliability Statistics: Employee interests - health education topics

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.858
Approx. Chi-Square		2333.75
Bartlett's Test of Sphericity	df	276
	Sig.	0

Section D: Employee interests (Physical Sport Codes)

Table 5.1(c): Reliability Statistics: Employee interest in -physical sport codes

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.815
Approx. Chi-Square		636.379
Bartlett's Test of Sphericity	df	78
	Sig.	0

Section E: Employee Perceptions of the Wellness Program

Table 5.1(d): Reliability Statistics: Employee perceptions of the wellness program

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.688
Approx. Chi-Square		1528.628
Bartlett's Test of Sphericity	df	300
	Sig.	0

Table 5.2: Cronbach's Alpha score for all items on questionnaire

	Number of Items	Cronbach's Alpha
Health-seeking habits	14 of 14	.672
Employee interests (health education)	24 of 24	.935
Employee interests (physical activity)	13 of 13	.823
Employee Perceptions of the Wellness Program	25 of 25	.646
Overall	76 of 76	.836

The overall reliability score of 0.836 exceeds the recommended value of 0.70. This is highly indicative that the measuring tool achieved what it was initially set to measure. All of the themes (sub-sections) have values that exceed or are very close to the acceptable standard. Amongst the reasons for this, is that the construct is newly developed. This indicates a high (overall) degree of acceptable, consistent scoring for the research. The high scores accentuate that employee perceptions, interests and health-seeking habits do have an impact on employee enrolment in health the wellness programs offered. The wellness management policy for the public service edifies the need for monitoring and evaluation of employee health and wellness programs, where public institution employees are afforded an opportunity to assess appropriateness of programs in place. Consultation and feedback from employees would assist in understanding employee needs and challenges and ensure that appropriate strategies and programs are in place that satisfy employee needs, thus prioritising employee health and wellness. This is a significant finding, as having employees that are healthy assists in productivity, thus fulfilling the principles of Chapter 10 of the Constitution of South Africa, which promotes good human resource management to maximise human potential. All the sections depicted reliabilities that can be placed within acceptable norms.

5.3 Section Analysis

The section that follows includes the analysis of scoring patterns of the respondents per variable in each section. Levels of disagreement (negative statements) were collapsed to show a single category of *disagree*. A similar procedure was followed for the levels of agreement (positive statements). This procedure is permitted during analysis in studies since acceptable levels of reliability have been determined. The results were first presented using summarised percentages for the variables that constitute each section. Results were also further analysed, according to the importance of the statements.

Factor Analysis

Factor analysis is a statistical technique whose main aim is data reduction whereby variables are regrouped into a limited set of constellations based on common variances. The general objective of factor analysis is to condense data in order to easily interpret and understand relationships and patterns and isolate concepts and constructs. A typical use of factor analysis is in survey research, where a researcher needs to represent a number of questions with a small number of hypothetical factors, states Gie (2013:1-3).

With reference to Tables 5.1a, 5.1b, 5.1c & 5.1c, below, relevant findings emerge:

The principle component analysis (PCA) was used as the extraction method, and the rotation method was Varimax with Kaiser Normalization. This is an orthogonal rotation method that minimizes the number of variables that have high loadings on each factor. It simplifies the interpretation of the factors.

Items of questions that loaded similarly imply measurement along a similar factor. An examination of the content of items loading at or above 0.5 (and using the higher or highest loading in instances where items cross-loaded at greater than this value), effectively measured the various components.

It is noted that the variables that constituted the sections all split along multiple components. This implies that respondents identified certain aspects of the sub-themes as belonging to other sub-sections.

Since the value of KMO in all tables below is more than 0.5, with some tables revealing a KMO of above 0.8), one deduces that the sample taken in this study is adequate as correlations between pairs of variables can be explained by other variables.

With the value for significance in Bartlett test of Sphericity being less than 0.05, the null hypothesis (which is all the correlations between the variables is (0) zero), is rejected. Therefore, one concludes that the correlation matrix in this study is not an identity matrix where all of the diagonal elements are (1) and all of the diagonal elements are (0). This deduction is good for this study since it has been observed that all the measures vary between 0 and (1) in all sections captured in the tables below (Bruin, 2006:n.p.).

Rotated Component Matrix

The aim of rotation is to reduce the number of factors on which the variables have high loadings, which assists in interpretation of the analysis.

In this study, all the variables in the table below loaded more than 0.7, which indicates that the factor extracted sufficient variance. Therefore, all variables with similar loading were identified in the same factor.

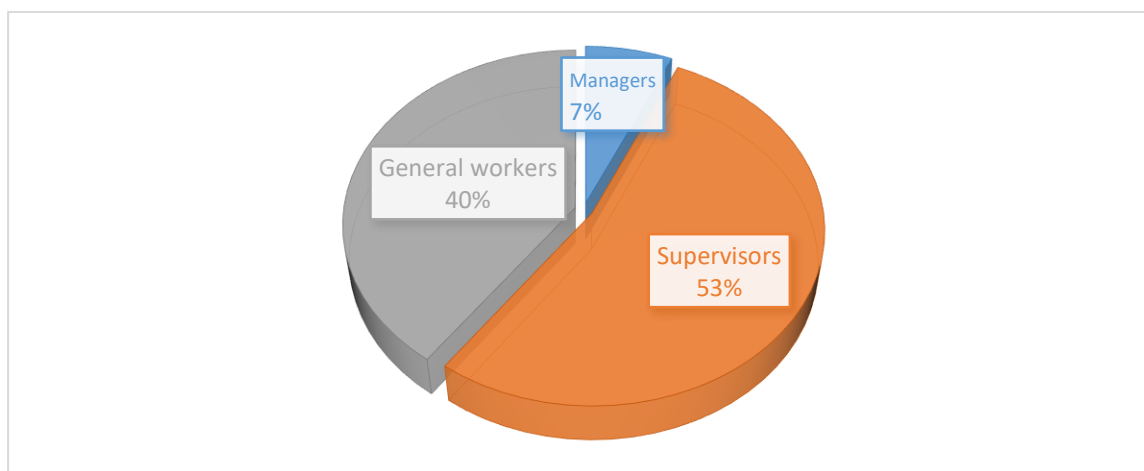
The tables below captured responses to questions relating to health-seeking habits of respondents, employee interests in health education and sporting codes, and employee perceptions of the health and wellness program. Themes were identified which link with the Public Service Wellness Policy, strategic objectives of wellness management, and Constitutional mandates and Batho Pele Principles that aim to promote individual and organizational wellness while improving work-life balance.

5.4 Section A: Biographical Data

This section captures a summary of the biographical characteristics of respondents in this study.

Classification of Employee category

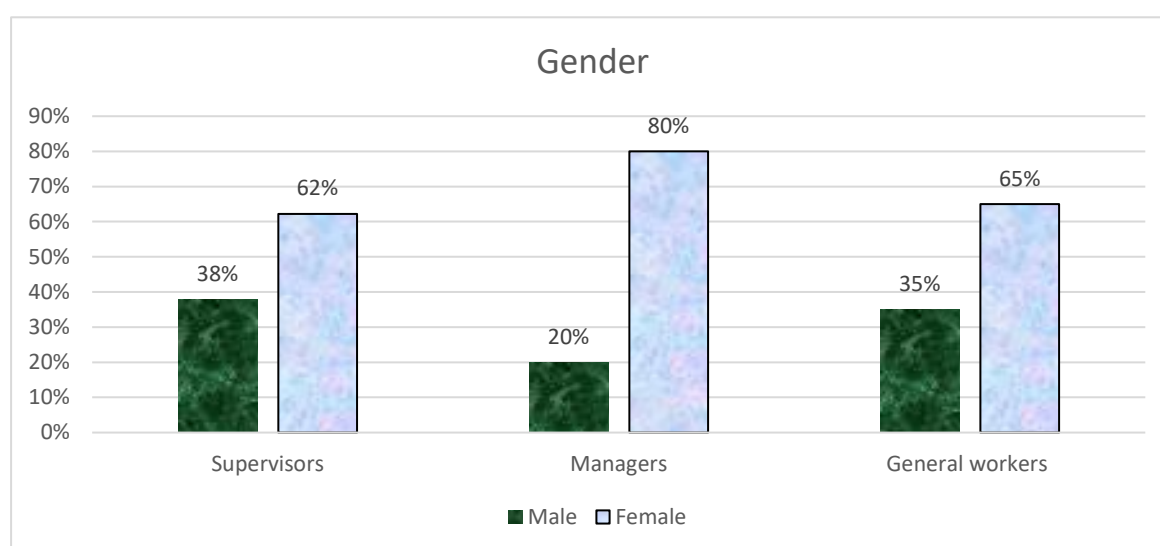
Figure 5.1: Classification of employee category



Three categories of employees formed part of the respondents of which 60% consisted of employees executing managerial tasks (Managers 7% and Supervisors 53%), and 40% consisted of employees who make up the general workforce. This is significant for this study, in that the employee health and wellness policy prescribes that the implementation and monitoring thereof, is allocated to managers of departments and sections. Managers and supervisors constitute a total of 60% of respondents, therefore it is a fairly acceptable distribution of respondents, since the study aimed to seek possible solutions to the challenges of low enrolment. Strategies, policies and programs that were developed to address the challenges were crafted and led by managers and supervisors who formed a major part of the sample population in this study.

Gender

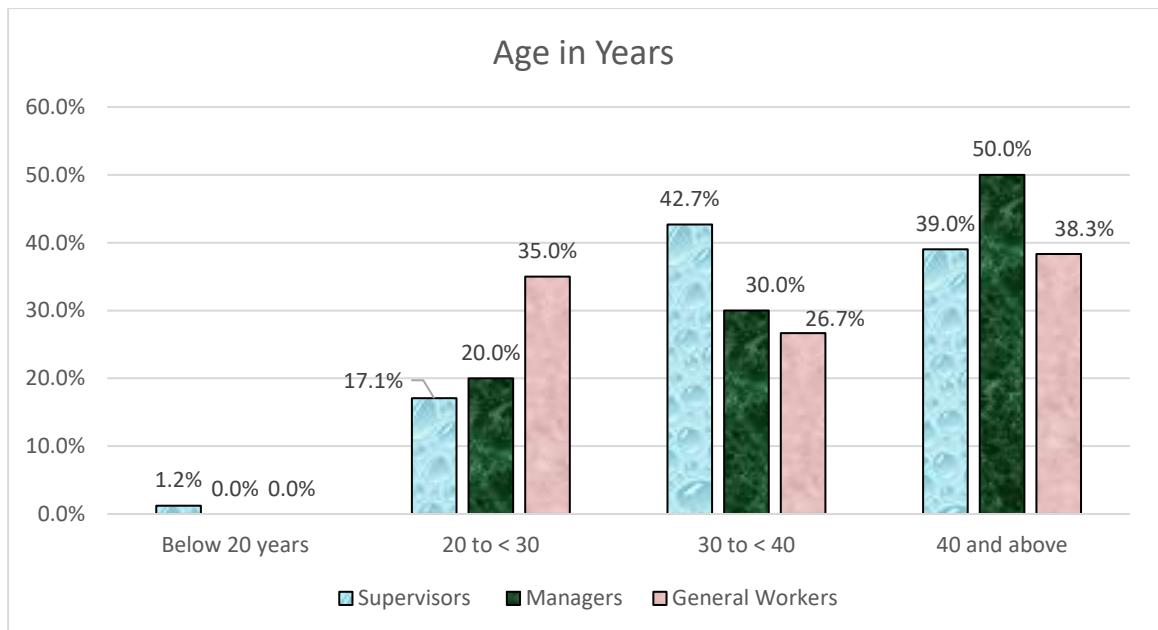
Figure 5.2: Gender Distribution



The findings revealed that the ratio of males to females is approximately 3.5:6.5 (35.5%:64.5%). This finding is useful as the responses would be deemed a fairly accurate measure of perceptions of the workforce, since the health care services workforce in South Africa and in ILembe Health District in particular is predominantly constituted of nurses. Internationally, nursing is generally regarded as a female occupation. Demographics within the public health sector in South Africa have displayed this trend throughout the years: in the employment profile of 2013, a total of 93.2% of the workforce was females (Statistics South Africa, 2011:14). The South African Nursing Council published the distribution of manpower per Province in South Africa in December 2015, where it was found that female nurses formed 90.88% (female nurses 253 196 and male nurses 25 421) of the total number of nurses in South Africa, while KwaZulu-Natal registered 94.74% (female nurses 62 192 and males 6453).

Age

Figure 5.3: Age in Years

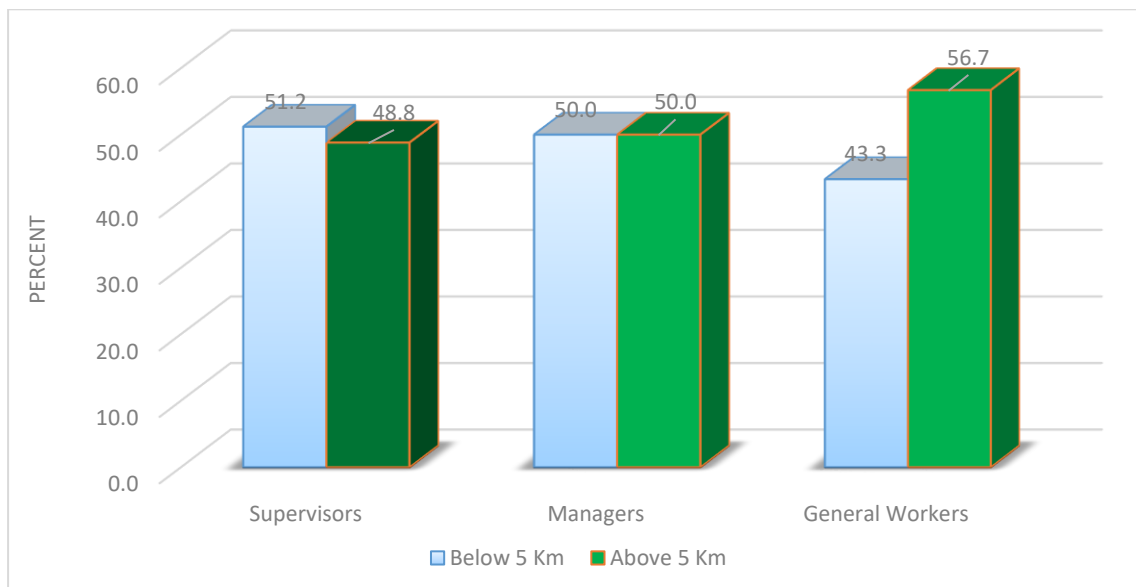


The age profile of the respondents reveals that majority of employees are above the age of 40, with 39.5% of the employees above this age, followed closely by the category of employees who are between the age of 30 and 40, who constitute 35.5% of the workforce.

Distance Travelled by Respondents to work

The Figure below illustrates the distance travelled by the respondents to work.

Figure 5.4: Distance travelled by employees to work

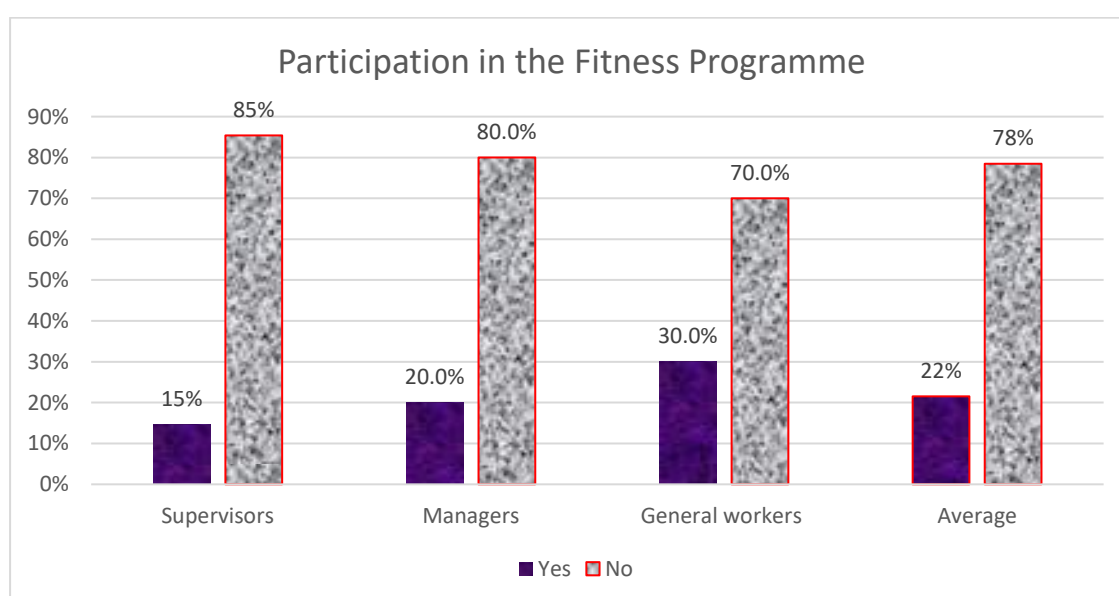


There is an approximate overall 50:50 split in terms of respondents travelling less or more than the 5 km distance to work. This is useful as the even groupings allow for direct comparison of the factors under section analysis. Managers who travelled under 5 kilometres equate in number with those travelling above 5 kilometres, while Supervisors travelling below 5 kilometres was higher than those travelling above 5 kilometres to work. General workers, however, revealed the highest percentage of workers travelling above 5 kilometres to work and the lowest number travelling below 5 kilometres.

Participation levels in the Ilembe Health District Physical Fitness Program.

The Figure below indicates the participation levels of employees in the Ilembe Health District in the physical fitness program.

Figure 5.5: Participation levels of employees



Findings of the study revealed generally low participation levels in the employee health and wellness fitness program (21.05% in total). However, general worker participation is higher than managers in the programs (30%), while managers recorded (14.6%) and supervisors (20%). This finding supports the Ilembe Districts quarterly performance report on low participation of employees in the employee health and wellness program. Further research to better understand the phenomenon is needed.

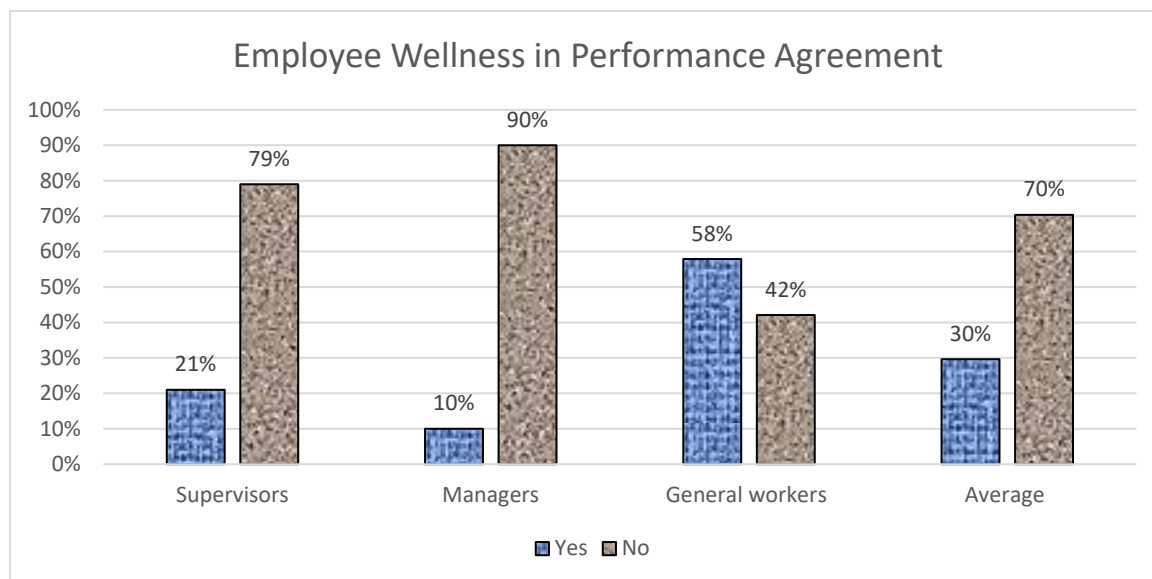
Literature reveals that this phenomenon has been found to exist in some institutions and can be explained. In a workplace wellness program study conducted in America by the Office of Policy and Research Employee Benefits Security Administration, it was confirmed that leadership support is evident at strategic level of management. However, at departmental management level, dwindling levels of support were revealed. The results of the study also

discovered that departmental managers were reluctant to release employees to participate in programs. The lack of support by line managers has a negative impact on employee participation. It was recorded, that employees whose managers show a lack of support are less likely to increase their efforts in participating in health programs. Results also revealed that lower level employees participated more in screening programs than any other category of staff. Wellness program attendance was recorded to be higher in female staff than male staff. (Rand Corporation, 2013:16-18). Employees are motivated when they see senior managers like the chief executive officer (CEO) on a treadmill, at Aerobics classes or jogging as part of the same training session as the general workforce. Such employees are more likely to acknowledge the benefits of the program and participate, recommends Craig (2016:n.d.). This finding is significant in that management charged with the responsibility of developing, implementing and monitoring employee health and wellness programs will prioritise leadership amongst managers and supervisors to improve participation levels of the general workforce. Recommendations to improve the return on investment in employee wellness programs include amongst others, executive buy into the strategy (Limeade, 2011:2).

In a study conducted in South Africa, only two organizations surveyed recorded excellent support of the employee health and wellness program in the workplace from management, whilst 13 organizations indicated good support and one recorded average support, with potential to affect resource allocations positively (Sieberhagen, 2011:13). The findings of this study support the business case for managers supporting employee health and wellness programs. Providing employee health and wellness programs at the workplace assists state departments to fulfil goals and objectives of transforming the public sector. Introduction of the employee wellness program formed part of the plethora of progressive policies and programs introduced in the new public administration of the democratically elected government of South Africa. The main aim was to improve service delivery by improving the working environment in public institutions with the ultimate goal of improving employee health and well-being, and creating a supportive environment for employees. The public health sector forms a major part of the public service delivery institutions and encourages employees to participate. This is a vital approach in improving service delivery to citizens who rely on public health employees to deliver such services. Furthermore, emphasis is placed on increasing life expectancy of South Africans in the National Development Plan 2014-2019; The Provincial Growth and Development plan (KwaZulu-Natal) and in the State of the Nation Address 2016. Implementing employee health and wellness programs assists in moving the country closer towards realising the goal of increasing life expectancy beyond 70 years of age in South Africa.

Employee wellness as a key responsibility area in performance agreements

Figure 5.6: Employee Wellness as a key performance area in performance agreements



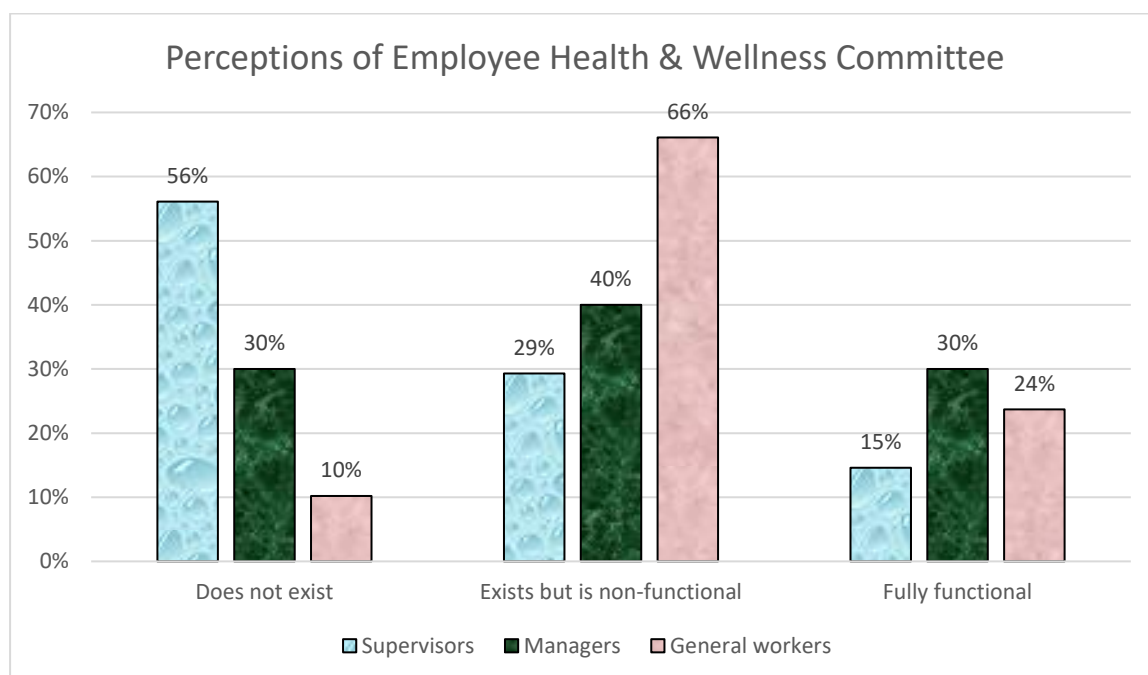
The Figure above depicts responses regarding whether or not employee wellness forms part of employee performance agreements.

The majority of employees do not have employee health and wellness as a key performance area in their performance agreements with 90% managers, 79% supervisors and 42% of general workers confirming this statement. This is a significant finding in that in the public sector the Human Resource White Paper of 2000 clearly stipulates that it is vital that there is a commitment to a total wellness program for all employees. Furthermore, the Public Service Commission (2010), confirms that managers and supervisors are responsible to provide strategic leadership and guidance in the organization to achieve strategic goals of employee health and wellness. This will assist the Department of Health to fulfil its mandate and deliver responsive and accountable public governance, which is critical in increasing the pace of delivery on Sustainable Development Goals linked to health care that supports the existence of strong strategic leadership in reaching set goals and objectives.

Employee perceptions about the employee health and wellness committee

The figure that follows depicts I Lembe Health District's employee perceptions about the existence and functionality of the health and wellness committee.

Figure 5.7: Perceptions of the employee health and wellness committee



A general variance of 20% exists between supervisors, managers and general workers in relation to their responses about the existence of the committee: the highest number of respondents who felt that the committee existed came from respondents who are supervisors (56.1%) and the lowest number of respondents who felt the same came from general workers, as only 10.2% agree that the committee does exist. This is a significant finding since the Department of Public Service Administration has recognised the importance of the establishment of employee health and wellness committees by the Heads of Department to address issues relating to employee health and wellness in all State institutions. Furthermore, the policy outlines the vital role that the committee plays in developing, reviewing and maintaining measures that ensure the wellness of employees in public institution workplaces. This would ensure organizational, psychosocial and physical wellness of employees. Moreover, the committee serves as a communication vehicle, thus promoting wellness in the workplace. (DPSA 2011:8). Table 5.7 above, has revealed large discrepancies between the general workforce and management perceptions regarding the existence of the committee. This trend can be explained by trends noted in Figure 5.3 and Table 5.3, which relate to employee participation in health and wellness programs, both being part of performance agreements. Figure 5.3 reveals very low participation levels in the employee health and wellness program: 85.4% Supervisors, 80% managers and 70% general workers did not participate in the program. Results from Table 5.3 reveal that 21% Supervisors, 10% Managers and 58% general workers did not have employee wellness as a key performance area in their performance agreement. By not having employee wellness as a key performance area in performance agreements of

managers and supervisors in particular, there is a negative effect on the success of the program since they play a key role in making the workplace health and wellness programs work. It is further recommended by literature and later in this study, that employee health and wellness forms part of managers and supervisors performance agreements processes and evaluation. (University of California, 2011:4). The wellness Policy for Public Service in South Africa has prioritised employee health and wellness committees as part of a broad objective of assuring a long and healthy life for citizens in South Africa. There is synergy between the Sustainable Development Goals and promotion of health of public servants, as health is central to sustainable development and plays a vital role in human well-being. Strengthening employee wellness committees assists institutions to focus on health in the workplace since employees are a key element of human capital that is funded by state coffers.

5.5 Section B – Health-seeking habits of employees

This section deals with the health-seeking habits of respondents.

All tables and figures in this section are indicative of the overall scoring pattern with respect to distance travelled. The figures also indicates the level of agreement only. By implication, the balance represents the level of disagreement. All graphs are captured under section analysis and are attached as Annexure A.

