UNIVERSITY OF MALAWI

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Measuring the Value of an Employee Assistance Program Intervention Using the Workplace Outcome Suite Well-being Scales in Malawi.

By

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CERTIFICATE OF APPROVAL

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DECLARATION

I, Maclean Vokhiwa, hereby declare that this dissertation is my original work and has not been presented for any other awards at the University of Malawi or any other University.

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ABSTRACT

Introduction and Background: The lack of local evidence on the effectiveness of Employee Assistance Programs (EAP) has restricted the scope of Malawi workplace well-being programs, as well as hindering training for local EAP professionals. Such evidence is relevant to support the spread of EAP into African countries. Global statistics indicate that EAPs significantly improve workplace outcomes *($p<0.05$)* with equal effectiveness across demographic factors. However, the effectiveness of EAP within localised African settings has received little attention in academic research. **Objectives**: This study sought to establish the effectiveness of an EAP intervention on work-related outcomes among Malawian employees. **Methods**: It adopts a mixed method, quantitative correlational 'pre-post' design to examine improvement over time in employees after EAP intervention, during 2018/2019. The target population was 335 employees working in a local organisation receiving EAP services. Dependent on chance and employee consent, 318 participants enrolled at pre-test and 226 (71%) completed assessments after EAP. The Chestnut Global Partners' Workplace Outcomes Suit (CGP-WOS) and a basic demographic questionnaire were used. **Findings**: Descriptively, there was no characteristic difference among participants between the two time-points, as well as between post-test responders and non-responders, $p>0.05$. Paired mean comparison tests indicated statistically significant improvement after EAP in four of five outcome scores. In addition, regression analysis indicated that participant characteristics do not predict this improvement. Furthermore, analysis of themes indicated that the intervention met participant expectations. **Conclusions and Recommendations**: The study established that EAP locally reduced absenteeism, presenteeism, and workplace distress, and increased employee life satisfaction, $p<0.05$. It also recommends adoption of EAP policies across Malawian organisations, training of local professionals, as well as the need for rigorous research among local workplace well-being programs.

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Abbreviations and Acronyms

BASIS-32®	Behaviour and Symptom Identification Scale
CDSR	Cochrane Database of Systematic Reviews
CGP	Chestnut Global Partners
COM	College of Medicine
COMREC	College of Medicine Research & Ethics Committee
EAP	Employee Assistance Programs
EAPA	Employee Assistance Professionals Association
EAPA-SA	Employee Assistance Professionals Association of South Africa
GLM	General Linear Model
HR	Human Resources
HSQ 2.0	Health Status Questionnaire
ICD-11	International Classification of Diseases
ICF	Informed Consent Form
WHO	World Health Organization
WMA	World Medical Association
WOS	Workplace Outcomes Suite

Chapter 1 Introduction and Background Information

1.1 Introduction

With the spread of Employee Assistance Programs (EAP) into African countries, there is a need for evidence that these programs locally improve work-related well-being. The study is an attempt to understand the importance of this program in the Malawian context. The international Employee Assistance Professionals Association (EAPA) defines EAP as "a set of professional services specifically designed to improve and/or maintain healthy productive workplaces through the application of specialized mental health knowledge and human behaviour expertise(1). The intervention aims to improve employee workplace well-being. It is a promising strategy for maintaining workplace mental health (2). Evidence shows that EAP significantly decreased absenteeism, presenteeism, workplace distress, and increased work engagement, and life satisfaction among employees, $p<0.05$ (3). It is equally effective across employees of different ages, sex, and problems. Global pooled reports of 24,363 employees since 2010 from 29 different countries have shown 48% relatively less absence from work, 26% more concentration, less stress (13%), increased sense of well-being (22%), and more engaged employees (7%) after an EAP(3–5). However, Malawi is not among these countries. Nonetheless, local research indicates there is need for evidence-based interventions to motivate and support workers (6). As Malawi adopts EAPs, such local evidence practically informs policy.

1.2 Background Information - The EAP

As a concept, EAP developed in 1940's and focused on workplace related alcohol-use problems(7)(8)(9). It has evolved to provide a broad range of well-being support services targeting employees and their families (10). This includes behaviour risk assessment, mental and physical health promotion, and stress management work-life balance trainings (11,12).

South African EAP specifies employee training and development, service promotion, short-term interventions, organisational consultation, stakeholder networking, as well as monitoring and evaluation as the different functions (13).

Coming to Malawi, an organisation implements confidential health screening and chronic illness support, experiential stress management and financial wellness training, and voluntary individual counselling as EAP activities following a needs assessment in 2015 (14–16). Out of 127 employees, 41.7% reported various anxiety levels affecting work. These related to workload, deadlines, responsibilities, performance expectations, physical work environment etc. As such, it prioritizes group EAP activities to address common problems. However, there is no evidence of whether such an approach is locally effective in improving workplace outcomes. In addition, international evidence suggests that thorough research is necessary to determine the value of EAP activity (17,18). As such, organisational policy makers as well as service providers require evidence.

1.3 Statement of the Problem

The lack of local evidence on the effectiveness of EAP has restricted the scope of workplace well-being programs, as well as hindering training for local EAP professionals within Malawi. Firstly, despite growing evidence on emotional and behavioural factors that affect organisational productivity(19), there is still a tendency to maintain traditional approaches to occupational health. For example, a local study found that the increase of burnout among hospital workers in Malawi require identification of factors and appropriate prevention (20). Similarly, another study found that 26.5% of Malawian health workers experience job satisfaction and motivation problems that affect job performance compared to 18.8% of Tanzania health workers (21). Such studies recommend targeted interventions. Nonetheless, most Malawian organisations have restricted workplace well-being activities to hygiene or

occupational disease prevention through control of physical, chemical, biological, and environmental hazards. Most specifically, they implement traditional occupational health and safety policies, which do not emphasize psychosocial hazards.

Secondly, there is no specific EAP professional training in Malawi. In Malawian context, practitioners of varying qualifications provide wellness consultation in organisations. This includes occupational safety, social work, counseling, physicians, psychologists, nurses, fitness coaches, nutritionists, motivational consultants, etc. Usually, these practitioners support organisations once a year through presentations during a 'family day' or 'health week' event. On the other hand, being a new concept that is gaining ground in Malawi, the importance of defined EAP training cannot be overemphasized. Without such training, it is difficult to ensure quality EAP. Globally, EAPA recommends certified professionals. In support, White & Sharar (2003) observe that organisations must receive services from knowledgeable experts with specific expertise in EA practice(22). Similarly, Taranowski (2013) argues that failure to ensure such expertise has adverse effects on integrity of EAP(23).

1.4 Literature Review

The review aimed at identifying relevant studies that evaluated effectiveness of EAP intervention using the *Workplace Outcome Suit (WOS) (5)* or other tools in contexts similar to Malawi.

1.4.1 Review Eligibility Criteria

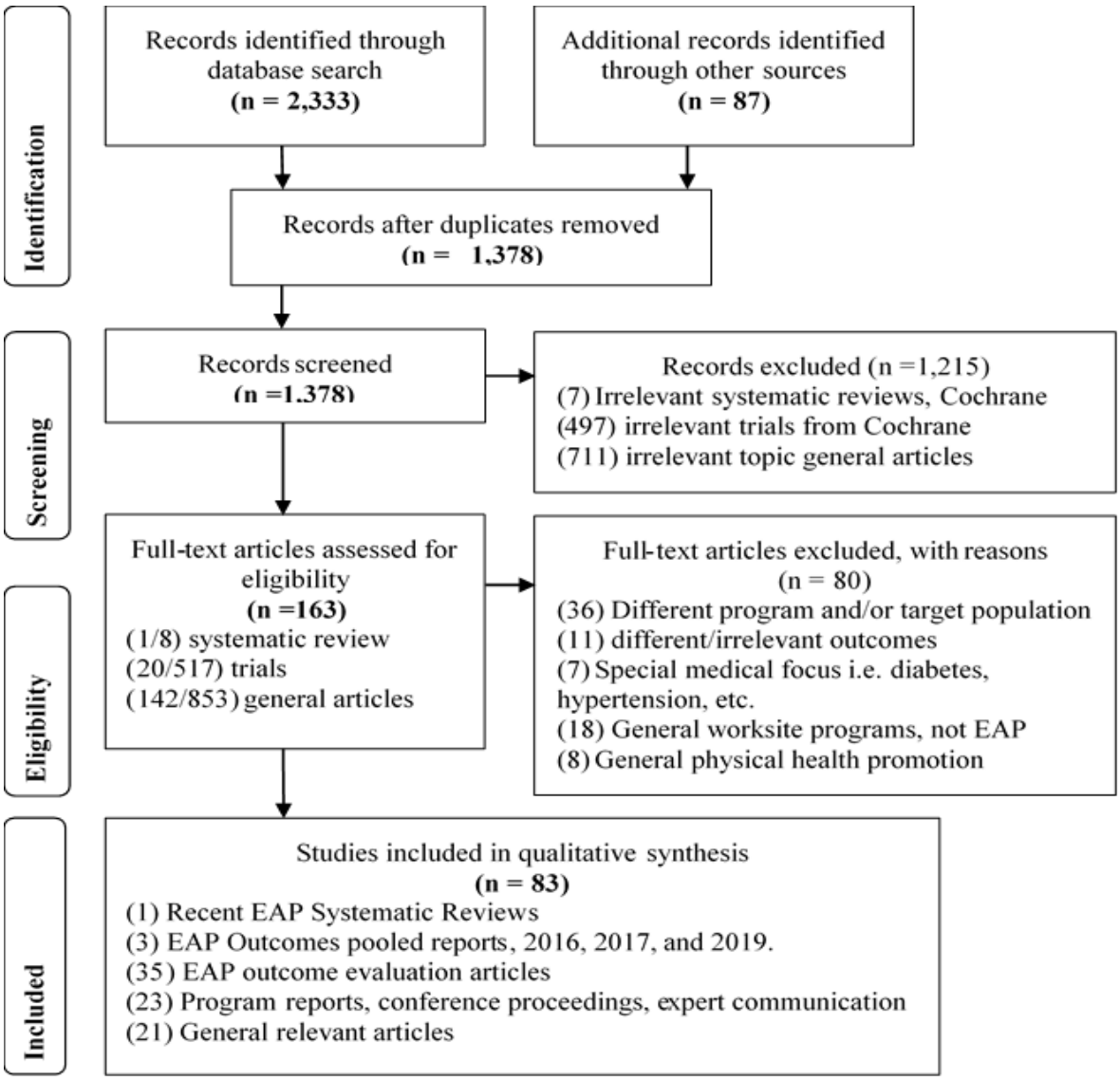
Firstly, the review includes recommended pre-post correlational EAP evaluations (24), as well as clinical outcome and client satisfaction surveys. Secondly, it includes EAP studies involving international employee populations. In addition, where interventions clearly defined as EAP. Furthermore, studies that evaluate individual participants by comparing outcomes before and

after EAP intervention. Lastly, clear outcomes specified any one or any combination of workplace well-being related outcomes.

1.4.2 Search Strategy

The review searched Pubmed and the Cochrane Database of Systematic Reviews (CDSR). Search terms used were 'employee assistance program OR EAP AND value'. Reference lists, conference proceedings, personal communication with experts in EAP, and local program reports provide other sources. **Figure 1** outlines selection process following prescribed systematic review (25).

Figure 1: Literature Selection Process



1.4.3 A Critical Review of Evidence

Overall, evidence on evaluating the value of EAP suggests an evolution across distinct methodological paradigms. Each of these paradigm shifts has important implications for ascertaining evidence in the Malawian context.

To begin with, early studies adopted noticeably varying study designs, outcome measures, and reported spasmodic findings. For Masi (1997), for example, evaluation was quality assurance through benchmarking client contracts to determine if about 35% of alcohol/drug abusing US employees are assisted (26). In the UK, Copper & Sadri (1991), Michie (1992, 1996), Doctor et al(1994), and Raynolds (1997) found conflicting results among 61 to 288 police, postal, city, and hospital employees following 12 weeks to 2 years after EAP (27). Various outcome measures included sickness absence, self-esteem, anxiety satisfaction, commitment levels, physical symptoms and health, and perceived functioning. Consequently, this wide variability in approach, sample populations, inconsistent follow-up periods, and outcome measures makes it difficult for Malawi to adopt the resulting evidence.

Secondly, for some time EAP outcome research depended on customer satisfaction data. Employees reported their satisfaction with EAP counseling process, and its impact on family relationships, work-related activities and general well-being (28). However, by using such data EAP research was unable to demonstrate health and productivity improvement. Alternatively, a pre-post study used select scales from the Health Status Questionnaire (HSQ 2.0, 1993) to assess general and emotional health status among 83 hospital workers after EAP in New York (29). There was significant change *($p<0.001$)* on perceived health, depression, and impact of emotional problems on social and daily activities. Certainly, Malawi EAP evaluation should go beyond client satisfaction data.

Further to the above, studies that focused on clinical outcomes demonstrate that EAP reduces symptoms and improves functioning. Greenwood et al (2006), found that EAP significantly improved *(t=10.71, p<0.001)* psychosis, impulsive/addictive behaviour, daily functioning, depression/anxiety symptoms among 321 Kentucky employees who completed the Behaviour and Symptom Identification Scale (BASIS-32®) before and a month after EAP (30). In this instance, Malawian EAP research should consider similar evaluations.

In addition, research highlights EAP's economic benefits. Hargrave et al (2008) demonstrated that EAP achieved a return between $5.17 and $6.47 for every dollar spent, through reducing absenteeism, presenteeism, and increasing work productivity among 155 American employees (31). Similarly, Malawian organisations invest in EAP to regain benefits from affected employees. As such, it is important to conduct Return on Investment (ROI) research. However, such investigation is outside scope of current study.

Evidently, previous EAP impact studies provide different estimates. Taranowski and Mahieu (2013) observed that such variability is due to different program structures and utilization rates (11). Jacobson et al(2011) faults use of different methods and measures (32). Clearly, lack of standardized EAP tools meant previous studies measured different constructs.

To address the measurement variability challenges, Chestnut Global Partners (CGP) developed Workplace Outcomes Suit (WOS) in 2010 (33). The WOS is an open access tool for empirical EAP research. It measures five popular EAP-related constructs i.e. absenteeism (hours absent from work), presenteeism (decreased productivity), work engagement (job passion), life satisfaction (general well-being), and workplace distress (degree of anxiety)[1]. Lennox et al (2010) validated the tool's paper-and-pencil self-administration modality.

[1] '*Absenteeism'*, refers to the total number of hours an employee is absent due to personal problems taking the employee away from work. The second construct, '*presenteeism'* measures the decrease in productivity even though the employee is not absent but not working at optimum due to personal problems. The third construct,

Following advent of the WOS, a series of studies uniformly evaluated EAP. Richmond et al (2016, 2017) found that improvements in absenteeism and presenteeism mediated depression and anxiety among 156 EAP-exposed US state government employees compared to 188 controls, $p<0.05$ (34,35). Nonetheless, age, gender, marital status, occupation types, language, and other demographic factors can affect measurement of WOS-related outcomes. To this end, Milot (2017) found that no demographic attributes affected EAP-related improvement among 249 Canadian employees (36). Similarly, a study in China demonstrated that the WOS is able to detect improvement after EAP across 670 employees of different cultural and contextual backgrounds, from 26 local and multinational companies (37). Furthermore, a recent systematic review (Joseph et al, 2018) determined that 17 pre-post studies that used WOS demonstrate improvements and mixed results on WOS-related employee outcomes (38). As such, the use of WOS as well as examination of local demographic factors within Malawian EAP context ensures conformity to current research.

Lastly, most importantly Malawian WOS research immediately contributes to latest international data about the significant, positive results of EAP outcome measurement. Most recent global pooled EAP reports have evaluated 24,363 employees before and after intervention, since 2010, from other 29 countries (3–5). These reports present evidence that EAP generates significant relative improvement $(p<0.05)$ in all five WOS outcomes and is equally effective across contextual factors (3). Specifically, it reduces absent hour in about 48% of employees, improves concentration in 26%, job passion in 7%, and general sense of well-being in 22%, as well as reducing work stress in 13% of employees. As such, the

'*work engagement'*, refers to the extent to which the employee is invested or passionate about his or her job. '*Workplace distress*' is the fourth construct and examines the degree of anxiety or stress at work. Lastly, '*life satisfaction'* addresses one's general sense of wellbeing.

international EAP community is keen to learn if a similar investigation within a Malawian local context finds consistent results.

1.5 Rationale of Study

As observed, a gap exists within Malawi organisations to adopt, fully, new workplace well-being programs that local research is yet to evaluate. By demonstrating the value of an EAP intervention, the study provides impact data and answers whether EAP is locally predictive of improvement in employee work-related well-being. In so doing, the evidence supports Malawian organisational and training policy makers. As such, this enables effective EAP integration within Malawi.

Chapter 2 Study Objectives and Hypotheses

2.1 Broad Objective of the study

Against the background above, the study aims to determine the effectiveness of an EAP intervention on improving work-related well-being, measured on the Workplace Outcome Suit (WOS) (5) in Malawi.

2.1.1 Specific Objectives

1. To determine the effect of an EAP exposure on WOS scores.
2. To examine four demographic factors that can moderate workplace outcomes.

2.2 Hypotheses

Analytically, the study tests two main hypotheses. Firstly, it tests hypothesis that *"There is a difference in workplace outcome scores for employees before and after exposure to an EAP activity"*. Furthermore, it examines hypothesis that "*participants' age, sex, job types, or*

employment levels do not affect EAP-related improvement/change in the WOS subscale scores".

Chapter 3 Methods

3.1 Type of Research Study

The study anchors within a mixed methods paradigm. It uses quantitative correlational 'pre-post' design with structured questionnaire to answer both objectives. The design allows examination of improvement over time in employees evaluated before and after EAP intervention. However, due to lack of comparison group, it does not explain 'why' (24). As such, a qualitative component attempts to substantiate results.

3.2 Study Place

The current study constitutes evaluation of an on-going EAP provided within a local group of five companies' organisation by *Corporate Wellness Solutions*. This group of companies receiving EAP operates across Malawi in urban areas of Blantyre, Lilongwe and Mzuzu. The intervention is set within a local context characterized by commercial, industrial and economic activity.

3.3 Study Population

The organisations receiving EAP operate in life assurance and property management. The study drew from 335 employees working in diverse occupations including executive managers, administrators, sales agents, estate officers, drivers, accountants, legal and marketing personnel, technicians, and support staff. Population characteristics under study include age, sex, type of job, and employment level as factors that can moderate change in mean workplace outcome scores over time. **Table 1** below shows previous contextual data.

Table 1: Previous Population data

Number of employees		*232*
Mean age (yrs.)		34 (min 21, max 65)
Sex	female	93 (40%)
	male	139 (60%)
% of employees per location	Blantyre	139 (60%)
	Lilongwe	79 (34%)
	Mzuzu	14 (6%)

3.4 Sample Size and Recruitment

Since this study evaluates an ongoing EAP involving 335 employees, all employees have equal chance of being included in the study. However, the study makes important assumptions. Firstly, it being a simple pre-post comparison of data, 50% post-test response rate is the minimum acceptable level for such EAP practice evaluation (24). Basing on outcome means reported from a recent global pooled EAP report(3), the study assumes variability i.e., population differences across outcome variables. Hence, means and standard deviations will be reported. In addition, the study assumes the possibility of rejecting a true null hypothesis or accepting a false null hypothesis i.e., type I and type II errors. As such, the study's confidence level is set at 5% and power at 80%. Furthermore, it avoids oversampling through downward adjustment as recommended using the formula '*sample = (sample size x population)/(sample size + population – 1)*' (46). Consequently, a calculated sample size of 139 participants is effective, for all five outcomes with 70 (50%) as post-test response minimum. **Appendix 1: Study Proposal** provides additional information.

Recruitment depended on chance and consent of participant. All employees received study information (**Appendix 2A & 2B: ICF – English & Chichewa**). There was no special

incentive. The study only recruited employees who confirmed willingness to complete assessment at the beginning and again after 30 to 90 days following completion of EAP.

3.5 Study Period

The study's duration was 23 months. Pre-study consultation started in October 2017, leading to draft concept in April 2018. Receipt of ethics approval on 28 September 2018 followed submission and COMREC review of full protocol (**Appendix 3 Ethics Certificate & Review Documents**). Participant enrollment and pre-test data collection completed over a 45-day period between October and December 2018. Collection of post-test data completed 30 - 90 days following EAP, ending in March 2019. Thereafter, data management, analysis, and report writing was conducted over a period of 8 weeks. It presents final report in August 2019. Refer to **Appendix 4 Study Timeline Gantt chart.**

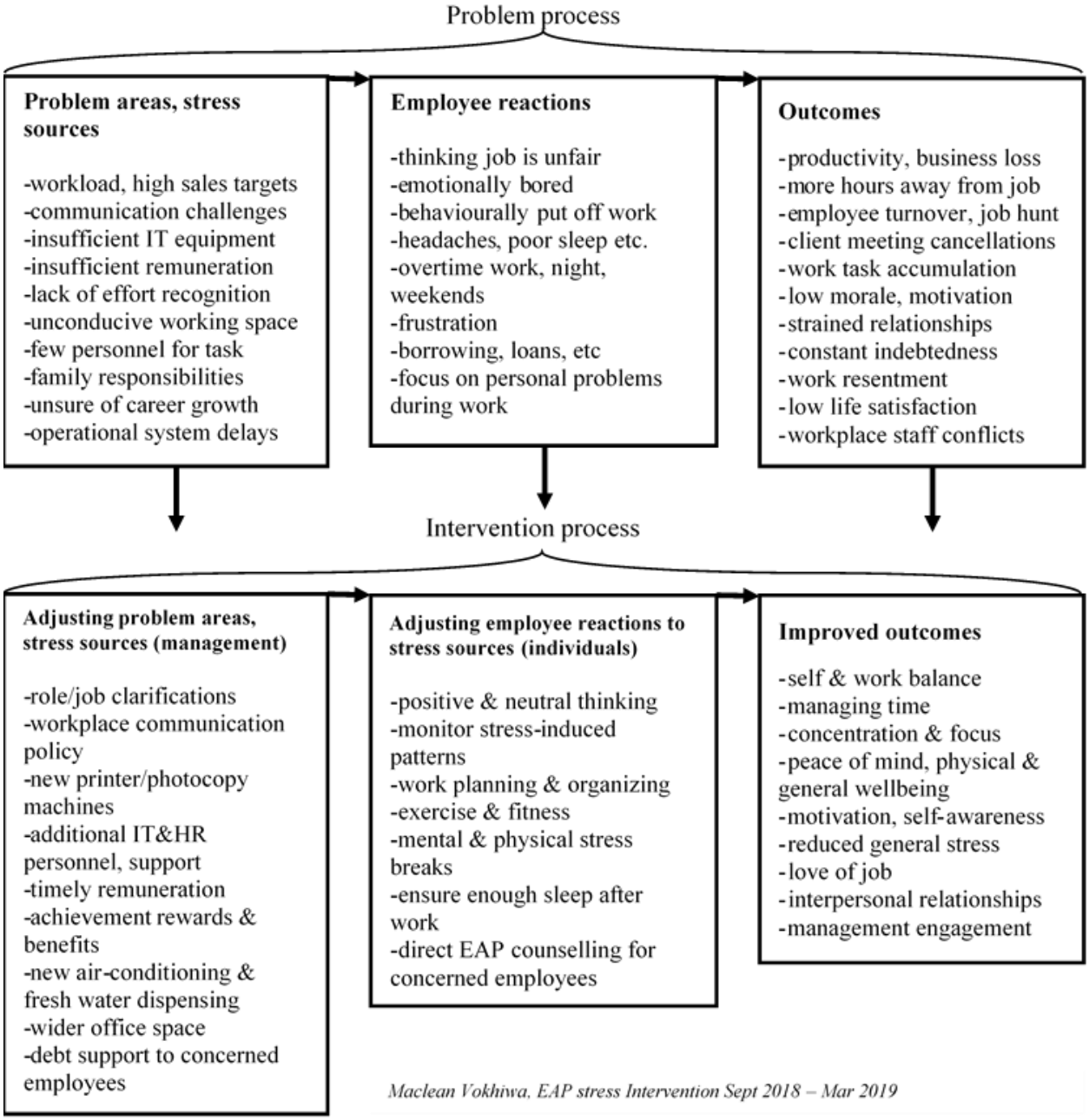
3.6 The Intervention – EAP Stress Training

EAP stress intervention facilitates practical adjustment to workplace stress sources and behaviour change at employee level. Giga et al (2003, 2011) and Pignata (2013) found that by reducing work-related stressors, such interventions minimize negative outcomes among workers(27,39,40). Various practical approaches for contemporary organisations are detailed (41–44). In the Malawian context, the lack of standardized stress training is noticeable. Practitioners providing wellness interventions emanate from different professional backgrounds. Counselors, psychologists, medical practitioners, fitness coaches, nutritionists, etc., provide EAP-related trainings. Additionally, the trainings follow different processes and standards.

The EAP stress intervention in this study is modelled after an experiential learning process that allows adults to transform their experiences and develop new response strategies (45,46). A psychologist with professional EAP qualification facilitated this training. **Figure 2** below

shows the problem and intervention process. This process was deemed necessary as it provides practical support to the employees and hence a natural and realistic setting to assess outcomes locally.

Figure 2: EAP Stress Intervention



The experiential process involved two stages with three respective focal areas. Firstly, employees identified problem sources, related reactions, and associated undesirable effects in a workshop setting. At the intervention stage, management initiated formal actions to

minimize stress; employees actively adjusted their reactions, and eventually, the group reported better effects on the workplace.

3.7 Measures

3.7.1 Workplace Outcomes

Before and after EAP, employees completed five 5-item scales from the WOS(33). Refer to **Appendix 5 WOS – English & Chichewa**. Each scale measures workplace well-being aspects in the previous 30 days. Absenteeism estimates the number of hours absent from work due to personal or work-related problems. Presenteeism scale measures decrease in productivity even though the employee is not absent but not working at optimum due to personal problems. Work engagement scale assesses the extent to which the employee is invested or passionate about their job. Workplace distress scale examines the degree of anxiety or stress at work. Lastly, life satisfaction items seek to assess one's general sense of well-being. The total score is simply adding together the five items in each scale into a single score. Except for absenteeism, items in the other four subscale follow Likert-type rating from '*1' = strongly disagree* to *'5' = strongly agree*. As such, scores for these scales range from 5 to 25. Life Satisfaction score is calculated using reversed scores for questions 17 and 20 - so that 5 becomes 1, 4 become 2, 3 stays the same, 2 becomes 4 and 1 becomes 5. Higher scores for absenteeism, presenteeism, and workplace distress reflect greater effect of work-related problems on well-being, as well as lower scores for work engagement and life satisfaction.

3.7.2 Demographic Factors and Employee Comment

Before the EAP, the study collected demographic information on age, sex, type of job, and level of employment. Age is continuous variable recorded in years. Quantitative codes for the three factors categories follows: Sex codes are 1 = female, and 2 = male. 'Job type/department'

codes are 1 = EXCO (Executive Committee), 2 = Finance, 3 = Marketing & Communication, 4 = Legal/Risk & Compliance, 5 = Sales, 6 = IT (Information Technology), 7 = Operations, 8 = Human Resources & Administration, 9 = Business Development, 10 = Support Staff, and 11 = Projects & Procurement. Lastly, 'Level of employment' codes are 1 = Operative/ Clerical, 2 = Supervisory/ Team leaders, 3 = Manager, 4 = Senior Manager, and 5 = Executive Management. In addition, employees provided a comment before and after EAP by responding to the question '*How do you feel (or think) participation in the EAP activity impacts your work-related well-being?*' Records are verbatim, (**Appendix 6 Moderating Factors Questionnaire – English & Chichewa**).

3.8 Procedure

Participating employees received assessment with the WOS twice, that is, before and about 30 to 90 days after EAP intervention. EAP practice evaluation research recommends the 90-day follow-up period because outcomes occur after intervention is complete and it allows observation of sustained impact. The section below describes data collection process, data management and the analytical approach.

3.8.1 Data Collection

Data collection process involved a number of stages. Firstly, pre-study activities include consultative meetings and employee sensitization. The study received permission to involve employees at this stage (**Appendix 7 Permission to Interview Employees)**. Secondly, EAP officers administered informed consent (**Appendix 2 – ICF**). To begin with, they shared detailed study information to all participants while providing procedure-related clarifications. Then, participants signed a certificate of consent.

Thirdly, participants completed a 2-part self-administered paper-and-pencil questionnaire. The first part consisted of all 25-items, five outcome scales of the workplace outcomes measure - WOS (**Appendix 5)**. This is quantitative information and takes five to ten minutes to complete. The second part consisted of demographic questions as well as asking participants to write their expectation for EAP(**Appendix 6**). This takes less than five minutes to complete. At this stage, participants received unique identifier numbers (ID) to use on data forms and keep for use during follow up 30 to 90 days later.

Following the first assessment, participants engaged in a full EAP intervention. During the first full day, participants identified their problem areas, stress sources, common reactions, and how this affects their workplace outcomes through experiential training session. On this day, they completed attendance register (**Appendix 8 – Materials Used)**. This register recorded date of training, location (Blantyre, Lilongwe, Mzuzu), whether or not they selected to participate in evaluation. Only identified in study by ID number. In addition, management initiated appropriate adjustments for the problems areas within 7 days of session. Furthermore, participants began to practice adjustments on their common reactions to the stress sources immediately. Refer to **Figure 2** above.

Another stage of the process involved participant tracking. During this stage, EAP officers traced participants 30 to 90 days after EAP intervention. Communication was sent through notice boards and staff group emails. The training register helped to identify participants who used previously assigned ID numbers.

Finally, participants completed the same 2-part self-administered paper-and-pencil questionnaire with the WOS, demographic questions. In addition, participants wrote comment on their perceived impact of EAP. Collected 30 – 90 days after EAP, this constitutes posttest data, and matched to appropriate pretest data using ID numbers.

3.8.2 Data Management

Following data collection, data management involved handling missing data, data entry and transformation. Firstly, checking ID numbers and confirming response completeness at point of collection prevented missing data. Secondly, data was double entered into a MS Access database. Each participant's information was in a single row. There were 37 variables, in columns. These include ID, age, sex, job type, employment level, comment, time (pretest or posttest), 25 WOS items, and 5 subscale scores for the WOS items. Simple addition of the five items in each scale calculates subscale scores. After organizing in excel spreadsheet, data analyses used Stata version 14.