Table 5.3: Rotated component matrix: Employee health-seeking habits

Rotated Component Matrix ^a					
Employee Health-seeking Habits	Component				
	1	2	3	4	5
I regard myself as being healthy	.429	-.242	.309	.785	-.205
I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it	-.004	.798	-.060	.209	.140
I exercise 5 days a week for 30 minutes or more	.632	-.233	.334	-.122	.154
I get 8 hours of sleep a day	.390	.125	.660	.232	-.092
I drink 8 glasses of water a day	.811	.023	.122	-.053	.035
I check my blood pressure every 6 months	.607	.425	-.091	-.249	.283
I check my blood glucose levels every 6 months	.204	.273	-.144	.060	.756
I always have the time to exercise daily	.535	-.522	.313	-.001	.298
I bring lunch from home rather than buy fast food	.560	.005	-.081	.453	.044
I eat at least 5 fruit and vegetable in a week	-.056	.238	.135	.715	-.008
When eating out, I never order dessert	.029	-.035	.797	-.172	.117
I never miss breakfast	.031	-.171	.407	.175	.711
If healthy snacks were sold at work, I would buy them	-.021	.707	.082	.106	.006
I always chose a healthy meal at a restaurant	-.069	.114	-.195	.654	.228

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

a. Rotation converged in 11 iterations

Four themes emerged during analysis of responses, labelled and discussed below.

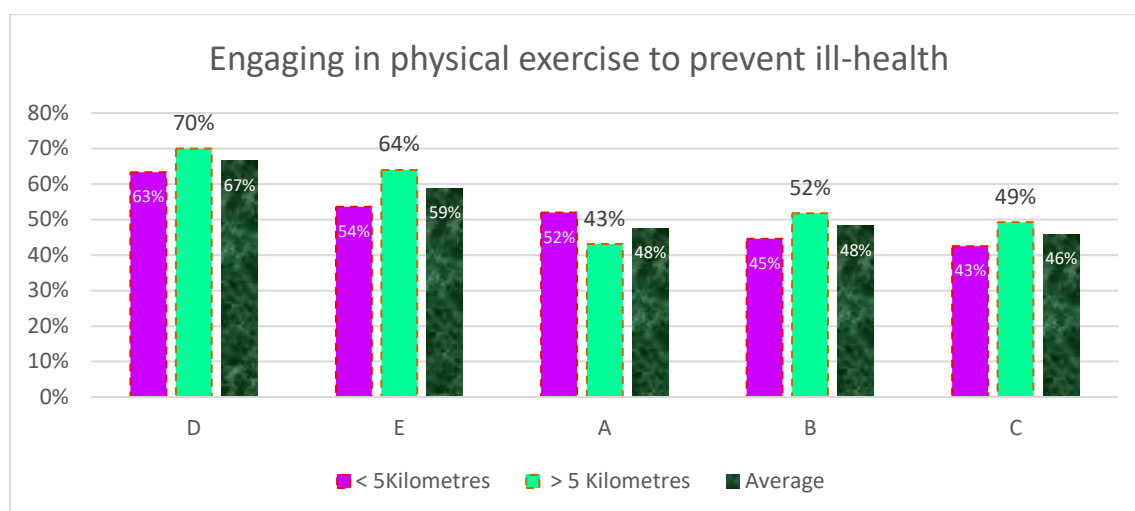
Table 5.4: Themes on Health-seeking habits

Factor	Theme	Link
Factor 1 loaded 5 items	Employee health-seeking habits that prevent ill-health through physical exercise	To promote physical wellness of employees in the public service Preventative health for enhanced service delivery
Factor 2 loaded 3 items	Employee health-seeking habits and beliefs that address risky behavior affecting the health status of employees	To promote psychosocial wellness of employees in the public service
Factor 3 loaded 2 items	Employee health-seeking habits to improve employee sleep patterns	To promote work-life balance
Factor 4 loaded 4 items	Employee health-seeking habits that improve nutritional status of employees	To promote physical wellness of employees in the public service

Component 1: Employee health-seeking habits that prevent ill-health through physical exercise

Five statements relating to employee health-seeking habits relating to engagement in physical exercise and the prevention of ill-health were identified in Component 1 and included the following statements (“I always exercise 5 days a week for 30 minutes”, “I drink 8 glasses of water a day”, “I Check my blood pressure every 6 months”, “I always have the time to exercise”, and “I bring lunch from home rather than buying fast food”. The summarised scoring patterns are shown in Figure 5.9 below.

Figure 5.8: Engaging in physical exercise to prevent ill-health



Key

A	I always have the time to exercise daily
B	I drink 8 glasses of water a day
C	I exercise 5 days a week for 30 minutes or more
D	I bring lunch from home rather than buy fast food
E	I check my blood pressure every 6 months

Summary

In the cross sectional analysis conducted on Component 1 referring to examined employee health-seeking habits in relation to physical exercise that prevents ill-health, it was discovered that on average 53.4% of employees engage in physical exercise to prevent ill-health. The differences recorded between those travelling below 5 kilometres and those travelling above 5 kilometres was minimal: 51.2% of employees travelling below 5 kilometres and (55.6%) of

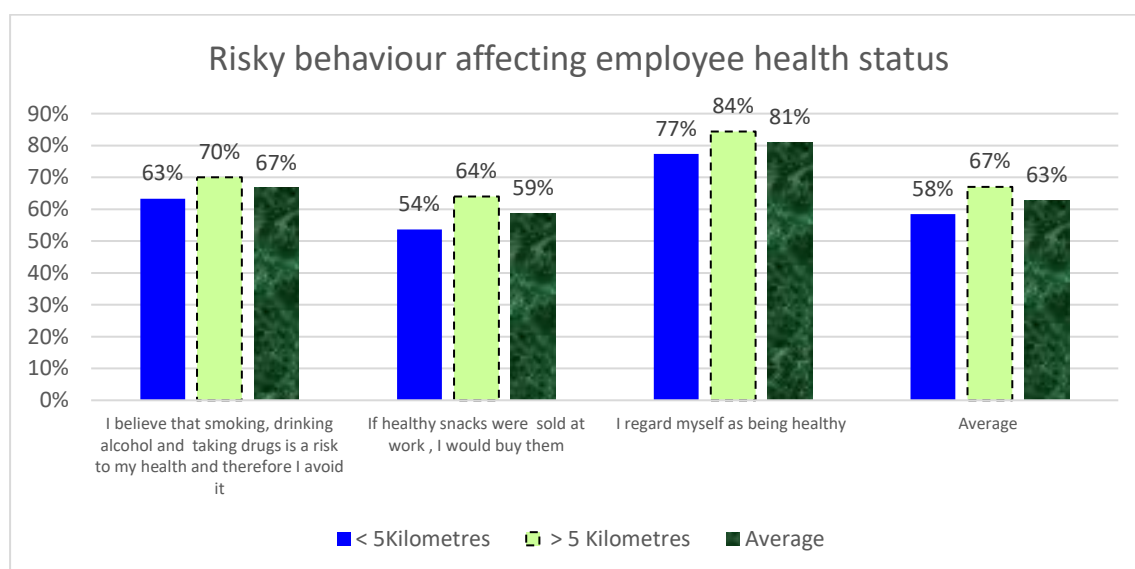
employees travelling above 5 kilometres reported agreement of health-seeking habits that involve the engagement in physical activity to prevent ill-health.

The highest level of agreement was recorded amongst employees who agree that they bring lunch from home rather than buy fast food, with a 7% variance noted between those travelling above and below 5 kilometres to work.

The lowest level of agreement (45.9%) was noted amongst employees when asked if they exercised 5 days a week for 30 minutes or more, with a very small variance (3%) noted between those employees travelling above and below 5 kilometres to work. This is a significant finding since the current employee health and wellness physical fitness program in ILembe Health District does include programs that promote physical activity, with a gymnasium available in all facilities. Employees who agree that they have the time to exercise were recorded at 48%, with not much variance noted between those travelling above and below 5 kilometres to work. This phenomenon could not be adequately answered in this study since the Department has allowed 2 hour concessions available for physical fitness programs. Further in-depth research is recommended to identify factors that influence such health-seeking habits.

Component 2: Health-seeking habits and beliefs that address risky behaviour affecting the health status of employees

Figure 5.9: Risky behaviour affecting employee health status

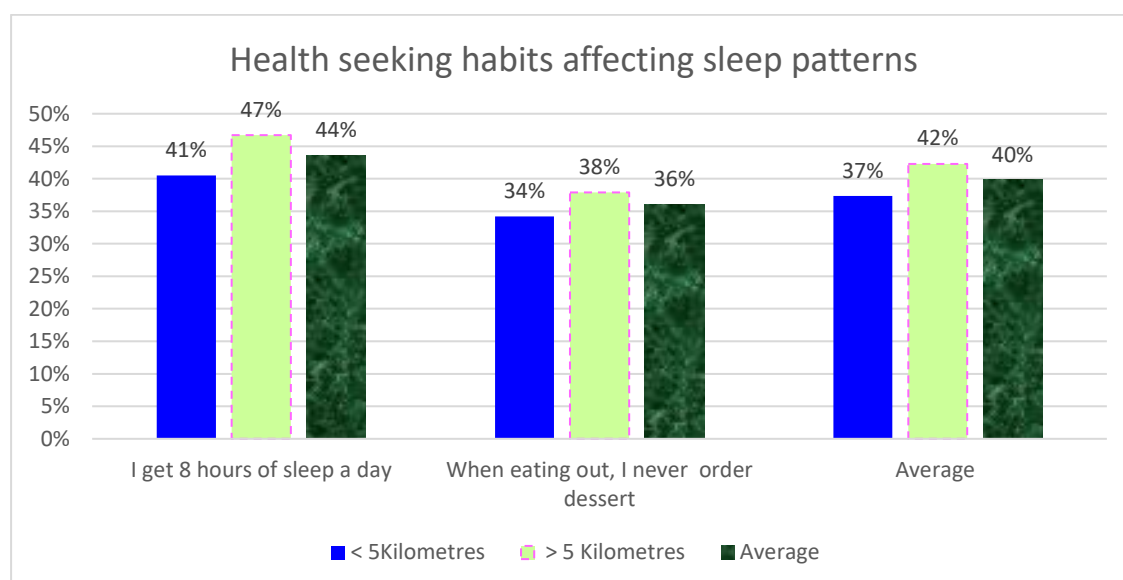


Component 2 consisted of three statements relating to employee health-seeking habits and beliefs around risky behaviour affecting the health status of employees. Analysis of the 3 statements revealed that 63% of employees adopt health-seeking habits and beliefs that avoid risky health behaviour. Minor differences in percentages of employees travelling above (67%)

and those below 5 kilometres (58%) was discovered, indicative of the fact that distance has very little influence on employees' ability to adopt health-seeking habits and beliefs to avoid risky behaviour. A further finding revealed that on average 81% of employees regard themselves as being healthy. Closer analysis revealed that general workers possess lower levels of health-seeking habits and beliefs to avoid risky behaviour. This is evident in the trend noted in this study, where 80 to 90 percent of managers and supervisors possess such health-seeking habits while only 58.7 percent of general workers possess such health-seeking habits. This is a significant finding as this study seeks to understand health-seeking habits of employees that may affect enrolment trends of employees in employee health and wellness programs. The fact that on the one hand, general workers regard themselves as being healthy but on the other, do not adopt health-seeking habits to avoid risky health behaviour, may have an effect on their choice to enrol in such programs. This requires health services management to address this issue as part of the employee health and wellness program. The ILembe Health District management can utilise health education programs to improve health literacy and influence health-seeking behaviour in fulfilling their role as guarantor and enablers. They should mobilise resources toward the employee health and wellness program that aims to fulfil universal health care delivery.

Component 3: Health-seeking habits affecting sleep patterns

Figure 5.10: Health-seeking habits affecting sleep patterns



On analysis of the above figure, employees in ILembe District report an average of 40% health-seeking habits affecting their sleep patterns. Sleep is a vital determinant of public health since it plays a major role in the health and well-being of citizens. The lack of sleep exposes

employees to a higher risk to, injury, chronic diseases like hypertension, diabetes, cancer and stroke and obesity, which in turn affects physical, mental, behavioural and performance ability since sleep deprivation increases absenteeism and presenteeism. This is a significant finding since absenteeism, presenteeism, accidents and injury have the potential of increasing costs of service delivery since employees will not be fully effective. Chapter 10 of the Constitution relates to public administration where public institutions like ILembe Health District Management are expected to provide services that are effective and efficient. Having employees who do not get adequate sleep and with more than half of them not adopting health-seeking habits to improve sleep patterns is an aspect to be addressed through employee health and wellness health promotion programs.

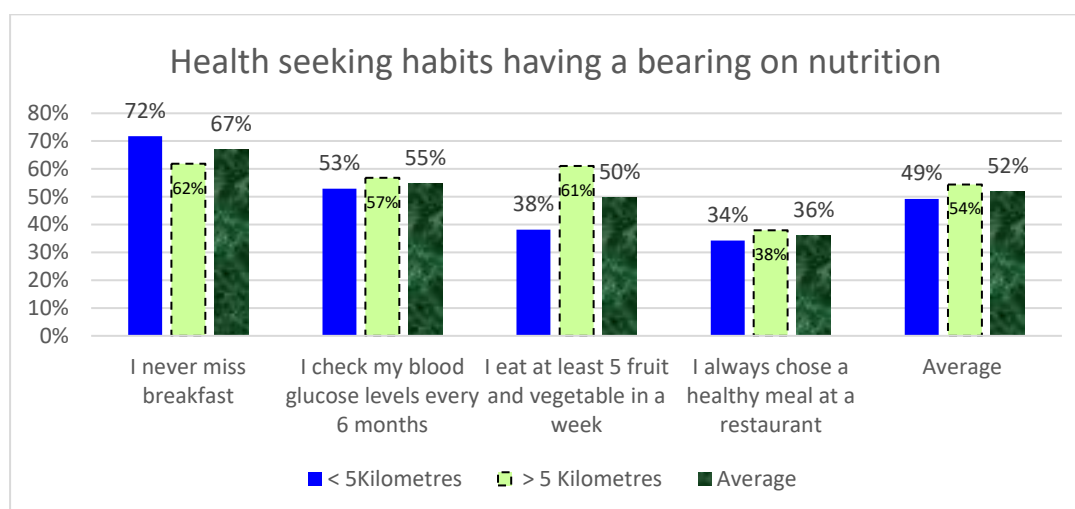
This is a significant finding since this study aimed to understand health-seeking habits of employees and it is evident that above 50% of employees do not have the time to exercise, while others who have the time to exercise, do not fulfil the recommended 30 minutes daily for 5 days a week and others do not get adequate sleep daily. This is evident of a weak culture of health-seeking habits, which exposes employees to medical conditions related to a sedentary lifestyle. The lack of sleep may pose a serious health and safety risk to employees, as espoused in the Occupational Health and Safety Act 85 Of 1993 (section 8:2e & section 14:a), which stipulate that the employer should provide information to employees to ensure health and safety in the workplace. By providing the necessary information to employees on the risks associated with the lack of sleep and exercise, the employer is able to empower employees to fulfil their responsibilities as captured in the Act, where an employee is expected to take reasonable care for his and other person's health and safety that maybe affected by his acts or omissions.

Component 4: Employee health-seeking habits relating to nutrition

Four statements linked to nutrition related health-seeking habits of employees and are discussed further in this section. The statements to be analysed further are:

- “I never miss breakfast”
- “I eat at least 5 fruit and vegetables in a week”
- “I check my blood glucose every 6 months”
- “I chose healthy meals at a restaurant”

Figure 5.11: Health-seeking habits having a bearing on nutrition



Analysis of the 4 statements contained in components 4 that dealt with employee health-seeking habits that have a bearing on their nutritional status, reveal that on average, 52 % of employees are in agreement that they possess health-seeking habits which influence their nutritional status.

The highest level of agreement amongst all 3 categories of respondents was found when examining employee habits regarding their choice to have breakfast, and the lowest level of agreement existed in the will power employees possess to choose healthy meals at a restaurant.

On average, 54.9% of employees have screening of blood glucose levels conducted every 6 months as part of health-seeking behaviour through health screening. This is a significant finding since the country is striving to assure “a long and healthy life for citizens” and in order to fulfil this vision, regular health screening is vital to detect early onset of health conditions like diabetes mellitus and the effective management thereof. When the draft National Development Plan (NDP) was released in 2011, there was a realisation that health and economic development are interdependent. Utilising the NDP as a vehicle to weave health into objectives of broader socio-economic development is therefore vital in order to address the epidemiological risk profile of South Africa. Therefore, a renewed focus on prevention in addressing the social determinants of health is being promoted through multiple approaches that involve policies to augment efforts that reduce the burden of non-communicable diseases in South Africa. Furthermore, the promotion and maintaining of a healthy workforce is elevated in the NDP. Achieving the goal of ‘a long and healthy life for all South Africans’ requires vigorous public policies, well-functioning institutional and physical infrastructure, social solidarity, and a dynamic and conscientious civil society (South African Medical Journal, 2012:827-829). Therefore, the ILembe Health District employee health and wellness program requires a focussed approach on improving employee nutritional status through health

promotion and increased support of programs. Innovative ways of promoting healthy choices could involve the addition of a fruit and vegetable kiosk in the cafeteria and health screening campaigns for employees.

5.6 Section C: Employee interests in health education topics

The table below captured responses to questions relating to employee interests in health education topics as part of the workplace health and wellness program. Four (4) components emerged and were grouped accordingly.

Table 5.5: Rotated component matrix: Employee interest in health education topics

Rotated Component Matrix ^a				
	Component			
	1	2	3	4
Management of Skin conditions	.592	.370	.383	-.092
Preventing obesity	.713	.267	.364	.029
Eye care	.517	.397	.424	.142
Stress management	.592	.187	.478	.152
Healthy cooking tips	.425	.083	.761	.092
Healthy eating	.309	.046	.726	.101
Family exercise routine	-.007	.298	.748	.250
Preventing accidents and injuries	.610	.178	.470	.082
Keeping fit	.190	.282	.795	.123
Stress management	.721	.071	.284	.245
Health effects of smoking ,alcohol and Drugs	.319	.685	.175	.155
Women's health	.764	.108	.094	.114
Men's health	.141	.680	.256	.123
Health tips on preventing chronic diseases	.146	.755	.346	.270
Managing diabetes	.304	.807	.195	.194
Managing hypertension	.749	.389	.186	.173
diagnosing and managing HIV AIDS	.561	.420	.025	.102
Detecting and managing TB	.230	.773	-.051	.334
Heart conditions	.338	.334	-.140	.719
Sexual and reproductive health	-.023	.510	.173	.604
Maintain healthy cholesterol levels	.192	.281	.083	.749
Personal financial management	.003	.045	.350	.774
Oral Care	.167	.187	.298	.584
Self defence	.410	.024	-.071	.328

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

a. Rotation converged in 9 iterations

The components or themes are:

- “ Employee interests in health topics to prevent physically debilitating conditions”
- “ Employee interests in health topics to prevent communicable diseases and non-communicable diseases”
- “ Employee interests in health topics that promote family health”
- “ Employee interests in health topics that promote a healthy heart ”

Table 5.6: Themes of employee interest in Health education topics

Factor	Theme	Link
Factor 1 loaded 10 items	Employee interests in health education topics to prevent physically debilitating conditions	To promote an organizational culture that is conducive to individual and organizational wellness
Factor 2 loaded 6 items	Employee interests in health education topics related to Prevention of Communicable and Non-communicable Diseases	To promote psychosocial wellness of employees in the public service
Factor 3 loaded 4 items	Employee interests in health topics that promote family health	To promote physical wellness of employees in the public service
Factor 4 loaded 4 items	Employee interests in health topics that promote a healthy heart	To promote physical wellness of employees in the public service

Component 1: Employee interests in health education topics to prevent physically debilitating conditions

Table 5.7: Prevention of physically debilitating conditions

PREVENTION of PHYSICALLY DEBILITATING CONDITIONS			
STATEMENTS	< 5Kilometres	> 5 Kilometres	Average
MANAGEMENT of SKIN CONDITIONS	95%	92%	93%
PREVENTING OBESITY	94%	92%	93%
STRESS MANAGEMENT	93%	92%	92%
EYE CARE	96%	87%	91%
PREVENTING ACCIDENTS and INJURIES	90%	88%	89%

PREVENTION of PHYSICALLY DEBILITATING CONDITIONS			
STATEMENTS	< 5Kilometres	> 5 Kilometres	Average
WOMEN'S HEALTH	77%	86%	81%
MANAGING HYPERTENSION	77%	86%	81%
DIAGNOSIS and MANAGING HIV-AIDS	77%	86%	81%
SELF-DEFENCE	77%	86%	81%
AVERAGE	84%	87%	85%

Statements that fell within this component related to employee choices in receiving health information (stress management, management of skin conditions, prevention of obesity, eye care, prevention of accidents and injury, women's health, management of hypertension, diagnosing and managing of HIV/AIDS and self-defence) received an 85% level of agreement on average. On further analysis, it was determined that 4 statements received 90 to 95% level of agreement, and 5 statements received between 89 to 81% level of agreement on average.

A high number of respondents agreed that they would be interested in receiving health education on women's health (average 86.4%). A high level of interest was show by managers (100%). A 10% variance was recorded between supervisors travelling above and below 5 kilometres to work. Lower levels of agreement was recorded by supervisors (17.1% lower) and general workers (23.7% lower). This is a significant finding since it has been determined that the health care workforce is dominated by female employees, hence women's health issues require prioritization and mainstreaming. However, the huge difference between manager's responses and supervisors and general workers, could not be adequately explained and would require further research to understand the phenomenon.

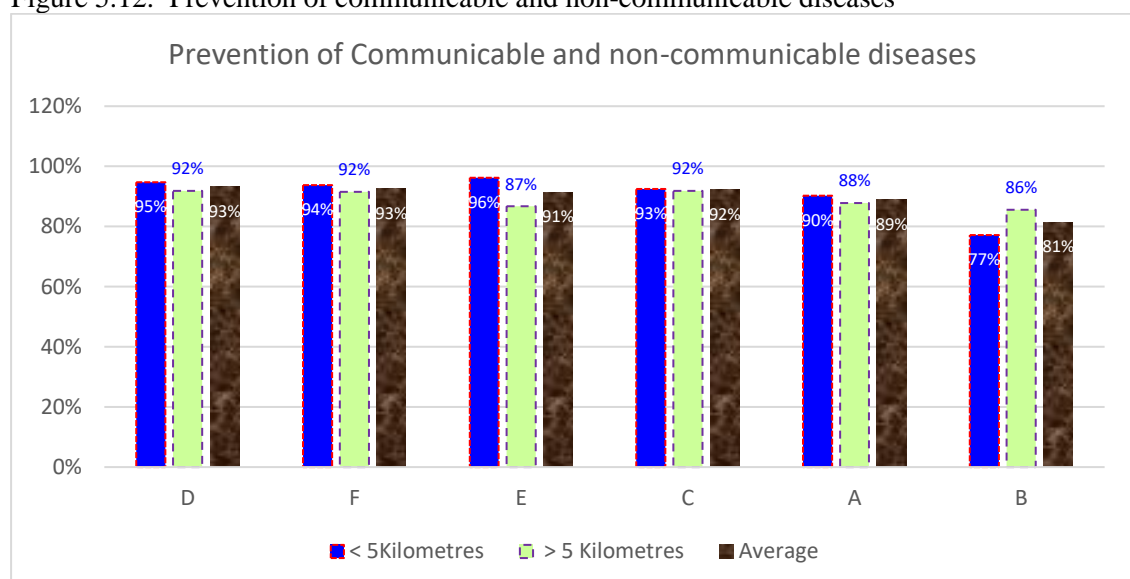
A high number of respondents are interested in topics that address eye care (average 95.4%) with all 3 groups of respondents travelling above 5 kilometres to work recording above 90% agreement and those travelling below 5 kilometres recording above 85 to 100% agreement. This finding is significant since the demographic profile of participants revealed that the majority of employees are above the age of 40 years (39.5%) when presbyopia sets in as a natural occurrence linked to ageing states (Sivardeen, 2015:20). South Africa has a vision of assuring "a long and healthy life for its citizens" and taking care of ophthalmic needs of the ageing population is vital in order to fulfil the vision captured in the NDP (National Department of Health).

On average, most respondents (94.9%) agree that they were interested in information on preventing accidents and injuries. This finding is significant as it reveals that employees in general are interested in improving occupational health and safety. The Occupational Health and Safety Act 85 of 1993 bequeaths common law duty of reasonable care on the employer. Section 8(2 d) clearly states that the employer must have a health and safety system in place. The Act further states that the employer must have a health risk assessment system in place to identify workplace hazards and control measures. Employees also have a legal duty (section 14 of the OHSA) to take reasonable care of their own health and safety and that of others who may be affected by their acts or omissions. Employers must provide systems to train employees and keep them informed of their legal obligations, as prescribed in the OHSA.

On average, close to all respondents are interested in getting information on the diagnosing and management of HIV/AIDS in the workplace (average 92.9%). Amongst employees travelling above 5 kilometres, general workers displayed the lowest level of agreement (88.5%), while supervisors who travel below 5 kilometres recorded the lowest level of agreement in comparison to managers and general workers (82.5%). This finding is significant. HIV/AIDS affects the most productive segment of population (15 to 49 years of age) and with South Africa having the highest HIV incidence amongst its workforce in the world, prioritising HIV/AIDS management programs is vital, emphasises Steenkamp, Von der Marwitz, Baasner-Weihs & Pietersen (2015:n.p.).

Component 2: Employee interests in health education topics to Prevent Communicable and Non-communicable Diseases

Figure 5.12: Prevention of communicable and non-communicable diseases



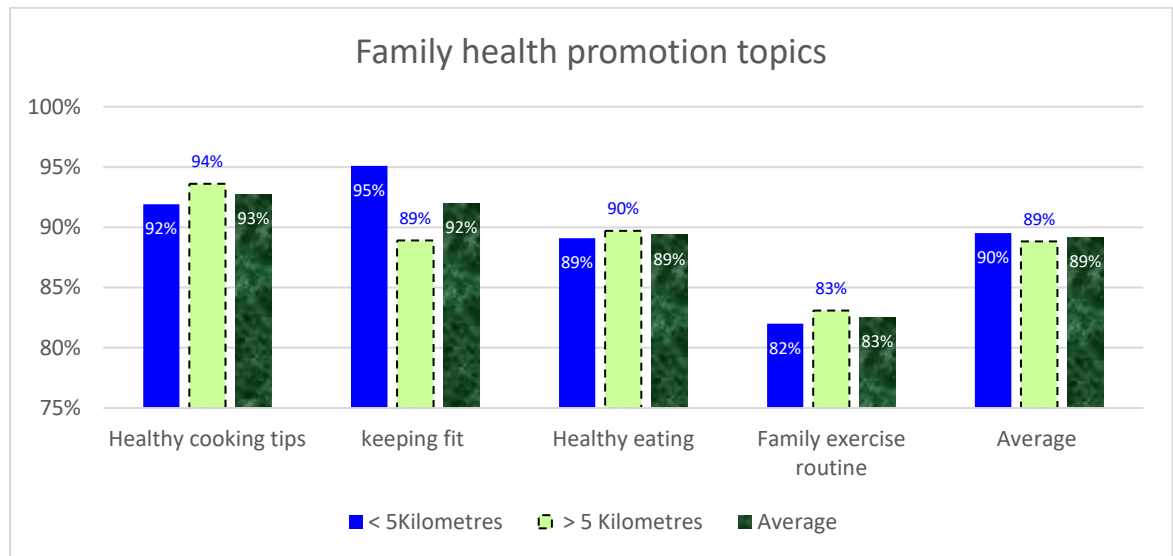
Key

A	Health effects of smoking, alcohol and Drugs
B	Men's health
C	Health tips on preventing chronic diseases
D	Managing diabetes
E	Detecting and managing TB
F	Sexual and reproductive health

On analysis of the table above, on average 92.1% of respondents are interested in receiving health tips on preventing chronic diseases. All managers (100%) indicated that they would be interested in receiving such information. General workers' level of agreement on average was recorded at 86.2%, with a minute variance (3.3%) recorded between those travelling above and below 5 kilometres to work. Supervisors recorded a 90.2% level of agreement with those travelling below 5 kilometres recording an 87.5% agreement and those travelling above 5 kilometres recording a 92.9% level of agreement. This is a significant finding since one of the research questions aimed to understand ILembe Health District's employee susceptibility to non-communicable diseases. With 92.1% of employees interested in receiving information, this shows that employees are interested in preventing NCDs. Furthermore, these employees are prepared to take responsibility for their own health, which is promoted through the Occupational Health and Safety Act 58 of 1993, in South Africa.

Component 3: Employee interests in family health promotion topics

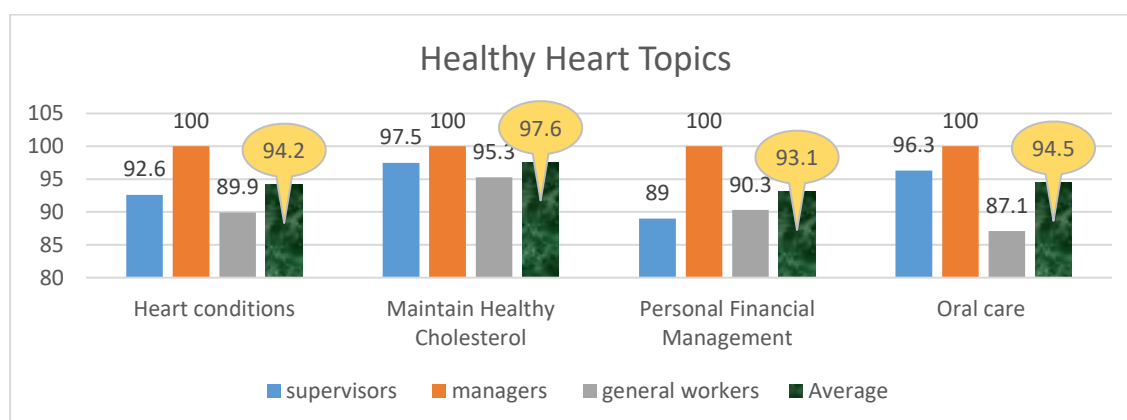
Figure 5.13: Family Health promotion topics



On analysis of the above figure, 89% of employees agree that they would support having family health promotion topics as part of the employee health and wellness program. Further analysis revealed that healthy cooking habits have the highest level of agreement followed closely by employees wanting to keep fit. Family exercise enjoyed the lowest level of agreement amongst employees (83%). This is a significant finding, since the Department of Public Service and Delivery in South Africa promotes the principle of “improving employee health and wellness in order to build and maintain a healthy workforce that promotes increased productivity and excellence in service delivery for employees and their families”(Department of Public Service and Delivery, 2008:14).

Component 4: Employee interests in health topics that promote a healthy heart

Table 5.14: Healthy heart topics



All statements were highly supported by employees from the 3 different categories: on average, all 4 high show level of agreement above 90%. This means that there is a keen interest in addressing cardiovascular health in ILembe Health District and thus investments in such programs should be promoted. In so doing, ILembe Health District would be assisting the country in assuring a long and healthy life for its citizens since loss of life linked to cardiac conditions remains a public health threat in the country.

5.7 Section D: Employee Interests (Physical Sport Codes to enhance employee wellness)

The table below captures responses to questions relating to employee interests in physical sports codes. Three (3) components emerged.

Rotated Component Matrix^a

Table 5.8: Employee interests in sport codes

EMPLOYEE INTERESTS (SPORT CODES)	Component		
	1	2	3
Soccer	.092	.626	.168
Netball	.219	.447	.516
Volleyball	.465	.473	.324
Aerobics	.797	.281	-.028
Exercising using the gym equipment	.722	.147	.132
Jogging	.545	.270	.308
Dancing	.810	.088	-.019
Walking	-.058	.085	.863
Table tennis	.290	.719	.189

EMPLOYEE INTERESTS (SPORT CODES)	Component		
	1	2	3
Indoor basketball	.252	.635	.372
Rugby	.229	.707	-.088
Yoga	.506	.337	-.316
Park and walk to work	-.479	.506	-.066

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

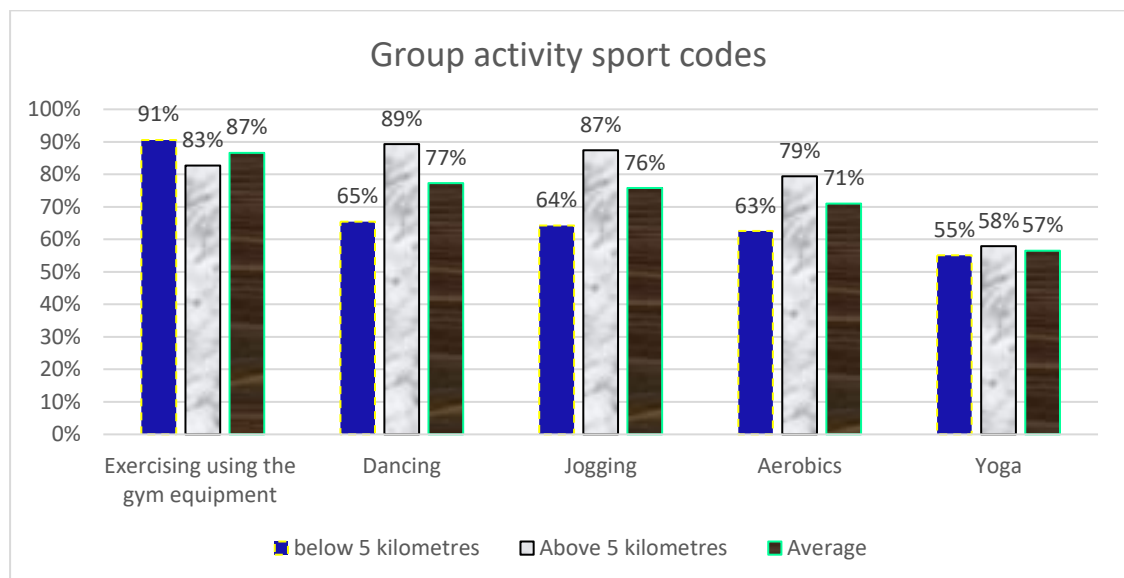
a. Rotation converged in 7 iterations

Table 5.9: Themes in Employee interests in Sport codes

Factor	Theme	Link
Factor 1 loaded 5 items	Group Activity Physical Sport Codes	To promote psychosocial wellness of employees in the public service
Factor 2 loaded 6 items	Ball control sport	To promote physical wellness of employees in the public service
Factor 3 loaded 2 items	Outdoor sport codes	To promote physical wellness of employees in the public service

Component 1: Group Activity Physical Sport Codes

Figure 5.15: Group activity sport codes



The above figure depicts employee responses to group activity sport codes. On analysis of the above Figure 5: 13, 73% of employees recorded a keen interest in group activity sport in

general. A variance of 11% was recorded between those employees travelling above and below 5 kilometres (below 5 kilometres 68% and above 5 kilometres 79%).

The highest level of agreement was recorded amongst employees who prefer exercising utilising gymnasium equipment (87%), with an 8% variance recorded between those travelling above and below 5 kilometres.

Employees preferring to engage in dancing, jogging and aerobics were in the 70 percent range, with those travelling below 5 kilometres recording above 60% but below 70% range.

The lowest level of agreement was recorded amongst employees choosing yoga (57%), with a very minute variance recorded between those travelling above and below 5 kilometres to work.

Component 3: Employee Interests (Outdoor Sport Codes)

Table 5.10: Employee interests in outdoor sport codes

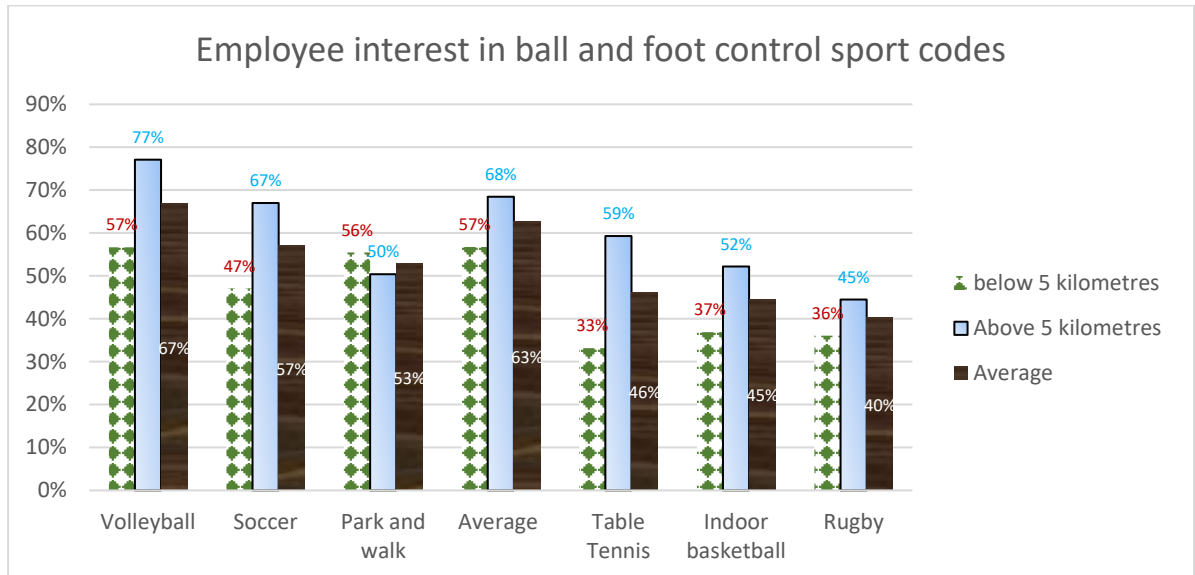
	Walking		
	Travels Below 5 Km	Travels Above 5 Km	Average
Managers	80.0%	100.0%	90.0%
Supervisors	90.5%	94.9%	92.7%
General Workers	34.6%	60.6%	47.6%
Average	68.4%	85.2%	76.8%
	Netball		
	Travels Below 5 Km	Travels Above 5 Km	Average
Managers	60.0%	100.0%	80.0%
Supervisors	47.6%	66.7%	57.1%
General Workers	38.5%	45.5%	42.0%
Average	48.7%	70.7%	59.7%

Summary

On average, 68.25% of respondents are interested in outdoor sport codes with all managers (100%) travelling above 5 kilometres interested in walking and in netball. General workers revealed the lowest level of agreement on average in participating in outdoor sport codes: 47.6% average was recorded for walking and 42% was recorded for netball. A higher level of agreement in participating in walking (76.8%) was recorded in comparison to netball (59.7%) on average amongst respondents.

Component 2: Employee interests in ball and foot strength sport codes as part of the employee health and wellness program

Figure 5.16: Employee interest in ball and foot control sport codes



The above Figure captures employee responses to their interests in ball and foot strength sport codes. On average, 51% of employees showed interest in sport codes that involve foot and ball strength sport codes. Employees travelling above 5 kilometres revealed a higher level of agreement (58%) on average in comparison to those travelling below 5 kilometres (44%).

Volleyball received the highest level of agreement amongst employees (67%), with a 20% variance recorded between those travelling above 5 kilometres (77.1%) and below 5 kilometres (56.7%).

On average, 40.3% employees chose to have rugby as part of the ball and foot control sport codes, with an 8.4% variance noted between those travelling above and below 5 kilometres. The lowest average level of agreement was recorded amongst supervisors (17.1%) with those travelling above 5 kilometres recording (12.8% below the average. General workers on average recorded a 43.8% level of agreement with a 34% variance noted between those travelling above and below 5 kilometres.

ILembe Health District employee health and wellness program does include volleyball in some facilities. Consideration should be given to add this sport code to most facilities to address employee needs in order to fulfil Batho Pele principle of consultation and cater for public services that are responsive to people's needs. Financial implications to be considered include costs of building and maintaining of sport fields, procurement of balls, sport kits and nets. Monitoring and evaluation of impact is vital to ensure fulfilment of the Batho Pele Principle

that addresses the best possible value-for-money (return on investment). Currently, rugby is not offered in any institution in ILembe District and from the results of this study, the *status quo* should remain, since it enjoyed the lowest level of agreement amongst employees.

5.8 Section E: Employee Perceptions of the Wellness Program

The table below captured responses to questions relating to employee perceptions of the wellness program. Seven (7) components emerged and were grouped along these lines:

Table 5.11: Employee Perceptions of the Wellness Program: Rotated Component Matrix^a

EMPLOYEE PERCEPTIONS OF THE WELLNESS PROGRAM							
	1	2	3	4	5	6	7
Employees regard private gyms as being more effective than workplace fitness programs	.002	.670	-.117	-.319	.121	-.148	-.029
Employees who are physically fit feel that they do not need to utilize the workplace fitness programs	-.229	.829	.266	.025	-.023	.055	.123
Employees who utilize private gyms feel that they do not need to utilize the workplace fitness programs	-.167	.868	.125	.095	-.001	-.083	.173
Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in worksite physical fitness programs	-.093	.720	-.183	.130	-.153	-.178	.060
Since participation in physical fitness programs is voluntary, it is negatively affecting participation trends	-.157	.276	.204	-.068	.131	-.109	.752
It is important to engage employees in designing workplace fitness programs	.151	.080	-.220	-.059	-.154	-.121	.812
Employees do feel safe exercising after hours at work	.204	-.313	-.137	-.051	.073	.784	-.009
There are sufficient bathroom facilities to freshen up after physical exercise	.092	.009	.054	.269	-.057	.697	-.310
Employees were consulted about the physical fitness program that is in place	-.055	.168	-.077	.635	.204	.205	-.311
The physical fitness program is correctly placed in the Health promotion unit and need not be led by HR	.009	.012	.140	.790	.117	-.199	.124
Benefits of the physical fitness program is well marketed	.036	-.102	.178	.729	.102	.260	-.099
The 2 hour concession being offered to exercise is sufficient	.199	.216	.638	.147	-.191	-.420	.019
Equipment to exercise is sufficient for all employees to exercise at work	-.159	.131	.795	.192	.239	-.038	-.045
Privacy is provided in the physical exercise areas	-.005	-.257	.460	.021	.484	.404	-.059
Managers motivate employees to exercise	.451	.110	-.019	-.039	.616	-.105	-.036
Physical fitness programs will prevent hypertension	.901	.028	-.100	-.093	-.007	.021	-.134
Physical fitness programs will prevent diabetes	.915	-.021	-.179	-.085	-.042	.013	-.131
Physical fitness programs will prevent cardiac conditions	.914	-.188	.039	-.036	.055	.061	.165

EMPLOYEE PERCEPTIONS OF THE WELLNESS PROGRAM							
	1	2	3	4	5	6	7
Physical fitness programs will assist in weight control	.891	-.148	-.058	.005	.115	.083	.189
Physical fitness programs can assist in preventing stress	.928	-.137	.070	.044	.028	.044	.086
Physical fitness programs can improve productivity	.879	.022	-.163	.058	-.002	-.040	-.145
Physical fitness programs can reduce absenteeism linked to ill-health	.753	-.218	-.005	.101	.094	.162	-.002
Health promotion messages are distributed regularly	.026	-.038	-.028	.177	.688	.281	.009
Employees take the advice offered in health promotion messages	-.067	-.074	-.088	.428	.732	-.280	-.020

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

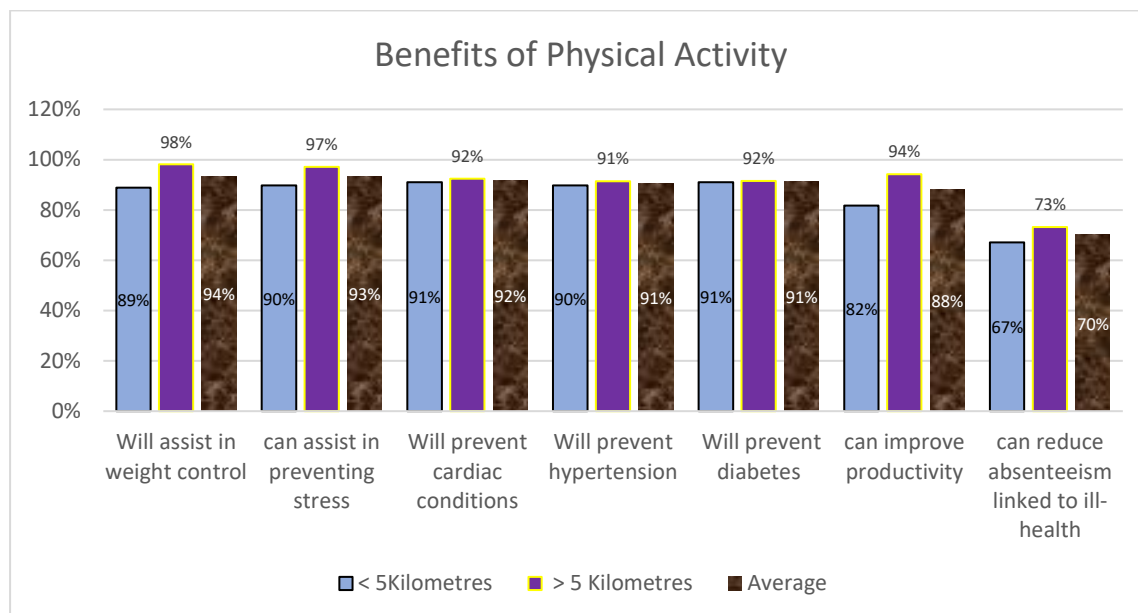
a. Rotation converged in 9 iterations

Table 5.12: Themes on Employee perceptions of the wellness program

Factor	Theme	Link
Factor 1 loaded 7 items	Benefits of physical activity promoting productivity	To promote organizational culture that is conducive to individual and organizational wellness
Factor 2 loaded 4 items	Impact of gymnasiums on public health	
Factor 3 loaded 3 items	Employee perceptions of wellness affecting governance of the wellness program	
Factor 4 loaded 3 items	Visibility of physical fitness programs to improve accountability in the public service	
Factor 5 loaded 3 items	Health promotion to improve health outcomes	
Factor 6 loaded 2 items	Promoting health and safety through wellness	
Factor 7 loaded 2 items	Employee engagement promoting responsive public service delivery	

Component 1: Benefits of physical activity in promoting productivity

Figure 5.17: Benefits of physical activity in promoting productivity



Summary

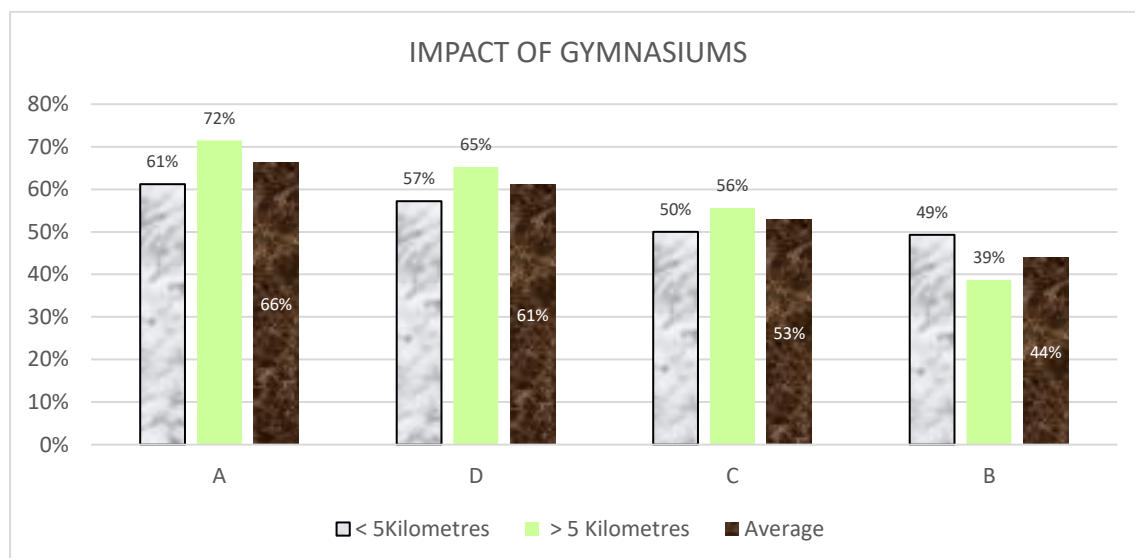
The highest level of agreement is recorded against the perception that employees hold that the benefit of physical activity is weight control (98%), with a 5% variance recorded between those travelling above and below 5 kilometres to work.

The lowest level of agreement was recorded against the perception that the benefit of physical activity is that it reduces absenteeism linked to ill-health (73%), with a minute variance recorded between those travelling above and below 5 kilometres.

Five (5) statements revealed average levels of agreement above 90% and all involve chronic non-communicable conditions that can be prevented through physical activity. This is an important finding since one of the questions of this study is to gauge employee susceptibility to non-communicable diseases. With this high level of agreement, it is evident that employees are interested in prevention of such conditions, therefore placing their susceptibility to chronic conditions at a lower level of risk.

Employee perceptions on the impact of gymnasiums on public health

Figure 5.18: Impact of gymnasiums



Themes

A	Employees regard private gyms as being more effect than workplace fitness programs
B	Employees who are physically fit feel that they do not need to utilize the workplace fitness programs
C	Employees who utilize private gyms feel that they do not need to utilize the workplace fitness programs
D	Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in worksite physical fitness programs

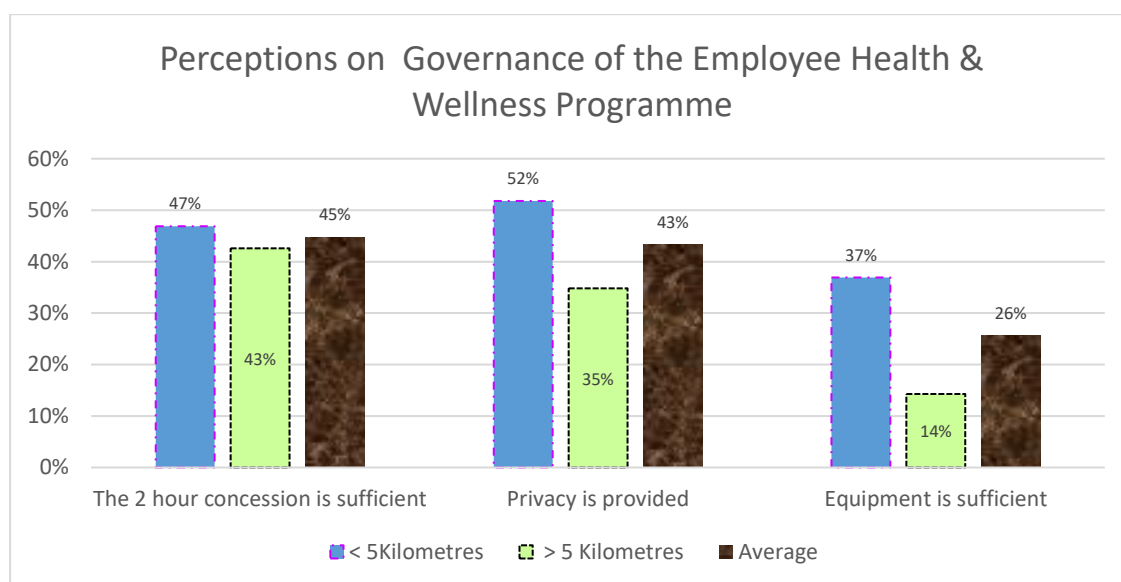
Summary

Fewer employees on average hold the view that if an employee is fit, they need not participate in the internal health and fitness workplace program (44%). However, a higher number of employees hold the belief that private gymnasiums are more effective than internal workplace health and fitness programs (average 66.4%). Furthermore, above 60% of employees hold the belief that the employer should rather subsidize their private gymnasium fees than invest in internal programs. This finding is significant, since one of the questions posed in this study was to find out the perceptions held by employees of the internal health and wellness fitness program. From a public management point of view, this will have financial implications on employee benefits since funding will have to be made available to subsidize such programs. Furthermore, a strong monitoring and evaluation system must be in place to constantly and closely monitor the impact of such an arrangement on employee health and wellness. All these

arrangements are put in place in order to fulfil prescripts emanating from Chapter 10 of the Constitution of the Republic of South Africa, regarding accountability in the public sector.

Perceptions affecting governance of the employee health and wellness program

Figure 5.19: Perceptions on governance of the employee health and wellness programs



Summary

On average, 45% employees believe that the 2 hour concession is sufficient with a minute variance (4%) noted between those travelling above and below 5 kilometres to work. Currently, ILembe Health District policy allows a 2 hour concession and the results show that employees regard the 2 hours as being insufficient. This is a significant finding since this perception does have the potential to pose a barrier to enrolment and participation in employee health and wellness programs. This requires that the policy be reviewed to address employee needs in order to get the highest impact and return on the investment.

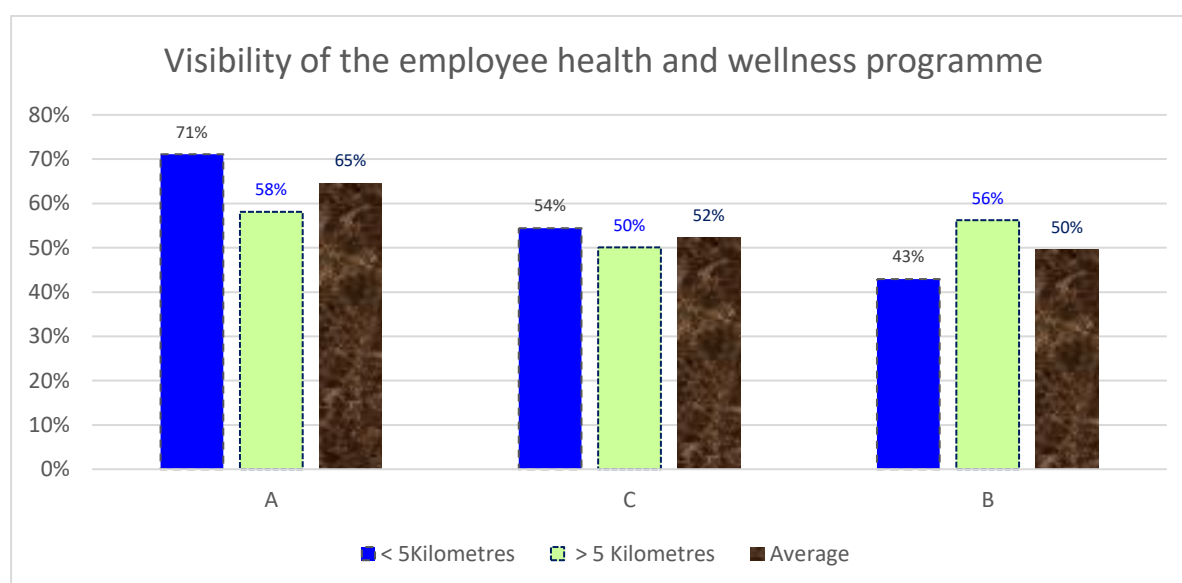
Employees who agreed that privacy is provided averaged 43%, with a 17% variance recorded between those travelling below 5 kilometres (52%) and those travelling above 5 kilometres (35%).

A very low level of agreement existed amongst employees who believe that the equipment to exercise was sufficient. This finding is significant, in that the main objective of this study was to identify factors that could have a bearing on enrolment trends. The factors identified, revealed that employees were not satisfied with the current arrangements pertaining to the availability of equipment to exercise. This factor has a bearing on the Batho-Pele Principle of

accessibility, where management is expected to address issues of access to health care in order to deliver and strengthen public service delivery. Addressing these gaps has the potential of improving enrolment trends. Consideration must be made to fund resources like equipment and devices or structures that promote privacy during physical activity.

Visibility of physical fitness programs to improve accountability in the public service

Figure 5.20: Visibility of employee health and wellness program



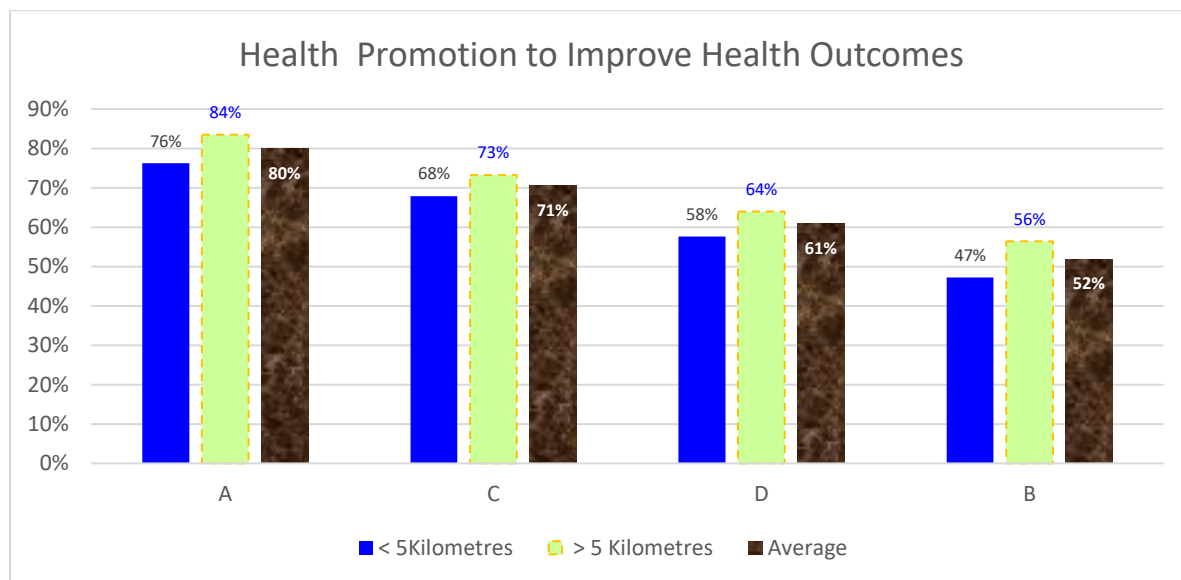
A	Employees were consulted about the physical fitness program that is in place
B	The physical fitness program is correctly placed in the Health promotion unit and need not be led by HR
C	Benefits of the physical fitness program is well marketed

Summary

Above 60 percent of employees on average agree that they were consulted about the physical fitness program, with those travelling below 5 kilometres having the highest level of agreement with the statement (71%). The level of agreement amongst employees who hold the belief that the program is correctly placed and that it was well marketed is 50% and 52% respectively. The level of agreement amongst general workers regarding placement of the physical fitness program was the lowest in this component (24%). Further exploration of this phenomenon would be useful to better understand factors that influence this category of staff holding this view and its impact on enrolment and participation in employee health and wellness programs.