3.8.3 Analytical Approach

The study's analytical approach breaks down the data into pre-test and post-test elements to demonstrate clearly the differences between the two time-points. For all statistical tests, the study's significance level alpha (α) is set at 0.05 $(p \leq 0.05)$. As such, if the probability of observing a difference as extreme or more extreme is as small as 0.05, the result is to be considered statistically significant and the null hypothesis thus rejected. Consequently, analysis follows recommended steps to decide whether data are consistent with the 'null hypothesis'(47,48).

Firstly, analysis compares pre-test and post-test participant characteristics i.e. mean age with standard deviations, male/female proportions, as well as proportions of the different job types and employment levels for the two time points. T-test mean comparison, as well as Chi Square and Fisher's exact test of proportions are used.

Secondly, analysis compares characteristics of responders and non-responders at post-test to examine selection bias. Again, t-test mean comparison and Chi Square tests examine the characteristic factors.

In addition, all pre-test and post-test subscale score distributions are tested for normality in preparation for hypotheses testing. Satisfying normality assumption for parametric tests is recommended to avoid statistical errors (49).

Fourth, analysis uses parametric paired t-tests, non-parametric Wilcoxon Signed Ranks Test where appropriate, on before-and-after subscale scores to test the hypothesis that '*there is a difference between scores of the two time points'*. Thereafter, regression analysis with improvement/change over time as a dependent variable, and moderating factors as fixed, tests the hypothesis that *'there is no relationship between outcomes scores and participants' age, sex, job type, and employment level*'. At this stage, analysis examines the categories within age, sex, job and employment level, separately, to prevent the model assume linear relationship due to large number of categories. In addition, effect size analysis examines which of the five outcomes has large improvement. Hence, *R squared* values are reported. Estimates of *Partial eta squared (adjusted R^2)* version of effect size from General Linear Model (GLM) on repeated measures test results can range from 0 to over 1.00; a small size effect is 0.02 to 0.12; a medium size effect is 0.13 to 0.25; and a large size effect is 0.26 or greater(3).

Lastly, to qualify the intervention's impact, an expert review panel comprising 3 HR officers, one employee welfare officer, one employee representative, and four EAP practitioners identified themes from employees' comments regarding their expectations and perceived impact after EAP. Using thematic network analysis (50), for 'perceived workplace well-being impact' as a global concept, various organizing and basic themes are identified. In addition,

quantitative analysis compared proportions of the different organizing themes before and after EAP to examine how far the intervention met participant expectations.

3.9 Addressing Foreseen Challenges

Nonetheless, the study resolved a number of foreseen challenges. Firstly, it avoided administrative delays in setup, COMREC approval, participant enrollment, data collection through keeping strict timelines. Secondly, it resolved participant organisational privacy concerns through consultation regarding study ethics (**Appendix 7)**. Lastly, it avoided missing data through on-point verification and hence preventing compromised statistical analyses.

3.10 Ethical Considerations

The study's conduct is consistent with ethical guidelines. Firstly, protection of participant anonymity, administration of informed consent (**Appendix 2 ICF**), as well as subsequent approval from COMREC demonstrates the study's compliance with the current revision of the Declaration of Helsinki (Brazil 2013)(51). Secondly, by maintaining essential documents with accurate, complete and timely data, it complies with regulations, as well as principles of the ICH Guidelines for Good Clinical Practice 1996(52). In addition, use of IDs during participant tracking prevented 'pre-post' design-related ethical challenges. Permission to interview employees demonstrates the organisation's satisfaction with study procedures. More specifically, the study's benefits to support vulnerable employees and provide EAP knowledge outweigh employees' risk to identify their emotional challenges. Moreover, the study engages management and participants at preparatory, implementation, and results dissemination stages. On the other hand, the study did not provide special incentives to participants on top of usual snack refreshments provided during worksite training. Further to the above, it respects confidentiality of the employees and organisation.

Chapter 4 Results

4.1 Comparison of Pre-test and Post-test Participant Characteristics

Results from the first analysis show that 318 participants completed pre-test assessments. Of these, 226 completed post-test assessments, representing 71% post-test uptake. There were no characteristic differences between the two time points with mean age of 32.8 ($SD = \pm 8.0$) before and 32.0 ($SD = \pm 7.6$) after EAP, $t(542)=1.2$, $p>0.05$. The proportions of male and female participants, their job types and levels of employment were similar for the groups between the two time points, $p>0.05$. Refer to **Table 2** below.

Table 2: participant characteristics by time point

Variable	*Characteristic*	*Pre-test N=318*	*Post-test N = 226*	*statistic*	*p-value*
Age (years)	Mean (SD)	32.8 (±8.0)	32.0 (±7.6)	t=1.2, df (542)	0.234*
Sex	Male (%)	200 (62.9%)	144 (63.7%)	$X^2(1)=0.04$	0.844**
	Female (%)	118 (37.1%)	82 (36.3%)		
Job type	EXCO	8 (2.5%)	3 (1.3%)		
	Finance	35 (11.0%)	26 (11.5%)		
	Marketing& Communication	6 (1.9%)	3 (1.3%)		
	Legal/Risk & Compliance	6 (1.9%)	4 (1.8%)	*** **Fisher's exact**	**0.906**
	Sales	132 (41.5%)	101 (44.7%)		
	IT	8 (2.5%)	2 (0.9%)		
	Operations	73 (23.0%)	58 (25.7%)		
	HR & Administration	13 (4.1%)	6 (2.7%)		
	Business Development	18 (5.7%)	13 (5.8%)		
	Support Staff	6 (1.9%)	3 (1.3%)		
	Projects & Procurement	13 (4.1%)	7 (3.1%)		
Employment level	Operative & Clerical	185 (58.2%)	141 (62.4%)	$X^2(4)=3.9$	0.415
	Supervisory/ Team leaders	51 (16.0%)	40 (17.7%)		
	Manager	64 (20.1%)	39 (17.3%)		
	Senior Manager	10 (3.1%)	3 (1.3%)		
	Executive Management	8 (2.5%)	3(1.3%)		

t-test (mann-whitney) for the mean, ** Chi Square (X^2) for the proportions. * X^2 validity not met, only 17 (77.3%) of expected frequencies are >5 so we use Fishers' Exact test*

4.2 Comparison of Post-test Responders and Non-responders Characteristics

Secondly, comparison of characteristics for post-test responders and non-responders confirmed that there was no selection bias. Although responders are younger in years than non-responders on average *(t(316)=2.9, p<0.05)*, there were no significant differences in the proportions of males and females among responders and non-responders, $X^2(1, N= 318) = 0.2, p>0.05$. Furthermore, the proportions of job types and employment levels varied similarly among responders and non-responders, $p<0.01$. Refer to **Table 3**, below.

Table 3: Characteristics of responders vs. non-responders at post-test

Variable	*Characteristic*	*Responders n=226*	*Non-responders n=92*	*statistic*	*p-value*
Age (years)	Mean (SD)	32.0 (±7.6)	34.8 (±8.9)	t=2.9, df(316)	0.005*
Sex	Male (%)	144 (63.7%)	56 (60.9%)	X^2 *(1)= 0.2*	*0.634***
	Female (%)	82 (36.3%)	36 (39.1%)		
Job type	EXCO	3 (1.3%)	5 (5.4%)	X^2 (10)= 25.7	0.004**
	Finance	26 (11.5%)	9 (9.8%)		
	Marketing& Communication	3 (1.3%)	3 (3.3%)		
	Legal/Risk & Compliance	4 (1.8%)	2 (2.2%)		
	Sales	101 (44.7%)	31 (33.7%)		
	IT	2 (0.9%)	6 (6.5%)		
	Operations	58 (25.7%)	15 (16.3%)		
	HR & Administration	6 (2.7%)	7 (7.6%)		
	Business Development	13 (5.8%)	5 (5.4%)		
	Support Staff	3 (1.3%)	3 (3.3%)		
	Projects & Procurement	7 (3.1%)	6 (6.5%)		
Employment level	Operative & Clerical	141 (62.4%)	44 (47.8%)	X^2 (4)= 19.5	0.001**
	Supervisory/ Team leaders	40 (17.7%)	11 (12.0%)		
	Manager	39 (17.3%)	25 (27.2%)		
	Senior Manager	3 (1.3%)	7(7.6%)		
	Executive Management	3(1.5%)	5 (5.4%)		

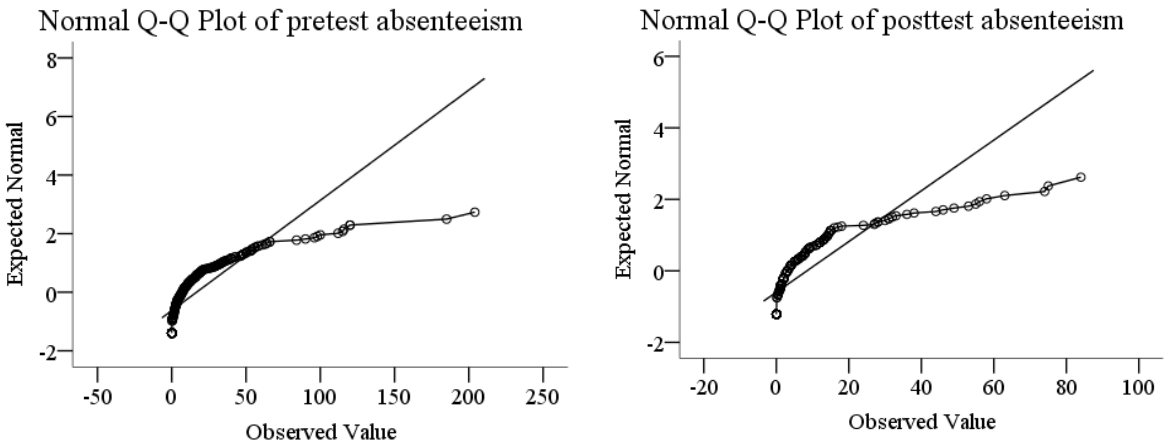
*t-test (mann-whitney) for the mean, ** Chi Square,

4.3 Normality Testing for WOS Outcomes Scores

Thirdly, results from normal Q-Q plot visual test and Shapiro-Wilk's W normality tests indicate that the Likert-type subscale scores i.e., presenteeism, work engagement, life satisfaction and workplace distress scores, were approximately normally distributed, and satisfy requirements for parametric tests **(Appendix 9A – Normality Testing Results for Likert-type subscale scores)**. Hence, it is safe to conduct paired t-tests for these scales. On the other hand, absenteeism score distributions were significantly non-normal, with skewness of 3.3 for pre-test and 3.0 for post-test, *($p<0.05$)*. Refer to **Figure 3** below. As such, analysis conducts non-parametric Wilcoxon Signed Ranks Test for absenteeism scores.

Figure 3: Normality test results for absenteeism scores

Absenteeism scores



statistic	df	sig.	Statistic	df	sig.
0.6	318	**.000**	0.6	226	**.000**
skewness (se)	**3.3**(0.2)		skewness (se)	**3.0** (0.2)	
kurtosis (se)	**16.8**(8.3)		kurtosis (se)	**9.6**(0.3)	

4.4 Hypotheses Testing

4.4.1 Difference of scores between pre-test and post-test – mean comparison tests

Fourthly, Results from mean comparison tests indicate that participants did not score differently before and after EAP intervention on the test of work engagement, the difference was not large enough to be statistically significant *(t(225)=0.4, p> 0.05)*. However, comparison of means for the other four scales before and after shows that there are statistically significant differences after EAP intervention. Measured in the same employees, absenteeism scores are significantly different and better (lower) after EAP *(z= 6.0, p<0.001)***, and similarly for presenteeism *(t(225)=7.3, p<0.001)*, and workplace distress *(t(225)= 3.2, p<0.01)*. In addition, significantly higher scores are observed for life satisfaction *(t(225)= -4.5, p<0.001)*. Refer to **Table 4** below.

Table 4: pre-test and post-test outcomes – unadjusted results, paired t-tests

Outcome subscale	***Pre-test n=226***	***Post-test n=226***	***Difference***			
*Absenteeism***	*Median (IQR)*	*median (IQR)*	*Wilcoxon Signed Ranks Test*		statistic	*p-value*
	6.8 (1.4-19.0)	3.0 *(0.5-9.6)*	-		*-6.0***	*0.000*
			Paired t-test (df=225)			
	M (sd)	*M (sd)*	MD *(se)*	CI	statistic	*p-value*
Presenteeism	13.0 (±6.1)	10.2 (±5.3)	2.8 (0.4)	2.0 – 3.5	7.3*	*0.000*
Work engagement	18.2 (±3.8)	18.1 (±4.1)	0.1 (0.3)	-0.5 – 0.7	0.4*	*0.700*
Life satisfaction	15.0 (±3.8)	16.2 (±3.7)	-1.2 (0.3)	-1.7 – - 0.6	-4.5*	*0.000*
Workplace distress	12.0 (±5.0)	10.9 (±4.6)	1.1 (0.3)	0.4 – 1.8	3.2*	*0.002*

**t-statistic paired t-test*
*** z-statistic Wilcoxon Signed Ranks Test for absenteeism scale*

4.4.2 Relationship between improvement/change over time in WOS scores and moderating factors – regression analysis

Further to the above, standard multiple regression assessed the ability of age, sex, job type, and employment level to predict improvement/change in WOS scores after EAP. As indicated earlier preliminary analyses checked to ensure there was no violation on normality.

After controlling for age, sex, job type, and level of employment the effect of time points (period) was statistically significant for all scores, $p<0.01$ (**Table 5,** below). Interestingly, the actual significance value for the effect of time (pre vs. post) is even stronger after adjustment. For example, p-value for work engagement is now at $p=0.751$, from $p=0.700$ before adjustment. This suggest the factors have a confounding effect on the change after EAP.

There is no linear association between outcome scores and each of the moderating factors, $r(452)=0$.

To prevent the model assume linear relationship due to large number of categories, further calculations compared categories for each factor separately. Refer to categorized detailed regression tables in **Appendix 9B**. The model significantly explained 20.7% of absenteeism scores $(F(49,402)=2.1,\ p<0.001,\ R^2=0.207)$; 24% of presenteeism scores $(F(49,402)=2.6,\ p<0.001,\ R^2=0.240)$; 19.7% of work engagement scores $(F(49,402)=2.0,\ p<0.001,\ R^2=0.197)$; and 19.6% of life satisfaction scores $(F(49,402)=2.0,\ p<0.001,\ R^2=0.196)$. However, it did not significantly account for the 14.2% of workplace distress scores $(F(49,402)=1.4,\ p>0.05,\ R^2 0.142)$. For all scores, the effect of age, sex, job type, or employment at category level was not significant, $p>0.05$. Therefore, an employee's age, sex, job type, or level of employment cannot be used to predict change over time in WOS scores.

Table 5: equation coefficients *(Yi=α+βXi+εi)* for WOS improvement/change over time results adjusted for moderating factors

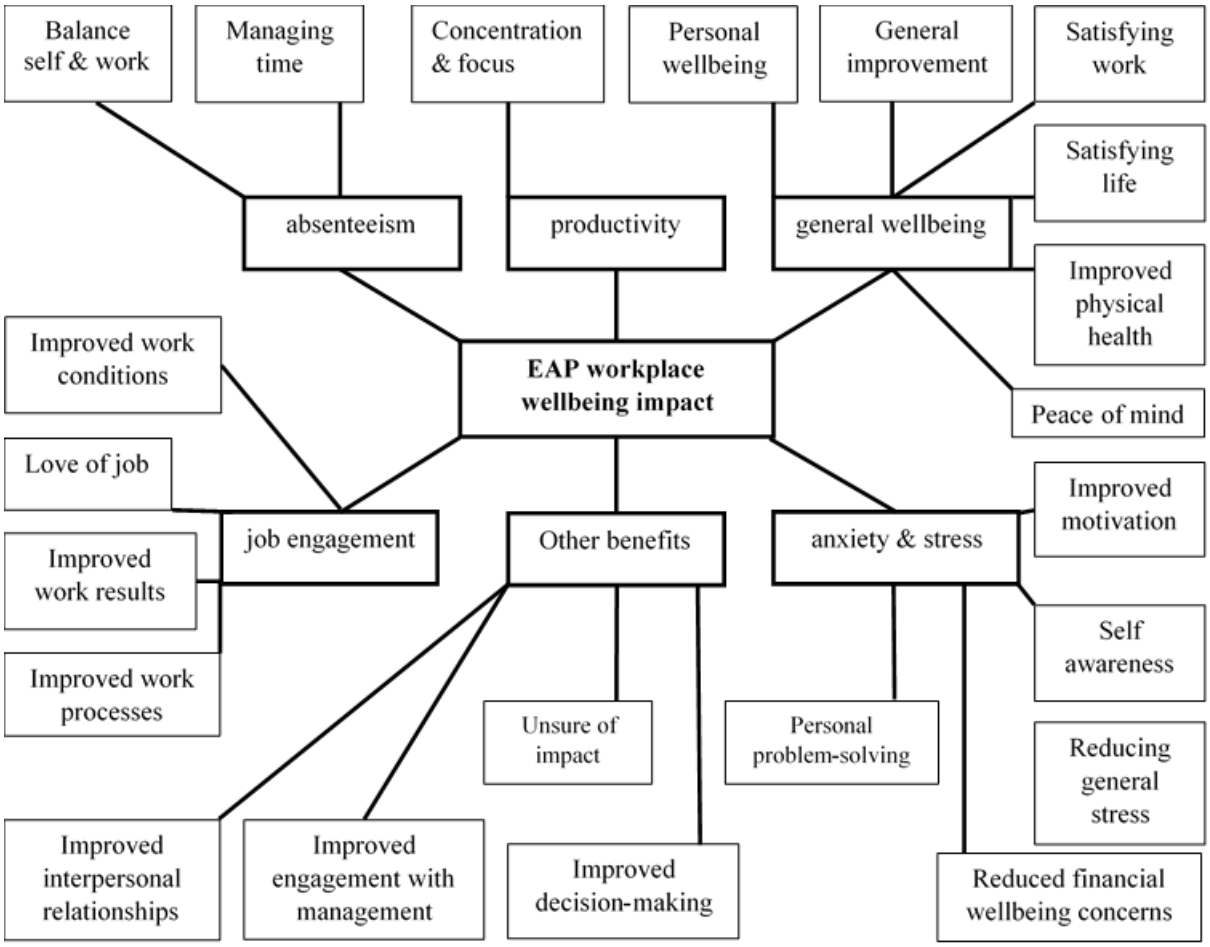
SCORES (dependent, y)	*Factor (Independent,X)*	*Intercept α (constant)*	*Slope β (coef.)*	*Error ε*	*statistic*	*Correlation r*	*p-value*
N = 452							
Absenteeism	**Time period**	**29.9**	**-6.7**	**1.8**	**-3.8**	**-0.2**	**0.000**
	age	29.9	-0.1	0.1	-1.1	-0.1	0.292
	sex	29.9	-1.4	1.9	-0.8	-0.1	0.446
	job	29.9	-0.7	0.4	-1.8	-0.1	0.072
	emplevel	29.9	-2.4	1.1	-2.3	-0.1	0.021*
	F(5, 446) = 6.0, p=0.0000, R-squared = 0.0629, Adj R-squared = 0.0524						
Presenteeism	**Time period**	**14.1**	**-2.8**	**0.5**	**-5.25**	**-0.2**	**0.000**
	age	14.1	0.0	0.0	0.8	0.0	0.439
	sex	14.1	0.1	0.6	0.1	0.0	0.903
	job	14.1	0.0	0.1	0.1	0.0	0.957
	emplevel	14.1	-1.4	0.3	-4.4	-0.2	0.000*
	F(5, 446) = 10.0, p=0.0000, R-squared = 0.0962, Adj R-squared = 0.0861						
Work engagement	**Time period**	**14.4**	**-0.1**	**0.4**	**-0.3**	**0.0**	**0.751**
	age	14.4	0.1	0.0	4.2	0.2	0.000*
	sex	14.4	0.3	0.4	0.7	0.1	0.479
	job	14.4	0.0	0.1	-0.4	0.0	0.680
	emplevel	14.4	-0.0	0.2	-0.0	0.1	0.973
	F(5, 446) = 4.7, p=0.0003, R-squared = 0.0500, Adj R-squared = 0.0393						
Life satisfaction	**Time period**	**13.0**	**1.2**	**0.3**	**3.3**	**0.2**	**0.001**
	age	13.0	0.0	0.0	0.2	0.1	0.867
	sex	13.0	0.3	0.4	0.7	0.1	0.479
	job	13.0	0.0	0.1	0.1	0.0	0.958
	emplevel	13.0	0.9	0.2	4.2	0.2	0.000*
	F(5, 446) = 6.6, p=0.000, R-squared = 0.0692, Adj R-squared = 0.0588						
Workplace Distress	**Time period**	**14.0**	**-1.1**	**0.5**	**-2.5**	**-0.1**	**0.014**
	age	14.0	0.0	0.0	0.6	0.0	0.539
	sex	14.0	-0.6	0.5	-1.2	-0.1	0.236
	job	14.0	-0.1	0.1	-0.5	0.0	0.612
	Emplevel	14.0	-0.9	0.3	-3.2	-0.2	0.001*
	F(5, 446) = 3.9, p=0.0020, R-squared = 0.0414, Adj R-squared= 0.0307						

**when test is split across categories, effects at category level are not significant, p>0.05*
*Please see **appendix 9B, Detailed Regression Tables***

4.5 Comparison of expectations and perceived impact after EAP

Lastly, using thematic network analysis (50), for 'perceived workplace well-being impact' as a global concept, an expert review panel identified 26 basic and 6 organizing themes from employees' comments regarding their expectations and perceived impact after EAP. This panel included 3 HR officers, one employee welfare officer, one employee representative from the target organisation, and four EAP practitioners from the service provider. WOS-related themes are in five categories. A sixth category identifies additional impact areas that are locally relevant. This helps to qualify the intervention's impact. Refer to **Figure 4** below.

Figure 4: network of organizing and basic themes relating to perceived impact of EAP



Additionally, quantitative examination of these themes indicates that EAP achieved expectations. There were no significant differences in the proportions of participants' WOS-related expectations before and perceived impact after EAP, $X^2(4,N=442)=9.1,\ p>0.05$. Additionally, compared to pre-test expectations there was increase in the proportion of participants who felt that EAP improved their sense of well-being (22.8% to 34.2%). **Table 6** below.

Table 6: WOS-related themes before and after EAP

Category of theme	*Expectations before EAP N=285*	*Perceived impact after EAP N = 158*	*Statistic**	*p-value*
Help to reduce absence from work	30 (10.5%)	17 (10.8%)		
Help to increase productivity	6 (2.1%)	4 (2.5%)	$X^2(4) = 9.1$	0.06
Improve job passion, engagement	42 (14.7%)	13 (8.2%)		
Improves general sense of well-being	65 (22.8%)	54 (34.2%)		
Reduce degree of anxiety, stress	142 (49.8%)	70 (44.3%)		

**chi square test of proportions*

Further to the above, participants associated EAP with other locally relevant impact areas. Again, proportions of expectations before and perceived impact after EAP were similar *(p>0.05)*. In addition, there was an increase (from 15% to 20%) in the proportion of participants, who felt EAP improved their interpersonal relationships. Furthermore, two employees felt the program helped practical well-being related decision-making. However, six participants were unsure of benefits after EAP. **Table 7** below.

Table 7: other relevant themes identified before and after EAP

Category of theme	*Expectations before EAP N=13*	*Perceived impact after EAP N = 20*	*Statistic**	*p-value*
Interpersonal relation and communication	2 (15.4%)	4 (20.0%)	Fisher's exact test	0.416
Management/employer engagement	9 (69.2%)	8 (40.0%)		
Decision making	0 (0%)	2 (10.0%)		
Unsure	2 (15.4%)	6 (30.0%)		

** Fishers exact test computed because Chi2 validity conditions not met: one expected frequency was <1, and only 25% of expected frequencies > 5.*

Chapter 5 Discussion

5.1 Limitations

The study faces several limitations. Firstly, the involvement of employees from one local organisation limits the study's ability to generalise beyond local EAPs. Additionally, granting that self-administered paper-pencil version of the WOS is valid and reliable (24,33), local understanding of the items, information bias, should be considered. Thirdly, the one-sample pre/post-test design that this study adopts limits control of other possible confounders. While the correlational 'pre-post' design is the 'workhorse' of EAP practice evaluations (24), evidence recommends stronger designs highlighting the need for a control group. A reviewed quasi-experimental study found significantly greater reductions in absenteeism *(b=-.596, p=.001)* and presenteeism *(b=-.217, p=.038)*, but not workplace distress *(b=-.079, p= .448)* for EAP-exposed employees compared to control group(35). Lastly, the experiential learning model, adopted in the EAP intervention, entails participants learnt according to their unique experiences making it difficult to credit specific EAP session elements for positive results.

5.2 Strengths of the Study

Nevertheless, this study has unique strengths. Willingness and permission of a local group organisation to conduct this study among employees of its five subsidiary companies, confirm the study's relevance for organisational policy. Findings are immediately useful. Secondly, the study demonstrates ethical compliance. It addressed ethical dilemmas following initial COMREC review. Anonymizing data and allowing participants to opt out of the evaluation ensured respect for persons as prescribed by ethical principles and standards(53–55). Importantly, use of internationally endorsed EAP assessment tool (56) implies that the study's results are comparable with global EAP best practice and outcome research.

5.3 What the Results Suggest

5.3.1 Current EAP Does Not Affect Work Engagement

To begin with, the present EAP did not improve employees' passion for their jobs *($t(225)=0.4$, $p= 0.7001$)*. This is consistent with the US and Chinese studies that found work engagement to either generate very little improvement or is resistant to change after EAP, *ANOVA* $F(1, 658)=1.2$, $p>0.05$ (37,57). Locally, a possible explanation is that measuring 'job passion' demands an understanding of factors that motivate employees to love their jobs. During EAP, employees remarked that high cost of living and low remuneration affect their enjoyment of work, leading to increased turnover. One would relate these remarks to reports that rank Malawi as fourth-poorest country in the world with 50.7% of the population below the poverty line (58). Arguably, economic factors and appropriate financial rewards affect employee engagement (59). Work engagement literature demonstrates that better working conditions and resource support are among factors that improve employee passion, recommending enhanced EAPs (60).

5.3.2 Local EAP Improves Four WOS Outcomes

Overall results suggests EAP locally decreased the number of hours missed due to personal problems, work presenteeism, as well as the degree of anxiety, and increased general sense of well-being among employees *($p<0.05$)*. Similarly, EAP reduced absenteeism by 43.6% ie 5.8 fewer hours of missed work after EAP, work presenteeism by 25.3%, and work distress by 24.2%, and increased life satisfaction by 13.3% among US and Chinese employees *($z=8.49$, $p<0.001$)*(37,57). Noting that the outcomes are self-reported, these figures could be under-reported. As such, the real effect could be higher. A plausible explanation for the improvement among local participants is that the EAP provided tips to identify, control intrusive thoughts and emotions. Specifically, EAP encouraged employees to identify, monitor and adjust their

stress-induced patterns, exercise, have stress breaks during work, and enough sleep rest after work (**Appendix 8C**). In addition, after discussing absenteeism as a behavioural reaction to stress, employees might have controlled this behaviour following EAP. On the other hand, lack of financial resources might have limited their practice of recommended exercises.

5.3.3 Local EAP is equally effective across moderating factors

Thirdly, regression results clearly indicate that the actual improvement over time due to EAP is not significantly dependent on age, sex, job, or employment categories. These categories did not predict change over time in all outcome scores, $p>0.05$ (**Appendix 9B**). Hence, local EAP is equally effective across these categories. In fact, after adjusting for these factors, the significance of change after EAP is even better, for example, for workplace distress *($p= 0.0014$,* from *$p=0.0018$).* In addition, lack of difference for work engagement is clearer *($p=0.751$,* from *$p=0.700$).* As such, although these factors may be important confounders locally, they do not affect actual EAP impact. This implies local organisations should target EAP support equally across all age groups, sexes, departments, operation, supervisory and executive management.

5.3.4 Support for WOS Annual Reports

Specific to the WOS, this study supports 2016, 2017 and 2018 annual reports. These reports present pooled pre and post results for over 24,363 employees, since 2010, from 29 countries except Malawi. EAP improved workplace outcomes in US, Greece, Portugal, Spain, China, and other countries (3–5). Furthermore, examined moderating factors did not have effect on the outcomes as observed in both this study and the WOS reports. On the other hand, it is important to note that locally group EAP interventions are preferred more than individual counselling interventions. Local culture affords extended family systems and support. In addition, local organisations have found it more convenient and cost-effective to prioritise

group EAP interventions (14,15). This study has established that such group EAP is effective in ways comparable to the pooled reports.

5.3.5 Local Employees Acknowledge EAP Impact

Further to the above, employees confirmed that EAP benefits their work-related well-being in various ways. Findings indicate that EAP met expectations and achieved improvement beyond WOS-related areas. For example, EAP improved interpersonal relationships. This demonstrates satisfaction with the program and consistent with previous studies in New York and a US Texas University, which found that improvement in family relationships because of EAP, accounted for 41.5% of variance in factor analysis for a satisfaction measure(28,29). Locally, this contentment confirms employees' perceived personal, organisational well-being and life satisfaction, all important contributors to reduce workplace dissatisfaction and stress.

5.4 A Critical Consideration: Prevention Paradox

Despite the benefits noted above, EAP is prone to health promotion misperceptions. If the whole population has to carry out some type of behaviour modification in order to improve the health of the population, it often offers little improvement to the individual. For example, in order to improve five workplace well-being outcomes, the whole employee population needs to be involved in EAP against work-related problems in order to prevent undesirable effect on a minority of employees. If the activity does not require much behaviour modification, for example simple EAP training attendance, most employees are relatively happy to comply. However, if the behaviour modification is difficult to follow, for example if each employee has to monitor his/her stress-induced behaviours and adjust accordingly to prevent a few other employees from getting stressed, then at an individual level there is not much gain. The WHO acknowledges that this paradox leads to misperceptions of health and well-being promotion advice and activities (61). Local EAP interventions should be mindful of this paradox.

Specifically, EAP policies should address misperceptions. Alternatively, targeted EAP counselling for high-risk employees offers better option without unnecessarily demanding direct action from all employees.