Health promotion to improve health outcomes

Figure 5.21: Health promotion to improve health outcomes



A	I motivate employees to exercise
B	Health promotion messages are distributed regularly
C	Employees take the advice offered in health promotion messages
D	If there were rewards like trophies and t-shirts or certificates for employees who participate, employees would be motivated to participate

Summary

On analysis of the above table relating to health promotion, approximately 10% variance was noted between the 4 statements, with the highest level of agreement being 80% and the lowest level of agreement at 52%.

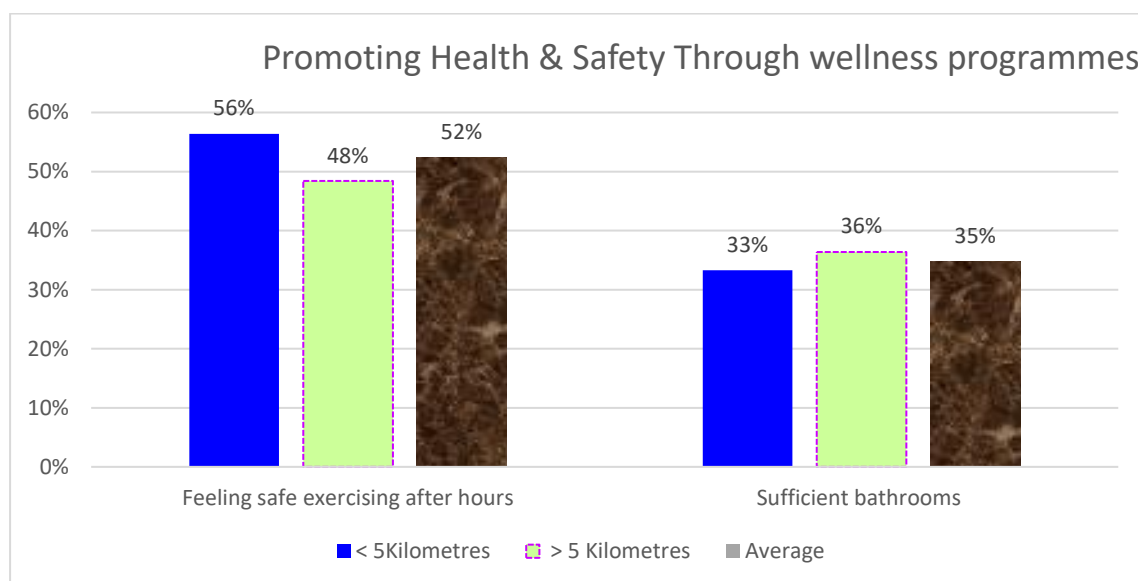
On average, 80% of employees agree that they motivate employees to exercise, with an 8% variance noted between those travelling above and below 5 kilometres to work. On average, just above 50% of employees agree that the health promotion messages are distributed regularly, with a 10% variance noted between those travelling above and below 5 kilometres to work.

Slightly above 60% of employees believe that trophies, certificates and t-shirts would motivate them to participate in programs. This is a significant finding in that one of the questions to be answered in this study was to find solutions to the problem of low enrolment in employee health

and wellness programs. Since above 60% of employees agree that trophies, T-shirts and certificates may stimulate them to participate in programs, management needs to consider this option, which will address the low enrolment challenges faced by ILembe District. However, consideration of costs to avail resources is recommended since such items require additional budgetary allocations.

Promoting health and safety through wellness

Figure 5.22: Promoting health and safety through wellness



Summary

On analysis of the above table, with regard to employee perceptions about bathroom facilities, on average 35% of employees in general agree that there are sufficient bathroom facilities to freshen up after physical exercise. General workers' responses revealed the highest level of agreement with a 20% variance noted between those travelling above and below 5 kilometres. Managers' level of agreement was recorded at 20% and supervisors at 37.8%.

A higher level of agreement was recorded amongst employees regarding the statement about them feeling safe exercising after hours. All managers travelling below 5 kilometres share this sentiment with a 40% variance noted between managers travelling above and below 5 kilometres to work. General workers in contrast recorded an average of 23.3% agreement with all responses below 30%. This is a significant finding in that the low level of agreement amongst general workers reveals a need to improve safety for this level of worker to stimulate increase in enrolment in programs and provide answers to questions raised in this study about factors affecting staff utilisation of the health and fitness program.

Employee engagement promoting responsive public service

Figure 5.23: Importance of engaging employees in designing workplace fitness programs

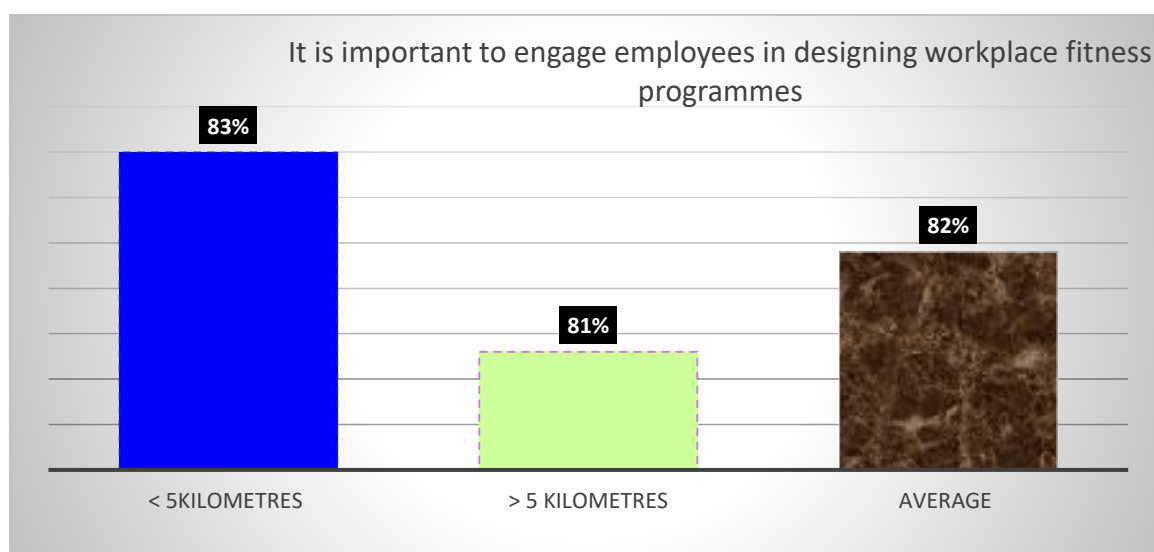
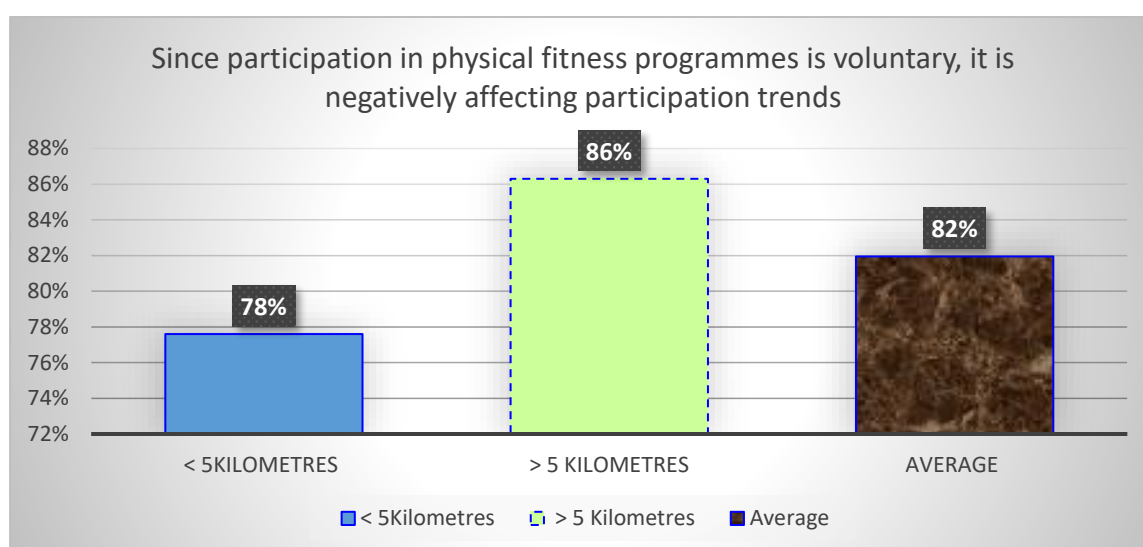


Figure 5.24: Voluntary Participation negatively affects participation trends



On analysis of the above tables both statements revealed an 82% level of agreement amongst employees. When analysing the importance of engaging employees in the design of workplace fitness programs, a minute (2%) was recorded amongst those travelling above and below 5 kilometres to work.

However, a high level of agreement (86%) was recorded on average amongst employees travelling above 5 kilometres to work regarding the negative effects of voluntary participation in the program, with an 8% variance noted between employees travelling above and below 5 kilometres to work. Currently, the employee health and wellness policy advocates voluntary

participation (Wellness management policy for the Public Service, 2011:5). In order to address employee needs, a national review of the policy is necessary to address and fulfil the needs of the workforce. Factors affecting the health of people are multifaceted. Some of these factors lie within the health sector, while others are externally located. It is important to prioritise the development, implementation and constant review of public policy that propels improved and more accessible health outcomes, state Carey & Friels (2015:795-798). Understanding the needs and expectations that customers have is vital since new the public administration approach promotes pluralistic and user centric relationships. Acceptable service delivery and the success of government intervention in the public sectors are measured by trends in the use of services offered. Employee health and wellness programs are a government intervention and their success is measured by the trends noted in the use thereof. Therefore, if policy is hindering progress, a need exists to review policy and explore alternatives (European Union, 2015:221).

5.9 Hypothesis Testing

The traditional approach to reporting a result requires a statement of statistical significance, where a p-value is generated from a test statistic. A significant result is indicated with " $p < 0.05$ ". These values are highlighted with an asterisk (*). The Chi-Square test was performed to determine whether there was a statistically significant relationship between the variables (rows vs. columns).

When interpreting a result, it is important to understand that the null hypothesis states that there is no association between the two. The alternate hypothesis indicates that there is an association.

The table summarises the results of the Chi-Square tests captured in Appendix (F4) with the excel sheet (Chi-Square Test). The direction of the scores can be obtained from the frequency tables in the Appendix (F5) (Excel sheet: Chi-Square Frequencies).

Table 5.13: Pearson Chi-Square Tests

Pearson Chi-Square Tests				
Health-seeking habits		Group		
		Supervisors	Managers	General Workers
		Distance travelled to work	Distance travelled to work	Distance travelled to work
I regard myself as being healthy	Chi-Square	7.216	.476	12.851
	df	3	1	3
	Sig.	0.065	0.49	.005*
I eat at least 5 fruit and vegetable in a week	Chi-Square	4.546	2.533	8.817
	df	3	2	3
	Sig.	0.208	0.282	.032*

Pearson Chi-Square Tests				
Health-seeking habits		Group		
		Supervisors	Managers	General Workers
		Distance travelled to work	Distance travelled to work	Distance travelled to work
If healthy snacks were sold at work, I would buy them	Chi-Square	25.133	2.667	1.199
	df	2	2	3
	Sig.	.000*	0.264	0.753
I always chose a healthy meal at a restaurant	Chi-Square	10.163	1.200	2.047
	df	3	2	3
	Sig.	.017*	0.549	0.563
Preventing accidents and injuries	Chi-Square	2.444	4.286	1.207
	df	3	1	2
	Sig.	0.486	.038*	0.547
Detecting and managing TB	Chi-Square	11.662	.400	1.933
	df	3	1	3
	Sig.	.009*	0.527	0.586
Sexual and reproductive health	Chi-Square	3.212	.400	7.927
	df	3	1	3
	Sig.	0.36	0.527	.048*
Oral Care	Chi-Square	6.393	0.000	4.561
	df	2	1	3
	Sig.	.041*	1	0.207
Netball	Chi-Square	6.324	2.533	10.222
	df	3	3	3
	Sig.	0.097	0.469	.017*
Jogging	Chi-Square	1.436	4.667	13.037
	df	3	2	3
	Sig.	0.697	0.097	.005*
Dancing	Chi-Square	8.846	3.143	.710
	df	3	3	3
	Sig.	.031*	0.37	0.871
Table tennis	Chi-Square	15.409	2.000	8.263
	df	3	2	3
	Sig.	.001*	0.368	.041*
Rugby	Chi-Square	1.628	1.333	8.883
	df	3	3	3
	Sig.	0.653	0.721	.031*
Yoga	Chi-Square	6.546	1.333	10.378
	df	3	3	3
	Sig.	0.088	0.721	.016*
Employees who utilize private gyms feel that they do not need to utilize the workplace fitness programs	Chi-Square	7.506	.667	8.151
	df	3	2	3
	Sig.	.057	0.717	.043*

Pearson Chi-Square Tests				
Health-seeking habits		Group		
		Supervisors	Managers	General Workers
		Distance travelled to work	Distance travelled to work	Distance travelled to work
Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in worksite physical fitness programs	Chi-Square	3.240	1.200	18.949
	df	3	2	3
	Sig.	0.356	0.549	.000*
It is important to engage employees in designing workplace fitness programs	Chi-Square	16.069	.225	4.224
	df	2	1	3
	Sig.	.000*	0.635	0.238
Employees do feel safe Exercising after hours at work	Chi-Square	15.990	2.533	1.404
	df	3	2	3
	Sig.	.001*	0.282	0.705
Employees were consulted about the physical fitness Program that is in place	Chi-Square	11.072	.225	4.204
	df	3	2	3
	Sig.	.011*	0.894	0.24
Benefits of the physical fitness Program is well marketed	Chi-Square	6.281	1.333	9.317
	df	3	3	3
	Sig.	0.099	0.721	.025*
The 2 hour concession being offered to exercise is sufficient	Chi-Square	16.055	2.667	.757
	df	3	2	3
	Sig.	.001*	0.264	0.86
Privacy is provided in the physical exercise areas	Chi-Square	10.979	4.333	2.542
	df	3	2	3
	Sig.	.012*	0.115	0.468
Physical fitness programs will assist in weight control	Chi-Square	7.855	2.200	2.121
	df	3	2	3
	Sig.	.049*	0.333	0.548
Physical fitness programs can assist in preventing stress	Chi-Square	6.673	3.143	1.747
	df	2	2	3
	Sig.	.036*	0.208	0.627
If there were rewards like trophies and t-shirts or certificates for employees who participate, employees would be motivated to participate	Chi-Square	17.131	2.200	
	df	3	2	
	Sig.	.001*	0.333	

All values without an * (or p-values more than 0.05) do not have a significant relationship.

The p-value (0.005) between “I regard myself as being healthy” and “General Workers” was found to be less than the significance value of 0.05. Therefore, there is a significant relationship between the variables, where the distance that general workers travel does have an effect on their state of being healthy.

The p-value between “Netball” and “General Workers” is 0.017 (which is less than the significance value of 0.05). This means that there is a significant relationship between the variables. That is, the distance that general workers travel does have an effect on their choice of netball as a sport.

The p-value between “Rugby” and “General Workers” is 0.031, which is less than the significance value of 0.05. This means that there is a significant relationship between the variables. That is, the distance that general workers travel does have an effect on their choice of rugby as a sport.

The p-value between “Table tennis” and “General Workers” is 0.041, thus giving it less than the significance value of 0.05. This means that there is a significant relationship between the variables. What this implies is that, the distance that general workers travel does have an effect on their choice of table tennis as a sport.

The p-value between “Dancing” and “Supervisors” is 0.031, therefore it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. That is, the distance that supervisors travel does have an effect on their choice of dancing as a sport.

The p-value between “Yoga” and “General Workers” was found to be 0.016, thus it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. That is, the distance that general workers travel does have an effect on their choice of yoga as a sport.

The p-value between “Table tennis” and “Supervisors” is 0.01 (which is less than the significance value of 0.05). This means that there is a significant relationship between the variables. That is, the distance that supervisors travel does have an effect on their choice of engaging in table tennis as a sport code in the employee health and wellness program.

The p-value between “Privacy is provided in the physical exercise areas” and “Supervisors” is 0.012, therefore it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. What this implies is that, the distance that supervisors travel does have an effect on their belief that privacy is provided in the physical exercise area.

The p-value between “I eat at least 5 fruit and vegetables a week” and “General Workers” is 0.032, which places it less than the significance value of 0.05. This means that there is a

significant relationship between the variables. That is, the distance that general workers travel does have an effect on their choice to eat at least 5 fruit and vegetables in a week.

The p-value between “Employees do feel safe exercising after hours at work” and “Supervisors” is 0.01, thus it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. In effect, the distance that supervisors travel does have an effect on their feelings of being safe when they exercise after hours.

The p-value between “It is important to engage employees in designing workplace fitness programs” and “Supervisors” is 0.000, less than the significance value of 0.05. This means that there is a significant relationship between the variables. In effect, the distance that supervisors travel does have an effect on their views on the importance of engaging employees in the design of workplace fitness programs.

The p-value between “Employees who utilize private gyms feel that they do not need to utilize the workplace fitness programs” and “General Workers” is 0.043; thus it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. That is, the distance that general workers travel does have an effect on their views of the use of workplace fitness programs. The direction of the scores can be obtained from the frequency tables in Appendix B.

The p-value between “Employees were consulted about the physical fitness program that is in place” and “Supervisors” is 0.011, thus giving it less than the significance value of 0.05. This means that there is a significant relationship between the variables. What this implies is that, the distance that supervisors travel does have an effect on their views on whether employees were consulted about the physical fitness program in place.

The p-value between “Preventing accidents and Injuries” and “Managers” is 0.038, which is less than the significance value of 0.05. This means that there is a significant relationship between the variables. That is, the distance that managers travel does have an effect on their choice of opting to receive information on the prevention of accidents and injuries.

The p-value between “I always chose a healthy meal at a restaurant” and “Supervisors” is 0.17, which is more than the significance value of 0.05. This means that there is no significant relationship between the variables. In effect, the distance that supervisors travel does not have an effect on their choice to choose health meals at restaurants.

The p-value between “Detecting and Managing TB” and “Supervisors” is 0.009, less than the significance value of 0.05. This means that there is a significant relationship between the

variables. In effect, the distance that supervisors travel does have an effect on them choosing to receive information on the detection and management of tuberculosis.

The p-value between “Oral care” and “Supervisors” is 0.041, thus it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. Therefore, the distance that supervisors travel does have an effect on their choice of oral care being part of employee health and wellness information given to employees.

The p-value between “Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in worksite physical fitness programs” and “General Workers” is 0.00, which is less than the significance value of 0.05. This means that there is a significant relationship between the variables. In effect, the distance that general workers travel does have an effect on general workers feeling that it would be more beneficial for the employer to subsidize private gym fees rather than invest in worksite fitness programs.

The p-value between “Benefits of the physical fitness program is well marketed” and “Supervisors” is 0.025; therefore it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. Therefore, the distance that supervisors travel does have an effect on supervisors believing that the benefits of the physical fitness program is well-marketed.

The p-value between “physical fitness programs can assist in weight control” and “Supervisors” is 0.049, which makes it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. Therefore, the distance that supervisors travel does have an effect on them believing that physical fitness programs are able to assist in weight control. In America, there is an increase in numbers of workers commuting to and from their places of work. The distance travelled also is also increasing in that more than 3 million workers travel more than 50 miles to or from work. It has been discovered that the longer they travel in the most common means of transportation trains and other automobiles, the higher their levels of stress. Those who chose to utilise vehicles are exposed to higher incidence of lower back ailments, obesity and insufficient leisure and social time. It was also found that those utilising public transport are more physically active than those utilising cars to work (Commission on Health, 2008:4).

The p-value between “Physical fitness programs can assist in preventing stress” and “Supervisors” is 0.036, which is less than the significance value of 0.05. This means that there is a significant relationship between the variables. Therefore, the distance that supervisors travel does have an effect on them believing that physical fitness programs are able to assist in preventing stress.

The p-value between “If there were rewards like trophies and t-shirts or certificates for employees who participate, employees would be motivated to participate” and “Supervisors” is 0.01, thus it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. In effect, the distance that supervisors travel does have an effect on their belief that rewards like trophies and t-shirts or certificates has the ability of motivating employees to participate in employee health and wellness programs.

The p-value between “If healthy snacks were sold at work, I would buy them” and “Supervisors” is 0.00; therefore, it is less than the significance value of 0.05. This means that there is a significant relationship between the variables. Therefore, the distance that supervisors travel does have an effect on them choosing to purchase healthy snacks sold at the workplace.

5.10 Correlations

Bivariate correlation was also performed on the (ordinal) data. Positive values indicate a directly proportional relationship between the variables, while a negative value indicates an inverse relationship. All significant relationships are indicated by one asterisk or two. Negative values imply an inverse relationship, that is, the variables have an opposite effect on each other. The results are found in Appendix C (excel sheet: Correlations table) since it is too large to include in this document.

The results indicate the following patterns:

Health-seeking Behaviour

Table 5.14: Positive Correlations: Health-seeking habits

		I Regard Myself as being health
I exercise 5 days a week for 30 minutes or more	Correlation Coefficient	.196*
	Sig. (2-tailed)	.018
	N	146
		I exercise 5 days a week for 30 minutes or more
I drink 8 glasses of water a day	Correlation Coefficient	.312**
	Sig. (2-tailed)	.000
	N	147
		I exercise 5 days a week for 30 minutes or more
I get 8 hours of sleep a day	Correlation Coefficient	.260**
	Sig. (2-tailed)	.001
	N	147

The correlation value for factors between “I exercise 5 days a week for 30 minutes or more” and “I regard myself as being healthy” is 0.196, which is a directly related proportionality. Respondents agree that the more they exercise, the healthier they would be, and *vice versa*.

The correlation value for factors between “I drink 8 glasses of water a day” and “I exercise 5 days a week” is 0.312. Therefore, it is a directly related proportionality. Respondents agree that the more they exercise, the more they would drink water and *vice versa*.

The correlation value for factors between “I get 8 hours of sleep a day” and “I exercise 5 days a week for 30minutes” is 0.260; thus, it is a directly related proportionality. Respondents agree that the more they get 8 hours of sleep a day, the more they would exercise and *vice versa*.

Negative Correlation

Table 5.15: Negative Correlations: Health-seeking habits

Negative Correlations		I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it
I exercise 5 days a week for 30 minutes or more	Correlation Coefficient	-.179
	Sig. (2-tailed)	.030
	N	147
		I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it
I always have the time to exercise daily	Correlation Coefficient	-.418
	Sig. (2-tailed)	.000
	N	151

The correlation value for factors between “I exercise 5 days a week for 30 minutes or more” and “I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it” is -0.179. There is a negative correlation which means that respondents believe that the more they smoke and drink alcohol, the less they would be able to exercise, and *vice versa*.

The correlation value between “I always have the time to exercise” and “I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it” is -0.418. There

is a negative correlation, which means that respondents believe that the more they smoke and drink alcohol, the less time they would have to exercise, and *vice versa*.

Employee Interests (Health Education Topics)

Positive Correlations

Table 5.16: Positive Correlations: Health education topics

Positive Correlations		Women's health
Sexual and reproductive health	Correlation Coefficient	.204*
	Sig. (2-tailed)	.013
	N	146
		Diagnosing and managing HIV/AIDS
Detecting and managing TB	Correlation Coefficient	.555**
	Sig. (2-tailed)	.000
	N	149
		Healthy eating
Health tips on preventing chronic diseases	Correlation Coefficient	.186*
	Sig. (2-tailed)	.023
	N	150

The correlation value for factors between “sexual and reproductive health” and “Women’s health” is 0.204, thus it is a directly related proportionality. Respondents agree that the more they get receive information on sexual and reproductive health, the more they would be interested in getting information on women’s health and *vice versa*.

The correlation value for factors between “Detecting and managing TB” and “Diagnosing and managing HIV/AIDS” is 0.555, therefore this is a directly related proportionality. Respondents agree that the more they detect and manage TB, the more they would be would be able to diagnose and manage HIV/AIDS and *vice versa*.

The correlation value for factors between “Health tips on preventing chronic diseases” and “Healthy eating” is a directly related proportionality since it is 0.186. Respondents agree that the more they receive healthy tips on preventing chronic diseases, the more they would eat healthily, and *vice versa*.

Negative Correlation

Table 5.17: Negative Correlations: Health education topics

Negative Correlations		I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it
Oral Care	Correlation Coefficient	-.229**
	Sig. (2-tailed)	.005
	N	150
		If healthy snacks were sold at work , I would buy them
Self defence	Correlation Coefficient	-.282**
	Sig. (2-tailed)	.000
	N	149

The correlation value for factors between “Oral care” and “I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it “is -0.229. There is a negative correlation which means that respondents believe that the more they smoke and drink alcohol, the less they would be interested in oral care, and *vice versa*.

The correlation value between “Self-defence” and “If healthy snacks were sold at work, I would buy them” is -0.282. There is a negative correlation which means that respondents believe that the more they learn self-defence, the less time they would purchase healthy snacks sold at work, and *vice versa*.

Employee interests in Sport codes

Positive Correlations

Table 5.18: Positive Correlations: Employee interests in sport codes

Positive Correlations		Netball
Volleyball	Correlation Coefficient	.451**
	Sig. (2-tailed)	.000
	N	149

		Jogging
Walking	Correlation Coefficient	.184*
	Sig. (2-tailed)	.024
	N	150

		Walking
Park and walk to work	Correlation Coefficient	.170**
	Sig. (2-tailed)	.000
	N	150

The correlation value for factors between “volleyball” and “netball” is 0.451, thus revealing a directly related proportionality. Respondents agree that the more they chose walking as a sport code, the more they would participate in jogging and *vice versa*.

The correlation value for factors between “Walking” and “Jogging” is 0.184, which is a directly related proportionality. Respondents agree that the more they chose walking as a sport code, the more they would engage in jogging and *vice versa*.

The correlation value for factors between “Park and walk” and “walking” is a directly related proportionality since it was recorded at 0.170. Respondents agree that the more they chose to park and walk to work, the more they would choose walking as a sport code and *vice versa*.

Negative Correlation

Table 5.19: Negative Correlations: Employee interests in sport codes

Negative Correlations		Aerobics
Rugby	Correlation Coefficient	-.292**
	Sig. (2-tailed)	.005
	N	150
		Dancing
Park and walk to work	Correlation Coefficient	-.221**
	Sig. (2-tailed)	.000
	N	149

The correlation value for factors between “Rugby” and “Aerobics” is -0.292. There is a negative correlation, which means that respondents believe that the more they more they play rugby, the less they would be interested in aerobics, and *vice versa*.

The correlation value for factors between “Park and Walk” and “Dancing” is -0.221. There is a negative correlation, which means that respondents believe that the more they get involved in parking and walking to work, the less they would be interested in dancing, and *vice versa*.

Perceptions of Employees

Positive correlations

Table 5.20: Positive Correlations: Employee perception of the health and wellness fitness program

Positive Correlations		Physical fitness programs can assist in preventing stress
Physical fitness programs can improve productivity	Correlation Coefficient	.560**
	Sig. (2-tailed)	.000
	N	150
		Physical fitness programs can improve productivity
Physical fitness programs can reduce absenteeism linked to ill-health	Correlation Coefficient	.379**
	Sig. (2-tailed)	.000
	N	150
		Employees do feel safe exercising after hours at work
Privacy is provided in the physical exercise areas	Correlation Coefficient	.188*
	Sig. (2-tailed)	.025
	N	143

The correlation value for factors between “Physical fitness programs can improve productivity” and “Physical fitness programs can assist in preventing stress” recorded a directly relate proportionality at 0.560. Respondents agree that the more employees hold the view that physical fitness programs prevent stress, the more productive they were, and *vice versa*.

The correlation value for factors between “Physical fitness programs can reduce absenteeism linked to ill-health” and “Employees do feel safe exercising after hours at work” is 0.379;

therefore this is a directly related proportionality. Respondents agree that the more employees hold the view that physical fitness have the potential of reducing absenteeism linked to ill-health , the more productive they were, and *vice versa*.

The correlation value for factors between “Privacy is provided in the physical exercise areas” and “Physical fitness programs can improve productivity” is 0.188, which is a directly related proportionality. Respondents agree that the more employees hold the view that privacy is provided during physical fitness, the more employees would feel safe exercising after hours, and *vice versa*.