This paradox notwithstanding, the study's findings support the hypothesis that there is a difference in outcome scores after EAP. There is significant improvement in four of the five subscales 30-90 days after intervention. Clearly, the impact is sustainable. In consequence, policy implications are worth noting.

5.5 Policy Implications

5.5.1 Supporting Legislation

The findings have important implications for occupational health policies. The Occupational Safety, Health and Welfare Act provides for the regulation of conditions of employment in workplaces as regards the safety, health and welfare of persons (62). However, this Act does not address workplace problems resulting from psychological hazards. Psychosocial hazards including stress, anxiety and depression affect occupational health. For example, job demands, tight deadlines, sales targets, etc., lead to anxiety and distress among employees. Since the findings suggest that EAP locally reduce workplace distress, also confirmed in similar evaluations (3), it is important for national health policy to encourage local EAPs. In an earlier keynote presentation at EAPA-SA annual meeting of 2015, this author argued that, unlike Malawi, South Africa has integrated EAP at legislation level (63). For example, Kwazulu-Natal Education department has *"Policy on the Employee Assistance Programme for the Department of Education and Culture"* underpinned by national level legislation (64), whereas local Malawi government departments do not have specific EAP policies.

5.5.2 Workplace Well-being Policies

Specifically, EAP policies must outline key workplace well-being program steps. First, identify psychological hazards i.e. stress, high demands, fatigue, etc. Secondly, assess the impact of these hazards on productivity, absenteeism rates, turnover, staff morale, etc. Lastly, control by taking action that reduce demand and increase support. Organisational risk management theories support these steps (65). This implies EAP policy can address workplace burnout, which is identified as an important occupational problem in the ICD-11 at this year's World Health Assembly(66). Most importantly, the World Medical Association (WMA) acknowledges work-related burnout among physicians as a serious problem that require new approaches to address physicians' workplace distress (67). EAP presents a unique approach to address emotional exhaustion, negativism, and decreased job passion cited by the WMA as major problems among physicians.

5.5.3 Local Professional EAP Training

Consequently, there is an implied need for local EAP training, within public health, to support policy implementation. It is worth noting that South African universities provide EAP training at graduate and postgraduate levels. For example, this author received professional EAP training from University of Pretoria, South Africa. **Appendix 10** shows South African EAP training brochure. On the other hand, Malawian universities do not offer specific EAP training. Locally trained EAP practitioners can be readily available to assist Malawian physicians who experience work-related burnout.

5.5.4 Local EAP Requires a Strong Evidence Base

However, local EAP demands an evidence base from research. This discussion suggests that the WOS allows comparison of Malawian EAP research to other settings. Secondly, controlled

experimental designs will present stronger evidence. Lastly, such research must be ethical to respect participating employees.

Chapter 6: Conclusion and Recommendations

The study has evaluated a local group EAP intervention. It analytically compares data collected before and after an EAP to determine the intervention's benefit. It concludes that a local EAP is effective in reducing employee's absence from work and level of anxiety and stress, as well as increasing productivity. However, EAP did not improve employee's job passion. A recent systematic review of 17 similar EAP studies supports this conclusion, recommending broader evaluation of equally important EAP components where majority of studies have focused on counselling only (38). This study's uniqueness is in measuring an equally important group EAP intervention, a prioritised training component with immediate local relevance. Similar to US 20-year EAP integration (68), demonstrating the value of local EAP enables its integration and survival in Malawi.

In summary, the study makes several recommendations. Firstly, because this is a first study to measure effect of an EAP in Malawi, it should be replicated among local wellness programs. Secondly, organisations that have current EAPs must update their policies. They should aim to sustain the impact already confirmed. In addition, those that do not have programs should consider developing policies basing on this evidence. Local EAPs should address workplace outcomes, including burnout. Lastly, provision of EAP short courses is an option within Public Health Department at COM. Demand for local EAP professionals is obvious as evidenced by the motivation of two major business organisations that provided a setting for this study.

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Appendices

Appendix 1: Approved Study Proposal & Budget

Version 1.1 05/09/2018

UNIVERSITY OF MALAWI

COLLEGE OF MEDICINE

MPH Research proposal

for submission to

COLLEGE OF MEDICINE RESEARCH AND ETHICS COMMITTEE (COMREC)

Title of Proposal:	**Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context.**
Short Title:	Employee Assistance Program (EAP) Evaluation Study
Version:	1.1
Submission Date:	**Monday, 06 August 2018**
Program of Study:	Master of Public Health – MPH 2017
Student Name:	Maclean Vokhiwa
Student Number:	M201770074118

Approved by
College of Medicine
28 SEP 2018
(COMREC)
Research and Ethics Committee

EAP Evaluation Study – Maclean Vokhiwa (PI) MPH Research

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[a] Title

Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context.

Short Title: Employee Assistance Program (EAP) Evaluation Study

[b] Investigator(s)

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[i] The College of Medicine - University of Malawi.

[ii] Sponsor:
CORPORATE WELLNESS SOLUTIONS

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[d] Executive Summary: Synopsis

The Type of Research Study:

This is a simple program evaluation study and a quantitative correlational 'pre-post' design will be utilised to achieve the first and second objectives of the study, using structured questionnaire. A qualitative component will be used to highlight related attitudes for the first objective. The objectives are outlined below.

The Problem to Be Studied

A gap exists for local evidence of effectiveness of Employee Assistance Programs (EAPs) in Malawi. Employee Assistance Program (EAP) is a broad class of workplace behavioural interventions designed to address work-productivity issues. EAPs help employees to identify and resolve personal health and emotional issues that may affect job performance(1). Aiming to improve employee workplace wellbeing outcomes, an EAP experiential stress management training in group sessions is implemented as a local EAP intervention. Previous research has demonstrated EAP as a promising strategy for maintaining workplace mental health (2). Recent evidence shows that EAP generates significant relative improvement ($p<0.05$) in five outcomes (absenteeism, presenteeism, work engagement, work distress, and life satisfaction) and is equally effective across contextual factors (3). A difference of 5.28 fewer hours of employee absence from work is reported after EAP, representing 48% relative improvement. More employees were deemed to have more concentration (26%) as well as less stress at work (13%). Although local research has uncovered need for interventions to motivate and support workers(4), Malawi EAP policies lack such evidence at local level. Local evidence on the impact of EAP is required to support policy makers in EAP implementation.

Broad Objective

To establish the effectiveness of an EAP activity on maintaining optimal work-related wellbeing, measured on the Workplace Outcome Suit (WOS)(5).

Specific Objectives:

1. Determine the effects of an EAP activity exposure on optimal WOS scores.
2. Examine moderating factors associated with EAP use and workplace outcomes.

Methodolody:

Study Place(s): The study will take place in three office sites located in three urban areas of the three regions of Malawi where the targeted organization operates, i.e. Blantyre, Lilongwe, and Mzuzu.

Study Population: The study is going to draw from all employees who will attend EAP stress management training sessions that are already planned to be conducted in Blantyre, Lilongwe and Mzuzu offices as part of an existing Employee Assistance Program (EAP). Currently, the organization has a total of 335 employees across these locations with access to onsite EAP training.

Study Period: Depending on when Ethics approval will be granted, participants will be enrolled and pre-test data collected at registration on day of an EAP training planned for a 40-day period between September and October 2018. Post-test data shall be collected at about 30-60 days following training, thus between October and December 2018. Thereafter, necessary data entry, cleaning, analysis, and report writing will be conducted over a period of 8 weeks. Dissertation will be submitted by 14 August 2019.

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Sample Size: EAP-related improvement in workplace wellbeing has been quantified with means before and after EAP exposure(3). For one sample, comparison of two means on two-sided tests and to determine sample size required, for each outcome category two means are compared with 5% significance level and 80% power, with a common standard deviation of 1, and a known finite population of 335. Using Stata/IC V14.1, highest sample size estimate is for the work engagement category (means 3.21, 3.42) at 118. Since 50% post-test response rate is the minimum acceptable level for such a pre-post EAP evaluation(6), 236 employees would be targeted for pre-test. However, resulting sampling fraction is > 0.5 and thus require downward adjustment using formula 'Sample = (Sample Size X Population)/(Sample Size + Population – 1)'(7). Thus, sample of **139** employees is effective, for all five outcomes with **70** (50%) as post-test response minimum.

Data Collection: Pre-study consultative meetings with targeted organization will discuss data collection process and address key questions. Employees will be sensitized during regular staff meetings. Special permission for employee participation will be sought from management. Eligibility will be confirmed before information and consent forms are administered. Self-administered questionnaires will then be distributed to obtain data on sociodemographic 'moderating' factors and aspects of work-life experiences during the past 30 days.

Expected Findings and Their Dissemination

A comprehensive report describing the evaluation process and discussing effectiveness of the EAP intervention will be prepared. Observed effects of moderating factors shall be reported. Preliminary results will be discussed with the target organization to determine appropriateness of recommendations. A final report will be submitted as MPH dissertation. Report shall be disseminated at relevant conferences and there is a plan to publish in relevant peer-review journals. Copies of the final report and any published paper(s) or abstracts of papers read at conferences out of the research findings will be submitted to The College of Medicine Research and Ethics Committee (COMREC), college library, and other relevant university committees, through COMREC.

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[e] Introduction and Background Information:

Employee Assistance Program (EAP) is a broad class of workplace behavioural interventions designed to address work-productivity issues. EAPs help employees to identify and resolve personal health and emotional issues that may affect job performance (1). Aiming to improve employee workplace wellbeing outcomes, experiential stress management training in group sessions is implemented as a local EAP intervention. Previous research has demonstrated EAP as a promising strategy for maintaining workplace mental health (2). Recent evidence shows that EAP generates significant relative improvement ($p<0.05$) in all five outcomes and is equally effective across contextual factors (3). A difference of 5.28 fewer hours of employee absence from work is reported after EAP, representing 48% relative improvement. More employees were deemed to have more concentration (26%), less stress at work (13%), more engaged in their jobs (7%), as well as reporting increased sense of wellbeing (22%) after an EAP intervention. Although local research has uncovered need for interventions to motivate and support workers (4), Malawi EAP policies lack supporting evidence at local level.

[i] The Employee Assistance Program – EAP

Employee Assistance Program (EAP) is defined as a broad class of workplace behavioural interventions designed to address work-productivity issues. This program has evolved since it started in the 1940's. In its early stages, the program focused on alcohol use related problems in workplaces(8)(9)(10). Over the years, it has developed to provide a broad range of wellbeing support services targeting organizations, employees and their families(11). It has expanded to provide behavior risk assessment, wellness, mental and physical health promotion(12). The program has evolved to embed organizational interventions for work-life balance including stress management(13). Consequently, the program has consistently developed to provide comprehensive behavioral health resources in support of workplace wellbeing and effectiveness. The international Employee Assistance Professionals Association (EAPA) has thus defined the EAP as "a set of professional services specifically designed to improve and/or maintain the productivity and healthy functioning of the workplace and to address a work organization's particular business needs through the application of specialized knowledge and expertise about human behavior and mental health(1). The South African Branch of the Employee Assistance Professionals Association (EAPA-SA) has specified core functions of the EAP to include (i) training and development of employees seeking to address behavioral or emotional issues that affect job performance; (ii) promotion of service guarantees including confidentiality; (iii) timely risk assessment and short-term interventions;(iv) consultation with work organization;(v) role-player networking; and (vi) monitoring and evaluation of the value/impact of such EAP services relating to the work organization and individual job performance(14). EAP training intervention and impact evaluation are key functions being considered in the current study.

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Recent EAP researchers have demonstrated that EAP bridges public health with workplace behavioral health services(15). These researchers have also highlighted core service areas. From a public health perspective, local Malawi researchers have uncovered the need for interventions to motivate and support workers (4)(16)(17). Specifically, burnout appears to be common among Malawi employees suggesting a need to identify factors and develop prevention for staff (18). Another study identified that 26.5% of Malawian health workers had job satisfaction and motivation problems that affected their performance compared to 18.8% of health workers in Tanzania (19). This study recommended more targeted human resources for health (HRH) strategies to support employees. The current researcher believes that the EAP would qualify for such a human resource for heath targeted strategy for Malawi employees.

In an effort to improve employee workplace wellbeing outcomes, a local organization – which also provides a setting for the current study –, initiated an Employees Assistance Program in June 2016. During an initial baseline assessment involving 127 employees, 41.7% of employees reported to have experienced significant work-related stress in the prior 12 month period (20). Reported stress included workload and deadlines, low motivation and job satisfaction, financial wellbeing challenges, work-life balance, emotional concerns due to relationships, family, and home demands. However, EAP stress management support was not implemented immediately. Alternatively, the organization opted to implement one after another of recommended 5 key action points to address in the year 2017(21). The action points included (i) on-site health screening, (ii) confidential chronic illness management, (iii) employee practical stress management training, (iv), confidential voluntary individual counselling, and (v) employee financial wellness training. Completed health screening identified various employee physical health and emotional wellbeing challenges that are being assisted through existing EAP chronic illness and counselling support(22). During the 2017 end of year staff meeting, employees still reported stress-related challenges that are affecting their workplace wellbeing. Again, issues of concern include workload, deadlines, personal responsibilities, performance expectations, physical work environment, etc. A need still exists for an EAP stress management intervention. An experiential stress management training in group sessions will thus be implemented. However, local evidence for effectiveness of such EAP intervention is lacking. The value or impact of such an intervention has not yet been established in this setting. Furthermore, international EAP researchers have also acknowledged that thorough research to determine the value of EAP activity is overdue (23)(24). This is a major concern for policy makers in the organization as well as the service providers.

[ii] Theoretical Framework of the EAP Experiential Stress Management Intervention

Studies have detailed practical approaches to reduce stress in contemporary work organizations(25)(26)(27)(28)(29). Stress management intervention has been conceptualized as any activity or programme initiated by an organization which focuses on reducing work-related stressors or on assisting individuals to minimize the negative outcomes of exposure to stressors (29). Research has emphasized that organizations can strategically address employee stress by

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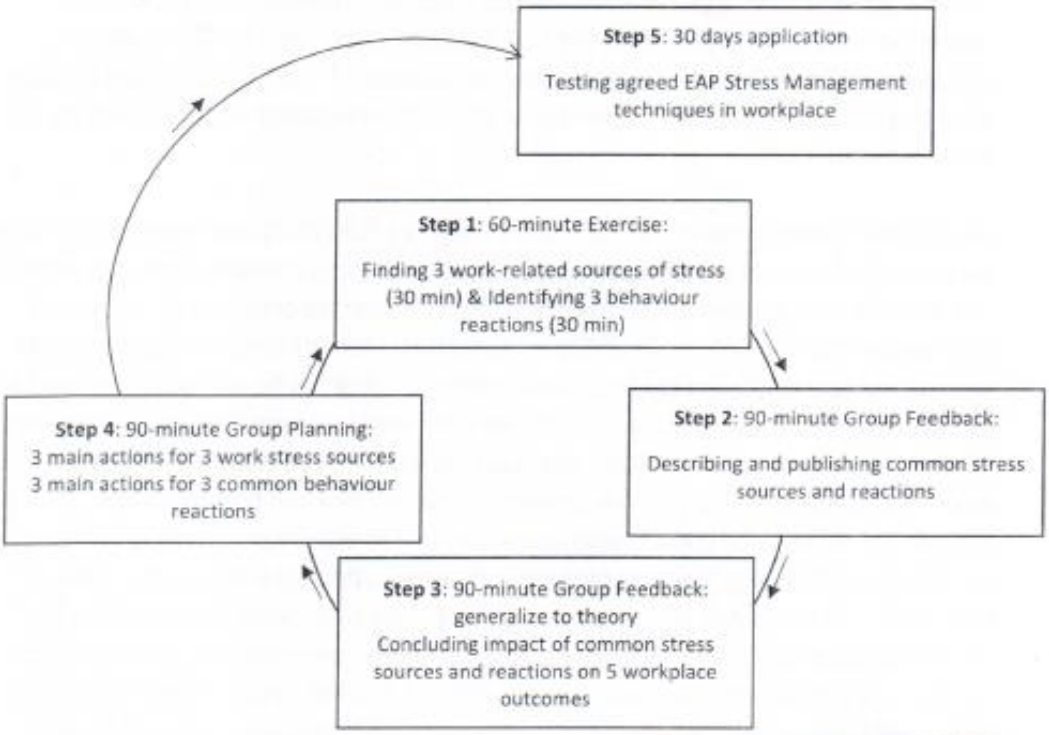
using broader perspectives that demonstrate profound impact on stress-related outcomes(30). Acknowledging that programs vary in objectives, structure, and target groups, comprehensive approaches to stress prevention and management in the workplace have included the EAP at individual level of the organization(31). At this level, stress management EAP intervention provides practical adjustment of sources of stress in the work environment and employee personal behaviors. As such, the EAP stress management intervention to be used for the current study involves practical stages from identification of sources of stress to trying out some new response strategies in dealing with that stress in the specific organization context. To achieve this practical process, an experiential learning model is utilized. This model recommends 5 distinct steps in the learning process, namely (i) concrete experience, (ii) reflect and publish, (iii) generalize to theory, (iv) develop a new response strategy, and (v) test the new response strategy, as expounded by David Kolb's (1984)(32). This model emphasizes the important role of experience in adult learning and defines learning as the process through which knowledge is created by grasping and transforming experience(33). Diagram 1 details these steps in the EAP stress management intervention.

Diagram 1: EAP Experiential Stress Management



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Each participant will be given a Workbook with descriptions to facilitate their progress from steps 1 to 5. The experiential learning will thus be conducted in their usual work environment. This provides a direct opportunity for employees to reflect on how their work environment affects their wellbeing outcomes. Practical EAP planning and immediate implementation of support action provides a pragmatic solution. The study will proceed to evaluate the value of this EAP solution.

[iii] Studies of the Value of EAP

Previous research has demonstrated EAP as a promising strategy for maintaining workplace mental health (2). Efforts to evaluate the value of EAP interventions started during the program's early stages(34). Historically, workplace stress management interventions were found to benefit both employees and their organizations(35). For some time, EAP outcome research has depended on customer satisfaction data (36)(37). Other studies, focusing on clinical outcomes, have demonstrated that EAP services have impact on reduction of symptoms and improvement in functioning(38). As such, EAP-specific studies of impact evaluation have provided different estimates of improvement. This variability is probably related to program structure and utilization rates (12), use of different methods and measures (39), what constructs the tests were measuring, and lack of EAP-specific appropriate standardized measures. However, even at this stage researchers were able to demonstrate that EAP impact on absenteeism and presenteeism increased work productivity by achieving a return of between 5.17 and 6.47 US dollars for every dollar that was spent on EAP(40). Determination of return on investment (ROI) is outside the scope of the current study.

The Chestnut Global Partners (CGP) Workplace Outcomes Suit (WOS) was developed to address the variability challenges in EAP impact evaluation(5). It is an open access instrument for empirical EAP research. Its paper-and-pencil self-administration modality has been validated to evaluate EAP services and interventions. The WOS measures 5 core constructs that are popular in EAP program evaluations. The first construct, '*absenteeism*', is defined as the total number of hours an employee is absent due to personal problems taking the employee away from work. The second construct, '*presenteeism*' measures the decrease in productivity even though the employee is not absent but not working at optimum due to personal problems. The third construct, '*work engagement*', refers to the extent to which the employee is invested or passionate about his or her job. '*Workplace distress*' is the fourth construct and examines the degree of anxiety or stress at work. Lastly, '*life satisfaction*' addressed one's general sense of wellbeing. Experimentally, the WOS has detected EAP-based reductions in absenteeism and presenteeism that were mediated by reductions in symptoms of depression and anxiety(41). A further, experimental study using the WOS found that employees exposed to EAP intervention had significantly greater reductions in absenteeism ($b = -.596$, $p = .001$) and presenteeism ($b = -.217$, $p = .038$), but not workplace distress ($b = -.079$, $p = .448$), than did non-EAP employees(42). Nonetheless, there has been debate on factors that could moderate such EAP outcomes presenting competing views on the size and direction of effects of age, gender, marital status, occupation types, language used, etc. A recent study has concluded that there is equitable distribution of benefits among different types of

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employees where no demographic attribute modified the extent of problem resolution (i.e. benefit) after EAP intervention(43). This finding supports observations that the WOS is able to detect impact of EAP interventions across employees of different cultural and contextual backgrounds. A study involving 670 employees from 26 local and multinational companies in China demonstrated that an EAP intervention improved four out of the five outcomes (except work engagement) from pretest to posttest (44). The international EAP field is now privileged to have latest data and information about the significant, positive results of outcome measurement with the WOS. A most recent pooled EAP evaluation involving pretest and posttest of 16,792 cases from different EAP services in multiple countries provides such valuable information. This recent evidence using the WOS shows that EAP generates significant relative improvement ($p<0.05$) in all five outcomes and is equally effective across contextual factors (3). A difference of 5.28 fewer hours of employee absence from work is reported after EAP, representing 48% relative improvement. More employees were deemed to have more concentration (26%), less stress at work (13%), more engaged in their jobs (7%), as well as reporting increased sense of wellbeing (22%) after an EAP intervention. Evidently, research has confirmed the value of EAPs to help employees address personal and work-related concerns that are affecting job performance.

[f] Rationale/Justification for The Research Project:

EAP interventions may help Malawian work organizations in optimizing workplace outcomes in ways that have not yet been locally assessed. By providing evidence on the value of an EAP intervention, this planned study will provide data on the impact and whether participation in an EAP activity is predictive of improvement in employee work-related wellbeing. This evidence will thus support policy makers to enhance and implement EAPs within Malawi organizations.

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[g] Objectives of the study

[i] Broad

To establish the effectiveness of an EAP activity on maintaining optimal work-related wellbeing, measured on the Workplace Outcome Suit (WOS) (5) in a local employee population.

[ii] Specific

1. Determine the effects of an EAP activity exposure on optimal WOS scores.

2. Examine moderating factors associated with EAP use and workplace outcomes.

[h] Methodology

[i] The Type of Research Study

Correlational 'Pre-Post' Design

Quantitative correlational 'pre-post' design will be utilised for objectives 1 and 2 using structured questionnaire. A qualitative component will highlight related attitudes for objective 1.

This 'pre-post' correlational design allows examination of improvement over time in an employee who is evaluated before and after being exposed to an EAP intervention. The post-test is administered 30 to 90 days after EAP intervention to observe if the intervention has a sustained impact. By focusing on correlation, this design will help the current study to establish whether the specific EAP intervention is associated with improved workplace outcomes. An examination of demographic factors that could moderate this association will substantiate results of this study.

[ii] Study Place

The study will take place in three urban areas of the three regions of Malawi where the targeted organization operates. The organization has 3 office locations. The head Office is in Blantyre and houses executive management, administration and sales personnel. Located in southern Malawi, Blantyre is the second largest city and considered a commercial and industrial capital. The office is located in the center of the city. Servicing the central region of Malawi, the Lilongwe regional office is located in City Centre. Being the largest and capital city, Lilongwe is considered an economic hub for central Malawi. For the northern region, the office is located in Mzuzu. Mzuzu is the third

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largest city and considered a gateway to lake Malawi. All offices are located in a busy central part of town.

[iii] Study Population

The study is going to draw from all employees who will attend EAP stress management training sessions that are scheduled to be conducted in Blantyre, Lilongwe and Mzuzu offices as part of the existing Employee assistance program. Data from a recent EAP activity in this setting, reporting demographics for 232 employees, estimates mean age of 34 years (min 21, max 65) 40% female and 60% male employees. 60% of employees are estimated to be in Blantyre, 34% in Lilongwe and the remaining 6% in Mzuzu. Since EAP training will be conducted in all locations, all employees available at the location have same chance of being included in this study. Currently, the organization has a total of 335 employees across these locations with access to onsite EAP training.

The population characteristics to be studied include distributions of age, sex, type of job activity (department), and level of employment as moderating demographic factors for change in mean workplace outcome scores over time.

[iv] Study Period

Preparation of the proposed study started in October 2017 with EAP consultative meetings at the target organization. Proposal writing started in April 2018 with a 2-page study concept after completion of the MPH Research Methods module. The full proposal has been completed for submission to COMREC in July 2018. Depending on when Ethics approval will be granted, participants will be enrolled and pre-test data collected at registration on day of an EAP training planned for a 40-day period between September and October 2018. Post-test data shall be collected at about 30-60 days following training, thus between October and December 2018. Thereafter, necessary data entry, cleaning, analysis, and report writing will be conducted over a period of 8 weeks. Dissertation will be submitted by 14 August 2019. Therefore, the total time to complete the study is 23 months. The ***Study Timeline Gantt Chart*** is shown below.

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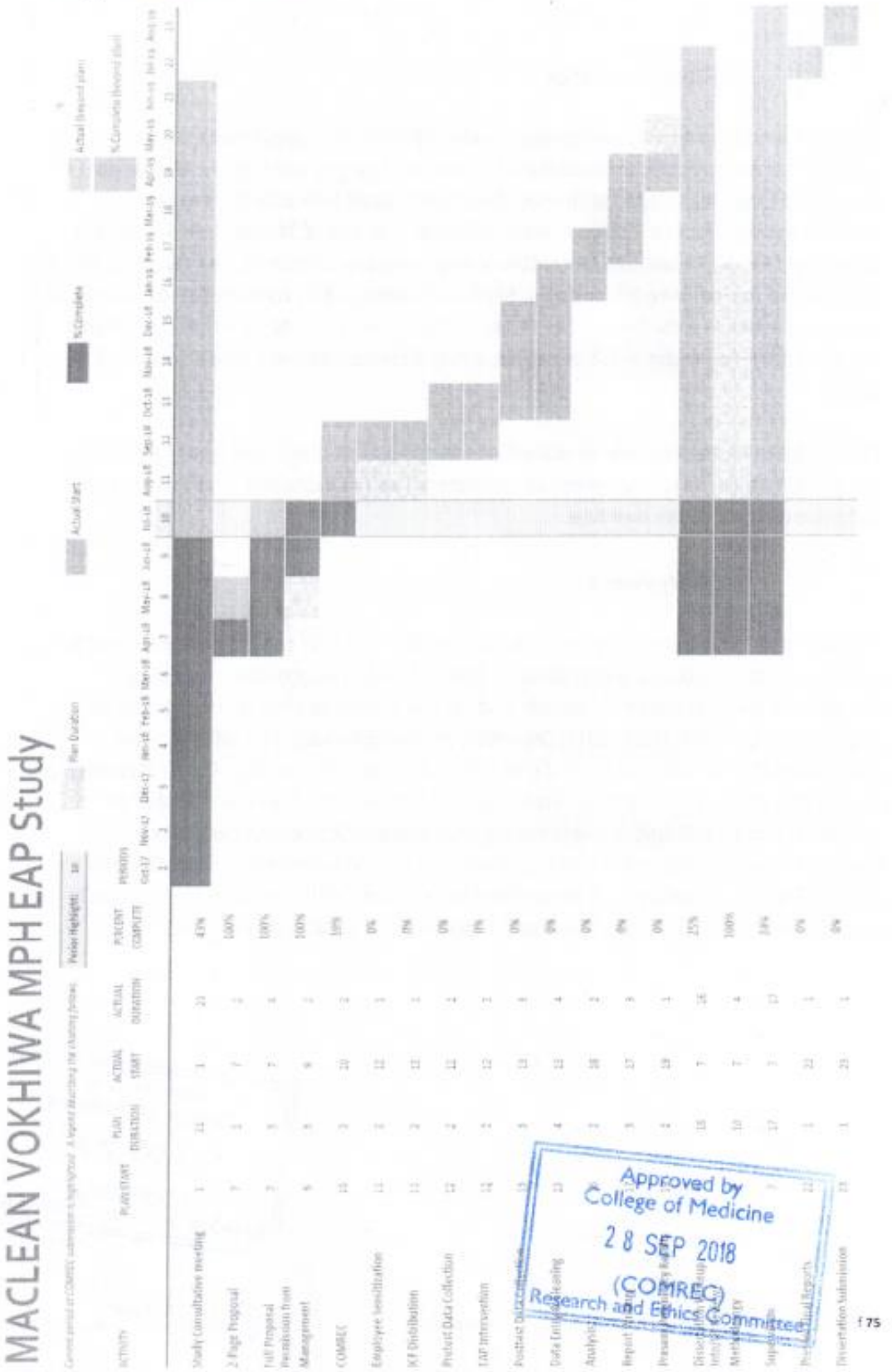
Version 1.1 05/09/2018

Study Timeline Gantt Chart



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[v] Sample Size

Sample size calculation summary

EAP-related improvement in workplace wellbeing has been quantified with means before and after EAP exposure (3). For one sample, comparison of two means on two-sided tests and to determine sample size required, for each outcome category two means are compared with 5% significance level and 80% power, with a common standard deviation of 1, and a known finite population of 335. Using Stata/IC V14.1, highest sample size estimate is for the work engagement category (means 3.21, 3.42) at 118. Since 50% post-test response rate is the minimum acceptable level for such a pre-post EAP evaluation(6), 236 employees would be targeted for pre-test. However, resulting sampling fraction is > 0.05 and thus require downward adjustment using formula 'Sample = (Sample Size X Population)/(Sample Size + Population – 1)'(7). Thus, sample of 139 employees is effective, for all five outcomes with 70 (50%) as post-test response minimum.

Description of sample size calculation

The sample size calculation process is outlined below. In a most recent EAP counseling outcomes study comparing improvement after EAP Counseling for different EAP outcomes (3), pre-test and post-test means were found to be; absenteeism (10.92, 5.64), Work presenteeism (3.29, 2.42), Work distress (2.20, 1.92), work engagement (3.21, 3.42), and Life satisfaction (3.03, 3.70). Evidence shows that calculation of optimum sample size is an essential component of any research (45)(46). Important assumptions for this study include the possibility of population differences in the outcome variables (variability), the possibility of rejecting a true null hypothesis or accepting a false null hypothesis (type I and type II errors), and the minimal difference in the pre-test and post-test means that this study wishes to detect (effect size).

To ascertain the first assumption, this study is using the pre-test and post-test means determined from the related outcome study above. Means are being used to estimate population variance of each of the 5 outcomes (absenteeism, presenteeism, work distress, work distress, and life satisfaction) before and after the EAP intervention. A common standard deviation is assumed in this case.

To ascertain the second and third assumptions, this study decides to set level of confidence at 5% that the current sample would lie outside the stated means and power is set at 80% to determine minimum sample size so that the study can detect minimum effect. The current study has a known population of 335 employees. As such, for one sample, comparison of two means on two-sided tests and to determine sample size required, for each outcome category two means are compared with 5% significance level and 80% power, with a common standard deviation of 1, and a known finite population of 335. Using this calculation, the table below shows quantitative sample size determination from Stata.

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Table 1: Sample size determination for each outcome variable

Outcome	Pre-test mean	Post-test mean	Alpha	Power	Standard deviation	Finite population	Estimated Sample size
Absenteeism	10.92	5.64	0.05	0.80	1	335	**3**
Work presenteeism	3.29	2.42	0.05	0.80	1	335	**13**
Work distress	2.20	1.92	0.05	0.80	1	335	**79**
Work engagement	3.21	3.42	0.05	0.80	1	335	**118**
Life satisfaction	3.03	3.70	0.05	0.80	1	335	**19**

This calculation determines that to detect 'inclusive' minimum effect across all 5 outcome categories, a sample size of 118 would be effective. This is because 118 is the highest sample size estimate appearing for one of the outcomes (work engagement).

Further considerations are made to achieve a more appropriate sample size. Because outcomes are being measured after the intervention is complete, participants will have to complete a test at baseline and another test at follow-up. As such, statistically meaningful follow-up post-test is a major factor in the success of this impact evaluation. A low response rate at post-test will greatly compromise effect size and significantly reduce statistical strength for the study. EAP evaluation research recommends that an 80% follow-up response rate is desirable and that 50% is the minimum acceptable level(6). This study targets the 50% minimum level. Therefore, to maintain an effective minimum of 118 as 50% at follow-up the study would need a minimum of double this number (236 employees) at baseline pre-tests assessment.

However, the finite know population of 335 limits the study's sampling flexibility when sampling fraction is considered. Assuming that all 335 employees in the study population have a known non-zero probability of being included in the sample, where each employee has the same chance of being included, the sampling fraction would be 0.7 (236 divided by 335). Reasonably, there is an expectation to be able to sample fewer participants when there are only 335 employees, as opposed to sampling from a large population. To avoid oversampling where the resulting sampling fraction of 0.7 is > 0.05 and thus require downward adjustment using formula 'Sample = (Sample Size X Population)/(Sample Size + Population – 1)'(7), a more reasonable sample size of 139 participants is determined. Thus, sample of **139** employees is calculated to be effective, for all five outcomes with **70** (50%) as post-test response minimum. Following these sample size calculations, the study purports to maintain assumed outcome variability, avoid statistical hypothesis testing errors, and maintain statistical power.

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Recruitment: Selection and Inclusion Criteria in this Sample

Since all 335 employees in the study population have a known non-zero probability of being included in the sample and each employee has the same chance of being included, every employee who register to attend the stress management training and consents to participate in evaluation will be recruited.

There is a need for participant consent. The study will involve employees who are willing to participate in the evaluation of their EAP activity. The correlational pre-post design entails that these participating employees will provide answers to the study questionnaires at the beginning of the EAP stress management training and again after 30 days following completion of training. As such, written consent will be required for these participants to provide identifying contact information. This consent will specify that a follow-up EAP staff member will contact them by phone or in person for them to complete a follow-up post-test. This consent will seek such permission to make this contact 30 days later. However, employees will not be offered any incentive to participate in the evaluation and will be allowed to drop out of the evaluation and/or EAP training at any time. Alternatively, the consent will guarantee anonymity and assure participating employees that their employer, managers, or supervisors are not allowed to view responses. The consenting procedure is outlined in the data collection section below.

[vi] Data Collection:

Pre-study consultative meetings with targeted organization have discussed data collection process and addressed key questions. Employees will be sensitized during regular staff meetings. Special permission for employee participation will be sought from management. Eligibility will be confirmed before information and consent forms are administered. Self-administered questionnaires will then be distributed to obtain data on sociodemographic 'moderating' factors and aspects of work-life experiences during the past 30 days.

The Informed Consent Form (ICF) details study information on 4 pages and a certificate of consent in 1 page (**Appendix 1A and 1B – English and Chichewa versions of the *Informed Consent Form - ICF***). A signed copy of the certificate of consent will be collected from each participant.

Data will be collected through a self-administered paper-and-pencil method where participants will complete the questionnaire during an office visit. The study will collect data on the full 25-item, five outcome scales of the Workplace Outcome Suit (WOS) (**Appendix 2A & 2B English and Chichewa versions of the *WOS questionnaire***). This WOS is a short, 1-page, precise and easy to administer survey that collects EAP-specific outcome information both at the beginning and after an EAP intervention. It asks about five keys aspects of work-related wellbeing. These are absenteeism patterns, presenteeism, workplace distress, work engagement and life satisfaction. Each of these scales has five questions. Only, absenteeism questions require the respondent to fill

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in the blanks by writing the number of hours they were absent due to stress related challenges. The other four scales, constituting 20 items in total, require the respondent to rate himself/ herself on a Likert-type response of: 1 = strong disagree, 2 = somewhat disagree, 3 = neutral, 4 = somewhat agree, and 5 = strongly agree to the statements of the items. This is quantitative information and takes five to ten minutes to complete.

The study will also collect data on the following moderating factors: age, sex, type of job activity (department), and level of employment. EAP research has demonstrated the possibility that change in workplace outcomes can be affected by different factors. This quantitative information will be collected on another 1-page (**Appendix 3 A & 3 B – English and Chichewa versions of the *Demographic Factors Questionnaire***). The respondent will be required to write their comment regarding their attitude towards association of EAP and outcome in their context at the end of the questionnaire. This will provide qualitative information to support discussion of results. This will take less than five minutes to complete.

Therefore, printed 5-page ICF and 2-page questionnaire are required. The ICF will be distributed all employees 1 week before the EAP training for their review and consideration. During the day of EAP training, the investigator will be available to provide study-related clarifications at the beginning of training. The signed 1-page certificate of consent will be collected by an EAP officer. The 2-page questionnaire will then be distributed for self-completion by employees who signed consent. This is pretest data.

Participant Tracking: At this stage, the EAP officer will collect information and permission to make contact a months later. The information will be recorded on a separate register, matched with assigned ID numbers, and will include date of training, location (Blantyre, Lilongwe, Mzuzu), participation in EAP training (YES or NO), and participant's assigned study ID number. Participants will be asked to keep their study ID number for use at the posttest stage 30 days later. All employees will be contacted through ordinary workplace communication channels (notice boards and staff group emails) 30 days after EAP training. The purpose of this communication is to remind respondents to complete the follow-up questionnaire. Participants will then use their previously assigned evaluation ID numbers.

Posttest data will be collected 30-60 days after EAP training. At follow up, all respondents will be contacted by an EAP officer to complete the 2-page questionnaire, again. Using the unique ID number, completed posttest questionnaires will be collected and matched with appropriate pretest questionnaires.

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[vii] Data Management and Analysis

Data Management

Checking of missing data will be conducted at point of collection by EAP officers. The officer will confirm that the responses are completed and that the identification number is on the questionnaire when each participant submits their survey. Investigator will check for errors at end of each day.

Data will be double-entered into a MS Access database, organized in an excel spreadsheet before being exported to Stata version 14 (or SPSS version 20) for analysis. Data will be arranged by participant where each participant's information will be in a single line. Consequently, there will be 31 columns of data including participants ID number in the first column and verbatim of comment in the last column. Since the calculated sample size is 139, there will be about 139 rows.

Data Transformation

Once the data has been cleaned and confirmed in a spreadsheet, scoring for the 5 subscales will be completed by the investigator using Stata. For Absenteeism, Presenteeism, Work Engagement, and Workplace Distress, this means simply adding together the five items in each scale into a single score. For example, Workplace Distress subscale score is simply the sum of the five items under workplace distress section on the WOS questionnaire = thus, Q21 + Q22 + Q23 + Q24 + Q25. For the Life Satisfaction subscale, questions 17 and 20 are scored in reverse so that 5 becomes 1, 4 become 2, 3 stays the same, 2 becomes 4 and 1 becomes 5. Thus, the subscale score for 'life satisfaction' will be calculated using these reversed scores.

Data for moderating factors will be quantitatively coded. Age is a continuous variable and will be recorded in years and Date of Birth (DOB) will be used to verify age. Sex, as unordered category variable, will be coded as 1 = female, and 2 = male. 'Type of job activity/department' is in unordered categories and will be coded as 1 = EXCO (Executive Committee), 2 = Finance, 3 = Marketing & Communication, 4 = Legal/Risk & Compliance, 5 = Sales, 6 = IT (Information Technology), 7 = Operations, 8 = Human Resources & Administration, 9 = Business Development, 10 = Support Staff, and 11 = Projects & Procurement. 'Level of employment' is an ordered category variable from low to high level and will be coded as 1 = Levels J & K (Operative/ Clerical), 2 = Level L (Supervisory/ Team leaders), 3 = Levels M & N (Manager), 4 = Level O (Senior Manager), and 5 = Levels P & Q (Executive Management).

Participant comment providing qualitative information will be recorded and maintained as verbatim.

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Table 2: Summary Data Types and Response Description

Variable	Data type		Description/ Range
ID	Identifier	**Serial number (001 to +139) ***	
Age	Quantitative	Continuous	± 20 to ± 65
Sex	Categorical	Nominal (unordered category)	1 = female 2 = Male
Type of Job activity (department)	Categorical	Nominal (unordered category)	1 = EXCO (Executive Committee) 2 = Finance 3 = Marketing & Communication 4 = Legal/Risk & Compliance 5 = Sales 6 = IT (Information Technology) 7 = Operations 8 = Human Resources & Administration 9 = Business Development 10 = Support Staff 11 = Projects & Procurement
Employment level	Categorical	Ordinal (ordered category)	1 = Levels J & K (Operative/ Clerical) 2 = Level L (Supervisory/ Team leaders) 3 = Levels M & N (Manager) 4 = Level O (Senior Manager) 5 = Levels P & Q (Executive Management)
Absenteeism item scores(Q1-Q5)	Quantitative	Continuous	0 and above hours
Presenteeism item scores (Q6-Q10)	Quantitative	Continuous	0 to 5
Work Engagement (Q11-Q15)	Quantitative	Continuous	0 to 5
Life Satisfaction (Q16-Q20)	Quantitative	Continuous	0 to 5
Work Distress item scores (Q21-Q25)	Quantitative	Continuous	0 to 5
Absenteeism **Subscale Score***	Quantitative	Continuous	0 and above hours

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Presenteeism, Work Engagement, Life satisfaction and Work Distress **Subscale Score***	Quantitative	Continuous	0 to 25
Comment	Qualitative	String variable	
*** limited by sample size** **** these subscale score will be calculated at during data transformation (scoring)**			

Data Analysis

Stata version 14 or SPSS version 20 will be used for data cleaning and analysis, depending on availability of computer program and expertise. Using a generalized linear model (GLM), Means and Standard Deviations (SD) will be recorded for individual item and subscale scores. Proportions will be treated as binary responses where analysis will focus on generating prevalence of the five outcomes plus corresponding 95% confidence intervals for each time point. Paired t-tests will compare means and proportions, and simple linear regression will be used to assess effect of moderating factors. Change over time will be tested using a general linear model (GLM) procedure with time as repeated measures approach with two time-points (pretest vs posttest).

Calculating Descriptive Statistics: Objective 1

For the purposes of evaluation, descriptive statistics, i.e. mean, its 95% Confidence Interval (CI) and standard deviation will be calculated for each individual item and subscale scores of the WOS for both pretest and posttest time points.

Proportion of employees achieving optimum WOS scores and corresponding 95% confidence intervals will be calculated for subscale scores of the WOS for both pretest and posttest time points. To determine proportions, the subscale scores, which are on a continuous scale, will be converted to a binary variable using a predetermined cut-off at 50 %. The table below summarizes cut-offs.

Table 3: Cutoffs converting subscale continuous scores to binary variables

Scale	Description of Optimal WOS subscale score (Cut-off points)
Absenteeism*	Defined as values ≤ (equal to or less than) 50% of total absenteeism subscale score
Presenteeism*	Defined as values ≤ (equal to or less than) 50% of total presenteeism subscale score
Work engagement**	Defined as values ≥ (equal to or greater than) 50% of total work engagement subscale score

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Life satisfaction**	Defined as values ≥ (equal to or greater than) 50% of total life satisfaction subscale score
Workplace distress*	Defined as values ≤ (equal to or less than) 50% of total workplace distress score
** Lower score is desired for absenteeism, presenteeism, and workplace distress subscales* ***higher score is desired for work engagement and life satisfaction subscales*	

Statistical Inference - Hypotheses Testing: Objective 1

The general hypothesis for the study is that: "**There is a difference in workplace outcome scores in employees before and after exposure to an EAP activity**". This hypothesis will be tested for each outcome measure using paired t-tests to compare means and proportions. Main steps are recommended for a method to decide whether data are consistent with the 'null hypothesis'(47). The study will conduct two-sided hypothesis tests and decision is predetermined as follows:

Null Hypothesis (Ho) is specified as: there is no difference in workplace outcome scores in employees before and after exposure to and EAP activity.
Alternative Hypothesis (Ha) is specified as: there is a difference in workplace outcome scores in employees before and after exposure to and EAP activity.

The study significance level alpha (α) is set at 0.05 ($p \leq 0.05$). If the probability of observing a difference as extreme or more extreme is as small as 0.05, the result will be considered statistically significant and the null hypothesis will thus be rejected.

The study's key assumption on the data is that the sample systematically estimated from the target population allowed members an equal known non-zero chance of being included in the study population. Data is collected from a probability sample. A test statistic will be derived from this data using formula (point estimate – hypothesized value/ standard error)(48). The resulting statistic will be compared to sampling distribution assuming that the null hypothesis (Ho) is true. The student's t distribution (t-test) will be used for means and the normal distribution (z-test) for proportions where necessary. P-values will be obtained using appropriate statistical tables. These p-values will help the study to decide for each outcome measure. The study will thus reject the null hypothesis (Ho) and accept alternative hypothesis (Ha) for any outcome measure if the resulting respective p-value $\leq \alpha$ (i.e. p-value ≤ 0.05). The study will not reject the null hypothesis (Ho) for any outcome measure if the resulting respective p-value $> \alpha$ (i.e. p-value > 0.05).

To make a program evaluation decision on whether EAP activity has had an effect on any of the workplace outcomes measured, the study's original research question will be considered in light of these statistical decisions.

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Statistical Inference - Examining Moderating Factors at Each Time Point: Objective 2

A general linear model (GLM) of simple linear regression will be used to examine the effect of moderating factors against each of the outcome subscales at each time point. The question to answer is: *"Is there a relationship between outcome subscale scores (absenteeism, presenteeism, work engagement, life satisfaction, or work distress) and selected moderating factors (age, sex, type of job, or level of employment) among employees before and after exposure to an EAP intervention?* Alternatively, *can an employee's age, sex, job type, or employment level be used to predict his/her WOS subscale scores*?

The outcome (dependent variable) is continuous as it can have any one of possible values between 0 to 25 (absenteeism can have an infinite number of possible hours). The study will examine if there is a direct association (correlation) between the workplace outcome variables and age, sex, type of job/Department, or employment level of employees. Specifically, analysis will test if the outcome variable is influenced by any of these four moderating factors. Regression equation ($Y_i = \alpha + \beta X_i + \varepsilon_i$) will model the relationship between the outcome variable (for each outcome dimension) and each of the moderating factors. The table below outlines how the variables fit in this model.

Table 4: Regression equation ($Y_i = \alpha + \beta X_i + \varepsilon_i$) examining moderating factors

	Variable	Description
Y_i	WOS subscale score: Absenteeism, Presenteeism, Work engagement, life satisfaction, or work distress	Continuous response, outcome variable Dependent, predicted variable
X_i	Moderating factor: Age, sex, job type, or employment level	Explanatory variable Independent, predictor variable
α	Interpretation parameter - intercept	Regression coefficient Unknown parameter to be estimated Indicating that the relationship will only be limited to the observed values of scores and moderating factors
β	Interpretation parameter - slope	Regression coefficient Unknown parameter to be estimated Estimating the magnitude of influence of a moderating factor (X) on outcome variable (Y)
ε_i	Interpretation parameter - error	Indicating how well this regression model fits the observed data

The effect will be examined at 0.05 significance level and the p-value will be reported for each moderating factor.

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Statistical Inference - Moderating Factors of Improvement Over Time: Objective 2

A further analysis will explore if change over time from before to after EAP intervention will be moderated by these factors. This change over time will be tested using a general linear model (GLM) procedure with time as repeated measures approach with two time-points (pretest vs posttest). The question to answer is: *to what extent is the improvement over time in each of the five WOS dimensions different for the moderating factors of age, sex, type of job, and employment level?*

Relative improvement over time for the WOS subscales is calculated by taking the difference between the Pre-test score minus the Post-test score and dividing that raw difference into the Pre-test score to yield a % (3). This is recommended in the most recent EAP outcome evaluation report. Acknowledging the degree of variance around the different means and the need to standardize the different rating scales, the report recommends that estimates of statistical effect size offer a way to more fairly compare the results of the five WOS scales. This analysis will thus calculate the *partial eta squared* version of effect size from General Linear Model (GLM) on repeated measures test results as recommended. This estimate can range from 0 to over 1.00; a small size effect is 0.02 to 0.12; a medium size effect is 0.13 to 0.25; and a large size effect is 0.26 or greater. More specifically, this analysis will determine if the *interaction effect* of time and age, sex, job type or employment level will be significant beyond chance and how big the effect size will be for each of these moderating factors.

Analysis of Qualitative Comment: Support for Objective 1

The qualitative question asks: *How do you feel (or think) participation in this experiential EAP stress management activity impacts your work-related well-being?* Responses to this question will be recorded verbatim to provide qualitative information. A quick step-by-step thematic networks analysis technique recommended for systemization and presentation of qualitative analyses will be applied to this data(49). Themes will be identified and reported in summary to support whether employees feel that exposure to an EAP activity has an impact on their work-related wellbeing in this setting.

[viii] Results Presentation

Summary of employees' age will be presented using a Box-and-Whisker plot. Summaries of employees' sex, job type, and employment level categories will be presented using pie charts that will show percentages.

Descriptive statistics results will be presented in tables. These tables will display number of sampled population (n), means, standard deviations, proportions, and 95% Confidence Intervals (CI) for each individual item and subscale scores of the WOS for both pretest and posttest time points.

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Hypotheses testing results will be presented in tables. These tables will display number of sampled population, type of test, significance level, test statistic, sampling distribution used (t-test or z-test), and the probability value (p-value) for each outcome measure.

Scatterplot of data with quantities and showing respective regression equation lines will present regression results for moderating factors. A supporting table will highlight the specific outcome variable, moderating factor, interpretation parameters, significance level and the respective probability value (p-value) for each moderating factor.

Tables will also be used to present results of moderator factors on change over time in the five outcomes. These tables will display number of sampled employees (count), pretest and posttest mean, relative improvement percentage, time effect size (eta2), description of time effect size and interaction with each moderating factor.

Themes from qualitative information will be presented in a figure. This figure will display a thematic network of global, organizing and basic themes for employees' perceived impact of EAP intervention in the setting.

[ix] Dissemination of the Results

A comprehensive report describing the evaluation process and discussing effectiveness of the EAP intervention will be prepared. Observed effects of moderating factors shall be reported. Preliminary results will be discussed with the target organization to determine appropriateness of recommendations. A final report will be submitted as MPH dissertation. Report shall be disseminated at relevant conferences and there is a plan to publish in relevant peer-review journals.

A copy of the final report and any published paper(s) or abstracts of papers read at conferences out of the research findings will be submitted to each of the following: -

- The College of Medicine Research and Ethics Committee (COMREC)
- College of Medicine Library
- The Health Sciences Research Committee (through the COMREC Secretariat)
- The University Research and Publication Committee (URPC) (through the COMREC Secretariat)

Publication Policy

Any data published in the peer-reviewed journal will protect the identity of the subjects and the organization. Investigators who have made a substantial contribution will be co-authors on publications. The organization will subsequently have the right to publish their data individually. The report will be integrated, and through relevant professional bodies such as Employee Assistance Professional Association (EAPA), EAP South Africa Branch (EAPA-SA), Malawi Mental

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Health Association, Malawi Association of Counsellors, and Institute of People Management in Malawi (IPMM), will be disseminated to policy makers.

[i] Ethical Considerations

Declaration of Helsinki

The Investigator will ensure that this study is conducted in compliance with the current revision of the Declaration of Helsinki (Brazil 2013)(50). Specifically, this research protocol is being submitted to the College of Medicine Research Ethics Committee (COMREC) for consideration, guidance, and approval. Risks and benefits are outlined where emotionally vulnerable participants will be directly supported. Participation is only by voluntary informed consent where every precaution is being taken to protect anonymity and confidentiality of identifying participant information.

ICH Guidelines for Good Clinical Practice

The Investigator will ensure that this study is conducted according to any National Regulations and that it will follow the principles of the ICH Guidelines for Good Clinical Practice 1996(51). This includes management of essential documents. It is the responsibility of the Principal Investigator (PI) to ensure accuracy, completeness, legibility and timeliness of all data and study related procedures. Essential documents will be filled according to the stage of the study i.e. pretest and posttest. The Principle Investigator (PI) has established and will maintain a Study Master File which will permit ethical evaluation of this study where necessary.

Study Design Ethics

The quantitative correlational 'pre-post' test design being used in this study is observational. Using interviews, data will be collected on sensitive private personal information and demographic information. Linking such data presents a unique ethical challenge. Privacy, description of data collection process and questionnaire, confidentiality of collected data, and the informed consent process is very key to this study. This is why the data collection questionnaire will only use Unique Identifier (ID) numbers and no names. However, every employee who comes to attend EAP training registers his/her attendance using a registration form (**Appendix 4 – EAP Training Attendance Register**). Even this form will not record identifying contact information. Nonetheless, it is important to track participants at the posttest stage of the study. As such, the attendance register will record date of training, location (Blantyre, Lilongwe, Mzuzu), participation in EAP training (YES or NO), and participant's assigned study ID number. As such, it is the PI who will assign the Identifier Numbers (IDs) at random to the employees who consent to participate in the actual study. No other person within or outside the study will access the 'linking' information. Participants will be asked to keep their study ID number for use at the posttest stage 30 days later. All employees will be contacted through ordinary workplace communication channels (notice boards and staff group emails) 30 days after EAP training. All employees will be contacted through ordinary workplace communication channels (notice boards and staff group emails) 30 days after EAP training. The purpose of this communication is to remind respondents to complete the follow-up questionnaire.

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Permission and Approvals

Permission from the targeted organization has been sought (**Letter 1 – Request for Permission Sent to Organization**) prior to the initiation of the study and authorization to conduct the study among employees has been obtained from Executive Management (**Letters 2 & 3 - Permission to Interview Employees**). The study protocol will be submitted for ethical review to the College of Medicine Research and Ethics Committee (COMREC) in July 2018. Voluntary individual informed consent to participate will be sought from employees. The Informed Consent Form (**Appendix 1 A & 1B - Informed Consent Form (ICF) – English and Chichewa**) shall be administered to all participants. For confidentiality, anonymity shall be guaranteed by using only unique ID identifier numbers on data collection forms. Individual permission will be sought for post-test tracking and contact details recorded in a separate register. Employers are not allowed to view responses. Vulnerable employees shall be referred to existing counselling support. Adequate consultation before and after preliminary results shall minimize management concerns regarding 'identifying' confidential outcome data.

The Investigators will submit and, where necessary, obtain approval from the above research ethics committee for all substantial amendments to the original approved documents.

Risks

By participating in this evaluation, it is possible that individual participating employees will be at greater risk than they would otherwise be. There is, for example, a risk of identifying and/or exposing their emotional or stress challenges. If, however, the group stress management session does not assist such employees and their concerns remain in 48 hours, they will be referred to existing free individual counselling support which is already offered by their organization's EAP. We trust this will be helpful.

While the possibility of such risk happening is very low, the study team and the participants will still need to be aware of the possibility. The study team will try to decrease the chances of such events occurring.

Benefits

By participating in this evaluation, participants will have the following benefits: any immediate work-related stress concerns will be addressed. If any participant feels vulnerable during completion of pre-test, training, or completion of post-test, he or she will be referred to free confidential individual counselling. Their participation is likely to help us to know whether the EAP intervention improves workplace wellbeing and life satisfaction of employees in their organization. There may not be any benefit to the society at this stage of the evaluation, but future generations are likely to benefit.

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Participant Engagement

During planning and preparation of the study, discussions were conducted and information provided to executive management of the target organization through meetings. This is in keeping with the norms within the target organization and follows the collaborative spirit of professional Employee Assistance Program (EAP) practice. The objectives and procedures of the study conduct have been explained to Executive Management of potential participating employees. It has been explained that this will be implemented as an integral part of the currently running internal employee assistance program and, as such, study procedure will not disrupt their ordinary work processes. Permission to include their employees in the study has been sought. Written permission for including employees in the study has been granted and is attached to this protocol.

A copy of the informed consent will be provided to Executive Management for open discussion. The results of the EAP stress intervention will be explained, as well as the purpose of the current assessments – direct program evaluation. The explanation will lay out the scientific value of this evaluation study, the potential value of the data to informing the management /support of the future stress-related workplace wellbeing outcomes found, and will outline the potential benefits or risks of participation. The choice of the Workplace Outcome Suit (WOS) as the assessment tool will be explained very clearly, and questions and answer sessions will be held on this aspect, so that the reliability of this tool is understood and accepted before the study begins. The system for record keeping and feedback that will preserve confidentiality will be explained to Management and employees.

At the end of stage 1 (Pre-test and EAP stress training), management and employees concerned will be informed and the next stage (of post-test assessment) will be described. Appointments will be made with each participating employee and their permission will be obtained to conduct the follow-up tests. In particular, information EAP contacts will also be provided for use by any employee who might feel vulnerable and would like to access direct free individual counselling support at any time in the period before post-test. In particular again, information will be shared that post-test assessments will be similar to the pre-test just completed but there will be no training. As such, less time will be required. Employees will have explanations of the time requirements.

Individual consent will be obtained prior to the commencement of any assessment. For this purpose, employees will be approached by the study team to be asked for their consent to participate in the evaluation study. The Informed Consent Form (ICF) will be in both English and Chichewa as these are the official and local languages used in the organization.

Investigators involved in this study have no personal or financial conflicts of interest. Should this arise, they are required to disclose such conflict. Employees are able to decline freely participation in this study.

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Incentives: Reimbursements

Employees will not receive money or any special gifts to participate in this evaluation. However, as is normal practice when employees attend meetings and training within this workplace, they will have water and snack refreshments during the first day of group EAP training.

Confidentiality

With this evaluation, something out of the ordinary is being done in this organization. It is possible that if other employees in the organization are aware that their colleagues are participating, they may ask questions. We will not be sharing the identity of those participating in the evaluation.

The information that we collect from this evaluation project will be kept confidential. Information about employees that will be collected during the evaluation will be put away and no-one but the researchers will be able to see it. Any information about the participant will have a unique number on it instead of their name. Only the researchers will know what their matching number is and the Principal Investigator (PI) will lock that information up with a lock and key. It will not be shared with or given to their employer, manager, supervisor, or anyone except the EAP counsellor upon their consent when they would like to access confidential individual counselling.

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[j] Possible Constraints:

A number of problems are envisaged in undertaking this study. Firstly, there is a possibility for study related administrative delays. For example, delayed ethics approval from COMREC would affect commencement of key study procedures including setup, enrollment of participants, and data collection. It will be difficult to complete data collection in time for writeup and dissertation deadlines. Strict timelines shall be kept to prevent such delays. This is the responsibility of the Principal Investigator who has initiated immediate submission of this proposal to COMREC.

Secondly, ensuring management support from target organizations has been a challenge to be addressed. For example, organizational ethical/ privacy concerns regarding identifying information were raised by management at the initial consultative meeting. Specifically, management does not want information identifying their employees and the organization to be published in the public domain. This constraint has already been addressed by the Principal Investigator. The Investigator has conducted review of relevant ethical principles and drafted the Informed Consent Form (ICF). The ICF was shared and discussed with management. Risks and benefits have been clarified and employees and the organization are assured anonymity and confidentiality. Data will be used for academic purposes. Such adequate consultation has convinced management to support the study by providing official written permission allowing employees to participate (**Appendix 5 - Permission to Interview Employees**).

Lastly, missing data will compromise the quality and strength of planned statistical analysis, results, and hence overall output of this study. The evaluation will not be complete if data is missing. For example, if some data for age is missing on the questionnaire for moderating factors, analysis for the effect of age on the measured workplace outcomes will be compromised to show significant effect. As such, the study will not be able to adequately answer its objectives. Data verification at the point of collection will help to prevent missing data. This is the responsibility of EAP officers. Checking of missing data will be conducted at point of collection by EAP officers. The officer will confirm that the responses are completed and that the identification number is on the questionnaire when each participant submits their survey. The Investigator will check for errors at end of each day.

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[k] Requirements and Sponsorship

Requirements:

Requirements include 1 investigator and 3 EAP officers, training for EAP objectives and data collection, Stationary and lockable cabinets and fuel for Lilongwe and Mzuzu.

Table 5: Requirements

Requirement	Description	
Personnel	Principle Investigator	Role: Overall responsibility for study conduct, management, data collection, cleaning Direct responsibility for welfare of participants Compliance with protocol and ethics, informed consent Analysis and report writing
	3 Data Collection EAP Officers (1 Blantyre, 1 Lilongwe, 1 Mzuzu)	ICF admin and pretest collection 5 days Blantyre, 5 days Lilongwe, 2 days Mzuzu Posttest collection 5 days Blantyre, 5 days Lilongwe, 2 days Mzuzu
	2 Data Entry EAP Officers (Blantyre)	Data entry 5 days pretest and 5 days Posttest
Training	Study protocol training for 3 Data Collection EAP Officer and 2 Data entry officers	During study initiation to ensure that study staff understand protocol, ethics, data quality management procedures. The PI will conduct this training 2 days at CWS in Blantyre and 1 day each for Lilongwe and Mzuzu, during the 1st trip (onsite EAP Office).
Paper – printing and photocopying	Informed Consent Form (ICF) Questionnaires, reports, Dissertation EAP training stress management workbook	5 pages x 139 copies plus ICFs 2 pages x 139 Questionnaires x 2 copies ± 5 copies of Reports ± 5 Copies of Dissertation 5 pages x 139 copies workbook
Transport	Fuel for PI travel from Blantyre to Lilongwe and Mzuzu	2 trips to Lilongwe, Mzuzu and back to Blantyre Trip 1: Pretest/ EAP Training visit Trip 2: Posttest data collection
Space	CWS offer space for: - Training of Data collection/ entry EAP officers - Working space for data entry - Data storage Space for Pretest, Employee EAP training, and Posttest is confirmed to be onsite workplace (Target organization)	
Lockable filing cabinet	Already available at CWS	

'CWS – CORPORATE WELLNESS SOLUTIONS (PI's Office)

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Sponsorship

CORPORATE WELLNESS SOLUTIONS is the study sponsor and will provide all the necessary personnel and institutional support.