Negative Correlation

Table 5.21: Negative Correlations: Employee perception of the health and wellness fitness program

Negative Correlations		Since participation in physical fitness programs is voluntary, it is negatively affecting participation trends.
It is important to engage employees in designing workplace fitness programs	Correlation Coefficient	-0.171
	Sig. (2-tailed)	.038
	N	147
		Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in work site physical fitness programs
Benefits of the physical fitness program is well marketed	Correlation Coefficient	-0.196
	Sig. (2-tailed)	.018
	N	147

The correlation value for factors between “It is important to engage employees in designing workplace fitness programs” and “Since participation in physical fitness programs is voluntary, it is negatively affecting participation trends” is -0.171. There is a negative correlation which means that respondents believe that the more they are engaged in the design of the workplace fitness program, the less they would be believe that voluntary participation is negatively affecting participation trends, and *vice versa*.

The correlation value for factors between “Benefits of the physical fitness program is well marketed” and “Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in worksite physical fitness programs” is -0.196. There is a negative correlation which means that respondents believe that the more they believe the more the

benefits of the physical fitness program is well marketed, the less employees will expect the employer to subsidize their private gymnasium fees, and *vice versa*.

5.11 Conclusion

The emphasis of this Chapter was to present key findings and interpret and analyse the data, while linking it to main objectives and questions of this study. Findings of the study confirmed that there is low participation levels amongst employees in the internal employee health and fitness programs. Furthermore, it was discovered that perceptions held by employees regarding their preferences between private gymnasiums and internal gymnasiums, do pose a challenge in encouraging employees to enrol in internal programs. It was also discovered in this study that intense engagement is required with employees to address the various issues raised. Against the background of the findings and their analysis, the chapter to follow presents the conclusion of this study, its recommendations and the need for further research.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

Employee health and wellness in the public sector is taking centre stage in elevating public health to a new level in South Africa. The main objective of this study was to examine the ILembe Health District employees' perceptions of the workplace health and wellness program, which could have a bearing on employee enrolment trends. The main findings of this study are discussed in this chapter.

6.2 Key findings and recommendations arising from the study and international perspectives

The recommendations put forward in the study are from defined gaps that arose following the research, and from international trends that ought to be considered in order to address immediate and future concerns in employee health and wellness.

6.2.1 Views and recommendations based on employee perceptions of wellness programs

- **Benefits of physical activity**

Findings of this study confirmed that employees firmly believe that the employee health and wellness program provides benefits to them in that they prevent non-communicable conditions like hypertension, diabetes mellitus, cardiac conditions and obesity (through weight loss). Furthermore, employees believe that such programs can assist in improving productivity and absenteeism and presenteeism. Presenteeism exists in an organization when employees come to work, but are not capable of executing tasks effectively due to their compromised state of health. Employee health and wellness initiatives will assist in keeping the workforce healthy and at work so that they are able to serve the population and assist the department to realise its vision of assurance a “long and healthy life for all”, as supported by the Department of Health. Studies support the findings of this study: it has been established that female employees are more likely to participate in health promotion programs, according to Rongen *et al.*, (2014:9-11).

- **Employee engagement**

Findings of this study confirm that it is vital to engage employees when planning work site health and wellness programs. Employees of ILembe further confirmed that some of them were

indeed consulted about the program. This also means that a portion of employees were not engaged, which could be affecting participation and enrolment adversely.

Furthermore, employees felt that the employee health and wellness program should not be voluntary since it affects enrolment and participation negatively.

- **Recommendations based on employee perceptions**

Currently, the Employee Health and Wellness Policy promotes voluntary participation, which employees have identified as a barrier in increasing participation levels. This recommendation should be further researched to understand the pros and cons of the strategy. Management should also develop a feedback mechanism to get employee views on programs and utilise these to influence programs that are in place.

- **Motivation**

Motivation is critical for employee performance because motivated employees are more effective, productive and efficient in the workplace, suggests Waiyaki (2017:26-61). Employee health and wellness programs play a dual role in motivating employees and keeping them healthy, which in turn promotes effectiveness efficiency and productivity in the workplace. It is important to motivate employees since it stimulates employees internally to act, to enrol and participate in such programs. Findings of this study confirm that participation and enrolment in employee health and wellness programs in Ilembe Health District, is hindered by the non-availability of rewards (trophies T-shirts and certificates), which is believed to improve participation levels amongst employees. Currently, such rewards are not offered, and this could be affecting enrolment and participation negatively.

It is therefore recommended that consideration should be given to making such rewards available during budgeting processes and public service management policy should address this gap.

- **Perception of gymnasiums**

It is vital to understand employee perceptions in order to address enrolment and participation challenges in workplace health and wellness programs. This study revealed that employees believe that private gymnasiums are more effective than in-house gymnasiums. It is therefore, not recommended that the District continue to invest in such programs, which employees do not regard as being effective to improve their physical fitness levels. If the District continues to invest and expand on such programs, expenditure may be deemed to be fruitless, thus flouting

provisions of Chapter 10 of the Constitution of RSA that promotes accountable, effective and efficient governance in the public sector.

This study supports the recommendation that management seek innovative ways to address this factor like exploring public private partnerships with private service providers to improve enrolment and participation. This will further call for prudent financial planning that promotes frugality in public spending on such programs, since it may result in the need for additional financial resources.

- **Visibility**

It is vital that employee health and wellness programs are visible and actively promoted in the public sector, as espoused by the South African public service employee health and wellness policy. Furthermore, the policy promotes the dissemination of information to employees in the workplace. Employee health and wellness program information is abundant in health promotion literature; however, since such activities are increasingly adopted as a crucial aspect of organizational viability, it is steadily being identified as a crucial HR activity. Findings of this study reveal that visibility of the program is impeded. This is evident in the incorrect placement of the employee health and wellness program in the health promotion section instead of the human resources section. The program is not being adequately marketed. Both these factors are negatively affecting enrolment and participation in the program.

The findings of this study support the recommendation that the Employee Health and Wellness program of ILembe Health District be relocated to the human resources section instead of the health promotion section, that primarily prioritises patient health issues rather than employee health needs.

- **Health and Safety**

It is judicious to assure the protection of employee's health and safety when participating in workplace health and wellness programs. Having adequate bathrooms is vital for employees who sweat profusely during exercise, causing damp condition that promote the growth of fungi and bacteria that may cause skin conditions. Employees therefore, require adequate bathrooms and need to freshen up after exercising. Having insufficient bathrooms to cater for employee needs may prevent employees from participating in the programs. The findings of this study confirm that there are insufficient bathrooms for employees to freshen up after exercising.

In view of the findings of this study it is recommended that management of ILembe Health District considers making available sufficient bathrooms for employees to freshen up after exercising, in order to encourage more employees to enrol and participate in exercise programs.

6.2.2 Views and recommendations based on the in-house programs

Access is vital to encourage enrolment and participation in employee health and wellness programs. Findings of the study confirm that the current 2 hour concession a week is insufficient, which ties with the finding that less than half of the employees have the time to exercise. Furthermore, the equipment provided for exercising is insufficient to cater for the needs of employees. The current programs also provide limited privacy when exercising, which hampers progress in attaining principles as outlined in the employee wellness management policy of the Public Service of South Africa, which promotes a culture that is conducive to wellness and confidentiality. One can therefore, postulate that these factors are hindering enrolment and participation in the employee health and wellness programs, leading to the low enrolment trends that are noted.

It is recommended in light of the findings of this study that the current policy that allows for 2 hour concession should be reviewed and innovative strategies be adopted to accommodate employees with the desire to participate, but do not have the time to do so. Furthermore, it is recommended that further research be undertaken to get an advanced understanding of the phenomenon, since expanding the hours for exercising on duty time, would mean reduced work hours and may have a negative impact on service delivery. In linking recommendations made earlier regarding private public partnerships with gymnasiums, such partnerships could address the issue of inadequate equipment. Furthermore investment in additional equipment with low enrolment figures may result in challenges with regard to frugality in financial management, which is promoted in Chapter 10 of the Constitution of South Africa. In addressing recommendations that link the need for privacy, ILembe Health District management should address this issue urgently, since this study has shown that it is affecting employee human dignity, as enshrined in the South African Bill of Rights.

- **Gender**

The majority of respondents in this study are females since the health sector in South Africa in general and ILembe Health District in particular, is dominated by nurses who are primarily females. Internationally nursing is generally regarded as a female occupation. Demographics within the public health sector in South Africa has displayed this trend throughout the years as in the employment profile of 2013, where a total of 93.2% of the workforce was female

(Statistics South Africa, 2011:14). The South African Nursing Council published details on the distribution of manpower per Province in South Africa in December 2015 and female nurses formed 90.88% (253 196, in comparison to 25 421 males) of the total number of nurses in South Africa. KwaZulu-Natal registered 94.74% females (62 192 female nurses and 6 453 males).

Safety is one of the key factors that affect female participation in sport. Those travelling in and through urban unsafe spaces and those with no safe transport to and from sporting facilities or events may opt not to participate in such activities. Results from this study have shown that only half of employees feel safe after exercising. This is a crucial factor for women in particular, who form the majority of the workforce. This view is supported by the Women's Sport Foundation (2016:n.p.), and could be a reason for low levels of participation in employee health and wellness fitness programs.

A significant finding of this study revealed the fact that there are more females employed in ILembe Health District with the majority of employees falling within older employee category. It is therefore, recommended that health and wellness programs address contemporary issues like the management of HIV/AIDS, the prevention and management of chronic diseases and non-communicable diseases in the workplace, in order to prevent and curb presenteeism. This is supported by findings of a study on global ageing and adult health conducted in South Africa, where women in general regarded their general health as worse than men; this affected their ability to execute household and work-related activity. Women in this category had a higher incidence of HIV/AIDS, as 8% incidence was recorded for women in comparison to 5% amongst older men, states the Human Science Research Council (2012:19-20).

In the findings of this study, safety issues was highlighted for employees in general and female employees in particular. Based on these findings of the study it is recommended that employee private car-pooling be considered. Furthermore, the possibility of implementing an employer funded transport arrangement could be considered to address the need for safe transportation of employees engaging in the after-hour physical fitness programs. These recommendations have a potential of positively improving participation trends in that it would be addressing key barriers reported by participants in this study. Therefore it is vital that managers take cognisance of the above trends related to factors linked to gender when crafting health and wellness programs, since it is important that employee wellness programs are planned with objectives and goals that address women's health issues.

- **Age**

With regard to age, the study revealed a higher number of managers (50%) being above 40 years of age, with the lowest number of them being between 20 to 30 years of age. A higher number of general workers fall within the 20 to 30 year category. This trend is indicative of an ageing workforce that requires prioritization in employee health and wellness programs.

It is therefore recommended that ILembe Health District considers investing in programs aimed at addressing health needs for an ageing work force in their human capital management strategy. This strategy links with the vision of the Department of Health in South Africa, which is aimed at assuring “a long and healthy life” for people in the country. Younger employees usually prefer sport activities that are physical in nature in comparison to older employees who prefer programs aimed at improvement of general health and the reduction in prevalence of current non-communicable and communicable conditions. For the ageing workforce of the district, investment in such programs will secure a long and rewarding life that encompasses longevity and an improved health status. In so doing, employees falling within the ageing workforce category, are supported to become more productive for longer in the organisation. This in turn, assists in improving the return on investment allocated for human resources. Furthermore, such initiatives have the potential of supporting efforts of the country in achieving “a long and healthy life” for South Africans state James, Matz-Costa & Smyer (2016:334-344).

- **The distance travelled by employees**

A higher number of employees travel above 5 kilometres to work, with general workers forming a higher percentage thereof. This trend may be influenced by the fact that ILembe Health District comprises of many rural and semi-rural based facilities where clinicians, managers and supervisors are offered on-site accommodation and need not travel long distances to work, while the general work force are expected to travel to and from work since they are not included in the residential policy of all ILembe Health Districts. This result is a significant finding in that studies show that employees who commute long distances to and from work are 20% more likely to report absent from work due to ill-health, in comparison to those commuting shorter distances to work (Goerke & Lorenz, 2017:1-17).

Findings of this study revealed that a larger number of general worker employees live more than 5 kilometres away from work and commute to work. Although commuting is a growing and necessary factor in peoples working lives, it does have negative effects on employee health and wellness strategies. It is recommended that management of ILembe Health district should take cognisance of this fact and prioritise employee health and wellness programs for

employees travelling more than 5 kilometres to work in general and general workers in particular.

6.2.3 Views and recommendations based on employee participation levels

Findings of the study confirmed that there is very low levels of participation in employee health and wellness programs in general, with managers and supervisors participating far less than general workers. This trend reveals that managers and supervisors of ILembe Health District place a low level of priority on participating in employee health and wellness programs.

It is vital that managers take cognisance of the above trends and recommendations when crafting health and wellness programs for the workforce. Employee health and wellness programs in the health sector must be planned with objectives and goals that address diverse health needs, while prioritising women's health issues, in order to improve access to health for a larger number of employees. Furthermore strategies should be adopted that motivate managers and supervisors to actively participate in wellness programmes in order to motivate the general workforce to participate.

6.2.4 Views and recommendations based on employee health seeking habits

Slightly above half of ILembe Health District employees adopt health-seeking habits as was determined by the themes linked to health-seeking habits relating to exercise and prevention of ill-health; health beliefs to avoid risky behaviour, and habits affecting sleep patterns and those relating to nutrition.

- **Employee interests in health education topics**

Findings of this study confirm that a high number of employees prefer receiving health education to prevent ill-health that can cause debilitating conditions, non-communicable disease, improve family health and promote a healthy heart. Currently, such programs are not offered, which could have a bearing on the low enrolment discovered in employee health and wellness programs in the workplace.

In order to address low enrolment in workplace employee health and wellness programs, it is recommended that management review current programs to include health education since employees have shown a keen interest in such programs. Investing in programs makes business sense in that it raises employee awareness by providing health-related knowledge required to empower individuals to make informed decisions on their own health action they chose to take. Through health education, employees was assisted to achieve a state of improved health. The ILembe Health District should transition for healthy workplaces to healthy employees and

incorporate employee driven lifestyle modification interests in employee health and wellness programs. This view is supported by Mackintosh (1996:14); and Bloom, Cafiero, Jané-Llopis, Abrahams-Gessel, Bloom, Fathima, Feigl, Gaziano, Mowafi, Pandya, Prettnner, Rosenberg, Seligman, Stein, and Weinstein (2011:n.p.).

- **Employee interests in physical activity**

The results of this study found that employees prefer sport codes that require group activity (aerobics, exercising using the gymnasium, jogging , volleyball and dancing), and outdoor sport codes like walking and netball, rather than current sport activities that require ball control like soccer.

Findings of this study support the recommendation that management should consider adopting methods to understand employee needs and preferences through regular employee surveys. Furthermore, it is recommended that management involve employees when introducing programs that address health and wellness, in order to address the mismatch between the needs of employees and the programs offered. When employees are involved in the selection of sporting codes, they tend to adopt self-directed behaviour, where they take action to prevent and detect their own ill-health. Furthermore, they adopt healthy behaviour which promotes a state of self-driven optimal health within themselves and the restoration of their own health, alludes Conner (2012:n.p.).

This study revealed findings that support the notion that there exists a relationship between health outcomes and healthy behaviour, which impacts on the longevity and the quality of life of a person in general and employees in particular. The core of the public service wellness program in South Africa is predominantly made up of pillars that elevate primary and secondary preventative health. Primary preventative health entails actions taken by an individual to avoid ill-health or medical conditions from occurring, while secondary preventative health involves the minimising of effects of a medical condition. Therefore, health-seeking habits of employees that are preventative in nature, can impact directly on the core of public service wellness programs, which is itself is preventative in nature. Furthermore, management should capitalise on existing employee health-seeking habits and introduce programs that promote health education to improve employee and wellness enrolment.

6.2.5 Recommendations for future consideration following international trends and perspectives

It is recommended that ILembe Health district considers adopting the stance taken by the United States of America, University of Ohio, toward employee health and wellness. The approach

that was adopted, prioritised employee health and wellness in all departments employing 50 or more employees. Furthermore, all those departments were given set targets that specifically focused on workplace health promotion activities. In so doing each Ohio University managed to exceed their target of 85% by an additional 10%. ILembe Health district performance and outputs can improve with the adoption of this strategy since each department in the district will be held responsible for the development of strategies that are linked to programs aimed at improving access to workplace wellness initiatives, through health promotion activities. (Jones, 2016:15-16).

Adopting innovative strategies to encourage employees to actively participate in workplace physical fitness programs sponsored through employee health and wellness initiatives assists in increasing enrolment in such programs. Studies in Poland (Coca Cola), show that employees view such initiatives as work place benefits. Furthermore, employees view management initiatives that promote group running sports codes as a critical success factor in strengthening workplace harmony. Studies show that such sporting codes improve and strengthen bonding between employees. This in turn develops spin-offs for the employer and employees alike in that it stimulates a positive work atmosphere and improves job satisfaction amongst employees. Employees also view their workplace as unique in addressing workplace benefits and prioritising their workplace health needs (Malek: 2017:58).

A recent study in Namibia supported the findings of this study, where it was found that non-availability of incentives, negatively affect enrolment in programs. It is therefore crucial that management in the public sector reviews policy governing employee health and wellness to ensure that it is responsive to the need for incentives that encourages employees to participate in programs. Suggested incentives include family holidays, massages, beauty treatment packages, the awarding of certificates and memorabilia including trophies (Maletzky, 2017:100).

6.3 Conclusion

The research study intended examining the ILembe Health District employee perceptions of the workplace health and wellness fitness program, which could have a bearing on employee enrolment trends. Current public sector policies linked to employee workplace health and wellness, Batho-Pele Principles and Constitutional imperatives were utilised to gauge prevailing perceptions that may have a bearing on observed trends. The findings of this study revealed that employee perceptions, health-seeking habits and employee interests do affect enrolment and participation trends of employees in the current workplace employee health and wellness fitness programs. The study affirms that workplace-based employee health and

wellness programs in the public sector are vital to realise the vision of public service delivery that espouses a workforce consisting of high value public servants of the future, who are physically and mentally healthy. There is no doubt that healthy and dedicated employees will assist the public health sector to deliver on its legal mandate within a public governance system that encircles accountability, efficiency, effectiveness, productivity and responsiveness to the needs of its workforce and the public it serves.

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ANNEXURES

ANNEXURE A



13 August 2013

Mrs Rosemary Van Heerden 201510560
School of Management, IT & Governance
Westville Campus

Protocol reference number: HSS/0741/013M

Project title: Employee Health and Wellness in ILambe Health District: A Public Health Perspective on Physical Fitness Programs

Dear Mrs Van Heerden

Expedited Approval

I wish to inform you that your application has been granted Full Approval.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully


.....
Dr Shenuka Singh (Acting Chair)

/pk

cc Supervisor: Dr M Subban
cc Academic Leader Research: Professor B McArthur
cc School Administrator: Ms A Pearce

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Acting Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 3587/8350/4557 Facsimile: +27 (0)31 260 4609 Email: ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville



ANNEXURE B1



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

Health Research & Knowledge Management sub-component
10 – 103 Natalia Building, 330 Langalibalele Street
Private Bag x9051
Pietermaritzburg
3200
Tel.: 033 – 3953189
Fax.: 033 – 394 3782
Email.: hrkm@kznhealth.gov.za
www.kznhealth.gov.za

Reference : HRKM64 /14
Enquiries: Mrs G Khumalo
Telephone : 033 – 395 3189

24 March 2014

Dear Mrs R Van Heerden

Subject: Approval of a Research Proposal

1. The research proposal titled 'Employee Health and Wellness in ILembe Health District: A public health perspective on Physical Fitness Programs' was reviewed by the KwaZulu-Natal Department of Health (KZN-DoH).

The proposal is hereby approved for research to be undertaken at Ilembe Health District.

2. You are requested to take note of the following:
 - a. Make the necessary arrangement with the identified facility before commencing with your research project.
 - b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.
3. Your final report must be posted to HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200 and e-mail an electronic copy to hrkm@kznhealth.gov.za

For any additional information please contact Mrs G Khumalo on 033-395 3189.

Yours Sincerely

Dr. E Lutge

Chairperson, KwaZulu-Natal Health Research Committee

Date: 25/03/2015



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

ILEMBE HEALTH DISTRICT OFFICE

HUMAN RESOURCE DEPARTMENT

P/Bag X 10820, KwaDukuza 4450

36/40 Chief Albert Luthuli Street, KwaDukuza, 4450

Tel.: 032 437 3533, Fax. 032 561 1592

Email: thenjiwe.thwala@kznhealth.gov.za

www.kznhealth.gov.za

Enquiries: Ms S.Dube

Telephone: (032) 437 3503

Date: 22nd July 2013

Mrs R Van Heerden

Private Bag X 10620

Kwa- Dukuza

4450

Email: rose.vanheerden@kznhealth.gov.za

RE: PERMISSION TO CONDUCT RESEARCH AT DISTRICT FACILITY

I have the pleasure in informing you that permission has been granted to you by the District to conduct research on "Employee Health and Wellness in Ilembe Health District : A Public Health Perspective on Physical Fitness Programs"

Please note the following:

1. Please ensure that you adhere to all the policies, procedures, protocols and guidelines of the Department of Health with regards to this research.
2. This research will only commence once this office has received confirmation from the Provincial Health Research Office Committee in the Department of Health.
3. Please ensure this office is informed before you commence your research.
4. The District Office / Facility will not provide any financial resources for this research.
5. You will be expected to provide feedback on your findings to the District Office/Facility

Thanking you

Sincerely,

Ms S. Dube
District Manager

uMnyango Wezempilo . Departement van Gesondheid

Fighting Disease, Fighting Poverty, Giving Hope

ANNEXURE C

TO WHOM IT MAY CONCERN

28 February 2018

EDITING CERTIFICATE

This dissertation, entitled **EMPLOYEE HEALTH AND WELLNESS IN ILEMBE HEALTH DISTRICT: A PUBLIC HEALTH PERSPECTIVE ON PHYSICAL FITNESS PROGRAMS**, has been edited to ensure technically accurate and contextually appropriate use of language for this level of study.

Yours sincerely

A handwritten signature in black ink, appearing to read 'CM Israel', with a stylized flourish at the end.

CM ISRAEL
BA Hons (UDW) MA (UND) MA (US) PhD (UNH)
Language Editor

ANNEXURE D1

UNIVERSITY OF KWAZULU-NATAL SCHOOL of Management, Information Technology and Governance

Dear Respondent,

Master's in Public Administration Research Project
Researcher: R van Heerden (Telephone number: 083 451 2178)
Supervisor: Name; Dr. M Subban (Office Telephone number 031 260 7763)

I, Rosemary van Heerden, a Masters in Public Administration student, at the SCHOOL of Management Information Technology and Governance, of the University of Kwazulu Natal. You are invited to participate in a research project entitled "Employee Health and Wellness in ILembe Health District: A Perspective on Physical Fitness Programs." The aim of this study is to examine the ILembe Health District Employees perceptions of the workplace health and wellness program which could have a bearing on employee enrolment trends.

Through your participation I hope to understand the primary motives for employee participation in the employee health and wellness physical fitness programs. The results of the survey are intended to contribute to the development of appropriate and sustainable solutions to address challenges facing the wellness programs in ILembe Health District

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey. Confidentiality and anonymity of records identifying you as a participant will be maintained by the School of Management, Information Technology and Governance, UKZN.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The survey should take you about 5 to 10 minutes to complete. I hope you will take the time to complete this survey.

Sincerely

Investigator's signature  Date _____

ANNEXURE D2

CONSENT

I..... (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT

DATE

.....

ANNEXURE E1

Annexure 2: Questionnaire for Managers

Questionnaire on employee health and wellness fitness program

Kindly Tick your responses in the box provided

1 Participant Information

Age In years	Below 20	20 to 30	30 to 40	40 and above
Gender			Male	Female
Distance travelled to work			Below 5 Km	Above 5 Km
Participation in the Ilembe Health District Physical Fitness Program			Participating	Not Participating
Who is the District Wellness champion?				
Is employee wellness a Key Responsibility Area in your Performance agreement?			Yes	No
The Employee Health and wellness Committee	Does not exist	Exists but is non-functional	Fully functional	

2. Health seeking habits

	Strongly Disagree 4	Disagree 3	Agree 2	Strongly Agree 1
I regard myself as being healthy				
I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it				
I exercise 5 days a week for 30 minutes or more				
I get 8 hours of sleep a day				
I drink 8 glasses of water a day				
I check my blood pressure every 6 months				
I check my blood glucose levels every 6 months				
I always have the time to exercise daily				
I bring lunch from home rather than buy fast food				
I eat at least 5 fruit and vegetable in a week				
When eating out, I never order dessert				
I never miss breakfast				
If healthy snacks were sold at work , I would buy them				
I always chose a healthy meal at a restaurant				

3 Employee interests

Would employees be interested in getting information on	Very Unlikely	Unlikely	Likely	Very Likely
Management of Skin conditions				
Preventing obesity				
Eye care				
Stress management				
Healthy cooking tips				
Healthy eating				
Family exercise routine				
Preventing accidents and injuries				
Keeping fit				
Stress management				
Health effects of smoking ,alcohol and Drugs				
Women's health				
Men's health				
Health tips on preventing chronic diseases				
Managing diabetes				
Managing hypertension				
diagnosing and managing HIV AIDS				
Detecting and managing TB				

Heart conditions				
sexual and reproductive health				
Maintain healthy cholesterol levels				
Personal financial management				
Oral Care				
Self defense				

3 Employee interests

Would employees be interested in participating in the following physical fitness activities?	Very Unlikely	Unlikely	Likely	Very Likely
Soccer				
Netball				
Volleyball				
Aerobics				
Exercising using the gym equipment				
Jogging				
Dancing				
Walking				
Table tennis				
Indoor basketball				
Rugby				
Yoga				
Park and walk to work				

4 Employee Perceptions of the Wellness Program

	Strongly Disagree	Disagree	Agree	Strongly Agree
	4	3	2	1
Employees regard private gyms as being more effect than workplace fitness programs				
Employees who are physically fit feel that they do not need to utilize the workplace fitness programs				
Employees who utilize private gyms feel that they do not need to utilize the workplace fitness programs				
Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in worksite physical fitness programs				
Since participation in physical fitness programs is voluntary, it is negatively affecting participation trends.				
It is important to engage employees in designing workplace fitness programs				
Employees do feel safe exercising after hours at work				
There are sufficient bathroom facilities to freshen up after physical exercise				
Employees were consulted about the physical fitness program that is in place				
The physical fitness program is correctly placed in the Health promotion unit and need not be led by HR				
Benefits of the physical fitness program is well marketed				

	Strongly Disagree	Disagree	Agree	Strongly Agree
The 2 hour concession being offered to exercise is sufficient				
Equipment to exercise is sufficient for all employees to exercise at work				
Privacy is provided in the physical exercise areas				
I motivates employees to exercise				
Physical fitness programs will prevent hypertension				
Physical fitness programs will prevent diabetes				
Physical fitness programs will prevent cardiac conditions				
Physical fitness programs will assist in weight control				
Physical fitness programs can assist in preventing stress				
Physical fitness programs can improve productivity				
Physical fitness programs can reduce absenteeism linked to ill-health				
Health promotion messages are distributed regularly				
Employees take the advice offered in health promotion messages				
If there were rewards like trophies and t-shirts or certificates for employees who participate, employees would be motivated to participate				

Thank you for your Time

ANNEXURE E2

Annexure 3: Questionnaire for Supervisors

Questionnaire on employee health and wellness fitness program

Kindly Tick your responses in the box provided

1 Participant Information

Age In years	Below 20	20 to 30	30 to 40	40 and above
Gender			Male	Female
Distance travelled to work			Below 5 Km	Above 5 Km
Participation in the Ilembe Health District Physical Fitness Program			Participating	Not Participating
Who is the District Wellness champion?				
Is employee wellness a Key Responsibility Area in your Performance agreement?			Yes	No
The Employee Health and wellness Committee	Does not exist	Exists but is non-functional	Fully functional	

2. Health seeking habits

	Strongly Disagree 4	Disagree 3	Agree 2	Strongly Agree 1
I regard myself as being healthy				
I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it				
I exercise 5 days a week for 30 minutes or more				
I get 8 hours of sleep a day				
I drink 8 glasses of water a day				
I check my blood pressure every 6 months				
I check my blood glucose levels every 6 months				
I always have the time to exercise daily				
I bring lunch from home rather than buy fast food				
I eat at least 5 fruit and vegetable in a week				
When eating out, I never order dessert				
I never miss breakfast				
If healthy snacks were sold at work , I would buy them				
I always chose a healthy meal at a restaurant				