Institutional and organizational capacity

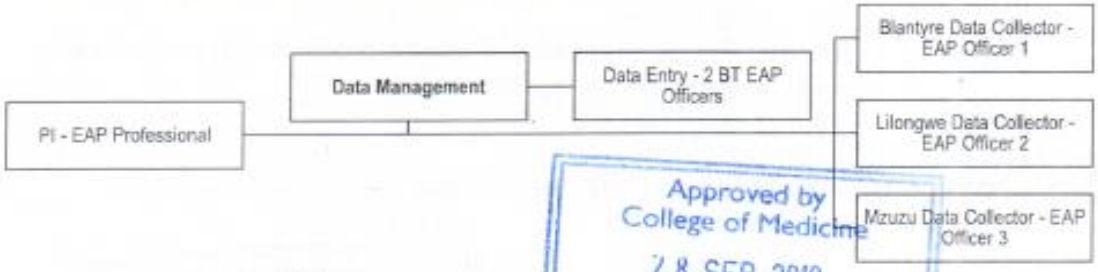
Oversight of the project will be provided through CORPORATE WELLNESS SOLUTIONS, which is a leading Employee Assistance Program (EAP) service provider within Malawi. CORPORATE WELLNESS SOLUTIONS (CWS) provides EAP to clients across the country. It was established in 2006, started providing EAP to the targeted client organizations in the year 2015, and has consulting offices in Blantyre, Lilongwe and Mzuzu. Its main focus is wellness training and employee counselling. Maclean Vokhiwa is the team leader and PI of this application. He will be located in Blantyre for the duration of the study and travel to Lilongwe and Mzuzu as specified in the '**Requirements**' section of this protocol. He will prepare all reports for CORPORATE WELLNESS SOLUTIONS.

CORPORATE WELLNESS SOLUTIONS has the capacity to undertake EAP-related assessments on-site in client locations. In all three locations, EAP counsellors are available to provide direct support to employees that require counselling support. Data collection will be executed onsite at each of the 3 client office locations – Blantyre, Lilongwe and Mzuzu. Each of these office locations has a training room which will be utilized for the EAP training. EAP officers which are already working in these respective locations will be assigned data collection and entry roles for this study. CORPORATE WELLNESS SOLUTIONS office spaces will be used for training, data entry and storage.

Management and Staffing Plan

The project builds on a well-established EAP structure between CORPORATE WELLNESS SOLUTIONS and the client organization. The client organization has already organized and is paying for the EAP training that is being implemented for its employees. As such, it is responsible for execution of the EAP training intervention. The study team will conduct an evaluation of this scheduled intervention program. This study counts on the time of a CORPORATE WELLNESS SOLUTIONS core team which will implement it and bring it to a successful conclusion. This team includes the EAP Professional (also PI), 3 EAP officers (existing EAP counsellors for Blantyre, Lilongwe, and Mzuzu) and 2 Data entry personnel (existing EAP officers in Blantyre).

The Management plan is based upon an existing system which is already working for EAP service provision between the EAP professional and administration. Technical, administrative and financial reports will be through CORPORATE WELLNESS SOLUTIONS. The EAP professional, as PI, will undertake oversight of the approved protocol. He will agree with the core team on site visits, data collection, monitoring, and supervision of data entry. The EAP Professional has considerable experience as a manager in charge of substantial administrative, funding, management and technical responsibilities, with proven ability to discharge them appropriately. Equally importantly, he has the trust and confidence of the team as Principal Investigator of this study.



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[I] Budgetary Estimates

Total estimated budget is **MK749,815.00** (Seven hundred forty-nine thousand eight hundred and fifteen Malawi kwacha)

Table 6: Itemized Budget Estimates

		Description	Institutional Contribution (CWS)	Being Asked for	Total
Personnel	PI allowance	34 months @ MK5,000.00/ month	340,000.00	0.00	170,000.00
	3 data collectors Allowance	10 days BT, 10 days LL, 4 days MZ @ MK 4,000/day	96,000.00	0.00	96,000.00
	2 data entry clerks Allowance	2 x 5 days pretest and 2 x 5 days posttest @ MK4,000.00/day	40,000.00	0.00	40,000.00
			Personnel Total		**306,000.00**
Training	BT allowance	3 people x 2 days @ MK4,000.00/day	24,000.00	0.00	24,000.00
	LL allowance	1-person x 1 day @ MK4,000.00/day	4,000.00	0.00	4,000.00
	MZ allowance	1-person x 1 day @ MK4,000.00/day	4,000.00	0.00	4,000.00
			Training Total		**32,000.00**
Paper – printing and photocopying	ICFs	139 copies @ MK125/ copy	17,375.00	0.00	17,375.00
	Questionnaires	139 copies x 2 @ MK50/copy	13,900.00	0.00	13,900.00
	Reports	5 copies @ MK500.00	2,500.00	0.00	2,500.00
	Dissertation	5 copies @ MK2,500.00/each	12,500.00	0.00	12,500.00
	EAP training workbook	139 copies @ MK125/ copy	17,375.00	0.00	17,375.00
			Total Printing		**63,650.00**
Transport	Fuel for PI travel BT-LL- MZ. back BT	2 trips @ MK70,000.00 / trip	140,000.00	0.00	140,000.00
			Total Transport		140,000.00
Space	Training, working and storage space		Institution	-	0.00
			Total Space		**0.00**
Lockable filing cabinet	Storage for data		Institution	-	0.00
			Total storage	-	0.00
			Total estimated Budget		**681,650.00**
Administration	**10% of total**				**68,165.00**
		Grand Budget Estimate			**749,815.00**

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[m] Justification of the Budget

1 principal investigator - for overall supervision of the project, data analysis, report production and dissemination. 5% of his time for 34 months at MK5,00.00 = 1 x MK5,000.00 x 34 = MK 170,000.00

Daily allowance for 3 data collectors – for administration of the Informed Consent Form (ICF), onsite collection of completed pretest and posttest questionnaires from employees. A total of 5 days Blantyre, 5 days Lilongwe, 2 days Mzuzu at pretest and a total of 5 days Blantyre, 5 days Lilongwe, 2 days Mzuzu at Posttest. Total days = 24 days calculated at standard CWS daily allowance rate for EAP officer of MK4,000.00 = 24 x MK4,000.00 = MK96,000.00

Daily allowance for 2 data entry personnel – for entering pretest and posttest data into MS Access database. A total of 5 days at pretest and 5 days at posttest for each clerk. Total days = 10 days calculated at standard CWS daily allowance rate for EAP officer of MK4,000.00 = 10 x MK4,000.00 = MK40,000.00

Daily training allowance for BT, LL, and MZ sessions. 3 data collection officers and 2 data entry clerks – for orientation on study protocol, ethics, and data quality management procedures. 2 days in BT for 3 people and 1 day in LL and MZ for 2 people. 3 people trained for 2 days (BT) calculated at standard CWS daily allowance rate for EAP officer of MK4,000.00 = 3 x 2 x MK4,000.00 = MK24,000.00.
And 2 people trained for 1 day (LL&MZ) calculated at standard CWS daily allowance rate for EAP officer of MK4,000.00 = 2 x 1 x MK4,000.00 = MK8,000.00.

Informed consent forms (ICF) for all participants - to share information about the research with all individual participants and obtain their signed agreement to participate in the study. 139 copies will be required each costing MK125 = MK17,375.00.

Study Questionnaires for all participants – data collection form for WOS and moderating factors to be self-completed by participants in a paper-and-pencil format. For both pretest and posttest, 2 x 139 copies will be required @ MK50/ copy = MK13,900.00.

Preliminary and after-study reports – for submission to the organization and relevant department, including Dissertation supervision. 5 copies are estimated @ MK500.00 per copy = MK2,500.00

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Final Dissertation – for submission to department, College Library, COMREC, etc. 5 copies are estimated @ MK2,500.00 each = MK12,500.00

EAP training workbook – for use by each participant during the experiential EAP stress management training. 139 copies @ MK125.00/ copy = MK17,375.00

Transport – the PI will require fuel to make one trip for pretest visit and another trip for posttest visit from Blantyre to Lilongwe and Mzuzu. Standard CWS fuel rates are used. 2 trips @ MK70,000.00 / trip = MK140,000.00

Space – CWS will provide space for training and working for study personnel as well as storage space for data. As is standard practice for ongoing EAP activity within target organization, all EAP training sessions are conducted onsite. A lockable filing cabinet is available for study use at CWS. No direct monetary expense is required.

Administration costs - A 10% [of the total] administrative contribution to the College of Medicine, is included. Of this - 3% will go to the individuals' department(s), 2% will go to the College Administration, 3% will go to the College Research Committee [to assist it in its various activities, e.g. secretarial, holding of research, dissemination meetings, sponsorship of research projects by students, etc), and 2% will go to the College Library.

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Appendix 2: ICF – English & Chichewa

Appendix 2 A - Informed Consent Form (ICF) – English

[MACLEAN VOKHIWA - PI]

Informed Consent form (ICF)

This Informed Consent Form is for employees who attend the workplace Employee Assistance Program (EAP) stress management intervention, and who we are inviting to participate in evaluation of the impact of that EAP intervention. The title of our research project is "**Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context.**"

Name of Principal Investigator:	MACLEAN VOKHIWA
Name of Organization:	PUBLIC HEALTH DEPARTMENT SCHOOL OF PUBLIC HEALTH & FAMILY MEDICINE COLLEGE OF MEDICINE, UNIVERSITY OF MALAWI
Name of Sponsor:	CORPORATE WELLNESS SOLUTIONS
Name of Proposal and version:	

Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context.

Version 1.1

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the research with you)**
- **Certificate of Consent (for signatures if you agree to take part)**

You will be given a copy of the full Informed Consent Form

PART I: Information Sheet

Introduction

I am an Employee Assistance Professional, working for CORPORATE WELLNESS SOLUTIONS that provides Employee Assistance Program (EAP) to your organization. I am a Master of Public Health (MPH) student at the College of Medicine in Blantyre and doing a research to evaluate the impact of an EAP intervention on your work-related wellbeing. Conducting this research is part of my training requirements. I am going to give you information and invite you to be part of this evaluation. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about the research.

There may be some words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can ask them of me, the study Principle Investigator or the EAP staff.

Purpose of the research

Stress is one of the most common concerns for employees in this organization. This stress may affect your general sense of wellbeing. Your organization is now implementing an EAP stress management activity. Other research shows that EAP activities help to improve employee work-related wellbeing and life satisfaction. The reason we are doing this research is to find out if the EAP intervention to be conducted in your workplace is going to improve your sense of wellbeing.

Type of Research Intervention

This evaluation will involve you to complete a 2-page questionnaire at the beginning, you will then attend an EAP stress management training, and you will also complete a follow-up questionnaire around 30 days after your training.

Participant selection

We are inviting all employees who attend the EAP stress management activity to participate in the evaluation of the activity.

Voluntary Participation

Your participation in this evaluation is entirely voluntary. It is your choice whether to participate or not. Since the study will collect data during an EAP program organized and paid for by your company, you may opt out of the evaluation part only. Whether you choose to participate or not, all the work you do and benefits you receive at this organization will continue and nothing will change. If you choose not to participate in this evaluation, you will still attend EAP training and be offered the support that is routinely offered in the EAP at this organization, and we will tell you more about it later. You may change your mind later and stop participating even if you agreed earlier.

Procedures and Protocol: Description of the Process

During the evaluation you interact with EAP personnel within your workplace at 2 visits.

- In the first visit, you will complete a 2-page self-administered questionnaire and attend a stress management session. The questionnaire will ask you about your age, sex, department, job level, and your general comment regarding EAP intervention. We will also ask you a few questions about your work and life experiences that may have been affected by workplace stress during the past 30 days. You will then participate in a practical EAP session that will share skills to manage stress.
- At the next visit, which will be 30 days later, you will again be asked some questions about your work and life experiences that may have been affected by workplace stress during the past 30 days.

Duration

The evaluation takes place over 90 days in total. During that time, it will be necessary for you to come to EAP session or interact for 2 days only. During the first day we would like you to attend an EAP session for the whole day (8 hours). We would like you to complete a follow-up questionnaire, 30 days afterwards. The questionnaire will take you less than 15 minutes.

In total, you will be asked to interact with EAP personnel 2 times in 3 months. At the end of three months, the evaluation will be finished.

Risks

By participating in this evaluation, it is possible that you will be at greater risk than you would otherwise be. There is, for example, a risk of identifying and/or exposing your emotional or stress challenges. If, however, the group stress management session does not assist you and your concerns remain in 48 hours we will refer you to existing free individual counselling support offered by your organization's EAP. We trust this will be helpful.

While the possibility of this happening is very low, you should still be aware of the possibility. We will try to decrease the chances of this event occurring.

Benefits

If you participate in this evaluation, you will have the following benefits: any immediate work-related stress concerns will be addressed. If you feel vulnerable, you will be referred to free confidential individual counselling. Your participation is likely to help us to know whether the EAP intervention improves workplace wellbeing and life satisfaction of employees in your organization. There may not be any benefit to the society at this stage of the evaluation, but at a later stage.

Reimbursements

You will not receive money or any special gifts to participate in this evaluation. However, as is normal practice when employees attend meetings and training within your workplace, you will have water and snack refreshments during the first day of group training.

Confidentiality

With this evaluation, something out of the ordinary is being done in your organization. It is possible that if other employees in the organization are aware that you are participating, they may ask you questions. We will not be sharing the identity of those participating in the evaluation.

The information that we collect from this evaluation project will be kept confidential. Information about you that will be collected during the evaluation will be put away and no-one but the researchers will be able to see it. Any information about you will have a unique number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a lock and key. It will not be shared with or given to your employer, manager, supervisor, or anyone except your EAP counsellor upon your consent when you would like to access confidential individual counselling.

Sharing the Results

The knowledge that we get from doing this evaluation will be shared with you through staff meetings before it is made available to other relevant audience. Confidential information will not be shared. There will be small meetings in the organization and these will be announced. After these meetings, we will submit the final report as a public health dissertation at the College of Medicine, University of Malawi. This report will be disseminated at relevant conferences and published in order that other interested people may learn from our research.

Right to Refuse or Withdraw

You do not have to take part in this evaluation if you do not wish to do so and refusing to participate will not affect your work or benefits at this organization in any way. You will still have all the benefits that you would otherwise have. You may stop participating in the evaluation at any time that you wish without losing any of your rights as an employee. It is your choice and all of your rights will still be respected.

Who to Contact

If you have any questions you may ask them now or later, even after the study has started. If you wish to ask questions later, you may contact the following:

MACLEAN VOKHIWA – **Principle Investigator**
CORPORATE WELLNESS SOLUTIONS
Phones: +265 999 080096 or +265 888 448866
e-mail: mvokhiwa@gmail.com

This proposal has been reviewed and approved by the College of Medicine Research Ethics Committee (COMREC), which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find out more about the Ethics Committee, contact:

COMREC Secretariat,
College of Medicine Research and Ethics Committee (COMREC),
Private Bag 360, Chichiri Blantyre 3,
Malawi,
Telephone: +265 1 874 377 ext 334,
Fax: +265 1 874 740,
Email: comrec@medcol.mw

You can ask me any more questions about any part of the research study, if you wish to. Do you have any questions?

PART II: Certificate of Consent

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

Print Name of Participant: _____

Signature of Participant: _____

Date: _____
Day/month/year

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Name of witness_____ **AND** **Thumb print of participant**

Signature of witness _____

Date: _____
Day/month/year

Statement by the researcher/person taking consent

I confirm that the participant has read (or that I have accurately read out) the information sheet to the potential participant. And to the best of my ability, I made sure that the participant understands that the following will be done:

1. **In the first visit, he/she will complete a 2-page self-administered questionnaire and attend a stress management session.**
2. **At the next visit, which will be 30 days later, he/she will complete a follow-up self-administered questionnaire.**

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent_____

Signature of Researcher /person taking the consent_____

Date _____
Day/month/year

Appendix 2 B - Informed Consent Form (ICF) – Chichewa

[MACLEAN VOKHIWA - PI]

Informed Consent form (ICF)

Kalata ya chidziwitso ndi chilolezo

Kalata yachidziwitso iyi ndiya awo amene akutenga nawo mbali mumaphunziro othana ndi zinthu zothodwetsa pa malo ogilira ntchito, omwe akuperekedwa mu pogalamu ya Chitsamaliro cha anthu ogwira ntchito (EAP). Ndipo, ogwira ntchito amenewa akupemphedwa kutenga nawo mbali pa kafukufuku ofuna kudziwa ubwino wa maphunziro ngati amenewa. Mutu wa kafukufuku wathu ndi **" "Kufuna kudziwa ubwino wa Pologalamu yothandiza anthu apantchito (EAP) pa malo ogwilira ntchito m'Malawi, pogwiritsa ntchito muyezo wa kakhalidwe and umoyo wapantchito"**

Dzina la wofufuza wamkulu:	MACLEAN VOKHIWA
Dzina la bungwe:	PUBLIC HEALTH DEPARTMENT
	SCHOOL OF PUBLIC HEALTH & FAMILY MEDICINE
	COLLEGE OF MEDICINE, UNIVERSITY OF MALAWI
Dzina la Othandiza:	CORPORATE WELLNESS SOLUTIONS

Mutu wa Kafuikufuku:

Kufuna kudziwa ubwino wa Pologalamu yothandiza anthu apantchito (EAP) pa malo ogwilira ntchito m'Malawi, pogwiritsa ntchito muyezo wa kakhalidwe and umoyo wapantchito.

Yolembedwa Kachiwiri (Version 1.1)

Kalatayi ili ndi mbali ziwiri:

- **Mbali yachidziwitso (kukudziwitsani inu za kafukufukuyu)**
- **Chitsimikizo cha chilolezo (kuti musaine ngati mwavomereza kutenga nawo mbali)**

Ndipo mudzapatsidwa Kalatayi.

MBALI OYAMBA: Fomu yachidziwitso

Mawu Oyambilira

Ine ndimagwira ntchito ku CORPORATE WELLNESS SOLUTIONS yomwe imapereka chithandizo cha umoyo pa malo anu ogwira ntchito. Ndine ophunzira za ukachenjede wa umoyo wa anthu (MPH) ku sukulu yaukachenjede wazachipatala (College of Medicine) ku Blantyre, ndipo ndikuchita kafukufuku ofuna kudziwa ubwino wa pologalamu ya EAP ku umoyo wanu wapantchito. Kuchita kafukufukuyu ndi mbali imodzi yokwanilitsa zofunikila pa maphinziro aukachenjedewa.

Ndikufotokozerani ndiponso ndikupemphani kuti mutenge nawo mbali pa pakafukufukuyi. Simukuumirizidwa kuvomera kapena kukana pompano zotenga nawo mbali mu kafukufukuyu. Musanaganize zotenga mbali, mukhonza kufunsa wina aliyense yemwe mugamasuke naye pa kafukufukuyu.

Pakhonza kukhala mau ena omwe simukuwamvetsetsa. Ngati mungakhale ndi mafunso, chonde tifunseni, wankulu wakafukufukuyu, kapena ena wogwira ntchito za EAP, panopa kapena nthawi ina.

Cholinga cha kafukufuku

Zothodwetsa za m'moyo (Stress) ndi chimodzi mwa zinthu zodziwika bwino zomwe zimakhudza ogwira ntchito. Zothodwetsa zimenezi zingathe kusokoneza umoyo wanu. Bungwe lanu tsopano likuchita ntchito zothandiza kuthana ndi zothodwetsazi. Kafukufuku wina waonetsa kuti ntchito za EAP zimathandiza kupititsa patsogolo umoyo wapantchito komanso umoyo watsiku-ndi-tsiku. Tikuchita kafukufukuyu kuti tiziwe ngati maphunziro a EAP, omwe atachitike pano, angathandize kupititsa patsogolo umoyo wanu.

Dongosolo la Kafukufuku

Poyamba, mupemphedwa kuti muyankhe mafunso okwana mapeji awiri, kenako mudzakhala nawo mu maphunziro a kuthana ndi zothodwetsa, ndipo mudzayankhanso mafunso otsatira pakatha masiku 30 mutachita maphunzirowo.

Kasankhidwe ka otenga mbali

Tikupempha ogwira ntchito onse omwe ataphunzire nawo maphunziro othana ndi zothodwetsawa kuti atenge nawo mbali mu kafukufukuyu.

Kutenga mbali mosakakamizidwa

Kutenga nawo mbali mu kafukufukuyu ndikosakakamizidwa. Ndiufulu wanu kutenga nawo mbali kapena ayi. Chifukwa choti kafukufukuyu akuchitika mu pologalamu ya EAP yokonzedwa ndinso yolipilidwa ndi kampani yanu, mutha kusankha kusatenga nawo mbali mu kafukufuku yekhayi. Ngati mungatenge nawo mbali kapena ayi, sipakhala kusintha pa ntchito yomwe mumagwira kapenanso zomwe mumalandira. Ngati musankha kusatenga nawo mbali mu kafukufukuyu, muzachitanawobe maphunziro aEAP komanso mudzalandirabe chithandizo cha EAP chomwe chimaperekedwa pa malo anu antchito monga zimachitikira nthawi zonse. Ndipo tikufotokozerani zimenezi bwino lino. Mutha kusintha maganizo anu, kapena kusiya kutenga nawo mbali nthawi iliyonse ngakhale mutavomera kale koyamba.

Njira ndi Machitidwe: Kufotokozera ndondomeko za kafukufukuyu.

Panthawi ya kafukufukuyu muzakumana, kwa maulendo awiri, ndi ogwira ntchito za EAP pa malo anu antchito.

- Pa ulendo woyamba, muzayankha mafunso okwana mapeji awiri mwanokha, kenako mudzaphunzira nawo maphunziro a kuthana ndi zothodwetsa. M'mafunsowa, mudzafunsidwa za zaka zanu, gulu lanu lachibadwidwe (ngati muli mkazi kapena mwamuna), mtundu wa ntchito yomwe mumagwira, geledi ya ntchito yanu, komanso mozapemphedwa kupereka ndemanga pa za ubwino wa pologalamu ya EAP. Mudzafunsidwanso mafunso ena okhudza umoyo wanu komanso kakhalidwe zomwe zingasokonezedwe ndizothodwetsa zokumana nazo m'masiku 30 apita m'mbuyomo. Kenako mudzatenga nawo mbali mu maphunziro a EAP omwe mudzalandira luso lothanirana ndi zothodwetsa.

- Pa ulendo wotsatirawo, womwe udzakhala patatha masiku 30, mudzafunsidwanso mafunso ena okhudzana umoyo komanso kakhalidwe zomwe zingasokonezedwe ndizothodwetsa zokumana nazo m'masiku 30 apita m'mbuyomo.

Kutalika kwaNthawi ya Kafukufuku

Kafukufuku achitika m'masiku okwana 90. Mu nthawi imeneyi, kudzakhala kofunika kupezeka pa za kafukufuku wa EAPyu kwa masiku awiri okha. Patsiku loyamba muzapemphedwa kuti muchite nawo maphunziro a EAP kwa tsiku limodzi lathunthu (8 hours). Mudzafunika kuti muyankhe mafunso otsatira, pakatha masiku 30. Mafunsowa adzakutengerani mphindi zosaposera 15.

Nthawi yonse pamodzi, mudzafunika kupezeka pa za kafukufuku wa EAPyu kwa masiku awiri mu miyezi itatu. Kafukufukuyu adzamalizidwa pakutha pa miyezi itatu.

Ziopsezo

Potenga nawo mbali mu kaafukufukuyu, mutha kukhala pa chiopsezo chokulirapo kosiyana ndi momwe mungakhalire musanatenge nawo mbali. Mwachitsanzo, pali chiopsezo chotha kuonetsera poyera maganizo anu kapena mavuto anu. Komabe ngati maphunziro apagulu othana ndizothodwetsawa sakukuthandizani, ndipo nkhawa zanu sizinasinthe patapita ma ola 48 (48 hours) tidzakutumizani kuti mukalandire panokha chithandizo cha uphungu wapadera kwa a EAP a pamalo anu ancthito womwe ulipo kwaulere. Tikukhulupilira kuti izi zingakuthandizeni.

Ngakhalebe mwina izi sizingachitike, mukuyenerabe kungodziwa kuti izi zikhoza kuchitika. Tiyesetsa kuti izi zisachitike.

Phindu lake

Ngati mutenga nawo mbali mu kafukufukuyu, mudzapindula mu njira izi: mupeza chithandizo pa zothodwetsa zilizonso zimene muli nazo tsopano lino. Ngati mukuona kuti muli pa chiopsezo, mudzatumizidwa kukalandira uphungu wapanokha wachinsinsi. Kutenga mbali kwanu kukhoza kutithandiza kudziwa ngati ntchito za EAP zikupititsa patsogolo kakhalidwe ndi umoyo watsiku-ndi-tsiku pa malo anu antchito. Mwna sipangakhale phindu lina lililonse kwa anthu ena panthawi imeneyi yomwe kafukufuku akuchutika, koma mtsogolomu anthu azapindula.

Zopatsidwa

Simudzalandira ndalama kapena mphatso iliyonse yapadera chifukwa chakutenga nawo mbali mu kafukufukuyu. Komabe, monga momwe zimakhalira pamene ogwira ntchito achita nawo mkumano ndi maphunziro apamalo ogwira ntchito amenewa, padzakhala madzi, zoziziritsa kukhosi ndi tina totafunatafuna pa tsiku loyamba la maphunziro apaguluwa.

Chinsinsi

Ndi kafukufukuyu, chinachake chachilendo chikuchitika Kumalo anu ogwira ntchito. N'kutheka kuti anzanu ogwira nawo adziwa kuti inu mukutenga nawo mbali pa kafukufukuyu, ndipo mwina adzakufunsani mafunso. Ife, sitizaulura munthu aliyense otenga nawo mbali mu kafukufukuyu.

Zomwe tipeze mu ntchito yakafukufukuyu zidzasungidwa mwachinsinsi. Chilichonse chokhudza inu chomwe tapeze pa nthawi ya kafukufukuyu chidzasungidwa ndipo palibe yemwe adzaone kupatula omwe akupanga kafukufukuyu. Zili zonse zokhudza inu zidzakhala ndi nambala yapaderadera m'malo mwa dzina lanu. Okhawo omwe akuchita kafukufukuyu ndi omwe azaidziwe nambala yanu ndipo zonse zidzasungidwa m'malo otsekedwa ndi loko. Sizizaululidwa kapena kuperekedwa kwa okulembani ntchito, mabwana anu, okuyang'anirani kapena wina aliyense kupatula aphungu anu a EAP ngati inu mwalola kuti zitero pamene mukufuna kulandira uphungu panokha.

Kupereka zotsatira

Tidzagawana nanu zomwe tipeze kuchokera ku kafukufukuyu kupyolera mu mikumano ya ogwira ntchito zisanaperekedwe kwa ena ofunikira. Zonse zachinsinsi sizidzaperekedwa. Padzakhala mikumano ing'onoing'ono pa malo antchito ndipo izi zidzalengezedwa. Ikatha mikumanoyi, tidzapereka zomwe tapeza pomaliza ngati zolembedwa zomaliza zokhudza maphunziro a umoyo wa anthu ku sukulu ya zachipatala (College of Medicine, University of Malawi). Zolembedwazi zidzaperekedwa pa misonkhano yofunikira ndikusindikizidwa kuti ena omwe angafune athe kuphunzirapo pa kafukufuku wathuyu.

Ufulu wokana kapena kuchoka mukafukufukuyu

Simukuumirizidwa kutenga mbali mukafukufukuyu ngati inu simukufuna kutero ndipo kukana kutengapo mbali sikuzakhudza ntchito yanu mwa njira ina ili yonse kapena zomwe mumalandira kuchokera ku ntchito kwanu. Mudzapitirizabe kulandira zabwino zonse zomwe mumalandira. Mukhoza kusiya kutenga nawo mbali mu mukafukufukuyu nthawi ina iliyonse yomwe mwafuna, popanda kuononga ufulu wanu ngati wogwira ntchito. Ndi chisankho chanu ndipo maufulu anu onse adzalemekezedwabe.

Omwe Mungalankhule Nawo

Ngati muli ndi mafunso mukhonza kufunsa pakali pano, kapena nthawi ina, ngakhale kafukufukuyu atayamba kale. Ngati mungafune kufunsa mafunso nthawi ina mutha kuyankhulana ndi:

MACLEAN VOKHIWA – **Wofufuza Wamkulu**

Public Health Department, College of Medicine

Phones: +265 999 080096 or +265 888 448866

e-mail: mvokhiwa@gmail.com

Ndondomeko ya kafukufukuyu yaonedwa ndikuvomerezedwa ndi komiti yoona za ndondomeko za kafukufuku ya sukulu ya zachipatala (College of Medicine Research Ethics Committee - COMREC),) yomwe ntchito yake ndi kuonetsetsa kuti otenga mbali mu kafukufuku ali otetezedwa ku ziopsezo. Ngati mukufuna kudziwa zambiri za komitiyi muntha kuyankhula ndi:

COMREC Secretariat,
College of Medicine Research and Ethics Committee (COMREC),
Private Bag 360, Chichiri Blantyre 3,
Malawi,
Telephone: +265 1 874 377 ext 334,
Fax: +265 1 874 740,
Email: comrec@medcol.mw

Mutha kundifunsa mafunso ena aliwonse okhudza mbali iliyonse ya kafukufukuyu ngati mukufuna kutero. Muli ndi funso lililonse?

GAWO II: Satifiketi ya Chilolezo (Chitsimikizo)

Ndawerenga (kapena ndawerengeredwa) zonse zomwe zafotokozedwazi. Ndipo ndakhala ndi mwai wofunsa mafunso okhudza zimenezi ndipo ndakhutira ndi mayankho omwe ndapatsidwa.

Ndavomera mwa kufuna kwanga kutenga nawo mbali mu kafukufukuyu.

Dzina La Otenga Mbali: _____

Kusainila kwa Otenga Mbali: _____

Deti: _____

Tsiku/mwezi/Chaka

Ngati Otenga mbali ali osatha kuwerenga

Ndikuchitira umboni kuti fomuyi yawerengedwa bwino kwa yemwe akufuna kutenga mbali, ndipo munthuyo anali ndi mwai wofunsa mafunso. Ndikutsimikiza kuti munthuyo wavomereza mwa kufuna kwake.

Dzina la Mboni_____ NDI Chidindo cha chala chachikulu cha wotenga mbali

Kusainila kwa Mboni_____

Deti: _____

Tsiku/Mwezi/Chaka

Umboni wa wochita kafukufuku yemwe akupempha chilolezochi

Ndikutsimikiza kuti otenga mbali wawerenga (kapena ndamuwerengela bwino lomwe) kalata yachidziwitso. Ndipo ndachita zotheka kuonetsetsa kuti wotenga mbaliyo wamvetsetsa kuti zitachitike ndizalembedwa mmunsimu:

1. Pa ulendo woyamba, otenga mbali mukafukufukuyu azayenela kuyankha payekha mafunso okwana mapeji awiri ndi kuchita nawo maphunziro a kuthana ndi zothodwetsa.
2. Pa ulendo wotsatirawo, womwe udzakhala patatha masiku 30, iye adzayankhanso payekha mafunso akumapeto.

Ndikutsimikizira kuti wotenga mbaliyo anapatsidwa mwai wofunsa mafunso okhudza kafukufukuyu, ndipo mafunso onse omwe iye anafunsa anayankhidwa molondola momwe ndikanathera. Ndikutsimikizira kuti munthuyu sanaumirizidwe kuti alole, ndipo chilolezocho wapereka mwakufuna kwake.

Wotenga mbali wapatsidwanso kope ya fomu ya ICF iyi.

Dzina la wofufuza yemwe akutenga chilolezo _____

Saini ya wofufuza yemwe akutenga chilolezo_____

Deti _____

Tsiku/Mwezi/Chaka

Appendix 3 Ethics Certificate & Review Documents

Appendix 3A – Approval Certificate P.08/18/2450 dated 28/09/2018

CERTIFICATE OF ETHICS APPROVAL

This is to certify that the College of Medicine Research and Ethics Committee (COMREC) has reviewed and approved a study entitled:

P.08/18/2450 - Measuring the value of an employee assistance program (EAP) Intervention using the workplace outcome suite (WOS)wellbeingscales in a Malawian organisation context. Version 1.1 dated 5 September 2018. by Maclean Vokhiwa

On 28-Sep-18

As you proceed with the implementation of your study, we would like you to adhere to international ethical guidelines, national guidelines and all requirements by COMREC as indicated on the next page

Approved by College of Medicine 28 SEP 2018 (COMREC) Research and Ethics Committee

Dr. YB. Mbombe - Chairperson (COMREC)

28-Sep-18

Date

Appendix 3B – Ethics Submission Cover Letter

Ethics Submission Covering Letter

MACLEAN VOKHIWA
Masters of Public Health – MPH
School of Public Health & Family Medicine
College of Medicine, University of Malawi

College of Medicine Research & Ethics Committee (COMREC)
Private Bag 360, Chichiri Blantyre 3,
Malawi

To: The Chairperson, COMREC

[Monday, 06 August 2018]

Dear Sir or Madam

Title: **Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context**.

I wish to submit the above proposed MPH project for ethical review by the Research Ethics Committee. I enclose the following documents:

- A signed copy of my application form and the Proposal (version 1.0)
- A letter from the Department of Public Health, which has reviewed the study, in support of this submission.
- A summary of the Project – Synopsis, Section [d] of proposal.
- Itemized Budget – Sections [k], [l], and [m] of proposal.
- Appendices
  - Appendix 1 A - Informed Consent Form (ICF) – English
  - Appendix 1 B - Informed Consent Form (ICF) – Chichewa
  - Data collection Tools:
    - Appendix 2 A - Workplace Outcome Suit (WOS) – English
    - Appendix 2 B - Workplace Outcome Suit (WOS) – Chichewa
    - Appendix 3 – Moderating Factors Questionnaire - English and Chichewa
  - Materials to be Used:
    - Appendix 4 – EAP Training Attendance Register – English & Chichewa
    - Appendix 4 – EAP Stress Management Training Workbook – English & Chichewa
  - Appendix 6 – Investigator Brief CV updated & Signed and EAP Certificates
  - Letters of Support and Permission
    - Letter 1 – Request for Permission Sent to Organization
    - Letters 2 & 3 - Letters of Permission to Interview Employees
    - Letter 4 - Support Letter from Department of Public Health
    - Letter 5 - Letter of commitment to sponsor the MPH Dissertation research budget & Resources

Yours sincerely

MACLEAN VOKHIWA

MPH STUDENT ID: 201770074118

Appendix 3C- COMREC Conditional Approval P.08/18/2450 dated 25/08/2018

COLLEGE OF MEDICINE

Principal
M. H. C. Mipando MSc PhD

Our Ref:

Your Ref: P.08/18/2450

College of Medicine
Private Bag 360
Chichiri
Blantyre 3
Malawi
Telephone: 01 871911
01 874107
Fax: 01 874 700

25-Aug-18

Maclean Vokhiwa
college of medicine
Department of Public Health
P/Bag 360
Chichiri
Blantyre 3

Dear Maclean Vokhiwa

RE: P.08/18/2450 - Measuring the value of an employee assistance program (EAP) Intervention using the workplace outcome suite (WOS)wellbeingscales in a Malawian organisation context. Version 1

I write to inform you that COMREC reviewed the above-captioned study. I am pleased to inform you that COMREC granted conditional approval to the study. Full approval will be granted when the researcher has addressed the following concerns:

1. The researcher is advised to clearly state in the participant information sheet that he is an MPH student and the evaluation he will conduct is part of his training requirement.
2. The researcher should advise the participants that they may opt out of the evaluation part only since he will collect data during an EAP program organised and paid for by the company.
3. CORPORATE WELLNESS SOLUTIONS is mentioned only in the appendices and not in the main protocol which is confusing until the reader gets to the appendices
4. Appendix 4 contains personal identifiers which should be removed

Please note that implementation of the study may not commence unless Full approval has been granted.

Yours Sincerely,

Dr. YB. Mlombe
COMREC CHAIRPERSON

Appendix 3D - 2nd Ethics Submission Covering Letter

2nd Ethics Submission Covering Letter – Addressing review concerns

MACLEAN VOKHIWA
Masters of Public Health – MPH
School of Public Health & Family Medicine
College of Medicine, University of Malawi

College of Medicine Research & Ethics Committee (COMREC)
Private Bag 360, Chichiri Blantyre 3,
Malawi

To: The Chairperson, COMREC

[Wednesday, 05 September 2018]

Dear Sir or Madam

RE: P.08/18/2450 – Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context. Version 1.1

Thank you for granting conditional approval (dated 20/08/2018) to this study. The researcher has addressed the outlined concerns, as below, and writes to seek full approval.

1. The researcher is advised to clearly state in the participant information sheet that he is an MPH student and the evaluation he will conduct is part of his training requirement.

Addressing concern 1:

The statement ***"I am a Master of Public Health (MPH) student at the College of Medicine in Blantyre and doing a research to evaluate the impact of an EAP intervention on your work-related wellbeing. Conducting this research is part of my training requirements."*** *(CHICHEWA: "Ndine ophunzira za ukachenjede wa umoyo wa anthu (MPH) ku sukulu yaukachenjede wazachipatala (College of Medicine) ku Blantyre, ndipo ndikuchita kafukufuku ofuna kudziwa ubwino wa pologalamu ya EAP ku umoyo wanu wapantchito. Kuchita kafukufukuyu ndi mbali imodzi yokwanilitsa zofunikila pa maphinziro aukachenjedewa.")* has been added in the **Introduction** section on page 1 of **PART I: Information Sheet** of the Informed Consent Form (ICF) (page 39 of protocol).

2. The researcher should advise the participants that they may opt out of the evaluation part only since he will collect data during an EAP program organized and paid for by the company.

Addressing concern 2:

The statements: "**Since the study will collect data during an EAP program organized and paid for by your company, you may opt out of the evaluation part only**"... "**If you choose not to participate in this evaluation, you will still attend EAP training and be offered the support that is routinely offered in the EAP at this organization**"... *(CHICHEWA: "Chifukwa choti kafukufukuyu akuchitika mu pologalamu ya EAP yokonzedwa ndinso yolipilidwa ndi kampani yanu, mutha kusankha kusatenga nawo mbali mu kafukufuku yekhayi."... "Ngati musankha kusatenga nawo mbali mu kafukufukuyu, muzachitanawobe maphunziro aEAP komanso mudzalandirabe chithandizo cha EAP chomwe chimaperekedwa pa malo anu antchito monga zimachitikira nthawi zonse"...)* have been added in the **Voluntary Participation** section on page 2 of **PART I: Information Sheet** of the Informed Consent Form (ICF) (page 40 of protocol).

Sent to Chairp
feedback by 12

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3. CORPORATE WELLNESS SOLUTIONS is mentioned only in the appendices and not in the main protocol which is confusing until the reader gets to the appendices.

Addressing concern 3:

A specific '**Sponsorship**' subsection has been added under **Section [k] Requirements and Sponsorship** on page 32 of the protocol. This subsection outlines the sponsorship role of CORPORATE WELLNESS SOLUTIONS including institutional / organizational capacity and management and staffing plan. This added subsection is summarised below:

Sponsorship

CORPORATE WELLNESS SOLUTIONS is the study sponsor and will provide all the necessary personnel and institutional support.

Institutional and organizational capacity

Oversight of the project will be provided through CORPORATE WELLNESS SOLUTIONS, which is a leading Employee Assistance Program (EAP) service provider within Malawi. CORPORATE WELLNESS SOLUTIONS (CWS) provides EAP to clients across the country. It was established in 2006, started providing EAP to the targeted client organizations in the year 2015, and has consulting offices in Blantyre, Lilongwe and Mzuzu. Its main focus is wellness training and employee counselling. Maclean Vokhiwa is the team leader and PI of this application. He will be located in Blantyre for the duration of the study and travel to Lilongwe and Mzuzu as specified in the '**Requirements**' section of this protocol. He will prepare all reports for CORPORATE WELLNESS SOLUTIONS.

CORPORATE WELLNESS SOLUTIONS has the capacity to undertake EAP-related assessments on-site in client locations. In all three locations, EAP counsellors are available to provide direct support to employees that require counselling support. Data collection will be executed onsite at each of the 3 client office locations – Blantyre, Lilongwe and Mzuzu. Each of these office locations has a training room which will be utilized for the EAP training. EAP officers which are already working in these respective locations will be assigned data collection and entry roles for this study. CORPORATE WELLNESS SOLUTIONS office spaces will be used for training, data entry and storage.

Management and Staffing Plan

The project builds on a well-established EAP structure between CORPORATE WELLNESS SOLUTIONS and the client organization. The client organization has already organized and is paying for the EAP training that is being implemented for its employees. As such, it is responsible for execution of the EAP training intervention. The study team will conduct an evaluation of this scheduled intervention program. This study counts on the time of a CORPORATE WELLNESS SOLUTIONS core team which will implement it and bring it to a successful conclusion. This team includes the EAP Professional (also PI), 3 EAP officers (existing EAP counsellors for Blantyre, Lilongwe, and Mzuzu) and 2 Data entry personnel (existing EAP officers in Blantyre).

The Management plan is based upon an existing system which is already working for EAP service provision between the EAP professional and administration. Technical, administrative and financial reports will be through CORPORATE WELLNESS SOLUTIONS. The EAP professional, as PI, will undertake oversight of the approved protocol. He will agree with the core team on site visits, data collection, monitoring, and supervision of data entry. The EAP Professional has considerable experience as a manager in charge of substantial administrative, funding, management and technical responsibilities, with proven ability to discharge them appropriately. Equally importantly, he has the trust and confidence of the team as Principal Investigator of this study.

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4. Appendix 4 contains personal identifiers which should be removed.

Addressing concern 4:

Personal identifiers have been removed from **Appendix 4 – Training Attendance Register**, on **page 52** of the protocol. The edited **Appendix 4** is presented as follows:

Appendix 4 – Material to be Used: EAP Training Attendance Register – English & Chichewa

EMPLOYEE ASSISTANCE PROGRAM – EAP

Experiential Stress Management Training

Training Attendance Register

		Date:	
Location *(Malo)*:	[ ] Blantyre	[ ] Lilongwe	[ ] Mzuzu

Participation in EAP Evaluation

Kutenga Mbali mu Kafukufuku wa EAP

Are you participating in the impact evaluation study for this training? *Kodi mukutenga nawo mbali mu kafukufuku owona ubwino wa maphunziro amenewa?*	[ ] YES *EYA*	[ ] NO *AYI*

If YES, you will receive EAP information, through ordinary employee communication, 30 to 60 days after this training to remind you to complete the follow-up questionnaire.

Ngati mukutenga nawo mbali, muzalandila uthenga wa EAP, kuzela mu njira za masiku onse za uthenga kwa ogwira ntchito, pakatha masiku 30 kufikira masiku 60 kukukumbutsani zoyankha mafunso akafukufuku ameneyu kachiwiri.

Study ID number is: *Nambala Yanu mukafukufuku ndi:*	* E /_____/ _____/ _____

* You will use this Study ID number on both your pretest and posttest evaluation forms.

** Mugwiritsa ntchito Nambala Yanu Yamukafukufukuyi (Study ID number) pa mapepala anu a gulu la muyezo oyamba (Pretest) komanso lachiwiri (Posttest).*

_____

Employee Signature

Kusainila Kwanu or Thumb Print (Chidindo cha chala chachikulu cha wotenga mbali)

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Removing personal identifiers from this appendix has necessitated edits to two specific paragraphs that referred to this particular appendix.

Paragraph 7 (**Participant Tracking**) of section **[vi] Data Collection,** that is associated with this **Appendix 4,** on **page 18** of the protocol has been edited to reflect the change in the associated appendix. This paragraph now reads:

> **Participant Tracking**: At this stage, the EAP officer will collect information and permission to make contact a months later. The information will be recorded on a separate register, matched with assigned ID numbers, and will include date of training, location (Blantyre, Lilongwe, Mzuzu), participation in EAP training (YES or NO), and participant's assigned study ID number. Participants will be asked to keep their study ID number for use at the post-test stage 30 days later. All employees will be contacted through ordinary workplace communication channels (notice boards and staff group emails) 30 days after EAP training. The purpose of this communication is to remind respondents to complete the follow-up questionnaire. Participants will then use their previously assigned evaluation ID numbers.

Paragraph 3 (**Study Design Ethics**) of section **[i] (Ethical Considerations)** that refers to this **Appendix 4** on **page 26** of the protocol has been edited to reflect this change in the referred appendix. This paragraph now contains statements which read:

> However, every employee who comes to attend EAP training registers his/her attendance using a registration form (**Appendix 4 – EAP Training Attendance Register**). Even this form will not record identifying contact information. Nonetheless, it is important to track participants at the posttest stage of the study. As such, the attendance register will record date of training, location (Blantyre, Lilongwe, Mzuzu), participation in EAP training (YES or NO), and participant's assigned study ID number. As such, it is the PI who will assign the Identifier Numbers (IDs) at random to the employees who consent to participate in the actual study. No other person within or outside the study will access the 'linking' information. Participants will be asked to keep their study ID number for use at the posttest stage 30 days later. All employees will be contacted through ordinary workplace communication channels (notice boards and staff group emails) 30 days after EAP training. All employees will be contacted through ordinary workplace communication channels (notice boards and staff group emails) 30 days after EAP training. The purpose of this communication is to remind respondents to complete the follow-up questionnaire.

Thank you for your consideration and valuable comments on this protocol. After addressing the 4 concerns, the researcher has updated the version number to **Version 1.1**. Please find attached.

I trust your good office will find the above outlined resolutions to the 4 concerns satisfactory. By providing permission to conduct this MPH study in their organization, the company had put on hold an already organized EAP activity. Granting full approval will give chance to a timely intervention that is key to the success of the study. The researcher will wait for such full approval to commence implementation of the study.

Yours Sincerely,

MACLEAN VOKHIWA

MPH STUDENT ID: 201770074118

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Appendix 4 Study Timeline Gantt chart

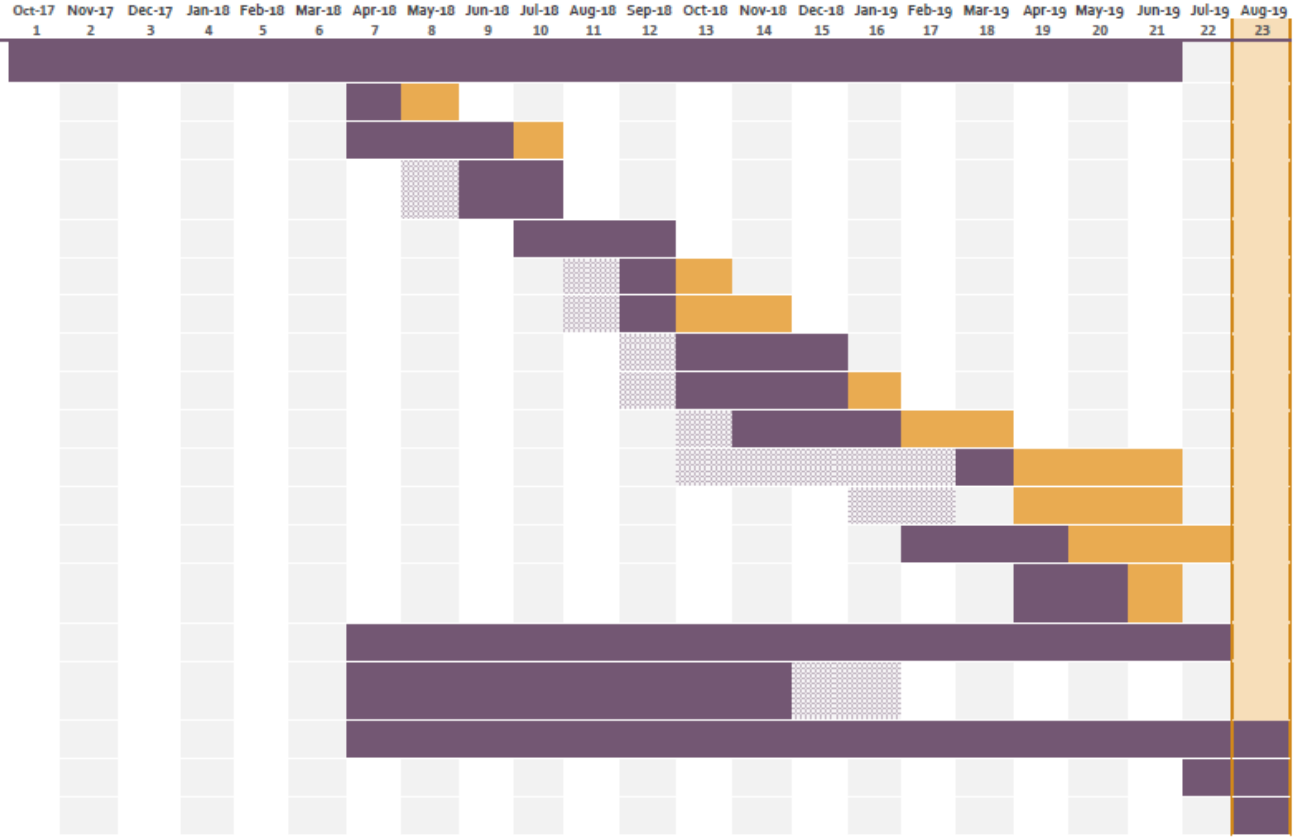
MACLEAN VOKHIWA MPH EAP Study

Current period at Dissertation submission is highlighted. A legend describing the charting follows.

Period Highlight: 23

Plan Duration | Actual Start | % Complete | Actual (beyond plan) | % Complete (beyond plan)

ACTIVITY	PLAN START	PLAN DURATION	ACTUAL START	ACTUAL DURATION	PERCENT COMPLETE
Study Consultative meetings	1	21	1	21	100%
2-Page Proposal	7	1	7	2	100%
Full Proposal	7	3	7	4	100%
Permission from Management	8	3	9	2	100%
COMREC	10	3	10	3	100%
Employee Sensitization	11	2	12	2	100%
ICF Distribution	11	2	12	3	100%
Pretest Data Collection	12	4	13	3	100%
EAP Intervention	12	4	13	4	100%
Posttest Data Collection	13	4	14	5	100%
Data Entry & Cleaning	13	6	18	4	100%
Analysis	16	2	19	3	100%
Report Writing	17	3	17	6	100%
Present Priliminary Results	19	2	19	3	100%
Dissertation Writeup	7	16	7	16	100%
Into/Lit Review/ Methodology	7	10	7	8	100%
Supervision	7	17	7	17	100%
Present Final Reports	22	2	22	2	100%
Dissertation Submission	23	1	23	1	100%



Appendix 5 WOS – English & Chichewa

Appendix 5 A - Workplace Outcome Suit (WOS) – English

Version 1.0 06/08/2018

Date: _____/_____/_____ Study ID: E _____/_____/_____
Day Month Year

Assessment Type: [1] Pretest (Before) [2] Posttest (After)

CGP WORKPLACE OUTCOME SUITE (WOS)

GENERAL INSTRUCTIONS
Below is a series of statements that refer to aspects of your work and life experience that may be affected by the personal problems you want to address at the EAP during the past 30 days. Please read each item carefully and answer as accurately as you can.

	INSTRUCTIONS FOR ITEMS 1-5 Please report for the period of the past 30 days the total number of hours your personal problems:	NUMBER OF HOURS
ABSENTEEISM	1. Caused you to miss work altogether.	
	2. Made you late for work.	
	3. Caused you to take off early.	
	4. Pulled you away from your normal work location.	
	5. Required you to be on the phone, e-mail or internet while at work.	

	INSTRUCTIONS FOR ITEMS 6-25 The following statements reflect what you may do or feel on the job or at home. Please indicate the degree to which you agree with each of the statements for the past 30 days. Use the 1-5 response key to the right.	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEUTRAL	SOMEWHAT AGREE	STRONGLY AGREE
PRESENTEEISM	6. I had a hard time doing my work because of my personal problems.	1	2	3	4	5
	7. My personal problems kept me from concentrating on my work.	1	2	3	4	5
	8. Because of my personal problems I was not able to enjoy my work.	1	2	3	4	5
	9. My personal problems made me worry about completing my tasks.	1	2	3	4	5
	10. I could not do my job well because of my personal problems.	1	2	3	4	5
WORK ENGAGEMENT	11. I feel stimulated by my work.	1	2	3	4	5
	12. I often think about work on my way to the work site.	1	2	3	4	5
	13. I feel passionate about my job.	1	2	3	4	5
	14. I am often eager to get to the work site to start the day.	1	2	3	4	5
	15. I often find myself thinking about my work at home.	1	2	3	4	5
LIFE SATISFACTION	16. My life is nearly perfect.	1	2	3	4	5
	17. I am not very satisfied with my life as a whole.	1	2	3	4	5
	18. So far, my life seems to be going very well.	1	2	3	4	5
	19. There isn't anything about my life that I would change if I could.	1	2	3	4	5
	20. I am very disappointed about the way my life has turned out.	1	2	3	4	5
WORKPLACE DISTRESS	21. I often feel anxious at work.	1	2	3	4	5
	22. Thinking about being at work makes me upset.	1	2	3	4	5
	23. I am unhappy most of the time at work.	1	2	3	4	5
	24. I dread going into work.	1	2	3	4	5
	25. I can't wait to get away from work.	1	2	3	4	5

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Study Short Title: Employee Assistance Program (EAP) Evaluation Study
Principle Investigator(PI): Maclean Vokhiwa

Approved by
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28 SEP 2018
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Appendix 5 B - Workplace Outcome Suit (WOS) – Chichewa

Version 1.0 06/08/2018

Deti: _____/_____/_____ Nambala mu Kafukufuku (Study ID): E _____/_____/_____

Tsiku Mwezi Chaka

Gulu la Muyezo (Assessment Type): **[1]** Pretest (Loyamba) **[2]** Posttest (Lachiwiri)

CGP WORKPLACE OUTCOME SUITE (WOS) – CHICHEWA VERSION

MALANGIZO

Munsimu muli mafunso azakakhalidwe ka pantchito komanso m'moyo zomwe zingakhudzidwe ndi mavito anu pa masiku 30 apitawa, zomwe mungafunile chithandizo cha EAP. Werengani ndikuyankha finso lirilonse molondola ndi moona mtima.

		MALANGIZO A MFUNDO 1-5 M'masiku 30 apitawa, kodi ndi ma ola angati pamene mavuto anu:	
KUSAPEZEKA PA NTCHITO	1	Anakulepheletsani kugwira ntchito	
	2	Anakuchedwetsani kufika kuntchito	
	3	Anakupangitsani kuweruka kuntchito nthawi isanakwane	
	4	Anakupangitsani kuchoka pa malo anu ogwira ntchito	
	5	Anakupangitsani kukhala pa foni, e-mail kapena pa intaneti nthawi yogwira ntchito	

		MALANGIZO A MFUNDO 6-23 Mfundo zotsatirazi zikuonetsa zomwe mungachite kapena kumva muli kuntchito kapena muli kunyumba. Polingalira masiku 30 apitawa, chonde sonyezani momwe mukugwilizanilana nazo mfundo zili m'musizi. Gwiritsani ntchito mulingo wa 1-5 uli kumanjaku posonyeza maganizo anuwo.	SINDIKUGWIRIZANA NAZO KWENIKWENI	SINDIKUGWIRIZANA NAZO KOMA	NDILI CHIKATIKATI	NDIKUGWIRIZANA NAZO KOMA SKWENIKWENI	NDIKUGWIRIZANA NAZO KWENIKWENI
KUFOOKA PANTCHITO	6	Ndakhala ndikuvutika kugwira ntchito chifukwa cha mavuto anga	1	2	3	4	5
	7	Mavuto anga akhala akusokoneza chidwi changa pa ntchito.	1	2	3	4	5
	8	Chifukwa cha mavuto anga, sindimatha kusangalatsidwa ndi ntchito yanga	1	2	3	4	5
	9	Mavuto anga amandipangitsa kukhala ndi nkhawa zam'mene ndingamalizire ntchito zanga	1	2	3	4	5
	10	Ndakhala ndikulephera kugwira ntchito yanga molongosoka chifukwa cha mavuto anga	1	2	3	4	5
KUZIPEREKA PANTCHITO	11	Ndimalimbikitsidwa ndi ntchito yanga	1	2	3	4	5
	12	Nthawi zambiri ndimaganiza za ntchito yanga, popita kuntchito	1	2	3	4	5
	13	Ndimaikonda ntchito yomwe ndimagwira	1	2	3	4	5
	14	Nthawi zambiri ndimaona kuchedwa kufika kuntchito, kukayayambapo kugwira ntchito yanga	1	2	3	4	5
	15	Nthawi zambiri ndimakhala ndikuganiza za ntchito yanga, ngakhale ndiri kunyumba	1	2	3	4	5
KUKHUTIRA NDI MOYO	16	Moyo wanga uli bwino	1	2	3	4	5
	17	Sindili okukhutira kweni-kweni ndi moyo wanga m'mene ulili	1	2	3	4	5
	18	Pakadali pano, moyo wanga ukuoneka kuti ukuyenda bwino	1	2	3	4	5
	19	Palibe chomwe ndikuona kuti ndingasinthe chamoyo wanga, ngakhale nditafuna	1	2	3	4	5
	20	Ndili okhumudwa kwambiri ndi momwe moyo wanga ulili pano	1	2	3	4	5
ZOKHUDZWITSA PA NTCHITO	21	Kawirikawiri ndimakhala wothunthumila kapena wa mantha paliponse pa ntchito	1	2	3	4	5
	22	Ndikaganiza zokhala kuntchito ndimakhumudwa	1	2	3	4	5
	23	Kawirikawiri ndimakhala wosasangala ku ntchito	1	2	3	4	5
	24	Ndikaganiza zopita kuntchito, iiih sindimafuna.	1	2	3	4	5
	25	Ndimalakalaka nthawi yowelukira izikwana msanga	1	2	3	4	5

Mutu wa Kafukufuku (Mchidule): Kuyeza Ubwino wa EAP

Dzina la Wofufuza Wamkulu: Maclean Vokhiwa - Principle Investigator(PI)

Approved by
College of Medicine
28 SEP 2018
(COMREC)
Research and Ethics Committee

Appendix 6 Moderating Factors Questionnaire – English & Chichewa

[MACLEAN VOKHIWA - PI]

Participant ID Number:E/___/ ___/ ___

Assessment Type: [1]Pretest (Before)
[2]Posttest (After)

STUDY TITLE: Measuring the Value of an Employee Assistance Program (EAP) Intervention using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context."

SHORT TITLE: Employee Assistance Program (EAP) Evaluation Study
(Kuyeza Ubwino wa EAP)

Demographic Factors Questionnaire

Please answer each question as accurately as possible by circling the correct answer or filling in the space provided.
Chonde yankhani mafunso ali mmunsiwa molondola, mmene mungathere, pozunguliza ansala yolondola komanso kulemba mu gawo zomwe zapatsidwa.

Age *(Zaka Zakubadwa)*

[_____] YEARS OLD

Date Of Birth *(Tsiku Lobadwa)*:

_____/_____/_____
DAY MONTH YEAR

Sex *(Gulu la Chibadwidwe)*: [1] FEMALE *(MKAZI)* [2] MALE *(MWAMUNA)*

Type of Job Activity/ Job Family *(Mtundu Wa Ntchito Yanu)*:

[1] EXCO (Executive Committee) [2] Finance [3] Marketing & Communication
[4] Legal/Risk & Compliance [5] Sales [6] IT (Information Technology)
[7] Operations [8] Human Resources & Administration
[9] Business Development [10] Support Staff [11] Projects & Procurement

Level of Employment
(Role Size/ Grade)
(Giledi ya ntchito yanu)

[1] Levels **J & K** (Operative/ Clerical)
[2] Level **L** (Supervisory/ Team leaders)
[3] Levels **M & N** (Manager)
[4] Level **O** (Senior Manager)
[5] Levels **P & Q** (Executive Management)

Comment
How do you feel (or think) participation in this experiential EAP stress management activity impacts your work-related well-being?
(Kodi mukuona (kapena kuganiza bwanji) za ubwino ya EAP, iyi yothana ndikuthodwa, pa umoyo wanu wa pantchito?)