3 Employee interests

Would employees be interested in getting information on	Very Unlikely	Unlikely	Likely	Very Likely
Management of Skin conditions				
Preventing obesity				
Eye care				
Stress management				
Healthy cooking tips				
Healthy eating				
Family exercise routine				
Preventing accidents and injuries				
Keeping fit				
Stress management				
Health effects of smoking ,alcohol and Drugs				
Women's health				
Men's health				
Health tips on preventing chronic diseases				
Managing diabetes				
Managing hypertension				
diagnosing and managing HIV AIDS				
Detecting and managing TB				

Heart conditions				
Sexual and reproductive health				
Maintain healthy cholesterol levels				
Personal financial management				
Oral Care				
Self defense				

3 Employee interests

Would employees be interested in participating in the following physical fitness activities?	Very Unlikely	Unlikely	Likely	Very Likely
Soccer				
Netball				
Volleyball				
Aerobics				
Exercising using the gym equipment				
Jogging				
Dancing				
Walking				
Table tennis				
Indoor basketball				
Rugby				
Yoga				
Park and walk to work				

4 Employee Perceptions of the Wellness Program

	Strongly Disagree	Disagree	Agree	Strongly Agree
	4	3	2	1
Employees regard private gyms as being more effect than workplace fitness programs				
Employees who are physically fit feel that they do not need to utilize the workplace fitness programs				
Employees who utilize private gyms feel that they do not need to utilize the workplace fitness programs				
Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in worksite physical fitness programs				
Since participation in physical fitness programs is voluntary, it is negatively affecting participation trends.				
It is important to engage employees in designing workplace fitness programs				
Employees do feel safe exercising after hours at work				
There are sufficient bathroom facilities to freshen up after physical exercise				
Employees were consulted about the physical fitness program that is in place				
The physical fitness program is correctly placed in the Health promotion unit and need not be led by HR				
Benefits of the physical fitness program is well marketed				

	Strongly Disagree	Disagree	Agree	Strongly Agree
The 2 hour concession being offered to exercise is sufficient				
Equipment to exercise is sufficient for all employees to exercise at work				
Privacy is provided in the physical exercise areas				
I motivates employees to exercise				
Physical fitness programs will prevent hypertension				
Physical fitness programs will prevent diabetes				
Physical fitness programs will prevent cardiac conditions				
Physical fitness programs will assist in weight control				
Physical fitness programs can assist in preventing stress				
Physical fitness programs can improve productivity				
Physical fitness programs can reduce absenteeism linked to ill-health				
Health promotion messages are distributed regularly				
Employees take the advice offered in health promotion messages				
If there were rewards like trophies and t-shirts or certificates for employees who participate, employees would be motivated to participate				

Thank you for your Time

ANNEXURE E3

Annexure 3: Questionnaire For General Workers

Questionnaire on employee health and wellness fitness program

Kindly tick your responses in the box provided

1 Participant Information

Age In years	Below 20	20 to 30	30 to 40	40 and above
Gender			Male	Female
Distance travelled to work			Below 5 Km	Above 5 Km
Participation in the Ilembe Health District Physical Fitness Program			Participating	Not Participating
Who is the District Wellness champion?				
The Employee Health and wellness Committee	Does not exist	Exists but is non-functional	Fully functional	

2. Health seeking habits

	Strongly Disagree	Disagree	Agree	Strongly Agree
	4	3	2	1
I regard myself as being healthy				
I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it				
I exercise 5 days a week for 30 minutes or more				
I get 8 hours of sleep a day				
I drink 8 glasses of water a day				
I check my blood pressure every 6 months				
I check my blood glucose levels every 6 months				
I always have the time to exercise daily				
I bring lunch from home rather than buy fast food				
I eat at least 5 fruit and vegetable in a week				
When eating out, I never order dessert				
I never miss breakfast				
If healthy snacks were sold at work , I would buy them				
I always chose a healthy meal at a restaurant				

3 Employee interests

Would you be interested in getting information on	Very Unlikely	Unlikely	Likely	Very Likely
Management of Skin conditions				
Preventing obesity				
Eye care				
Stress management				
Healthy cooking tips				
Healthy eating				
Family exercise routine				
Preventing accidents and injuries				
Keeping fit				
Stress management				
Health effects of smoking ,alcohol and Drugs				
Women's health				
Men's health				
Health tips on preventing chronic diseases				
Managing diabetes				
Managing hypertension				
diagnosing and managing HIV AIDS				
Detecting and managing TB				

Heart conditions				
sexual and reproductive health				
Maintain healthy cholesterol levels				
Personal financial management				
Oral Care				
Self defense				

3 Employee interests

Would you participate in the following physical fitness activities?	Very Unlikely	Unlikely	Likely	Very Likely
Soccer				
Netball				
Volleyball				
Aerobics				
Exercising using the gym equipment				
Jogging				
Dancing				
Walking				
Table tennis				
Indoor basketball				
Rugby				
Yoga				
Park and walk to work				

4 Employee Perceptions of the Wellness Program

	Strongly Disagree	Disagree	Agree	Strongly Agree
	4	3	2	1
Private gyms are more effect than workplace fitness programs				
I am physically fit and do not need to utilize the workplace fitness programs				
I am using a private gym and do not need to utilize my workplace fitness programs				
It is more beneficial for the employer to subsidize my gym fees rather than invest in worksite physical fitness programs				
Participation in physical fitness programs being voluntary is affecting participation trends				
It is important to engage employees in designing workplace fitness programs				
I feel safe exercising after hours at work				
There are sufficient bathroom facilities to freshen up after physical exercise				
I was consulted about the physical fitness program that is in place				
The physical fitness program is not correctly placed in the Health promotion unit and should be led by HR				
Benefits of the physical fitness program is well marketed				

	Strongly Disagree	Disagree	Agree	Strongly Agree
The 2 hour concession being offered to exercise is sufficient				
Equipment to exercise is sufficient for all employees to exercise at work				
Physical exercise areas provide privacy				
My manager motivates me to exercise				
Physical fitness programs will prevent hypertension				
Physical fitness programs will prevent diabetes				
Physical fitness programs will prevent cardiac conditions				
Physical fitness programs will assist in weight control				
Physical fitness programs can assist in preventing stress				
Physical fitness programs can improve productivity				
Physical fitness programs can reduce absenteeism linked to ill-health				
I receive regular health promotion messages				
I take the advice offered in health promotion messages				
If there were rewards like trophies and t-shirts for employees who participate, I would be motivated to participate				

Thank you for your Time

ANNEXURE F1

Correlations

			I regard myself as being healthy	that smoking, drinking alcohol and taking drugs is a risk to my	I exercise 5 days a week for 30 minutes or more	I get 8 hours of sleep a day	I drink 8 glasses of water a day
action to avoid risky behaviour	I regard myself as being healthy	Correlation Coefficient Sig. (2-tailed) N	1.000 151				
action to avoid risky behaviour	I believe that smoking, drinking alcohol and taking drugs is a risk to	Correlation Coefficient Sig. (2-tailed) N	.031 .703 151	1.000 152			
action to prevent ill health	I exercise 5 days a week for 30 minutes or more	Correlation Coefficient Sig. (2-tailed) N	.186 ^{**} .018 146	.179 ^{**} .030 147	1.000 147		
choices affecting sleep patterns	I get 8 hours of sleep a day	Correlation Coefficient Sig. (2-tailed) N	.151 .065 151	.185 ^{**} .022 152	.260 ^{**} .001 147	1.000 152	
action to prevent ill health	I drink 8 glasses of water a day	Correlation Coefficient Sig. (2-tailed) N	.103 .210 151	.080 .327 152	.312 ^{**} .000 147	.328 ^{**} .000 152	1.000 152
action to prevent ill health	I check my blood pressure every 6 months	Correlation Coefficient Sig. (2-tailed) N	-.047 .565 150	.278 ^{**} .001 151	.015 .859 147	.115 .159 151	.296 ^{**} .000 151
preventin DM	I check my blood glucose levels every 6 months	Correlation Coefficient Sig. (2-tailed) N	.072 .377 151	.236 ^{**} .004 152	.154 .062 147	.098 .230 152	.102 .212 152
action to prevent ill health	I always have the time to exercise daily	Correlation Coefficient Sig. (2-tailed) N	.093 .260 150	.413 ^{**} .000 151	.567 ^{**} .000 146	.208 ^{**} .011 151	.288 ^{**} .000 151
action to prevent ill health	I bring lunch from home rather than buy fast food	Correlation Coefficient Sig. (2-tailed) N	.139 .089 150	.133 .104 151	.115 .167 146	.066 .424 151	.196 ^{**} .016 151
healthy meals	I eat at least 5 fruit and vegetable in a week	Correlation Coefficient Sig. (2-tailed) N	.254 ^{**} .002 151	.075 .358 152	-.061 .463 147	.163 ^{**} .045 152	.058 .481 152
choices affecting sleep patterns	When eating out, I never order dessert	Correlation Coefficient Sig. (2-tailed) N	.030 .717 150	-.114 .164 151	.072 .387 146	.238 ^{**} .003 151	.106 .197 151
preventin DM	I never miss breakfast	Correlation Coefficient Sig. (2-tailed) N	.122 .142 147	-.046 .580 148	.257 ^{**} .002 143	.083 .315 148	.089 .283 148
action to avoid risky behaviour	If healthy snacks were sold at work, I would buy them	Correlation Coefficient Sig. (2-tailed) N	-.047 .564 150	.465 ^{**} .000 151	-.142 .086 146	.015 .859 151	.029 .724 151
choices affecting sleep patterns	I always chose a healthy meal at a restaurant	Correlation Coefficient Sig. (2-tailed) N	.016 .844 149	.163 ^{**} .046 150	-.012 .885 145	-.016 .846 150	.156 .056 150
	Management of	Correlation Coefficient	-.053	-.160	.194 ^{**}	.002	-.041

	Skin conditions	Sig. (2-tailed)	.519	.051	.019	.978	.618
		N	149	150	145	150	150
	Preventing obesity	Correlation Coefficient	.114	-.157	.154	.034	.099
		Sig. (2-tailed)	.166	.015	.049	.681	.228
		N	150	151	146	151	151
	Eye care	Correlation Coefficient	.030	-.161	.137	.060	.014
		Sig. (2-tailed)	.719	.049	.099	.463	.865
		N	150	151	146	151	151
	Stress management	Correlation Coefficient	.073	-.113	.160	-.005	.054
		Sig. (2-tailed)	.375	.168	.054	.947	.513
		N	150	151	146	151	151
	Healthy cooking tips	Correlation Coefficient	-.093	-.032	.037	.044	-.029
		Sig. (2-tailed)	.259	.699	.661	.594	.719
		N	150	151	146	151	151
	Healthy eating	Correlation Coefficient	-.040	-.184	.041	-.087	-.032
		Sig. (2-tailed)	.624	.024	.626	.291	.698
		N	149	150	145	150	150
	Family exercise routine	Correlation Coefficient	-.050	-.023	-.158	-.080	-.057
		Sig. (2-tailed)	.544	.775	.042	.327	.484
		N	150	151	146	151	151
	Preventing accidents and injuries	Correlation Coefficient	.118	-.062	.085	-.091	-.028
		Sig. (2-tailed)	.154	.453	.309	.267	.730
		N	149	150	145	150	150
	Keeping fit	Correlation Coefficient	-.023	-.159	.113	-.018	.039
		Sig. (2-tailed)	.780	.051	.174	.825	.638
		N	150	151	146	151	151
	Stress management	Correlation Coefficient	.047	-.232	.198	.004	.103
		Sig. (2-tailed)	.575	.005	.018	.962	.213
		N	147	148	143	148	148
	Health effects of smoking ,alcohol and Drugs	Correlation Coefficient	-.095	-.357	.100	-.007	-.030
		Sig. (2-tailed)	.248	.000	.230	.933	.719
		N	150	151	146	151	151
	Women's health	Correlation Coefficient	.109	-.136	.082	-.198	-.079
		Sig. (2-tailed)	.190	.101	.332	.016	.344
		N	146	147	143	147	147
	Men's health	Correlation Coefficient	-.030	.051	-.094	-.015	-.124
		Sig. (2-tailed)	.716	.539	.262	.853	.134
		N	147	148	143	148	148
	Health tips on preventing chronic diseases	Correlation Coefficient	-.093	-.128	.064	.044	.058
		Sig. (2-tailed)	.259	.116	.445	.594	.481
		N	150	151	146	151	151
	Managing diabetes	Correlation Coefficient	-.065	-.163	.084	.018	.026
		Sig. (2-tailed)	.428	.025	.315	.831	.753
		N	149	150	145	150	150
	Managing hypertension	Correlation Coefficient	.058	-.205	.112	-.010	.102
		Sig. (2-tailed)	.481	.012	.178	.904	.215
		N	149	150	145	150	150
	diagnosing and managing HIV AIDS	Correlation Coefficient	.009	-.146	.109	.109	.033
		Sig. (2-tailed)	.910	.074	.189	.182	.685

		N	150	151	146	151	151
	Detecting and managing TB	Correlation Coefficient	.020	.243	.017	-.020	-.097
		Sig. (2-tailed)	.805	.003	.837	.809	.239
		N	148	149	144	149	149
	Heart conditions	Correlation Coefficient	.058	-.150	-.004	-.109	.102
		Sig. (2-tailed)	.481	.067	.964	.184	.215
		N	149	150	145	150	150
	Sexual and reproductive health	Correlation Coefficient	-.042	-.145	-.045	-.112	-.009
		Sig. (2-tailed)	.609	.077	.591	.172	.913
		N	149	150	145	150	150
	Maintain healthy cholesterol levels	Correlation Coefficient	-.026	-.139	.076	-.161	-.078
		Sig. (2-tailed)	.750	.092	.364	.051	.345
		N	147	148	144	148	148
	Personal financial management	Correlation Coefficient	-.041	-.094	-.097	-.065	.039
		Sig. (2-tailed)	.618	.257	.246	.431	.637
		N	148	149	145	149	149
	Oral Care	Correlation Coefficient	.050	.229	.028	-.040	-.028
		Sig. (2-tailed)	.548	.005	.740	.631	.730
		N	149	150	145	150	150
	Self defence	Correlation Coefficient	.122	.331	.378	.109	.103
		Sig. (2-tailed)	.138	.000	.000	.183	.212
		N	149	150	145	150	150
	Soccer	Correlation Coefficient	.030	-.054	-.043	-.002	-.041
		Sig. (2-tailed)	.717	.508	.610	.976	.613
		N	150	151	146	151	151
	Netball	Correlation Coefficient	-.082	-.078	.096	-.075	-.037
		Sig. (2-tailed)	.322	.345	.252	.365	.657
		N	149	150	145	150	150
	Volleyball	Correlation Coefficient	.001	.049	-.034	-.081	.052
		Sig. (2-tailed)	.995	.555	.686	.326	.528
		N	148	149	144	149	149
	Aerobics	Correlation Coefficient	.048	.215	.390	-.121	.243
		Sig. (2-tailed)	.563	.008	.000	.141	.003
		N	149	150	145	150	150
	Exercising using the gym equipment	Correlation Coefficient	.069	-.041	.165	-.053	-.068
		Sig. (2-tailed)	.401	.621	.026	.517	.408
		N	149	150	145	150	150
	Jogging	Correlation Coefficient	.020	.025	-.031	.070	.037
		Sig. (2-tailed)	.809	.762	.707	.392	.655
		N	149	150	145	150	150
	Dancing	Correlation Coefficient	.089	.184	.249	-.035	-.127
		Sig. (2-tailed)	.283	.025	.003	.674	.124
		N	147	148	143	148	148
	Walking	Correlation Coefficient	.160	.170	.443	.124	.085
		Sig. (2-tailed)	.052	.038	.000	.131	.301
		N	149	150	145	150	150
	Table tennis	Correlation Coefficient	.049	-.067	.006	.002	-.054
		Sig. (2-tailed)	.551	.418	.941	.981	.512
		N	149	150	145	150	150

	Indoor basketball	Correlation Coefficient	.244 ^{**}	-.108	.157	.023	-.002
		Sig. (2-tailed)	.003	.190	.059	.779	.984
		N	149	150	145	150	150
	Rugby	Correlation Coefficient	.110	.205 ^{**}	-.109	.069	.012
		Sig. (2-tailed)	.183	.000	.192	.404	.880
		N	149	150	145	150	150
	Yoga	Correlation Coefficient	.142	.118	-.040	-.099	-.194 [*]
		Sig. (2-tailed)	.085	.153	.636	.230	.018
		N	148	149	144	149	149
	Park and walk to work	Correlation Coefficient	-.044	-.138	.096	.141	.153
		Sig. (2-tailed)	.590	.093	.252	.085	.061
		N	149	150	145	150	150
	Employees regard private gyms as being more effect than workplace	Correlation Coefficient	-.082	.305 ^{**}	.342 [*]	-.032	-.083
		Sig. (2-tailed)	.325	.000	.000	.699	.319
		N	146	147	142	147	147
	Employees who are physically fit feel that they do not need to utilize the	Correlation Coefficient	-.077	.232 ^{**}	.175 [*]	-.046	-.020
		Sig. (2-tailed)	.355	.005	.037	.575	.806
		N	147	148	143	148	148
	Employees who utilize private gyms feel that they do not need to utilize the	Correlation Coefficient	-.027	-.097	-.002	-.088	-.140
		Sig. (2-tailed)	.749	.240	.977	.287	.091
		N	147	148	143	148	148
	Employees feel that it is more beneficial for the employer to subsidize their gym	Correlation Coefficient	.064	.007	-.020	-.104	-.153
		Sig. (2-tailed)	.441	.934	.812	.210	.064
		N	146	147	142	147	147
	Since participation in physical fitness programmes is voluntary, it is	Correlation Coefficient	-.011	-.214 [*]	.088	.059	-.060
		Sig. (2-tailed)	.896	.009	.299	.475	.470
		N	147	148	143	148	148
	It is important to engage employees in designing workplace fitness	Correlation Coefficient	-.054	.429 ^{**}	.220 [*]	-.061	.023
		Sig. (2-tailed)	.518	.000	.009	.462	.783
		N	146	147	142	147	147
	Employees do feel safe exercising after hours at work	Correlation Coefficient	.025	.179 [*]	-.107	-.024	.084
		Sig. (2-tailed)	.766	.030	.203	.774	.314
		N	146	147	143	147	147
	There are sufficient bathroom facilities to freshen up after physical exercise	Correlation Coefficient	.206 ^{**}	-.039	.045	.052	-.025
		Sig. (2-tailed)	.012	.639	.597	.528	.762
		N	146	147	142	147	147
	Employees were consulted about the physical fitness programme that is	Correlation Coefficient	-.013	-.031	.118	.023	-.012
		Sig. (2-tailed)	.880	.711	.167	.783	.887
		N	143	144	139	144	144
	The physical fitness programme is correctly placed in the Health	Correlation Coefficient	.000	.214 [*]	.129 [*]	.094	.020
		Sig. (2-tailed)	.997	.009	.025	.258	.814
		N	145	146	141	146	146
	Benefits of the physical fitness programme is well marketed	Correlation Coefficient	-.039	.113	.277 ^{**}	.162 [*]	.219 [*]
		Sig. (2-tailed)	.643	.175	.001	.050	.008
		N	146	147	142	147	147
	The 2 hour concession being offered to exercise is sufficient	Correlation Coefficient	-.021	.180 [*]	-.143	-.020	-.025
		Sig. (2-tailed)	.802	.045	.089	.810	.762
		N	146	147	142	147	147
	Equipment to	Correlation Coefficient	-.033	-.005	.070	.096	.004

	exercise is sufficient for all employees to	Sig. (2-tailed)	.696	.956	.410	.250	.963
		N	144	145	140	145	145
	Privacy is provided in the physical exercise areas	Correlation Coefficient	.071	-.044	.087	.129	.129
		Sig. (2-tailed)	.396	.602	.304	.121	.121
		N	144	145	140	145	145
	Managers motivates employees to exercise	Correlation Coefficient	.244*	-.129	.123	.039	.069
		Sig. (2-tailed)	.003	.117	.140	.636	.405
		N	149	150	145	150	150
	Physical fitness programmes will prevent hypertension	Correlation Coefficient	.226*	-.016	.012	-.095	.082
		Sig. (2-tailed)	.005	.847	.883	.247	.320
		N	149	150	145	150	150
	Physical fitness programmes will prevent diabetes	Correlation Coefficient	.169	-.138	.053	-.001	.124
		Sig. (2-tailed)	.040	.092	.530	.992	.130
		N	149	150	145	150	150
	Physical fitness programmes will prevent cardiac conditions	Correlation Coefficient	.136	-.127	.099	-.030	.105
		Sig. (2-tailed)	.017	.121	.236	.713	.202
		N	149	150	145	150	150
	Physical fitness programmes will assist in weight control	Correlation Coefficient	.145	-.082	.012	-.035	.082
		Sig. (2-tailed)	.077	.319	.883	.669	.320
		N	149	150	145	150	150
	Physical fitness programmes can assist in preventing stress	Correlation Coefficient	.145	-.082	.074	-.155	.022
		Sig. (2-tailed)	.077	.319	.376	.058	.793
		N	149	150	145	150	150
	Physical fitness programmes can improve productivity	Correlation Coefficient	.000	-.087	.010	-.070	.118
		Sig. (2-tailed)	.996	.292	.906	.397	.150
		N	149	150	145	150	150
	Physical fitness programmes can reduce absenteeism linked	Correlation Coefficient	-.028	.206*	.293*	.022	.012
		Sig. (2-tailed)	.732	.000	.001	.793	.884
		N	149	150	145	150	150
	Health promotion messages are distributed regularly	Correlation Coefficient	.225*	-.005	.113	.235*	.142
		Sig. (2-tailed)	.006	.954	.177	.004	.084
		N	149	150	145	150	150
	Employees take the advice offered in health promotion messages	Correlation Coefficient	-.001	.003	.134	.235*	-.019
		Sig. (2-tailed)	.992	.974	.107	.004	.817
		N	149	150	145	150	150
	If there were rewards like trophies and t-shirts or certificates for	Correlation Coefficient	-.142	-.084	-.184	.042	.042
		Sig. (2-tailed)	.184	.429	.092	.692	.692
		N	89	90	85	90	90

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

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

HEALTH SEEKING HABITS

I check my blood pressure every 6 months	I check my blood glucose levels every 6 months	I always have the time to exercise daily	I bring lunch from home rather than buy fast food	I eat at least 5 fruit and vegetable in a week	When eating out, I never order dessert	I never miss breakfast	If healthy snacks were sold at work , I would buy them	I always chose a healthy meal at a restaurant
1.000								
151								
.342	1.000							
.000								
151	152							
-.052	.074	1.000						
.526	.365							
150	151	151						
.078	.090	.079	1.000					
.344	.271	.335						
150	151	150	151					
.111	.182	.033	.100	1.000				
.175	.025	.684	.221					
151	152	151	151	152				
-.057	-.038	.121	-.145	.072	1.000			
.489	.642	.141	.076	.381				
150	151	150	150	151	151			
.010	.213	.301	.067	.062	.106	1.000		
.909	.009	.000	.421	.454	.203			
147	148	147	147	148	147	148		
.247	.187	.258	.219	.132	-.022	.004	1.000	
.002	.041	.001	.007	.106	.790	.980		
150	151	150	150	151	150	147	151	
.126	.102	.000	.225	.233	.077	.057	.246	1.000
.126	.214	.998	.006	.006	.353	.496	.003	
149	150	149	149	150	149	146	149	150
-.061	.164	.109	.034	.134	.079	.160	.023	.247

.460	.045	.015	.684	.103	.336	.053	.783	.002
149	150	149	149	150	149	146	149	149
-.032	-.034	.271 [~]	.110	.155	-.007	-.013	-.024	.327 [~]
.695	.681	.001	.179	.058	.931	.879	.767	.000
150	151	150	150	151	150	147	150	150
-.002	.109	.144	.098	.079	.078	.096	.022	.183 [~]
.978	.183	.079	.232	.335	.346	.250	.792	.025
150	151	150	150	151	150	147	150	150
-.085	.144	.188 [~]	.051	.131	.083	.098	-.019	.314 [~]
.301	.079	.021	.533	.110	.312	.236	.819	.000
150	151	150	150	151	150	147	150	150
.045	.217 [~]	.091	.076	.122	.164 [~]	.189 [~]	.156	.220 [~]
.582	.008	.268	.357	.135	.045	.041	.057	.007
150	151	150	150	151	150	147	150	150
-.066	-.029	.215 [~]	-.083	.124	.083	.082	-.181 [~]	.086
.424	.721	.008	.317	.131	.315	.323	.049	.297
149	150	149	149	150	149	146	149	149
-.040	.050	-.054	.098	.111	-.016	.116	.066	.117
.631	.546	.515	.232	.176	.850	.162	.424	.153
150	151	150	150	151	150	147	150	150
.041	.146	-.020	-.103	.223 [~]	-.031	-.053	-.007	.076
.617	.074	.809	.209	.006	.704	.528	.932	.360
149	150	149	149	150	149	146	149	149
.020	.145	.110	.134	.182 [~]	-.031	.180 [~]	-.028	.110
.805	.076	.181	.103	.026	.710	.041	.736	.181
150	151	150	150	151	150	147	150	150
-.127	-.004	.257 [~]	.144	.083	.034	0.000	-.064	.278 [~]
.125	.962	.002	.081	.318	.684	1.000	.442	.001
147	148	147	147	148	147	144	147	147
-.068	.045	.255 [~]	.001	.011	-.068	.081	-.280 [~]	.103
.407	.579	.002	.992	.892	.405	.332	.000	.209
150	151	150	150	151	150	147	150	150
-.141	-.073	.101	-.041	.014	-.019	.062	-.113	.019
.089	.380	.224	.627	.863	.819	.463	.173	.822
146	147	146	146	147	146	143	147	146
-.194 [~]	-.082	-.110	.140	-.007	.014	-.068	.037	.143
.019	.321	.183	.091	.929	.870	.421	.654	.084
147	148	147	147	148	147	144	147	147
-.085	.173 [~]	.177 [~]	.076	.165 [~]	.077	.120	-.041	.266 [~]
.299	.033	.030	.357	.042	.348	.148	.615	.001
150	151	150	150	151	150	147	150	150
-.064	.130	.220 [~]	.035	.063	.018	.035	-.092	.189 [~]
.440	.113	.007	.671	.445	.832	.676	.265	.021
149	150	149	149	150	149	146	149	149
-.088	-.040	.253 [~]	.080	.094	.039	-.035	-.048	.218 [~]
.287	.630	.002	.334	.251	.633	.675	.559	.008
149	150	149	149	150	149	146	149	149
-.063	.114	.160	.064	.104	.147	-.005	.046	.289 [~]
.446	.163	.050	.437	.203	.073	.953	.580	.000

150	151	150	150	151	150	147	150	150
-.068	.024	.211	-.032	.060	.013	-.044	-.161	.198
.409	.767	.010	.703	.466	.872	.602	.050	.016
148	149	148	148	149	148	145	148	148
-.138	-.036	.055	.134	.140	.093	.016	-.110	.265
.094	.665	.503	.103	.088	.261	.847	.183	.001
149	150	149	149	150	149	146	149	149
-.066	.161	.118	.065	.058	-.029	.107	-.060	.241
.427	.049	.151	.428	.482	.725	.200	.467	.003
149	150	149	149	150	149	146	149	149
.011	.093	.041	.121	.032	.036	.118	-.061	.189
.896	.263	.619	.145	.696	.663	.160	.466	.022
147	148	147	147	148	147	144	147	147
.158	.209	.031	.166	.149	-.072	.202	.146	.199
.056	.011	.704	.044	.069	.386	.015	.076	.016
148	149	148	148	149	148	145	148	148
-.010	-.008	.083	.010	.172	.174	.059	-.011	.185
.900	.920	.316	.905	.036	.034	.479	.890	.024
149	150	149	149	150	149	146	149	149
-.098	-.009	.258	.033	.054	.183	.189	.282	-.072
.234	.916	.001	.691	.515	.026	.022	.000	.385
149	150	149	149	150	149	146	149	149
.009	.002	.027	.120	-.100	.052	.067	-.083	.053
.917	.976	.743	.143	.222	.525	.422	.314	.523
150	151	150	150	151	150	147	150	150
.012	-.047	.127	.036	.186	.022	.095	-.013	-.054
.883	.565	.124	.666	.022	.788	.256	.878	.514
149	150	149	149	150	149	146	149	149
.029	-.119	-.144	.026	-.088	.093	.058	.064	-.024
.727	.147	.080	.754	.286	.261	.491	.442	.772
148	149	148	148	149	148	145	148	148
.059	.027	.312	.010	.114	.000	-.022	.326	.008
.475	.739	.000	.908	.164	.998	.790	.000	.925
149	150	149	149	150	149	146	149	149
.014	-.144	-.143	.126	.112	.087	-.033	.023	.096
.866	.078	.083	.126	.174	.291	.695	.783	.242
149	150	149	149	150	149	146	149	149
.091	.176	.042	.013	-.082	.082	.027	-.025	.068
.270	.031	.607	.871	.317	.318	.749	.761	.409
149	150	149	149	150	149	146	149	149
.132	.027	.242	.073	.030	.052	-.016	.171	.042
.112	.747	.003	.379	.719	.526	.845	.038	.617
147	148	147	147	148	148	144	147	147
-.033	.102	.326	-.056	-.054	.214	.216	-.153	.164
.687	.213	.000	.500	.511	.009	.009	.063	.046
149	150	149	149	150	149	146	149	149
-.015	.048	.032	.075	-.109	-.037	.265	-.009	-.026
.861	.557	.702	.365	.186	.653	.001	.917	.753
149	150	149	149	150	149	146	149	149