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College of Medicine
28 SEP 2018
(COMREC)
Research and Ethics Committee

Appendix 7 Permissions to Interview Employees

OLDMUTUAL

Old Mutual Life Assurance Company (Malawi) Limited

Old Mutual Building, 30 Glyn Jones Road, Blantyre
PO Box 393, Blantyre, Malawi
Tel: +265 [0]1 820 677, Fax: +265 [0]1 822 649

www.oldmutual.co.mw

27th July 2018

Mr Maclean Vokhiwa
Public Health Department
School Of Public Health and Family Medicine
College Of Medicine, University Of Malawi
Blantyre

Dear Maclean

RE: PERMISSION TO CONDUCT AN EAP EVALUATION STUDY AMONG EMPLOYEES

I acknowledge receipt of your letter dated 10th July 2018, requesting for permission to carry out a study amongst our staff as part of your research titled: "**Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context.**" I am pleased to advise that permission has been granted.

In granting this permission, we are assured that in this study, you will use the employees Informed Consent Form (ICF) and questionnaire for employees as per the samples submitted to us. You have also committed to protect the confidentiality and anonymity of both employees and the organization in the thesis and resulting publication, protocols which have satisfactorily addressed our management concerns.

Furthermore, we look forward to benefiting by accessing the data and publishing our own EAP program evaluation reports. We trust that this evaluation will present immediate direct benefits to our employees and the EAP program.

We wish you the best in your study.

Sincerely yours,

REX KADZONGWE
HUMAN RESOURCES MANAGER

CC: The Administrator,
College of Medicine Research and Ethics Committee (COMREC),

The Head of Public Health Department, School of Public Health & Family Medicine, College of Medicine

I Ottober (Chairperson), J Kamsesa, A Burke, E Jiya, R Mijiga, K Gleeson, L Chilando, T Biza (Managing Director)

Company Secretary: C Kalaile

Postal Address: P.O Box 30459, Lilongwe 3, Malawi
Physical Address: Old Mutual House, Lilongwe, City Centre
Telephone: 265 (0) 1 770 622 / 987
Fax: 265 (0) 1 772 201 / 270
E-mail: mpicoll@mpicomw.com
Website: www.mpicomw.com

MPICO

EJ/MPICO

30th July 2018

Mr. Maclean Vokhiwa
Public Health Department
School of Public Health and Family Medicine
College of Medicine, University of Malawi
Blantyre,

Dear Maclean Vokhiwa,

PERMISSION TO CONDUCT AN EAP EVALUATION STUDY AMONG EMPLOYEES

We acknowledge receipt of your letter dated 10 July 2018, requesting permission to carry out a study amongst our staff as part of your research titled: "**Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context.**" We are pleased to advise that permission has been granted.

In granting this permission, we are assured that in this study you will use the employee's Informed Consent Form (ICF) and questionnaire for employees as per the samples submitted to us. You have also committed to protect the confidentiality and anonymity of both employees and the organization in the thesis and resulting publication, protocols which have satisfactorily addressed our management concerns.

Furthermore, we look forward to benefiting by accessing the data and publishing our own EAP program evaluation reports. We trust that this evaluation will present immediate direct benefits to our employees and the EAP program.

We wish you the best in your study.

Yours Sincerely,
FOR MPICO PLC

ELLIOT JAMBO
OPERATIONS & HUMAN RESOURCE MANAGER

CC: **The Administrator**
The College of Medicine Research and Ethics Committee (COMREC)

The Head of Public Health Department,
School of Public Health & Family Medicine, College of Medicine

Company Registration No. 1495

Directors:Mrs E.Jiya(Chairperson),D.Kafoteka(MD),A.G Barron,C.A.Kapanga,Mrs V.Masikini,M.Mikwamba,Ms E.Salamba,Ms C.Kalaile

A Member of the OLDMUTUAL Group

Appendix 8 – Materials Used

Appendix 8A - EAP Training Attendance Register – English & Chichewa

EMPLOYEE ASSISTANCE PROGRAM – EAP

Experiential Stress Management Training

Training Attendance Register

		Date:	
Location *(Malo)*:	[ ] Blantyre	[ ] Lilongwe	[ ] Mzuzu

Participation in EAP Evaluation

Kutenga Mbali mu Kafukufuku wa EAP

Are you participating in the impact evaluation study for this training? *Kodi mukutenga nawo mbali mu kafukufuku owona ubwino wa maphunziro amenewa?*	[ ] YES *EYA* [ ] NO *AYI*
If YES, you will receive EAP information, through ordinary employee communication, 30 to 60 days after this training to remind you to complete the follow-up questionnaire. *Ngati mukutenga nawo mbali, muzalandila uthenga wa EAP, kuzela mu njira za masiku onse za uthenga kwa ogwira ntchito, pakatha masiku 30 kufikira masiku 60 kukukumbutsani zoyankha mafunso akafukufuku ameneyu kachiwiri.*	
Study ID number is: *Nambala Yanu mukafukufuku ndi:*	* E /_____/ _____/ _____

* You will use this Study ID number on both your pretest and posttest evaluation forms.

** Mugwiritsa ntchito Nambala Yanu Yamukafukufukuyi (Study ID number) pa mapepala anu a gulu la muyezo oyamba (Pretest) komanso lachiwiri (Posttest).*

_____

Employee Signature
Kusainila Kwanu

or Thumb Print (Chidindo cha chala chachikulu cha wotenga mbali)

Approved by
College of Medicine
28 SEP 2018
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Appendix 8B – EAP Stress Management Training Workbook – English & Chichewa

EMPLOYEE ASSISTANCE PROGRAM – EAP

Experiential Stress Management Training

Training Workbook

Introduction

Stress is a common concern among employees in organizations. Issues of concern include workload, deadlines, personal responsibilities, performance expectations, and physical work environment challenges that would affect an employee's performance. Specifically, these challenges influence an employee's presence and concentration at work, their engagement with work, anxieties and satisfaction with life. Organizations implement workplace Employee Assistance Program activities to support employees and improve wellbeing. This experiential training provides a direct opportunity for employees to reflect on how their work environment affects their wellbeing outcomes. Employees have a chance to plan and immediately implement actions to address common stress concerns within their workplace.

Kawirikawiri Ogwira ntchito ambiri amakhala zothodwetsa. Nkhawa zambiri zimakhala pa kuchuluka kwa ntchito, nthawi yoyenera kumalizira ntchito, zofunika zamoyo wawo watsiku ndi tsiku, ndinso zomwe amafuna kukwaniritsa pa ntchito yawo. Kwenikweni mavuto amenewa amasokoneza kakhalidwe kake pa ntchito, magwiridwe awo a ntchito, kukhumudwa ndi kukwanitsidwa ndi moyo wawo. Makampani amakhala ndi ma pologalamu othandiza ogwira ntchito ndikupititsa patsogolo umoyo wawo. Maphunzirowa omwe amagwiritsa ntchito zenizeni zomwe munthu akukumana nazo m'moyo, amapereka mwayi woti ogwira ntchito aganizire momwe malo awo a ntchito angakhudzire umoyo wawo. Ogwira ntchito amakhala ndi mpata wokonza ndikuchita moyenera pokonza mavuto apamalo awo antchito.

Goal *(Cholinga)*

The goal of the training is to help employees to implement practical adjustment of sources of stress in the work environment and their personal behaviours.

Cholinga cha maphunzirowa ndi kuthandiza ogwira ntchito kuzindikira zomwe zimayambitsa zothodwetsa pa malo antchito ndi makhalidwe awo.

Experiential Learning *(Kuphunzira kupyolera mu zochitika zenizeni)*

The experiential learning model that will used in this training emphasizes the important role of an employee's experience in learning. Learning is defined as the process through which knowledge is created by grasping and transforming experience. You will be guided through five (5) steps that are outlined in the diagram below:

Njira imeneyi yomwe idzagwiritsidwe ntchito mu maphunzirowa imakhazikika pa kufunika kwa zomwe ogwira ntchito angazindikire. Kuphunzira kumafotokozedwa monga njira imene kuzindikira kumayambira pakutenga ndikusanduliza zomwe timazidziwa kale. Mudzadutsitsidwa mu masitepe 5 omwe alongosoledwa m'munsimu:

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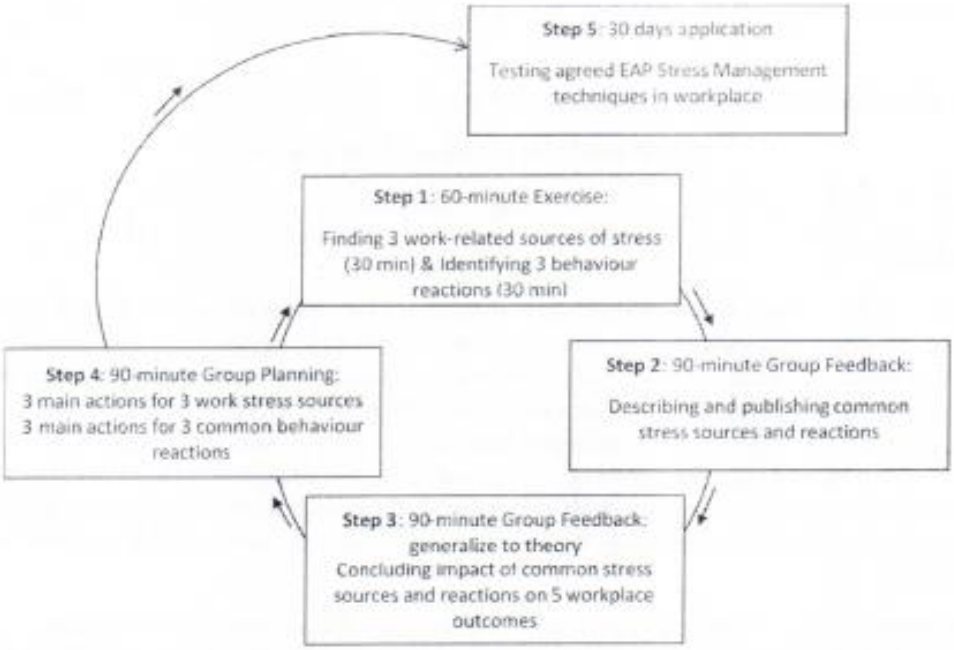
Diagram 1: Your steps in the training



Masitepe a kuphunzira kumeneku ndi awa

1. ***Zochitika mphindi 60***
   Kuunika zomwe zimayambitsa zothodwetsa pantchito (mphindi 30) ndikupeza momwe anthu amachitira nazo (mphindi 30)
2. ***Mphindi 90** – kumva maganizo a anthu pagulu*
   Kufotokoza ndi kulemba zinthu zomwe zimayambitsa zothodwetsa ndi momwe anthu amachitira Nazo
3. ***Mphindi 90** – Kumva maganizo m'magulu*
   Kulinganiza ndi kupeza zomwe zimayambitsa zothodwetsa kawirikawiri ndi momwe anthu anthu amachitira nazo
4. ***Mphindi 90** – Zinthu zitatu zikuluzikulu zomwe zimabweretsa zothodwetsa, ndi njira zitatu zomwe tingathanirane ndi zomwe anthu amachita kamba ka zothodwetsazi*
5. ***Kugwiritsa ntchito njirazi – Masiku 30***
   Kuona momwe njira za EAP zikugwirira ntchito pakati pa ogwira ntchito.

You are asked to actively follow through the individual and group exercises in this workbook.

Mukupemphedwa kuti muzitsatira ndi kuchita nawo zomwe zili mu kabukuka.

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Exercise 1: **Identifying Stress Sources and Behaviours**
(Zochitika Zoyamba: ***Kupeza zochitika ndi zikhalidwe zomwe zimabweretsa zothodwetsa)***

This first exercise makes you identify common sources of stress in your work environment and how you react or behave in relation to these sources of stress. Please, write down what you feel are common sources of stress and your corresponding behaviours in your work environment.

Zochitika zoyambazi zikupangitsani kudziwa zomwe zimayambitsa zothodwetsa pa malo anu a ntchito ndo momwe inu mumachitira nazo.

Mode *(Njira)*	Individual task *(Aliyense payekha payekha)*
Instruction *(Langizo)*	Complete immediately in training session *(Malizani mu kalasi)*
Identify 3 sources of stress that are common in your work environment *Perekani zitatu zomwe zimayambitsa zothodwetsa pamalo anu antchito*	1. 2. 3.
For each source of stress, identify the ways in which you react (your behaviours) *Pa chifukwa chilichonse, fotokozani momwe mumachitira ndi zothodwetsazo*	1. 2. 3.

Exercise 2: **Group Feedback** ***(Maganizo a Pagulu)***

This second exercise makes you appreciate what your group agrees to be the common sources of stress in your work environment, as well as common reactions or behaviours in relation to these sources of stress. Please write down group consensus below.
Chochitika chachiwirichi chikupangitsani kuvomereza zomwe gulu lanu lapeza monga chiyambitsa zothodwetsa chodziwika pamalo anu antchito, komanso momwe anthu amachitira nazo kawirikawiri. Lembani zomwe gulu lagwirizana m'musimu.

Mode *(Njira)*	Group Task *(Ntchito ya pagulu)*
Instruction *(Langizo)*	Complete immediately in training session *(Malizani mu kalasi)*
Agreed 3 sources of stress that are common in your work environment *Gwirizanani zinthu zitatu zomwe zimayambitsa zothodwetsa pamalo antchito.*	1. 2. 3.
For each source of stress, write down agreed common reactions and behaviours *Pa chilichonse choyambitsa zothodwetsa chomwe wagwirizana, lembani mchitidwe ooneka kawirikawiri*	1. 2. 3.

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Exercise 3: Group Conclusion on Impact of Identified Stresses and Behaviours
Zomwe gulu lagwirizana pa zotsatira za zothodwetsa ndi mchitidwewo

This third exercise makes you appreciate what your group concludes to be the impact of the common sources of stress and the common reactions or behaviours on your workplace wellbeing. Please write down group consensus below.

Zochita zachitatuzi zikupangitsani kuvomereza zomwe gulu lanu lapeza kuti ndi zotsatira zoyambitsa zodziwika bwino za zothodwetsa ndi momwe anthu amachitira nazo pa malo anu antchito. Lembani zomwe mwagwirizanazo musimu.

Mode *(Njira)*	Group Task *(Ntchito ya pagulu)*
Instruction *(Langizo)*	Complete immediately in training session *(Malizani mu kalasi)*
Agreed IMPACT of the 3 sources of stress that are common in your work environment *Zomwe zavomerezedwa ngati zotsatira za zoyambitsa zothodwetsa pa malo antchito*	1. 2. 3.
Agreed IMPACT of the 3 common reactions and behaviours in your work environment *Zomwe zavomerezedwa ngati zomwe anthu amachita chifukwa cha zothodwetsa pamalo antchito*	1. 2. 3.

Exercise 4: Group EAP Action Planning ***(Dongosolo la Pulani ya EAP yochitika yapagulu)***

This fourth exercise makes you aware and commit to the 3 main actions that are agreed to address the 3 main identified sources of stress in your work environment. It also helps you to be aware and commit to the 3 main behavioural adjustments that have been agreed to among the group. Please write down group consensus below.

Zochitika izi zikupangitsani kudziwa komanso kudzipereka pa zochitika zitatu zikuluzikulu zomwe zavomerezeda kuti zithandize kukonza zikhalidwe zomwe zimadza

Mode *(Njira)*	Group Task *(Ntchito ya pagulu)*
Instruction *(Langizo)*	Complete immediately in training session *(Malizani mu kalasi)*
Planned/ agreed 3 main actions to address the 3 identified sources of stress in your work environment *Zinthu Zitatu zomwe zavomerezedwa ngati zoyambitsa zothodwetsa pamalo antchito* MARKED FOR IMMEDIATE ACTION Both organizational and employee level. *ZOFUNIKA KUCHITAPO KANTHU MWAMSANGA* *Zofunika kampani ndi ogwira ntchito pamodzi*	1. 2. 3.
Planned/agreed 3 main work-related behavioural adjustments MARKED FOR IMMEDIATE ACTION - Employee level ZOFUNIKA KUCHITAPO KANTHU - Kwa ogwira ntchito	1. 2. 3.

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Exercise 5: EAP Stress Management Action ***(Zochita Pothana ndi Zothodwetsa)***

This last exercise (fifth) is to be completed during 30 days after this group training session. The exercise will help you to monitor application and immediate implementation of agreed actions and behavioural adjustments in your daily work environment. Remember that to address the 3 specific common sources of stress and the 3 behavioural adjustments, both the organization and employees have agreed and have committed to the 3 main actions and to the 3 main behavioural adjustments that have been specified in **Exercise 4: Group EAP Action Planning** above. It is the responsibility of every employee to monitor and ensure that these actions are implemented immediately. This will help to improve wellbeing of your work environment. Please write down group consensus below.

Zochita zotsirizirazi ndizofunika kumalizitsa mu masiku 30 atachitika maphunziro. Zochititikazi zikuthandizani kulondoloza machitidwe a zomwe mwagririzana ndi kukonza zikhalidwe pamalo anu antchito tsiku ndi tsiku. Kumbukirani kuti pokonza zinthu zitatu zomwe zimayambitsa zothodwetsa ndi masinthidwe a zikhalidwe zomwe zanenedwa 4 m'mwambamu. Ndi udindo wa ogwira ntchito aliyense kulondoloza ndikuonetsetsa kuti zimenezi zikuchitika nthawi yomweyo. Izi zithandiza kupititsa patsogolo ubwino wa pamalo anu antchito. Lembani zomwe mwagwirizana pagulu m'musimu:

Mode *(Njira)*	Individual Task *(aliyense payekha payekha)*		
Instruction *(Langizo)*	Complete during 30 days after training session. *Yankhani mkati mwa masiku 30 akatha maphunziro*		
You are completing this EAP action monitoring how many days after the training? *Mukulemba izi patatha masuku angati chimalizireni maphunziro?*	[ ] Days		
Is each of the 3 EAP actions implemented or applied? *Kodi zinthu zitatu zoyenera kuchitidwa zija zachitika?*	Action 1	[ ] YES	[ ] NO
	Action 2	[ ] YES	[ ] NO
	Action 3	[ ] YES	[ ] NO
Comment regarding application of the 3 EAP stress management actions: *Ndemanga pa zinthu zitatu zimenezi*			
Is each of the 3 EAP related behavioural adjustment implemented or applied? *Kodi machitidwe atatu oyenera kusintha aja asintha?*	Behaviour 1	[ ] YES	[ ] NO
	Behaviour 2	[ ] YES	[ ] NO
	Behaviour 3	[ ] YES	[ ] NO
Comment regarding application of the 3 EAP stress management related behavioural adjustments: *Ndemanga pa kusintha kwa machitidwe atatu aja.*			

Thank you for actively completing this training. *(Zikomo pochita nawo maphuziro amenewa)*

Feel free to contact your EAP professional for any support relating to this workbook or any issues that might arise while you are participating in this training.

Muli omasuka kuyankhulana ndi ogwira ntchito a EAP pa chithandizo chilichonse chokhuza buku ili kapena zovuta zina zomwe mungakumane zazo chifukwa chotenga mbali mu maphuziro awa.

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Appendix 8C – EAP Experiential Intervention PowerPoint Presentation

OLDMUTUAL

EAP Experiential Stress Management

Maclean Vokhiwa
OLDMUTUAL/MPICO EAP

EAP Stress Management 2019 - M Vokhiwa

Stress is a process

EAP Stress Management 2019 - M Vokhiwa

•a state of mental or emotional strain or tension resulting from adverse or demanding circumstances

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EAP Stress Management 2019 - M Vokhiwa

Job Stress

•A condition arising from interaction of people and their jobs and characterized by changes within people that force them to deviate from their normal functioning

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EAP Stress Management 2019 - M Vokhiwa

•Adaptive response to an external situation that results in psychological, emotional, physical, and/or behavioural deviations for organizational employees

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EAP Stress Management 2019 - M Vokhiwa

Stress Process

Sources → Reactions → Undesired Impact

EAP Stress Management 2019 - M Vokhiwa

Workplace Outcomes

Work Presenteeism

Decreased productivity even though you are not absent per se, but not working at your optimum due to unresolved personal problems

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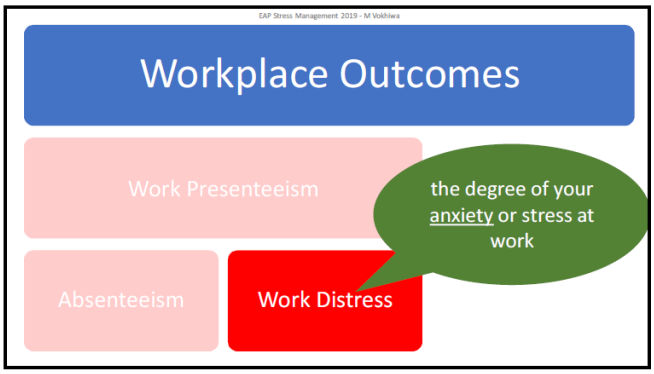
EAP Stress Management 2019 - M Vokhiwa

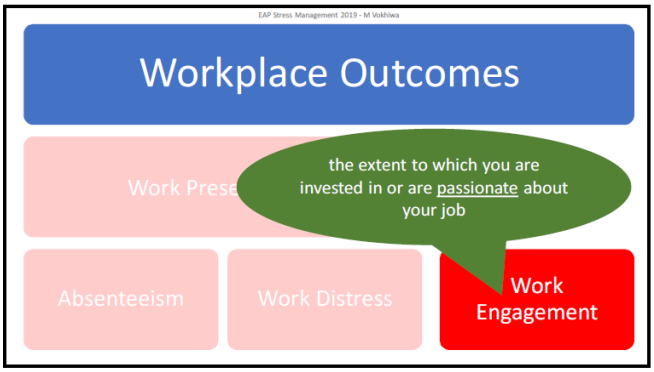
Workplace Outcomes

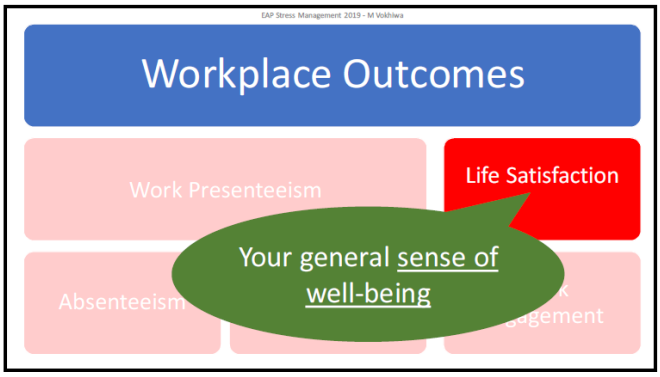
Work Presenteeism

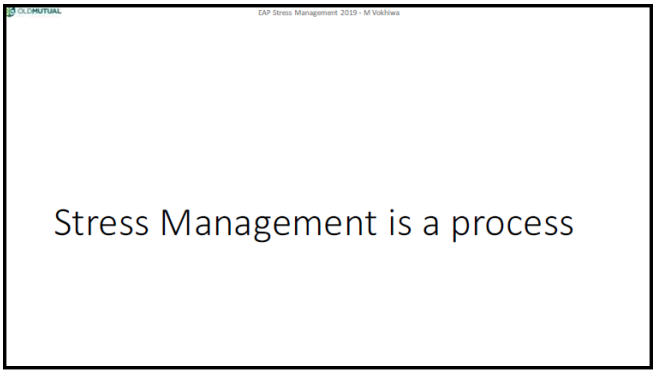
Absenteeism

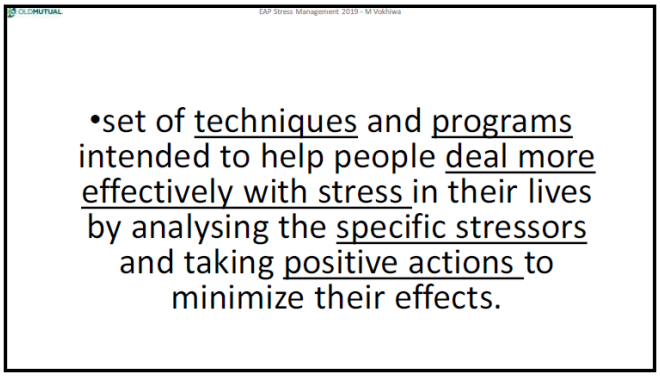
Number of hours absent due to a personal problem taking you away from work

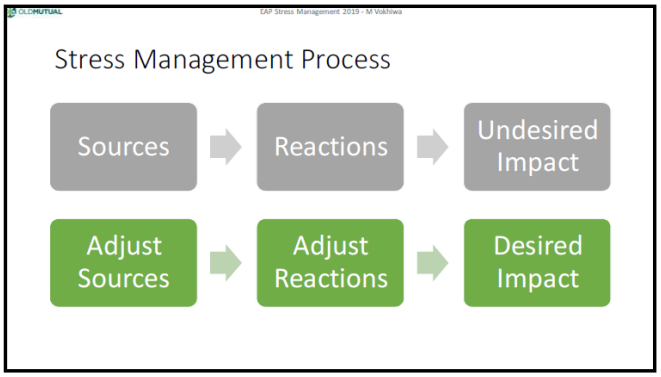

EAP Stress Management 2019 - M Vokhiwa
Workplace Outcomes
Work Presenteeism
the degree of your anxiety or stress at work
Absenteeism
Work Distress

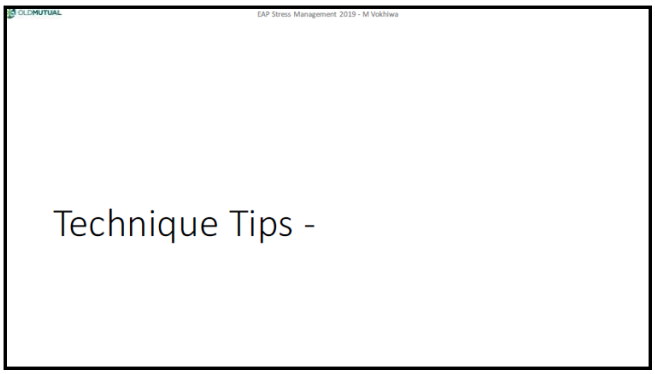

EAP Stress Management 2019 - M Vokhiwa
Workplace Outcomes
the extent to which you are invested in or are passionate about your job
Absenteeism
Work Distress
Work Engagement

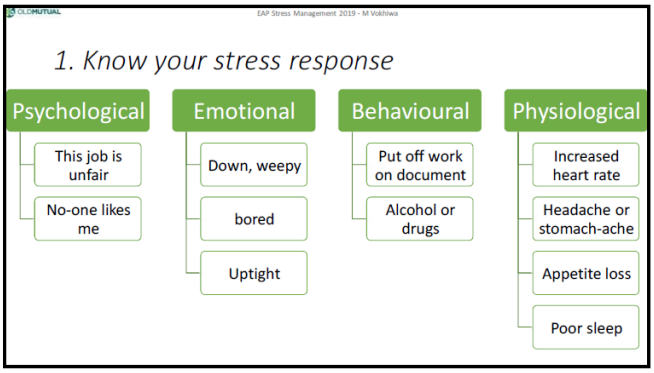

EAP Stress Management 2019 - M Vokhiwa
Workplace Outcomes
Work Presenteeism
Life Satisfaction
Your general sense of well-being
Absenteeism

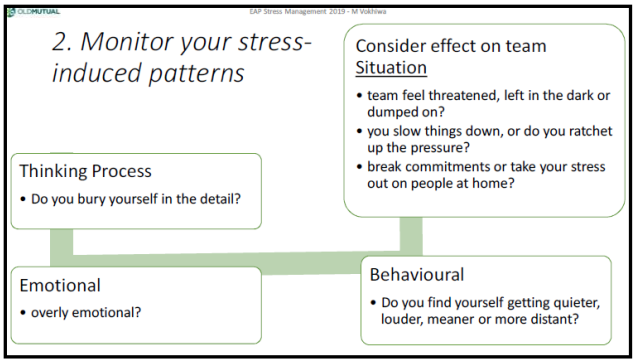

OLDMUTUAL
EAP Stress Management 2019 - M Vokhiwa
Stress Management is a process

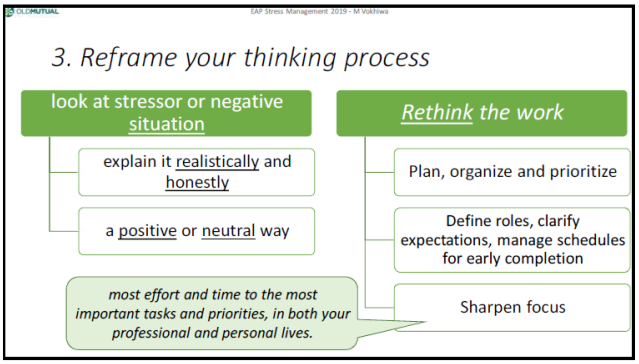

OLDMUTUAL
EAP Stress Management 2019 - M Vokhiwa
•set of techniques and programs intended to help people deal more effectively with stress in their lives by analysing the specific stressors and taking positive actions to minimize their effects.