-.065	-.092	.093	171	-.067	.036	.116	-.051	-.025
.428	.265	.260	.037	.418	.665	.165	.540	.758
149	150	149	149	150	149	146	149	149
.122	.125	-.115	248	-.034	-.007	.111	.187	.119
.140	.127	.163	.002	.679	.936	.182	.022	.149
149	150	149	149	150	149	146	149	149
-.017	.153	-.080	.083	.141	-.170	.136	.008	.106
.838	.062	.331	.316	.087	.032	.102	.924	.199
148	149	148	148	149	148	145	148	148
.108	.006	194	202	-.079	.157	.134	-.135	-.054
.188	.938	.018	.000	.334	.056	.108	.101	.514
149	150	149	149	150	149	146	149	149
.129	-.035	474	-.156	.089	-.037	250	237	.089
.121	.673	.000	.059	.284	.655	.003	.004	.283
146	147	146	146	147	146	143	146	146
.052	.019	321	-.112	-.027	-.060	-.097	172	.096
.528	.817	.000	.177	.749	.473	.249	.037	.246
147	148	147	147	148	147	144	147	147
-.043	.033	-.031	227	.039	-.014	-.061	-.014	-.064
.602	.692	.709	.006	.639	.862	.468	.866	.439
147	148	147	147	148	147	144	147	147
.051	-.004	210	-.114	.058	162	-.062	-.008	-.059
.542	.960	.011	.171	.487	.028	.460	.926	.482
146	147	146	146	147	146	143	146	146
275	-.094	.043	-.028	-.046	.075	.031	-.126	-.089
.001	.253	.605	.738	.578	.364	.709	.129	.283
147	148	147	147	148	147	144	147	147
216	.087	326	175	.085	-.037	201	340	.252
.009	.297	.000	.034	.305	.655	.002	.000	.002
146	147	146	146	147	146	143	146	146
346	.095	-.086	.043	225	.062	-.052	213	.130
.004	.252	.301	.606	.005	.456	.537	.010	.118
146	147	146	146	147	146	143	146	146
182	283	176	.131	205	211	.134	-.008	-.060
.028	.001	.033	.115	.013	.010	.111	.928	.475
146	147	146	146	147	146	143	146	146
.139	.074	.085	.006	.026	-.074	.023	-.022	.060
.098	.378	.312	.940	.760	.382	.787	.796	.475
143	144	143	144	144	143	140	143	143
.039	.113	-.059	170	224	.028	.078	.111	.126
.646	.175	.482	.041	.006	.736	.357	.184	.130
145	146	146	145	146	145	142	145	145
.148	.153	206	178	-.021	-.030	.133	.047	.016
.074	.064	.012	.032	.800	.722	.113	.569	.851
146	147	146	146	147	146	143	146	146
-.104	-.052	228	.039	.133	.021	-.088	213	183
.213	.528	.006	.642	.109	.798	.295	.010	.027
146	147	146	146	147	146	143	146	146
.007	.144	.072	-.014	.104	-.006	.030	.017	.052

.934	.084	.389	.871	.213	.941	.722	.841	.538
144	145	144	144	145	144	141	144	144
.004	.052	.098	.191	.077	-.097	.238	.086	.114
.963	.533	.244	.022	.357	.249	.004	.304	.175
144	145	144	144	145	144	141	144	143
-.039	.062	.097	-.143	.077	-.085	.108	-.159	-.105
.638	.454	.240	.083	.352	.305	.197	.053	.206
149	150	149	149	150	149	146	149	148
.087	.092	.055	-.024	.003	-.048	.050	-.077	.099
.290	.264	.507	.775	.969	.558	.545	.350	.232
149	150	149	149	150	149	146	149	148
-.006	.062	.154	-.005	.035	.042	.074	.009	.084
.938	.454	.061	.955	.675	.609	.376	.917	.312
149	150	149	149	150	149	146	149	148
.024	.096	.132	.017	.003	.010	.101	-.047	.067
.776	.242	.107	.836	.974	.907	.225	.569	.421
149	150	149	149	150	149	146	149	148
.087	.032	.055	-.089	.063	-.048	-.017	-.010	.035
.290	.698	.507	.281	.447	.558	.843	.904	.675
149	150	149	149	150	149	146	149	148
.147	.032	.055	-.089	.063	-.108	.117	.057	.035
.073	.698	.507	.281	.447	.190	.158	.488	.675
149	150	149	149	150	149	146	149	148
.012	.065	.065	.008	.028	-.105	.019	.081	.007
.889	.427	.430	.919	.736	.205	.823	.326	.937
149	150	149	149	150	149	146	149	148
.097	-.031	-.227	.122	.221	-.009	-.121	.425	.172
.239	.704	.005	.138	.007	.918	.144	.000	.037
149	150	149	149	150	149	146	149	148
.030	.022	.088	.051	.253	.112	.124	-.040	.016
.717	.794	.286	.535	.002	.173	.136	.626	.848
149	150	149	149	150	149	146	149	148
-.193	-.058	.156	-.017	.054	.104	.312	-.120	-.086
.018	.479	.057	.834	.516	.205	.000	.146	.298
149	150	149	149	150	149	146	149	148
-.051	-.003	.069	-.069	.074	.009	-.057	.088	-.088
.632	.979	.520	.520	.487	.931	.600	.413	.411
89	90	90	90	90	90	87	89	90

ANNEXURE F2

CHI SQUARE INDICATOR STATEMENT

	Chi-Square	df	Asymp. Sig.
I regard myself as being healthy	73.013	1	.000
I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it	30.421	1	.000
I exercise 5 days a week for 30 minutes or more	4.959	1	.026
I get 8 hours of sleep a day	2.632	1	.105
I drink 8 glasses of water a day	3.789	1	.052
I check my blood pressure every 6 months	1.914	1	.167
I check my blood glucose levels every 6 months	2.632	1	.105
I always have the time to exercise daily	0.007	1	.935
I bring lunch from home rather than buy fast food	26.285	1	.000
I eat at least 5 fruit and vegetable in a week	0.105	1	.746
When eating out, I never order dessert	0.166	1	.684
I never miss breakfast	29.432	1	.000
If healthy snacks were sold at work, I would buy them	33.384	1	.000
I always chose a healthy meal at a restaurant	18.027	1	.000

	Chi-Square	df	Asymp. Sig.
Management of Skin conditions	116.16	1	.000
Preventing obesity	113.649	1	.000
Eye care	117.146	1	.000
Stress management	100.192	1	.000
Healthy cooking tips	93.781	1	.000
Healthy eating	77.76	1	.000
Family exercise routine	37.252	1	.000
Preventing accidents and injuries	109.227	1	.000
Keeping fit	90.656	1	.000
Stress management	84.757	1	.000
Health effects of smoking ,alcohol and Drugs	78.682	1	.000
Women's health	58.637	1	.000
Men's health	43.243	1	.000
Health tips on preventing chronic diseases	93.781	1	.000
Managing diabetes	102.507	1	.000
Managing hypertension	105.84	1	.000
diagnosing and managing HIV AIDS	96.96	1	.000
Detecting and managing TB	95.04	1	.000
Heart conditions	105.84	1	.000
Sexual and reproductive health	96	1	.000
Maintain healthy cholesterol levels	128.676	1	.000
Personal financial management	95.04	1	.000
Oral Care	109.227	1	.000
Self defence	36.507	1	.000

	Chi-Square	df	Asymp. Sig.
Soccer	0.166	1	.684
Netball	0.427	1	.514
Volleyball	7.309	1	.007
Aerobics	6	1	.014
Exercising using the gym equipment	56.427	1	.000
Jogging	27.307	1	.000
Dancing	33.108	1	.000
Walking	38.507	1	.000
Table tennis	25.627	1	.000
Indoor basketball	30.827	1	.000
Rugby	20.907	1	.000
Yoga	0.06	1	.806
Park and walk to work	0.427	1	.514

	Chi-Square	df	Asymp. Sig.
Employees regard private gyms as being more effect than workplace fitness programmes	6.537	1	.011
Employees who are physically fit feel that they do not need to utilize the workplace fitness programmes	0.243	1	.622
Employees who utilize private gyms feel that they do not need to utilize the workplace fitness programmes	3.892	1	.049
Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in works	19.109	1	.000
Since participation in physical fitness programmes is voluntary, it is negatively affecting participation trends.	59.703	1	.000
It is important to engage employees in designing workplace fitness programmes	44.633	1	.000
Employees do feel safe exercising after hours at work	2.456	1	.117
There are sufficient bathroom facilities to freshen up after physical exercise	4.959	1	.026
Employees were consulted about the physical fitness programme that is in place	4.694	1	.030
The physical fitness programme is correctly placed in the Health promotion unit and need not be led by HR	2.219	1	.136
Benefits of the physical fitness programme is well marketed	0.17	1	.680
The 2 hour concession being offered to exercise is sufficient	4.959	1	.026
Equipment to exercise is sufficient for all employees to exercise at work	43.041	1	.000
Privacy is provided in the physical exercise areas	0.062	1	.803
It motivates employees to exercise	64.027	1	.000
Physical fitness programmes will prevent hypertension	119.707	1	.000
Physical fitness programmes will prevent diabetes	123.307	1	.000
Physical fitness programmes will prevent cardiac conditions	126.96	1	.000
Physical fitness programmes will assist in weight control	119.707	1	.000
Physical fitness programmes can assist in preventing stress	119.707	1	.000
Physical fitness programmes can improve productivity	102.507	1	.000
Physical fitness programmes can reduce absenteeism linked to ill-health	15.36	1	.000
Health promotion messages are distributed regularly	0.24	1	.624
Employees take the advice offered in health promotion messages	34.56	1	.000
If there were rewards like trophies and t-shirts or certificates for employees who participate, employees would b	64.178	1	.000

ANNEXURE F4

Pearson Chi-Square Tests

		Group		
		Supervisors	Managers	General Workers
		Distance travelled to work	Distance travelled to work	Distance travelled to work
I regard myself as being healthy	Chi-square	7.216	.476	12.851
	df	3	1	3
	Sig.	0.065	0.49	.005*
I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it	Chi-square	2.829	2.500	5.440
	df	3	1	3
	Sig.	0.419	0.114	0.142
I exercise 5 days a week for 30 minutes or more	Chi-square	2.945	6.000	2.970
	df	3	3	3
	Sig.	0.4	0.112	0.396
I get 8 hours of sleep a day	Chi-square	6.120	1.333	5.662
	df	3	3	3
	Sig.	0.106	0.721	0.129
I drink 8 glasses of water a day	Chi-square	5.821	7.000	6.206
	df	3	3	3
	Sig.	0.121	0.072	0.102
I check my blood pressure every 6 months	Chi-square	4.673	4.000	2.531
	df	3	3	3
	Sig.	0.197	0.261	0.47
I check my blood glucose levels every 6 months	Chi-square	3.878	2.333	.545
	df	3	3	3
	Sig.	0.275	0.506	0.908
I always have the time to exercise daily	Chi-square	2.936	.667	2.466
	df	3	2	3
	Sig.	0.402	0.717	0.478
I bring lunch from home rather than buy fast food	Chi-square	1.571	1.200	2.419
	df	3	2	3
	Sig.	0.666	0.549	0.48
I eat at least 5 fruit and vegetable in a week	Chi-square	4.546	2.533	8.817
	df	3	2	3
	Sig.	0.208	0.282	.032*
When eating out, I never order dessert	Chi-square	2.936	2.667	2.200
	df	3	2	3
	Sig.	0.402	0.264	0.532
I never miss breakfast	Chi-square	2.724	1.333	.501
	df	3	3	2
	Sig.	0.436	0.721	0.778
If healthy snacks were sold at work, I would buy them	Chi-square	25.133	2.667	1.198
	df	2	2	3
	Sig.	.000*	0.264	0.753
I always chose a healthy meal at a restaurant	Chi-square	10.163	1.200	2.047
	df	3	2	3
	Sig.	.017*	0.549	0.563
Management of Skin conditions	Chi-square	2.971	.225	1.551
	df	3	1	3
	Sig.	0.396	0.635	0.671
Preventing obesity	Chi-square	1.285	.476	1.869
	df	3	1	3
	Sig.	0.733	0.49	0.6
Eye care	Chi-square	3.494	0.000	5.723
	df	3	1	3
	Sig.	0.322	1	0.126
Stress management	Chi-square	1.682	.476	4.393
	df	3	1	3
	Sig.	0.641	0.49	0.222
Healthy cooking tips	Chi-square	2.570	0.000	4.909
	df	3	1	3
	Sig.	0.463	1	0.179
Healthy eating	Chi-square	2.415	.400	1.877
	df	3	1	3
	Sig.	0.491	0.527	0.598
Family exercise routine	Chi-square	1.603	400	6.287
	df	3	1	3

Preventing accidents and injuries	Sig.	0.659	0.527	0.098
	Chi-square	2.444	4.286	1.207
	df	3	1	2
Keeping fit	Sig.	0.486	.038*	0.547
	Chi-square	2.589	.476	6.337
	df	3	1	3
Stress management	Sig.	0.463	0.49	0.096
	Chi-square	.268	2.500	4.062
	df	3	1	3
Health effects of smoking ,alcohol and Drugs	Sig.	0.966	0.114	0.255
	Chi-square	4.170	.400	5.974
	df	3	1	3
Women's health	Sig.	0.244	0.527	0.113
	Chi-square	7.472	1.667	.332
	df	3	1	3
Men's health	Sig.	0.058	0.197	0.954
	Chi-square	3.390	2.000	2.399
	df	3	2	3
Health tips on preventing chronic diseases	Sig.	0.335	0.368	0.494
	Chi-square	1.391	.400	6.627
	df	3	1	3
Managing diabetes	Sig.	0.708	0.527	0.085
	Chi-square	5.608	0.000	3.512
	df	3	1	3
Managing hypertension	Sig.	0.132	1	0.319
	Chi-square	4.699	0.000	.761
	df	3	1	2
diagnosing and managing HIV AIDS	Sig.	0.195	1	0.684
	Chi-square	6.638	.400	.232
	df	3	1	2
Detecting and managing TB	Sig.	0.084	0.527	0.891
	Chi-square	11.662	.400	1.933
	df	3	1	3
Heart conditions	Sig.	.009*	0.527	0.686
	Chi-square	1.257	0.000	.375
	df	2	1	2
Sexual and reproductive health	Sig.	0.533	1	0.829
	Chi-square	3.212	.400	7.927
	df	3	1	3
Maintain healthy cholesterol levels	Sig.	0.36	0.527	.048*
	Chi-square	2.366	.476	5.053
	df	2	1	2
Personal financial management	Sig.	0.306	0.49	0.08
	Chi-square	3.214	1.667	3.191
	df	2	1	2
Oral Care	Sig.	0.2	0.197	0.203
	Chi-square	6.393	0.000	4.561
	df	2	1	3
Self defence	Sig.	.041*	1	0.207
	Chi-square	5.679	.900	4.266
	df	3	1	3
Soccer	Sig.	0.126	0.343	.232
	Chi-square	4.431	2.533	2.452
	df	3	3	3
Netball	Sig.	.219	0.469	0.484
	Chi-square	6.324	2.533	10.222
	df	3	3	3
Volleyball	Sig.	0.097	0.489	.017*
	Chi-square	2.769	2.533	3.349
	df	3	3	3
Aerobics	Sig.	0.429	0.469	0.341
	Chi-square	7.172	3.800	4.315
	df	3	2	3
Exercising using the gym equipment	Sig.	.067	0.15	0.229
	Chi-square	4.802	3.600	3.746
	df	3	1	3
	Sig.	0.187	0.058	0.29

Jogging	Chi-square	1.436	4.667	13.037
	df	3	2	3
	Sig.	0.697	0.097	.005*
Dancing	Chi-square	8.646	3.143	.710
	df	3	3	3
	Sig.	.031*	0.37	0.871
Walking	Chi-square	6.837	1.111	5.217
	df	3	1	3
	Sig.	0.077	0.292	0.157
Table tennis	Chi-square	15.409	2.000	8.263
	df	3	2	3
	Sig.	.001*	0.368	.041*
Indoor basketball	Chi-square	4.358	2.000	1.246
	df	3	2	3
	Sig.	0.225	0.368	0.742
Rugby	Chi-square	1.628	1.333	8.883
	df	3	3	3
	Sig.	0.653	0.721	.031*
Yoga	Chi-square	6.546	1.333	10.378
	df	3	3	3
	Sig.	0.088	0.721	.016*
Park and walk to work	Chi-square	4.526	2.667	2.714
	df	3	2	3
	Sig.	0.21	0.264	0.438
Employees regard private gyms as being more effect than workplace fitness programmes	Chi-square	6.347	1.333	5.746
	df	3	2	3
	Sig.	0.098	0.513	0.125
Employees who are physically fit feel that they do not need to utilize the workplace fitness programmes	Chi-square	6.174	3.333	7.446
	df	3	3	3
	Sig.	.103	0.343	0.059
Employees who utilize private gyms feel that they do not need to utilize the workplace fitness programmes	Chi-square	7.506	.667	8.151
	df	3	2	3
	Sig.	.057	0.717	.043*
Employees feel that it is more beneficial for the employer to subsidize their gym fees rather than invest in worksite physical fitness programmes	Chi-square	3.240	1.200	18.949
	df	3	2	3
	Sig.	0.356	0.549	.000*
Since participation in physical fitness programmes is voluntary, it is negatively affecting participation trends.	Chi-square	7.027	.533	6.721
	df	3	2	3
	Sig.	0.071	0.766	0.081
It is important to engage employees in designing workplace fitness programmes	Chi-square	16.069	.225	4.224
	df	2	1	3
	Sig.	.000*	0.635	0.238
Employees do feel safe exercising after hours at work	Chi-square	15.990	2.533	1.404
	df	3	2	3
	Sig.	.001*	0.282	0.705
There are sufficient bathroom facilities to freshen up after physical exercise	Chi-square	4.147	2.533	7.438
	df	3	3	3
	Sig.	0.246	0.469	0.059
Employees were consulted about the physical fitness programme that is in place	Chi-square	11.072	.225	4.204
	df	3	2	3
	Sig.	.011*	0.894	0.24
The physical fitness programme is correctly placed in the Health promotion unit and need not be led by HR	Chi-square	3.912	1.200	1.791
	df	3	3	3
	Sig.	0.271	0.753	0.617
Benefits of the physical fitness programme is well marketed	Chi-square	6.281	1.333	9.317
	df	3	3	3
	Sig.	0.099	0.721	.025*
The 2 hour concession being offered to exercise is sufficient	Chi-square	16.055	2.667	.757
	df	3	2	3
	Sig.	.001*	0.264	0.86
Equipment to exercise is sufficient for all employees to exercise at work	Chi-square	3.168	4.800	4.978
	df	3	2	3
	Sig.	0.367	0.091	0.173
Privacy is provided in the physical exercise areas	Chi-square	10.979	4.333	2.542
	df	3	2	3
	Sig.	.012*	0.115	0.468
I motivates employees to exercise	Chi-square	4.032	2.000	4.970

	df	3	3	3
	Sig.	0.258	0.572	0.174
Physical fitness programmes will prevent hypertension	Chi-square	2.926	4.800	.130
	df	2	2	2
	Sig.	0.231	0.091	0.937
Physical fitness programmes will prevent diabetes	Chi-square	.868	4.800	.910
	df	2	2	2
	Sig.	0.648	0.091	0.634
Physical fitness programmes will prevent cardiac conditions	Chi-square	5.838	2.000	2.056
	df	2	2	2
	Sig.	0.054	0.368	0.358
Physical fitness programmes will assist in weight control	Chi-square	7.855	2.200	2.121
	df	3	2	3
	Sig.	.049*	0.333	0.548
Physical fitness programmes can assist in preventing stress	Chi-square	6.673	3.143	1.747
	df	2	2	3
	Sig.	.036*	0.208	0.627
Physical fitness programmes can improve productivity	Chi-square	3.884	5.200	2.670
	df	3	3	3
	Sig.	0.274	0.158	0.445
Physical fitness programmes can reduce absenteeism linked to ill-health	Chi-square	3.241	3.800	5.090
	df	2	2	3
	Sig.	0.198	0.15	0.165
Health promotion messages are distributed regularly	Chi-square	2.607	2.000	.452
	df	3	3	3
	Sig.	0.456	0.572	0.929
Employees take the advice offered in health promotion messages	Chi-square	1.762	1.200	5.158
	df	3	2	3
	Sig.	0.625	0.549	0.161
If there were rewards like trophies and t-shirts or certificates for employees who participate, employees would be motivated to participate	Chi-square	17.131	2.200	
	df	3	2	
	Sig.	.001*	0.333	

ANNEXURE F5

CHI SQUARE FREQUENCIES

		Group											
		Supervisors				Managers				General Workers			
		Distance travelled to work				Distance travelled to work				Distance travelled to work			
		Below 5 Km		Above 5 Km		Below 5 Km		Above 5 Km		Below 5 Km		Above 5 Km	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
I regard myself as being healthy	Strongly Agree	2	4.8%	8	22.1%	0	0.0%	0	0.0%	18	60.3%	11	32.4%
	Agree	33	78.8%	23	66.0%	3	80.0%	4	80.0%	5	19.2%	30	88.6%
	Disagree	7	16.7%	6	16.4%	2	60.0%	1	20.0%	0	0.0%	2	6.0%
I believe that smoking, drinking alcohol and taking drugs is a risk to my health and therefore I avoid it	Strongly Disagree	0	0.0%	1	2.8%	0	0.0%	0	0.0%	3	11.9%	1	2.9%
	Strongly Agree	21	60.0%	19	40.0%	3	80.0%	5	100.0%	1	3.9%	3	8.8%
	Agree	19	46.2%	19	47.9%	2	40.0%	0	0.0%	12	46.2%	9	26.8%
I exercise 5 days a week for 30 minutes or more	Disagree	2	4.8%	9	7.5%	0	0.0%	0	0.0%	8	30.8%	10	30.9%
	Strongly Disagree	0	0.0%	2	5.0%	0	0.0%	0	0.0%	5	19.2%	3	9.0%
	Strongly Agree	0	0.0%	1	2.8%	0	0.0%	1	20.0%	6	19.2%	4	11.9%
I get 8 hours of sleep a day	Agree	4	10.5%	8	20.5%	2	40.0%	2	40.0%	15	57.7%	13	39.4%
	Disagree	32	84.5%	27	69.2%	3	80.0%	0	0.0%	4	15.4%	11	32.4%
	Strongly Disagree	2	5.0%	3	7.7%	0	0.0%	2	40.0%	2	7.7%	1	2.9%
I drink 8 glasses of water a day	Strongly Agree	2	4.8%	4	7.0%	0	0.0%	1	20.0%	2	7.7%	6	17.9%
	Agree	8	19.0%	16	40.0%	2	40.0%	1	20.0%	13	50.0%	11	32.4%
	Disagree	28	68.7%	17	42.0%	2	40.0%	2	40.0%	9	34.8%	17	50.0%
I check my blood pressure every 6 months	Strongly Disagree	4	9.8%	3	7.8%	1	20.0%	1	20.0%	2	7.7%	0	0.0%
	Strongly Agree	9	0.0%	3	7.8%	0	0.0%	2	40.0%	2	7.7%	7	20.0%
	Agree	10	25.0%	14	35.0%	3	80.0%	1	20.0%	11	42.3%	11	32.4%
I check my blood glucose levels every 6 months	Disagree	30	71.4%	30	80.0%	2	40.0%	0	0.0%	10	38.5%	16	47.1%
	Strongly Disagree	2	4.8%	3	7.8%	0	0.0%	2	40.0%	3	11.9%	0	0.0%
	Strongly Agree	1	2.4%	4	10.0%	0	0.0%	1	20.0%	2	7.7%	8	17.9%
I always have the time to exercise daily	Agree	23	56.1%	22	55.0%	3	80.0%	3	60.0%	9	34.8%	10	29.4%
	Disagree	17	41.8%	12	30.0%	2	40.0%	0	0.0%	14	53.8%	18	52.9%
	Strongly Disagree	0	0.0%	2	5.0%	0	0.0%	1	20.0%	1	3.9%	0	0.0%
I eat at least 5 fruit and vegetable in a week	Strongly Agree	1	2.4%	2	5.0%	1	20.0%	1	20.0%	3	11.9%	3	8.8%
	Agree	23	56.8%	21	52.5%	1	20.0%	2	40.0%	13	50.8%	16	44.1%
	Disagree	18	43.9%	14	35.0%	3	80.0%	1	20.0%	7	26.9%	12	35.3%
I bring lunch from home rather than buy fast food	Strongly Disagree	9	0.0%	5	7.8%	0	0.0%	1	20.0%	3	11.9%	4	11.9%
	Strongly Agree	2	4.8%	2	5.0%	0	0.0%	0	0.0%	12	46.2%	11	32.4%
	Agree	8	19.0%	9	22.5%	2	40.0%	1	20.0%	13	48.2%	16	48.0%
I live in a house rather than buy fast food	Disagree	30	71.4%	23	57.5%	2	40.0%	2	40.0%	1	3.9%	5	15.2%
	Strongly Disagree	2	4.8%	6	15.0%	1	20.0%	2	40.0%	1	3.9%	1	2.9%
	Strongly Agree	5	11.8%	7	17.5%	0	0.0%	1	20.0%	2	8.0%	7	20.0%
I eat at least 5 fruit and vegetable in a week	Agree	28	61.0%	26	66.0%	3	80.0%	2	40.0%	12	46.0%	16	47.1%
	Disagree	4	10.0%	4	10.0%	2	40.0%	2	40.0%	10	40.0%	9	26.0%
	Strongly Disagree	3	7.1%	1	2.5%	0	0.0%	0	0.0%	1	4.0%	2	5.9%
When eating out, I never order dessert	Strongly Agree	4	9.8%	5	12.5%	0	0.0%	3	40.0%	0	0.0%	4	11.9%
	Agree	18	36.1%	22	55.0%	2	40.0%	1	20.0%	7	26.9%	15	44.1%
	Disagree	20	47.8%	10	25.0%	3	80.0%	2	40.0%	12	46.2%	13	38.2%
I never miss breakfast	Strongly Disagree	2	4.8%	3	7.8%	0	0.0%	0	0.0%	7	26.9%	2	5.9%
	Strongly Agree	3	7.1%	1	2.5%	0	0.0%	0	0.0%	7	26.9%	7	21.2%
	Agree	12	28.8%	18	45.0%	4	80.0%	2	40.0%	8	30.8%	16	48.0%
I always choose a healthy meal at a restaurant	Disagree	28	61.8%	20	50.0%	1	20.0%	1	20.0%	9	34.8%	9	27.8%
	Strongly Disagree	1	2.4%	1	2.5%	0	0.0%	2	40.0%	2	7.7%	1	2.9%
	Strongly Agree	8	14.8%	5	12.5%	1	20.0%	1	20.0%	7	26.9%	7	21.2%
If healthy snacks were sold at work, I would buy them	Agree	23	56.1%	17	44.7%	2	40.0%	1	20.0%	16	67.7%	22	66.7%
	Disagree	11	26.8%	12	31.0%	2	40.0%	2	40.0%	4	15.4%	4	12.1%
	Strongly Disagree	1	2.4%	4	10.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%
I always choose a healthy meal at a restaurant	Strongly Agree	26	60.0%	6	15.4%	0	0.0%	2	40.0%	1	3.9%	3	8.8%
	Agree	19	51.0%	28	74.4%	4	80.0%	2	40.0%	10	38.5%	12	35.3%
	Disagree	0	0.0%	4	10.0%	1	20.0%	1	20.0%	12	46.2%	17	50.0%
Management of skin conditions	Strongly Disagree	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	11.9%	2	5.9%
	Strongly Agree	4	9.8%	1	2.5%	0	0.0%	0	0.0%	1	3.9%	1	2.9%
	Agree	3	7.1%	21	52.5%	3	80.0%	2	40.0%	2	7.7%	5	15.0%
Preventing obesity	Disagree	28	66.7%	19	40.0%	2	40.0%	2	40.0%	19	73.1%	18	53.3%
	Strongly Disagree	1	2.4%	3	7.5%	0	0.0%	1	20.0%	4	15.4%	3	9.0%
	Very Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	1	3.9%	0	0.0%
Eye care	Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	2	7.7%	4	12.1%
	Very Likely	27	64.3%	28	70.0%	3	75.0%	3	80.0%	15	57.7%	19	57.0%
	Very Unlikely	15	36.7%	10	25.0%	1	25.0%	2	40.0%	8	30.8%	10	30.3%
Stress management	Very Unlikely	1	2.4%	1	2.5%	0	0.0%	0	0.0%	1	3.9%	0	0.0%
	Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	2	7.7%	4	12.1%
	Likely	28	61.8%	22	55.0%	3	80.0%	1	20.0%	18	61.0%	18	54.5%
Healthy eating tips	Very Unlikely	15	36.7%	12	30.0%	3	80.0%	4	80.0%	7	26.9%	11	33.3%
	Very Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	2	7.7%	0	0.0%
	Unlikely	7	16.7%	3	7.5%	0	0.0%	0	0.0%	0	0.0%	3	9.1%
Healthy eating	Likely	28	66.7%	29	72.5%	2	40.0%	2	40.0%	15	57.7%	19	57.0%
	Very Likely	7	16.7%	7	17.5%	3	80.0%	3	80.0%	9	34.8%	11	33.3%
	Very Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	1	3.9%	0	0.0%
Family exercise routine	Unlikely	4	9.8%	4	10.0%	0	0.0%	0	0.0%	5	18.9%	8	24.2%
	Likely	39	78.8%	28	69.7%	3	80.0%	2	40.0%	10	31.0%	19	57.0%
	Very Likely	5	11.8%	8	20.0%	2	40.0%	3	80.0%	4	15.4%	8	24.2%
Preventing accidents and injuries	Very Unlikely	1	2.4%	2	5.0%	0	0.0%	0	0.0%	3	11.9%	0	0.0%
	Unlikely	12	28.8%	11	27.5%	0	0.0%	0	0.0%	3	11.9%	8	24.2%
	Likely	24	57.1%	19	47.5%	3	80.0%	3	80.0%	17	65.4%	18	54.5%
Sleeping fit	Very Likely	5	11.8%	8	20.0%	3	80.0%	2	40.0%	3	11.9%	8	24.2%
	Very Unlikely	0	0.0%	2	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Unlikely	2	4.8%	2	5.0%	0	0.0%	0	0.0%	1	4.0%	4	12.1%
Health effects of smoking, alcohol and Drugs	Likely	31	73.8%	26	66.0%	3	80.0%	0	0.0%	17	65.0%	21	63.0%
	Very Likely	9	21.4%	10	25.0%	2	40.0%	5	100.0%	7	26.0%	8	24.2%
	Very Unlikely	0	0.0%	1	2.5%	0	0.0%	1	20.0%	1	3.9%	0	0.0%
Stress management	Unlikely	3	7.1%	5	12.5%	0	0.0%	0	0.0%	1	3.9%	8	24.2%
	Likely	33	78.8%	28	69.0%	2	40.0%	1	20.0%	19	73.1%	18	53.3%
	Very Likely	8	14.3%	8	20.0%	3	80.0%	4	80.0%	5	19.2%	11	33.3%
Health effects of smoking, alcohol and Drugs	Very Unlikely	1	2.4%	2	5.0%	0	0.0%	0	0.0%	3	11.9%	5	15.2%
	Unlikely	12	28.8%	10	25.0%	3	80.0%	5	100.0%	8	30.8%	11	33.3%
	Likely	1	2.4%	2	5.0%	0	0.0%	0	0.0%	5	19.2%	1	2.9%
Health effects of smoking, alcohol and Drugs	Very Unlikely	0	0.0%	3	7.5%	0	0.0%	0	0.0%	2	7.7%	7	21.2%
	Unlikely	24	57.1%	20	50.0%	3	80.0%	2	40.0%	14	53.8%	18	48.0%
	Likely	17	40.8%	12	30.0%	2	40.0%	3	80.0%	5	19.2%	9	27.3%

Women's health	Very Unlikely	3	7.7%	0	0.0%	0	0.0%	0	0.0%	2	7.7%	2	8.1%
	Unlikely	2	4.8%	9	22.2%	0	0.0%	0	0.0%	4	15.4%	8	18.2%
	Likely	26	61.9%	10	52.8%	3	60.6%	1	20.0%	14	58.6%	10	57.6%
	Very Likely	11	26.2%	9	25.0%	2	40.0%	4	80.0%	8	33.1%	8	18.2%
Men's health	Very Unlikely	0	0.0%	3	7.5%	0	0.0%	0	0.0%	1	3.8%	0	0.0%
	Unlikely	12	29.5%	10	36.5%	1	20.0%	0	0.0%	4	15.4%	3	9.1%
	Likely	18	43.9%	16	42.1%	2	40.0%	1	20.0%	12	48.2%	20	60.6%
	Very Likely	11	26.8%	9	23.7%	2	40.0%	4	80.0%	9	34.8%	10	30.2%
Health tips on preventing chronic diseases	Very Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	3	11.0%	0	0.0%
	Unlikely	3	7.7%	4	10.0%	0	0.0%	0	0.0%	1	3.8%	4	12.1%
	Likely	29	69.0%	25	62.5%	3	60.0%	2	40.0%	13	50.0%	22	68.7%
	Very Likely	10	23.6%	10	25.0%	2	40.0%	3	60.0%	9	34.8%	7	21.2%
Managing diabetes	Very Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	2	8.0%	0	0.0%
	Unlikely	0	0.0%	4	10.0%	0	0.0%	0	0.0%	2	8.0%	4	12.1%
	Likely	27	64.2%	23	57.5%	3	60.0%	3	60.0%	13	62.0%	21	63.6%
	Very Likely	16	55.7%	12	30.0%	2	40.0%	2	40.0%	8	32.0%	8	24.2%
Managing hypertension	Very Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Unlikely	0	0.0%	3	7.5%	0	0.0%	0	0.0%	4	15.4%	4	12.1%
	Likely	30	73.2%	24	60.0%	3	60.0%	3	60.0%	12	48.2%	19	67.6%
	Very Likely	11	26.8%	12	30.0%	2	40.0%	2	40.0%	10	38.6%	10	30.2%
diagnosing and managing HIV/AIDS	Very Unlikely	0	0.0%	4	10.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Unlikely	2	4.8%	3	7.5%	0	0.0%	0	0.0%	3	11.5%	3	8.1%
	Likely	23	54.8%	24	60.0%	3	60.0%	2	40.0%	15	67.7%	21	63.6%
	Very Likely	17	40.6%	9	22.5%	2	40.0%	3	60.0%	8	30.8%	9	27.3%
Detecting and managing TB	Very Unlikely	0	0.0%	3	7.5%	0	0.0%	0	0.0%	2	7.7%	1	3.1%
	Unlikely	0	0.0%	4	10.0%	0	0.0%	0	0.0%	1	3.8%	4	12.6%
	Likely	22	53.7%	25	62.5%	3	60.0%	2	40.0%	12	48.2%	19	60.6%
	Very Likely	16	48.3%	8	20.0%	2	40.0%	3	60.0%	11	42.3%	14	48.8%
Heart conditions	Very Unlikely	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Unlikely	2	4.8%	4	10.0%	0	0.0%	0	0.0%	2	7.7%	4	12.6%
	Likely	23	54.8%	18	45.0%	3	60.0%	3	60.0%	15	67.7%	17	63.1%
	Very Likely	17	40.6%	18	45.0%	2	40.0%	2	40.0%	10	34.8%	11	34.4%
Sexual and reproductive health	Very Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	3	11.6%	0	0.0%
	Unlikely	3	7.1%	3	7.5%	0	0.0%	0	0.0%	0	0.0%	5	16.0%
	Likely	26	68.7%	20	30.0%	3	60.0%	2	40.0%	14	68.8%	15	49.0%
	Very Likely	11	28.2%	18	40.0%	2	40.0%	3	60.0%	8	34.6%	12	37.6%
Maintain healthy cholesterol levels	Very Unlikely	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Unlikely	0	0.0%	2	5.0%	0	0.0%	0	0.0%	0	0.0%	3	9.4%
	Likely	25	61.0%	21	32.5%	4	60.0%	3	60.0%	18	78.0%	16	50.0%
	Very Likely	18	36.0%	17	42.5%	1	20.0%	2	40.0%	8	34.0%	13	40.6%
Personal financial management	Very Unlikely	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Unlikely	7	17.1%	2	5.0%	0	0.0%	0	0.0%	1	3.8%	5	15.6%
	Likely	25	61.0%	28	86.0%	3	60.0%	1	20.0%	19	73.1%	17	58.1%
	Very Likely	9	22.8%	12	30.0%	2	40.0%	4	80.0%	8	32.1%	10	31.3%
Oral Care	Very Unlikely	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	9.4%
	Unlikely	0	0.0%	3	7.5%	0	0.0%	0	0.0%	1	3.8%	4	12.6%
	Likely	28	69.5%	28	70.0%	3	60.0%	3	60.0%	18	61.5%	14	43.6%
	Very Likely	4	9.8%	8	22.5%	2	40.0%	2	40.0%	8	34.6%	11	34.4%
Self defence	Very Unlikely	0	0.0%	1	2.5%	0	0.0%	0	0.0%	7	28.5%	13	39.4%
	Unlikely	0	0.0%	4	10.0%	0	0.0%	0	0.0%	4	15.4%	9	27.3%
	Likely	25	59.5%	22	55.0%	2	40.0%	1	20.0%	8	30.8%	4	12.1%
	Very Likely	17	40.6%	13	32.5%	2	40.0%	4	80.0%	7	28.5%	7	21.2%
Soccer	Very Unlikely	16	38.1%	8	20.0%	1	20.0%	0	0.0%	9	34.6%	6	18.2%
	Unlikely	8	19.0%	11	27.5%	1	20.0%	0	0.0%	7	28.0%	11	33.3%
	Likely	9	21.4%	7	17.5%	1	20.0%	2	40.0%	5	30.8%	11	33.3%
	Very Likely	8	21.4%	14	35.0%	2	40.0%	3	60.0%	2	7.7%	6	15.2%
Netball	Very Unlikely	9	21.4%	7	17.5%	1	20.0%	0	0.0%	5	34.6%	3	9.1%
	Unlikely	13	31.0%	6	15.4%	1	20.0%	0	0.0%	7	28.5%	15	48.8%
	Likely	19	46.2%	20	51.3%	1	20.0%	2	40.0%	10	38.5%	10	30.3%
	Very Likely	1	2.4%	8	15.4%	2	40.0%	3	60.0%	0	0.0%	3	9.1%
Volleyball	Very Unlikely	8	19.0%	3	7.7%	1	20.0%	0	0.0%	7	28.0%	5	15.2%
	Unlikely	13	31.0%	12	30.8%	1	20.0%	0	0.0%	3	12.0%	5	15.2%
	Likely	17	40.6%	21	63.8%	2	40.0%	3	60.0%	8	30.8%	13	39.4%
	Very Likely	4	8.9%	3	7.7%	1	20.0%	2	40.0%	10	40.0%	10	30.3%
Aerobics	Very Unlikely	10	23.8%	7	17.5%	0	0.0%	0	0.0%	3	11.5%	0	0.0%
	Unlikely	19	45.2%	14	35.0%	1	20.0%	0	0.0%	3	11.5%	3	9.4%
	Likely	10	23.8%	7	17.5%	3	60.0%	1	20.0%	11	42.8%	18	58.3%
	Very Likely	3	7.1%	12	30.0%	1	20.0%	4	80.0%	9	34.8%	11	34.4%
Exercising using the gym equipment	Very Unlikely	2	4.8%	5	12.5%	0	0.0%	0	0.0%	2	7.7%	1	3.0%
	Unlikely	5	11.9%	7	17.5%	0	0.0%	0	0.0%	1	3.8%	8	18.2%
	Likely	27	64.3%	18	41.0%	4	80.0%	1	20.0%	12	48.2%	16	48.8%
	Very Likely	8	19.0%	11	28.2%	1	20.0%	4	80.0%	11	42.3%	10	30.2%
Jogging	Very Unlikely	2	4.8%	1	2.5%	0	0.0%	0	0.0%	4	15.4%	0	0.0%
	Unlikely	12	28.8%	9	23.1%	1	20.0%	0	0.0%	10	38.5%	4	12.1%
	Likely	23	54.8%	21	53.8%	4	80.0%	2	40.0%	8	30.8%	15	54.6%
	Very Likely	5	11.9%	8	20.5%	0	0.0%	3	60.0%	4	15.4%	11	33.2%
Dancing	Very Unlikely	3	7.1%	2	5.1%	1	20.0%	0	0.0%	2	7.7%	1	3.2%
	Unlikely	19	46.2%	8	20.5%	1	20.0%	0	0.0%	1	3.8%	1	3.2%
	Likely	15	36.7%	15	38.5%	3	60.0%	4	80.0%	10	60.0%	15	48.4%
	Very Likely	5	11.9%	14	35.0%	0	0.0%	1	20.0%	10	38.5%	14	45.2%
Walking	Very Unlikely	1	2.4%	1	2.5%	0	0.0%	0	0.0%	7	28.5%	3	9.1%
	Unlikely	3	7.1%	1	2.5%	1	20.0%	0	0.0%	10	38.5%	10	30.3%
	Likely	27	64.3%	16	41.0%	4	80.0%	3	60.0%	5	19.2%	13	39.4%
	Very Likely	11	26.2%	21	53.8%	0	0.0%	0	0.0%	4	15.4%	7	21.2%
Table tennis	Very Unlikely	17	40.6%	4	10.3%	0	0.0%	0	0.0%	8	30.8%	7	21.2%
	Unlikely	20	47.8%	20	51.3%	1	20.0%	0	0.0%	18	61.6%	13	36.4%
	Likely	3	7.1%	14	35.0%	2	40.0%	4	80.0%	2	7.7%	8	24.2%
	Very Likely	2	4.8%	1	2.5%	2	40.0%	1	20.0%	0	0.0%	6	16.2%
Indoor basketball	Very Unlikely	18	38.1%	10	25.0%	0	0.0%	0	0.0%	13	50.0%	10	30.2%
	Unlikely	18	42.9%	14	36.9%	1	20.0%	0	0.0%	10	38.5%	9	27.3%
	Likely	6	14.3%	13	33.3%	2	40.0%	4	80.0%	1	3.8%	3	9.1%
	Very Likely	2	4.8%	2	5.1%	2	40.0%	1	20.0%	2	7.7%	3	9.1%
Rugby	Very Unlikely	19	45.2%	21	53.8%	1	20.0%	0	0.0%	11	42.3%	4	12.1%
	Unlikely	14	33.3%	13	33.3%	1	20.0%	2	40.0%	8	30.8%	8	27.3%
	Likely	7	18.7%	3	7.7%	2	40.0%	2	40.0%	5	19.2%	14	42.4%
	Very Likely	2	4.8%	2	5.1%	1	20.0%	1	20.0%	2	7.7%	8	18.2%
Yoga	Very Unlikely	13	35.7%	9	23.1%	1	20.0%	1	20.0%	2	7.7%	9	28.1%
	Unlikely	17	40.5%	10	25.0%	0	0.0%	1	20.0%	3	30.8%	3	9.4%
	Likely	6	18.0%	16	41.0%	2	40.0%	2	40.0%	13	50.0%	10	31.3%
	Very Likely	2	4.8%	4	10.3%	2	40.0%	1	20.0%	3	11.6%	10	31.3%
Park and walk to work	Very Unlikely	7	16.7%	2	5.1%	0	0.0%	2	40.0%	10	38.5%	7	21.2%
	Unlikely	10	23.8%	8	23.1%	1	20.0%	1	20.0%	9	34.8%	13	38.4%
	Likely	24	57.1%	24	61.6%	4	80.0%	2	40.0%	6	19.2%	11	33.3%
	Very Likely	1	2.4%	4	10.3%	0	0.0%	0	0.0%	2	7.7%	2	8.1%
Employees regard private gyms as being more effective than workplace fitness programmes	Strongly Agree	13	31.7%	15	40.6%	1	20.0%	2	40.0%	8	11.6%	1	3.0%
	Agree	20	48.8%	14	37.0%	3	60.0%	3	60.0%	3	11.6%	11	33.3%
	Disagree	4	9.5%	8	21.6%	1	20.0%	0	0.0%	18	61.6%	19	57.6%

Employees who are physically fit feel that they do not need to utilize the workplace fitness programmes	Strongly Disagree	4	8.8%	0	0.0%	0	0.0%	0	0.0%	4	15.4%	2	6.1%
	Strongly Agree	5	12.2%	8	21.1%	1	20.0%	0	0.0%	4	15.4%	2	6.1%
	Agree	20	48.8%	17	44.7%	2	40.0%	1	20.0%	3	11.5%	8	24.2%
	Disagree	7	17.1%	11	28.5%	2	40.0%	2	40.0%	12	46.2%	21	63.6%
Employees who utilize private gyms feel that they do not need to utilize the workplace fitness programmes	Strongly Disagree	9	22.0%	2	5.3%	0	0.0%	2	40.0%	7	26.9%	2	6.1%
	Strongly Agree	7	17.1%	19	54.5%	0	0.0%	0	0.0%	10	38.0%	5	15.2%
	Agree	16	39.0%	11	28.5%	2	40.0%	2	40.0%	4	15.4%	16	46.5%
	Disagree	9	22.0%	12	31.6%	2	40.0%	1	20.0%	9	34.0%	9	27.3%
Employees feel that it is more beneficial for the workplace to subsidize their gym fees rather than invest in workplace physical fitness programmes	Strongly Disagree	9	22.0%	2	5.3%	1	20.0%	2	40.0%	3	11.5%	3	9.1%
	Strongly Agree	13	31.7%	16	39.0%	1	20.0%	0	0.0%	7	26.0%	7	21.2%
	Agree	18	43.9%	13	34.2%	2	40.0%	2	40.0%	2	8.0%	20	60.6%
	Disagree	6	14.6%	9	22.7%	2	40.0%	3	60.0%	18	62.0%	4	12.1%
Since participation in physical fitness programmes is voluntary, it is negatively affecting participation trends.	Strongly Disagree	4	9.8%	1	2.6%	0	0.0%	0	0.0%	3	12.0%	2	6.1%
	Strongly Agree	11	28.5%	18	47.4%	2	40.0%	1	20.0%	10	38.5%	10	30.3%
	Agree	17	41.5%	12	31.6%	2	40.0%	3	60.0%	12	46.2%	23	69.7%
	Disagree	13	31.7%	8	15.8%	1	20.0%	1	20.0%	3	11.5%	0	0.0%
It is important to engage employees in designing workplace fitness programmes	Strongly Disagree	0	0.0%	2	5.3%	0	0.0%	0	0.0%	1	3.8%	0	0.0%
	Strongly Agree	10	24.4%	26	66.4%	2	40.0%	1	20.0%	4	15.4%	7	21.2%
	Agree	29	70.7%	12	31.6%	3	60.0%	3	60.0%	10	38.0%	7	21.2%
	Disagree	2	4.9%	0	0.0%	0	0.0%	0	0.0%	10	38.0%	11	33.8%
Employees do feel safe exercising after hours at work	Strongly Disagree	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	7.7%	8	24.2%
	Strongly Agree	18	40.0%	8	15.8%	2	40.0%	1	20.0%	3	11.5%	3	9.1%
	Agree	4	10.0%	18	47.4%	3	60.0%	2	40.0%	2	7.7%	8	18.2%
	Disagree	18	45.0%	10	26.3%	0	0.0%	2	40.0%	11	42.3%	13	39.4%
There are sufficient bathroom facilities to freshen up after physical exercise	Strongly Disagree	2	5.0%	6	15.8%	0	0.0%	0	0.0%	10	38.5%	11	33.3%
	Strongly Agree	2	4.9%	4	10.5%	1	20.0%	0	0.0%	0	0.0%	8	24.2%
	Agree	18	39.0%	8	21.1%	0	0.0%	1	20.0%	0	0.0%	11	33.3%
	Disagree	10	24.0%	15	39.5%	2	40.0%	1	20.0%	11	44.0%	9	27.3%
Employees were consulted about the physical fitness programme that is in place	Strongly Disagree	7	17.1%	11	28.5%	2	40.0%	3	60.0%	5	20.0%	5	15.2%
	Strongly Agree	2	4.9%	3	7.9%	2	40.0%	1	20.0%	0	0.0%	3	9.1%
	Agree	27	65.9%	11	28.5%	2	40.0%	2	40.0%	8	37.5%	17	53.1%
	Disagree	9	22.0%	16	42.1%	1	20.0%	1	20.0%	8	33.3%	8	25.0%
The physical fitness programme is correctly placed in the Health promotion unit and need not be led by HR	Strongly Disagree	3	7.3%	8	21.1%	0	0.0%	0	0.0%	1	4.2%	4	12.5%
	Strongly Agree	2	4.9%	7	18.4%	1	20.0%	0	0.0%	0	0.0%	2	6.1%
	Agree	18	43.9%	10	26.3%	2	40.0%	3	60.0%	5	20.0%	7	21.2%
	Disagree	10	24.0%	15	39.5%	1	20.0%	0	0.0%	14	50.0%	17	53.1%
Benefits of the physical fitness programme is well marketed	Strongly Disagree	2	4.9%	2	5.3%	1	20.0%	1	20.0%	6	24.0%	6	18.2%
	Strongly Agree	6	14.6%	0	0.0%	0	0.0%	1	20.0%	1	4.0%	5	15.2%
	Agree	15	36.6%	17	44.7%	2	40.0%	2	40.0%	17	62.0%	10	30.3%
	Disagree	18	39.0%	16	47.4%	2	40.0%	1	20.0%	5	20.0%	18	48.8%
The 2 hour concession being offered to exercise is sufficient	Strongly Disagree	4	9.8%	3	7.9%	1	20.0%	1	20.0%	2	8.0%	2	6.1%
	Strongly Agree	0	0.0%	7	18.4%	0	0.0%	0	0.0%	1	3.8%	3	9.1%
	Agree	17	41.5%	18	47.4%	4	80.0%	2	40.0%	4	15.4%	4	12.5%
	Disagree	6	15.0%	10	26.3%	0	0.0%	2	40.0%	13	50.0%	18	50.0%
Equipment to exercise is sufficient for all employees to exercise at work	Strongly Disagree	18	39.0%	3	7.9%	1	20.0%	1	20.0%	8	30.8%	9	26.1%
	Strongly Agree	0	0.0%	2	5.3%	3	60.0%	0	0.0%	0	0.0%	1	3.2%
	Agree	8	14.6%	7	18.4%	0	0.0%	0	0.0%	8	30.8%	6	18.2%
	Disagree	17	41.5%	17	44.7%	1	20.0%	4	80.0%	12	48.0%	14	45.2%
Privacy is provided in the physical exercise area	Strongly Disagree	18	43.9%	12	31.6%	1	20.0%	1	20.0%	4	16.0%	11	35.5%
	Strongly Agree	8	19.4%	4	10.5%	3	60.0%	0	0.0%	1	4.0%	0	0.0%
	Agree	14	35.6%	15	39.5%	0	0.0%	0	0.0%	10	40.0%	18	54.5%
	Disagree	18	39.0%	5	13.2%	1	20.0%	2	40.0%	9	36.0%	11	33.3%
It motivates employees to exercise	Strongly Disagree	4	10.3%	14	36.8%	1	20.0%	3	60.0%	5	20.0%	4	12.1%
	Strongly Agree	3	7.1%	6	15.8%	0	0.0%	1	20.0%	3	11.5%	7	20.8%
	Agree	20	49.0%	23	59.5%	3	60.0%	3	60.0%	21	80.8%	25	76.5%
	Disagree	10	23.8%	7	18.4%	1	20.0%	1	20.0%	2	7.7%	0	0.0%
Physical fitness programmes will prevent hypertension	Strongly Disagree	0	0.0%	2	5.3%	1	20.0%	0	0.0%	0	0.0%	2	6.0%
	Strongly Agree	10	23.8%	11	28.5%	0	0.0%	3	60.0%	4	15.4%	5	14.7%
	Agree	26	69.0%	27	71.1%	4	80.0%	1	20.0%	21	80.8%	27	76.4%
	Disagree	3	7.1%	0	0.0%	0	0.0%	1	20.0%	0	0.0%	0	0.0%
Physical fitness programmes will prevent diabetes	Strongly Disagree	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	3.8%	2	5.9%
	Strongly Agree	11	28.2%	10	26.3%	0	0.0%	3	60.0%	4	15.4%	4	12.5%
	Agree	29	69.7%	27	71.1%	4	80.0%	1	20.0%	22	84.6%	29	85.5%
	Disagree	3	7.1%	1	2.6%	1	20.0%	1	20.0%	0	0.0%	0	0.0%
Physical fitness programmes will prevent cardiac conditions	Strongly Disagree	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	2.9%
	Strongly Agree	11	28.2%	18	47.4%	1	20.0%	3	60.0%	8	30.8%	8	17.8%
	Agree	28	68.7%	20	52.6%	3	60.0%	1	20.0%	18	69.2%	27	79.4%
	Disagree	3	7.1%	0	0.0%	1	20.0%	1	20.0%	0	0.0%	0	0.0%
Physical fitness programmes will assist in weight control	Strongly Disagree	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	2.9%
	Strongly Agree	12	28.8%	19	50.0%	1	20.0%	3	60.0%	4	15.4%	8	17.8%
	Agree	26	61.5%	18	47.4%	3	60.0%	2	40.0%	21	80.8%	27	79.4%
	Disagree	4	9.8%	0	0.0%	1	20.0%	0	0.0%	1	3.8%	0	0.0%
Physical fitness programmes can assist in preventing stress	Strongly Disagree	0	0.0%	1	2.6%	0	0.0%	0	0.0%	0	0.0%	1	2.9%
	Strongly Agree	11	28.2%	19	50.0%	0	0.0%	2	40.0%	5	19.2%	6	14.7%
	Agree	26	68.7%	19	50.0%	4	80.0%	3	60.0%	20	76.9%	28	76.6%
	Disagree	3	7.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	5.9%
Physical fitness programmes can improve productivity	Strongly Disagree	0	0.0%	0	0.0%	1	20.0%	0	0.0%	1	3.8%	1	2.9%
	Strongly Agree	11	28.2%	11	28.5%	0	0.0%	3	60.0%	2	7.7%	8	17.8%
	Agree	29	69.7%	28	69.4%	3	60.0%	2	40.0%	22	84.6%	29	87.8%
	Disagree	3	7.1%	0	0.0%	1	20.0%	0	0.0%	2	7.7%	4	11.5%
Physical fitness programmes can reduce absenteeism linked to ill-health	Strongly Disagree	0	0.0%	1	2.6%	1	20.0%	0	0.0%	0	0.0%	1	2.9%
	Strongly Agree	13	31.0%	17	44.7%	1	20.0%	4	80.0%	2	7.7%	2	5.9%
	Agree	25	58.6%	15	39.5%	3	60.0%	1	20.0%	6	23.1%	10	29.4%
	Disagree	4	9.8%	6	15.8%	0	0.0%	0	0.0%	10	38.5%	19	55.9%
Health promotion messages are distributed regularly	Strongly Disagree	0	0.0%	0	0.0%	1	20.0%	0	0.0%	8	30.8%	3	8.8%
	Strongly Agree	4	9.8%	1	2.6%	0	0.0%	1	20.0%	1	3.8%	2	5.9%
	Agree	16	38.1%	17	44.7%	2	40.0%	2	40.0%	15	50.0%	19	56.9%
	Disagree	19	45.2%	15	39.5%	2	40.0%	2	40.0%	9	34.8%	10	29.4%
Employees take the advice offered in health promotion messages	Strongly Disagree	3	7.1%	5	13.2%	1	20.0%	0	0.0%	3	11.5%	3	9.1%
	Strongly Agree	3	7.1%	2	5.3%	0	0.0%	1	20.0%	9	34.4%	21	61.8%
	Agree	23	56.5%	24	62.3%	3	60.0%	2	40.0%	11	42.3%	10	29.4%
	Disagree	13	31.0%	8	21.1%	2	40.0%	2	40.0%	5	19.2%	2	5.9%
If there were rewards like trophies and t-shirts or certificates for employees who participate, employees would be motivated to participate	Strongly Disagree	1	2.4%	3	7.9%	0	0.0%	0	0.0%	1	3.8%	1	2.9%
	Strongly Agree	23	58.6%	15	39.5%	1	20.0%	3	60.0%	0	0.0%	0	0.0%
	Agree	6	14.6%	20	52.6%	3	60.0%	2	40.0%	0	0.0%	0	0.0%
	Disagree	0	0.0%	2	5.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Strongly Disagree	3	7.1%	1	2.6%	1	20.0%	0	0.0%	0	0.0%	0	0.0%
	Strongly Agree	3	7.1%	1	2.6%	1	20.0%	0	0.0%	0	0.0%	0	0.0%

ANNEXURE G

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