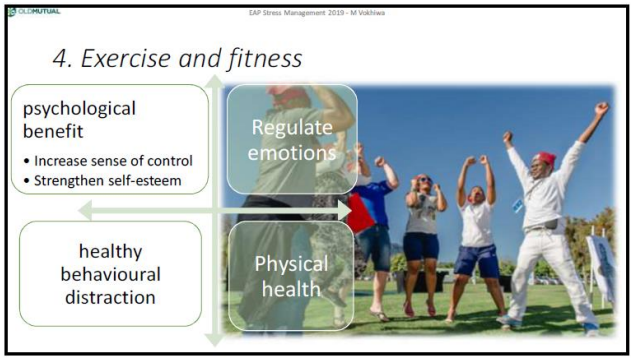

OLDMUTUAL
EAP Stress Management 2019 - M Vokhiwa
Stress Management Process
Sources
Reactions
Undesired Impact
Adjust Sources
Adjust Reactions
Desired Impact

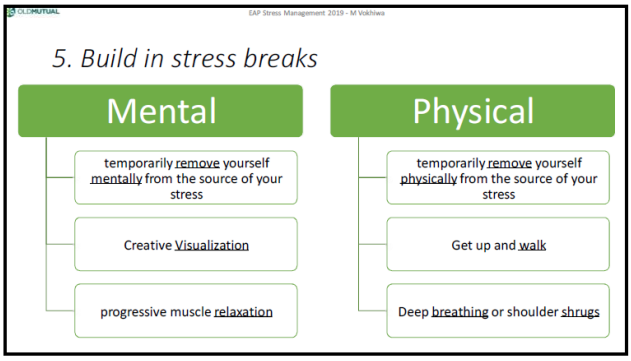

OLDMUTUAL
EAP Stress Management 2019 - M Vokhiwa
Technique Tips -

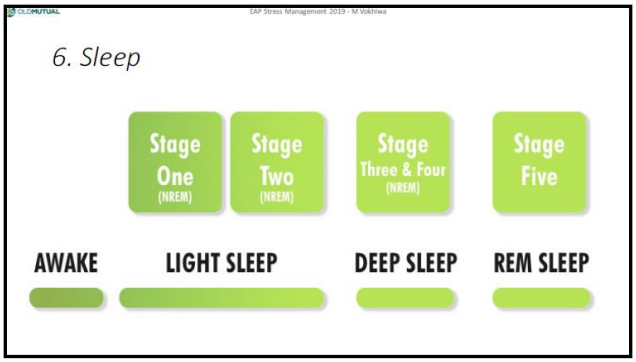

OLDMUTUAL
EAP Stress Management 2019 - M Vokhiwa
1. Know your stress response
Psychological
This job is unfair
No-one likes me
Emotional
Down, weepy
bored
Uptight
Behavioural
Put off work on document
Alcohol or drugs
Physiological
Increased heart rate
Headache or stomach-ache
Appetite loss
Poor sleep

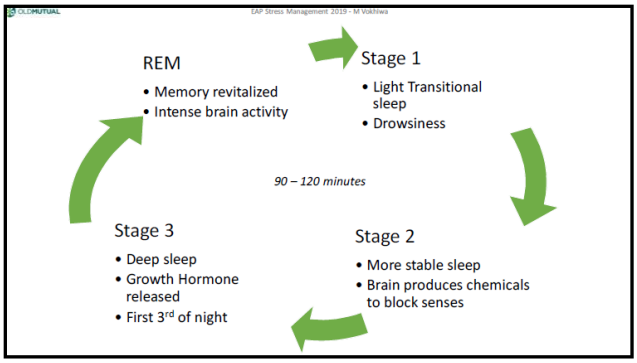

2. Monitor your stress-induced patterns
Consider effect on team
Situation
• team feel threatened, left in the dark or dumped on?
• you slow things down, or do you ratchet up the pressure?
• break commitments or take your stress out on people at home?
Thinking Process
• Do you bury yourself in the detail?
Emotional
• overly emotional?
Behavioural
• Do you find yourself getting quieter, louder, meaner or more distant?


3. Reframe your thinking process
look at stressor or negative situation
explain it realistically and honestly
a positive or neutral way
Rethink the work
Plan, organize and prioritize
Define roles, clarify expectations, manage schedules for early completion
Sharpen focus
most effort and time to the most important tasks and priorities, in both your professional and personal lives.


4. Exercise and fitness
psychological benefit
• Increase sense of control
• Strengthen self-esteem
healthy behavioural distraction
Regulate emotions
Physical health

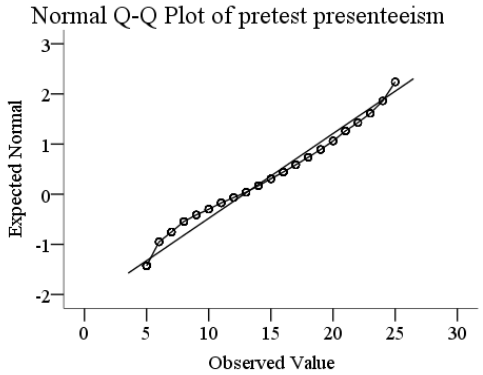

5. Build in stress breaks
Mental
temporarily remove yourself mentally from the source of your stress
Creative Visualization
progressive muscle relaxation
Physical
temporarily remove yourself physically from the source of your stress
Get up and walk
Deep breathing or shoulder shrugs


6. Sleep
Stage One (NREM)
Stage Two (NREM)
Stage Three & Four (NREM)
Stage Five
AWAKE
LIGHT SLEEP
DEEP SLEEP
REM SLEEP

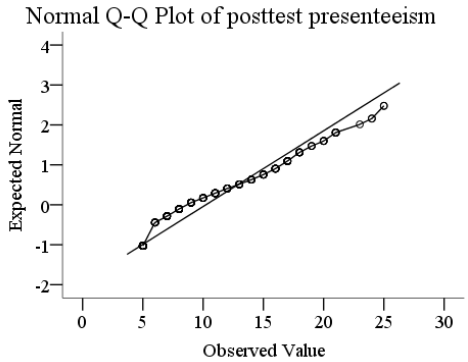

REM
• Memory revitalized
• Intense brain activity
Stage 1
• Light Transitional sleep
• Drowsiness
90 – 120 minutes
Stage 3
• Deep sleep
• Growth Hormone released
• First 3rd of night
Stage 2
• More stable sleep
• Brain produces chemicals to block senses

Appendix 9 Detailed Results Tables and Figures

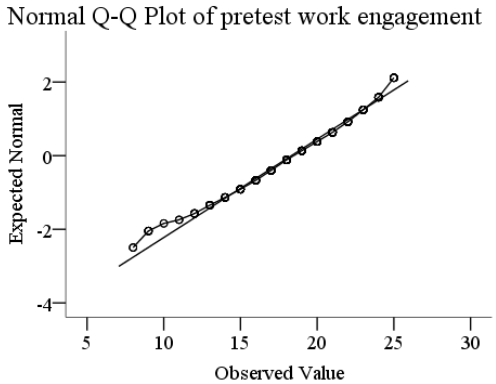
Appendix 9A – Normality testing results for the Likert-type subscale scores, **Figures 5A-5H**



skewness (se): 0.259 (.137) kurtosis (se): -1.088 (.273)



skewness (se): .772 (.162) kurtosis (se): -.429 (.322)



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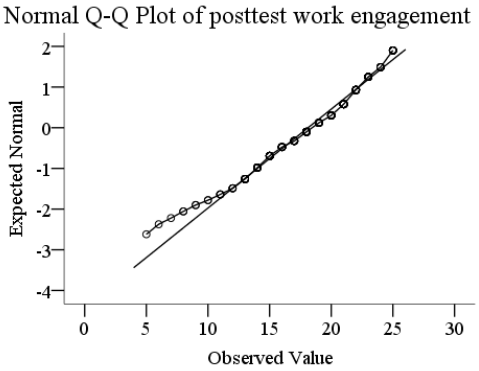
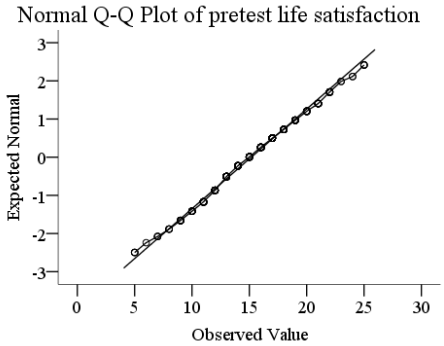
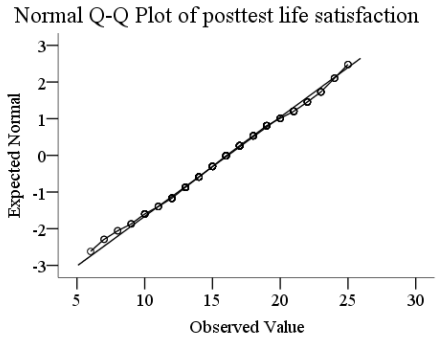


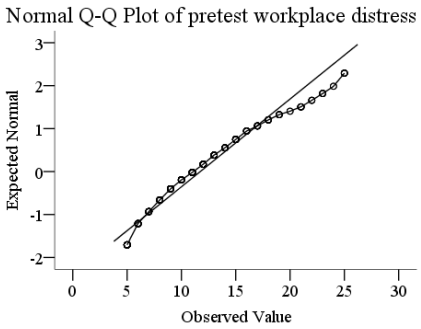
skewness (se): -.479 (.162) kurtosis (se): -.037 (.322)



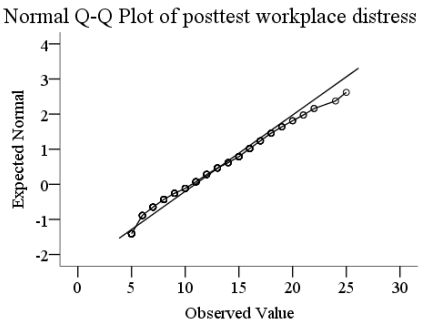
skewness (se): .119 (.137) kurtosis (se): -.057 (.273)



skewness (se): .006 (.162) kurtosis (se) -.096 (.322)



skewness (se): .744 (.137) kurtosis (se): .070 (.273)



skewness (se): .503 (.162) kurtosis (se): -.438 (.322)

Appendix 9B – Categorized detailed regression result tables **Table 8A – 8E**

Absenteeism scores

Source	*SS*	*df*	*MS*	*Number of obs*	=	*452*
				F(49, 402)	=	2.14
Model	34159.01	49	697.1227	*Prob > F*	=	0.000
Residual	131190.7	402	326.3451	*R-squared*	=	0.2066
				Adj R-squared	=	0.1099
Total	165349.7	451	366.6291	*Root MSE*	=	18.065

Absenteeism scores	*Coefficient*	*Std. Err.*	*t*	*P>t*	*[95% Conf. Interval]*	
						Change over time
period	**-6.66527**	**1.699414**	**-3.92**	**0.0000**	**-10.0061**	**-3.32442**
Age in years						
age_22	15.30388	13.83289	1.11	0.269	-11.89	42.4977
age_23	19.11659	13.58301	1.41	0.16	-7.58601	45.81919
age_24	19.69513	13.39621	1.47	0.142	-6.64024	46.0305
age_25	16.80927	13.17751	1.28	0.203	-9.09617	42.71471
age_26	20.01477	13.23978	1.51	0.131	-6.01309	46.04263
age_27	21.1434	13.32566	1.59	0.113	-5.05328	47.34009
age_28	11.59913	13.47174	0.86	0.39	-14.8847	38.08299
age_29	13.44917	14.15391	0.95	0.343	-14.3758	41.27409
age_30	30.68474	13.25511	2.31	0.021	4.626745	56.74274
age_31	12.27701	13.30381	0.92	0.357	-13.8767	38.43074
age_32	20.16535	13.39258	1.51	0.133	-6.1629	46.49359
age_33	20.60555	13.47003	1.53	0.127	-5.87496	47.08605
age_34	19.18398	13.54081	1.42	0.157	-7.43567	45.80363
age_35	11.17278	13.78018	0.81	0.418	-15.9174	38.26299
age_36	15.95176	14.5403	1.1	0.273	-12.6328	44.53629
age_37	11.14898	14.00975	0.8	0.427	-16.3926	38.69051
age_38	26.54829	13.83371	1.92	0.056	-0.64716	53.74374
age_39	11.97488	13.74579	0.87	0.384	-15.0477	38.99748

age_40	21.14	14.85525	1.42	0.155	-8.06367	50.34367
age_41	16.08851	14.38335	1.12	0.264	-12.1875	44.36448
age_42	14.13446	15.45156	0.91	0.361	-16.2415	44.51042
age_43	14.00433	14.99364	0.93	0.351	-15.4714	43.48006
age_44	11.1671	18.36936	0.61	0.544	-24.9449	47.27911
age_45	14.89371	14.44978	1.03	0.303	-13.5129	43.30027
age_46	6.316083	15.76965	0.4	0.689	-24.6852	37.31736
age_47	12.11282	15.28075	0.79	0.428	-17.9273	42.15299
age_48	22.0449	18.47797	1.19	0.234	-14.2806	58.37042
age_49	13.19108	18.17328	0.73	0.468	-22.5355	48.91762
age_50	14.17032	18.9006	0.75	0.454	-22.9861	51.32669
age_51	33.5449	18.47797	1.82	0.07	-2.78061	69.87042
age_54	18.59297	18.5292	1	0.316	-17.8333	55.01921
age_56	16.0449	18.47797	0.87	0.386	-20.2806	52.37042
age_59	30.97623	19.20259	1.61	0.108	-6.7738	68.72627
age_66	14.27752	20.83681	0.69	0.494	-26.6852	55.24025
						Sex
male	0.808917	1.980652	0.41	0.683	-3.08481	4.702647
						Job Type
finance	-12.8301	10.01957	-1.28	0.201	-32.5274	6.867162
marketing & comm	-2.55128	12.48661	-0.2	0.838	-27.0985	21.99592
legal/risk & Compliance	-11.8313	11.45018	-1.03	0.302	-34.341	10.67843
sales	1.095742	9.750556	0.11	0.911	-18.0727	20.26419
IT	0	(omitted)				
operations	-11.2552	9.659026	-1.17	0.245	-30.2437	7.73335
HR & admin	-10.8789	11.08368	-0.98	0.327	-32.6681	10.91029
business dev	-6.90748	10.2612	-0.67	0.501	-27.0798	13.26483
Support staff	-13.7407	14.01889	-0.98	0.328	-41.3002	13.81881

projects & procure	-13.6865	10.94193	-1.25	0.212	-35.1971	7.824063
						Employment level
supervisory	-2.72601	2.754149	-0.99	0.323	-8.14035	2.688322
manager	-3.75292	3.232414	-1.16	0.246	-10.1075	2.601631
senior manager	-0.55366	8.630808	-0.06	0.949	-17.5208	16.4135
exco	-1.35814	13.68792	-0.1	0.921	-28.267	25.55071
_constant	**2.986891**	**16.09248**	**0.19**	**0.853**	**-28.649**	**34.62282**

Presenteeism scores

Source	*SS*	*df*	*MS*	*Number of obs*	=	*452*
				F(49, 402)	=	2.59
Model	3693.886	49	75.38542	*Prob > F*	=	0.000
Residual	11686.23	402	29.07022	*R-squared*	=	0.2402
				Adj R-squared	=	0.1476
Total	15380.11	451	34.10225	*Root MSE*	=	5.3917

Presenteeism scores	*Coef.*	*Std. Err.*	*t*	*P>t*	*[95% Conf. Interval]*	
						Change over time
period	**-2.75664**	**0.507207**	**-5.43**	**0.0000**	**-3.75375**	**-1.75953**
						Age in years
age_22	2.068666	4.128558	0.5	0.617	-6.0476	10.18493
age_23	-0.56214	4.05398	-0.14	0.89	-8.53179	7.407511
age_24	3.146658	3.998226	0.79	0.432	-4.71339	11.0067
age_25	1.997606	3.932955	0.51	0.612	-5.73412	9.729333
age_26	2.128907	3.951541	0.54	0.59	-5.63936	9.897173
age_27	3.077123	3.977171	0.77	0.44	-4.74153	10.89577
age_28	1.852592	4.020772	0.46	0.645	-6.05177	9.756958
age_29	3.067464	4.22437	0.73	0.468	-5.23715	11.37208
age_30	4.347793	3.956116	1.1	0.272	-3.42947	12.12505
age_31	2.520507	3.970651	0.63	0.526	-5.28533	10.32634
age_32	0.726129	3.997145	0.18	0.856	-7.13179	8.584047
age_33	2.439048	4.020261	0.61	0.544	-5.46431	10.34241
age_34	6.831922	4.041386	1.69	0.092	-1.11297	14.77681
age_35	1.799273	4.112826	0.44	0.662	-6.28606	9.884607
age_36	3.499478	4.339693	0.81	0.42	-5.03185	12.0308
age_37	5.555423	4.181346	1.33	0.185	-2.66461	13.77546
age_38	6.715995	4.128803	1.63	0.105	-1.40075	14.83274
age_39	2.299661	4.102563	0.56	0.575	-5.7655	10.36482
age_40	6.181375	4.433691	1.39	0.164	-2.53474	14.89749
age_41	3.957142	4.292848	0.92	0.357	-4.48209	12.39638
age_42	3.044545	4.611667	0.66	0.51	-6.02145	12.11054

age_43	2.791328	4.474996	0.62	0.533	-6.00599	11.58865
age_44	-0.09462	5.482513	-0.02	0.986	-10.8726	10.68336
age_45	1.727072	4.312675	0.4	0.689	-6.75114	10.20529
age_46	-4.696	4.706603	-1	0.319	-13.9486	4.556628
age_47	1.570068	4.560687	0.34	0.731	-7.39571	10.53584
age_48	17.12878	5.514927	3.11	0.002	6.287075	27.97047
age_49	4.303998	5.42399	0.79	0.428	-6.35893	14.96693
age_50	-0.76086	5.641067	-0.13	0.893	-11.8505	10.32882
age_51	9.628775	5.514927	1.75	0.082	-1.21293	20.47047
age_54	-3.67014	5.53022	-0.66	0.507	-14.5419	7.201624
age_56	0.628775	5.514927	0.11	0.909	-10.2129	11.47047
age_59	0.635573	5.731197	0.11	0.912	-10.6313	11.90243
age_66	2.538993	6.218947	0.41	0.683	-9.68673	14.76471
						sex
male	0.196002	0.591145	0.33	0.74	-0.96612	1.358123
						Job types
finance	-3.24572	2.990436	-1.09	0.278	-9.12457	2.633122
marketing & comm	-5.85156	3.726748	-1.57	0.117	-13.1779	1.474791
legal/risk & Compliance	-2.73541	3.417415	-0.8	0.424	-9.45365	3.982825
sales	-2.32125	2.910147	-0.8	0.426	-8.04226	3.39976
IT	0	(omitted)				
operations	-3.00729	2.882829	-1.04	0.297	-8.67459	2.660018
HR & admin	-5.03012	3.30803	-1.52	0.129	-11.5333	1.47308
business dev	-2.655	3.062552	-0.87	0.387	-8.67562	3.365616
Support staff	0.943756	4.184074	0.23	0.822	-7.28164	9.169155
projects & procure	-4.51408	3.265726	-1.38	0.168	-10.9341	1.90595
						Employment level
supervisory	-0.60139	0.822002	-0.73	0.465	-2.21735	1.014573
manager	-3.63874	0.964745	-3.77	0	-5.53532	-1.74216

senior manager	-7.46474	2.575948	-2.9	0.004	-12.5288	-2.40073
exco	-10.2482	4.085292	-2.51	0.013	-18.2794	-2.21696
_constant	13.69957	4.802955	2.85	0.005	4.25752	23.14161

Work engagement scores

Source	*SS*	*df*	*MS*	*Number of obs*	=	*452*
				F(49, 402)	=	2.01
Model	1377.532	49	28.11291	*Prob > F*	=	0.0001
Residual	5611.007	402	13.95773	*R-squared*	=	0.1971
				Adj R-squared	=	0.0992
Total	6988.54	451	15.49565	*Root MSE*	=	3.736

Work engage. scores	*Coef.*	*Std. Err.*	*t*	*P>t*	*[95% Conf.Interval]*	
					Change over time	
period	**-0.11504**	**0.351454**	**-0.33**	**0.744**	**-0.80596**	**0.575873**
					Age in years	
age_22	4.399031	2.860761	1.54	0.125	-1.22489	10.02295
age_23	0.451303	2.809085	0.16	0.872	-5.07103	5.973634
age_24	2.801452	2.770452	1.01	0.313	-2.64493	8.247836
age_25	2.523548	2.725224	0.93	0.355	-2.83392	7.881018
age_26	2.863032	2.738103	1.05	0.296	-2.51976	8.245821
age_27	3.679356	2.755862	1.34	0.183	-1.73835	9.097058
age_28	1.433407	2.786074	0.51	0.607	-4.04369	6.910502
age_29	2.701985	2.927151	0.92	0.357	-3.05245	8.456421
age_30	1.545074	2.741273	0.56	0.573	-3.84395	6.934096
age_31	1.96019	2.751345	0.71	0.477	-3.44863	7.369011
age_32	2.493406	2.769703	0.9	0.369	-2.95151	7.938317
age_33	3.336735	2.78572	1.2	0.232	-2.13966	8.813134
age_34	3.071586	2.800358	1.1	0.273	-2.43359	8.576762
age_35	3.869763	2.849861	1.36	0.175	-1.73273	9.472255
age_36	3.210084	3.007061	1.07	0.286	-2.70145	9.121613
age_37	2.043755	2.897339	0.71	0.481	-3.65207	7.739584
age_38	3.700795	2.860931	1.29	0.197	-1.92346	9.325051
age_39	5.068312	2.842749	1.78	0.075	-0.5202	10.65682
age_40	-0.59092	3.072194	-0.19	0.848	-6.63049	5.448653
age_41	4.623933	2.974601	1.55	0.121	-1.22378	10.47165
age_42	4.232962	3.195518	1.32	0.186	-2.04905	10.51497

age_43	4.259822	3.100816	1.37	0.17	-1.83602	10.35566
age_44	0.600995	3.798945	0.16	0.874	-6.86728	8.069275
age_45	8.552854	2.98834	2.86	0.004	2.678129	14.42758
age_46	5.548062	3.261301	1.7	0.09	-0.86327	11.9594
age_47	4.104481	3.160193	1.3	0.195	-2.10809	10.31705
age_48	6.671041	3.821405	1.75	0.082	-0.84139	14.18347
age_49	2.798062	3.758393	0.74	0.457	-4.5905	10.18662
age_50	0.700658	3.90881	0.18	0.858	-6.9836	8.384919
age_51	8.671041	3.821405	2.27	0.024	1.158607	16.18347
age_54	6.052226	3.832001	1.58	0.115	-1.48104	13.58549
age_56	6.171041	3.821405	1.61	0.107	-1.34139	13.68347
age_59	7.868912	3.971263	1.98	0.048	0.061875	15.67595
age_66	4.139845	4.309234	0.96	0.337	-4.3316	12.61129
						Sex
male	0.201938	0.409616	0.49	0.622	-0.60332	1.007195
						Job types
finance	1.653953	2.072134	0.8	0.425	-2.41962	5.727525
marketing & comm	-1.69173	2.582339	-0.66	0.513	-6.76831	3.384845
legal/risk & Compliance	2.718146	2.367996	1.15	0.252	-1.93706	7.373349
sales	2.105184	2.0165	1.04	0.297	-1.85902	6.069387
IT	0	(omitted)				
operations	0.85845	1.997571	0.43	0.668	-3.06854	4.78544
HR & admin	-0.66238	2.292201	-0.29	0.773	-5.16858	3.843818
business dev	1.505522	2.122105	0.71	0.478	-2.66629	5.67733
Support staff	4.263402	2.89923	1.47	0.142	-1.43614	9.962947
projects & procure	2.160579	2.262887	0.95	0.34	-2.28799	6.60915
						Employment level
supervisory	-0.30293	0.569582	-0.53	0.595	-1.42267	0.816798
manager	0.873756	0.668491	1.31	0.192	-0.44042	2.187931
senior manager	-0.79682	1.784926	-0.45	0.656	-4.30577	2.712138

exco	0.459147	2.830782	0.16	0.871	-5.10584	6.024132
_constant	13.45234	3.328065	4.04	0	6.909752	19.99492

Life satisfaction scores

Source	*SS*	*df*	*MS*	*Number of obs*	=	*452*
				F(49, 402)	=	2
Model	1275.357	49	26.02768	*Prob > F*	=	0.0002
Residual	5225.378	402	12.99845	*R-squared*	=	0.1962
				Adj R-squared	=	0.0982
Total	6500.735	451	14.41405	*Root MSE*	=	3.6053

Life sati. scores	*Coefficient*	*Std. Err.*	*t*	*P>t*	*[95% Conf. Interval]*	
					Change over time	
period	**1.150442**	**0.339162**	**3.39**	**0.001**	**0.483691**	**1.817194**
					Age in years	
age_22	-0.89593	2.760705	-0.32	0.746	-6.32315	4.531298
age_23	-0.4823	2.710836	-0.18	0.859	-5.81148	4.846888
age_24	-0.58054	2.673555	-0.22	0.828	-5.83644	4.675352
age_25	0.996328	2.629909	0.38	0.705	-4.17376	6.166419
age_26	-0.41613	2.642337	-0.16	0.875	-5.61065	4.778398
age_27	-1.11151	2.659475	-0.42	0.676	-6.33973	4.116704
age_28	-1.08485	2.68863	-0.4	0.687	-6.37038	4.200682
age_29	-1.40321	2.824773	-0.5	0.62	-6.95638	4.149966
age_30	-0.35771	2.645396	-0.14	0.893	-5.55825	4.842827
age_31	-0.04942	2.655116	-0.02	0.985	-5.26907	5.170223
age_32	0.300442	2.672832	0.11	0.911	-4.95403	5.554915
age_33	0.876218	2.688289	0.33	0.745	-4.40864	6.161079
age_34	-0.62942	2.702415	-0.23	0.816	-5.94205	4.683211
age_35	0.303011	2.750186	0.11	0.912	-5.10353	5.709554
age_36	-0.57079	2.901888	-0.2	0.844	-6.27557	5.133978
age_37	-2.52446	2.796004	-0.9	0.367	-8.02107	2.972158
age_38	0.411089	2.76087	0.15	0.882	-5.01646	5.838634
age_39	0.755007	2.743323	0.28	0.783	-4.63804	6.148058
age_40	-2.79649	2.964743	-0.94	0.346	-8.62483	3.031848
age_41	1.100279	2.870564	0.38	0.702	-4.54291	6.74347
age_42	-1.67273	3.083753	-0.54	0.588	-7.73502	4.389572

age_43	3.219745	2.992364	1.08	0.283	-2.66289	9.102381
age_44	-2.68898	3.666075	-0.73	0.464	-9.89605	4.518095
age_45	0.738159	2.883822	0.26	0.798	-4.9311	6.407415
age_46	4.291483	3.147236	1.36	0.173	-1.89561	10.47858
age_47	0.572053	3.049664	0.19	0.851	-5.42323	6.567334
age_48	-1.73206	3.68775	-0.47	0.639	-8.98175	5.517623
age_49	-0.45852	3.626942	-0.13	0.899	-7.58866	6.671625
age_50	1.391517	3.772098	0.37	0.712	-6.02399	8.807019
age_51	-4.73206	3.68775	-1.28	0.2	-11.9817	2.517623
age_54	-3.4513	3.697976	-0.93	0.351	-10.7211	3.818491
age_56	-2.23206	3.68775	-0.61	0.545	-9.48175	5.017623
age_59	3.22365	3.832367	0.84	0.401	-4.31033	10.75763
age_66	-0.904	4.158518	-0.22	0.828	-9.07916	7.271158
						Sex
male	-0.04148	0.39529	-0.1	0.916	-0.81858	0.73561
						Job type
finance	2.397325	1.99966	1.2	0.231	-1.53377	6.328423
marketing & comm	0.220216	2.492021	0.09	0.93	-4.6788	5.119237
legal/risk & Compliance	2.232081	2.285175	0.98	0.329	-2.2603	6.724467
sales	1.135009	1.945972	0.58	0.56	-2.69055	4.960562
IT	0	(omitted)				
operations	2.208061	1.927705	1.15	0.253	-1.58158	5.997703
HR & admin	1.003308	2.212031	0.45	0.65	-3.34528	5.351901
business dev	2.554513	2.047883	1.25	0.213	-1.47139	6.580412
Support staff	-0.41951	2.797828	-0.15	0.881	-5.91971	5.080693
projects & procure	2.75235	2.183742	1.26	0.208	-1.54063	7.045332
						Employment level

supervisory	-0.26954	0.549661	-0.49	0.624	-1.35011	0.81103
manager	1.200491	0.645111	1.86	0.063	-0.06772	2.468703
senior manager	1.684604	1.722498	0.98	0.329	-1.70163	5.070833
exco	7.192812	2.731774	2.63	0.009	1.822464	12.56316
_constant	13.28977	3.211665	4.14	0	6.976013	19.60353

Workplace distress scores

Source	*SS*	*df*	*MS*	*Number of obs*	=	*452*
				F(49, 402)	=	1.36
Model	1496.374	49	30.53825	*Prob > F*	=	0.0626
Residual	9054.358	402	22.52328	*R-squared*	=	0.1418
				Adj R-squared	=	0.0372
Total	10550.73	451	23.39408	*Root MSE*	=	4.7459

Work distress scores	*Coefficient*	*Std. Err.*	*t*	*P>t*	*[95% Conf. Interval]*	
						Change over time
period	**-1.10177**	**0.446454**	**-2.47**	**0.014**	**-1.97945**	**-0.22409**
						Age in years
age_22	2.571794	3.634043	0.71	0.48	-4.57231	9.715896
age_23	4.088342	3.568398	1.15	0.253	-2.92671	11.10339
age_24	1.196688	3.519322	0.34	0.734	-5.72189	8.115263
age_25	1.177446	3.461869	0.34	0.734	-5.62818	7.983074
age_26	2.931281	3.478229	0.84	0.4	-3.90651	9.769071
age_27	1.640404	3.500789	0.47	0.64	-5.24174	8.522544
age_28	2.085932	3.539167	0.59	0.556	-4.87166	9.04352
age_29	2.10224	3.718378	0.57	0.572	-5.20766	9.412136
age_30	3.595747	3.482256	1.03	0.302	-3.24996	10.44145
age_31	3.670161	3.49505	1.05	0.294	-3.2007	10.54102
age_32	2.869123	3.518371	0.82	0.415	-4.04758	9.785827
age_33	3.045146	3.538718	0.86	0.39	-3.91156	10.00185
age_34	4.544825	3.557313	1.28	0.202	-2.44843	11.53808
age_35	3.572262	3.620196	0.99	0.324	-3.54462	10.68914
age_36	3.236852	3.819888	0.85	0.397	-4.2726	10.7463
age_37	5.137207	3.680508	1.4	0.164	-2.09824	12.37265
age_38	4.81183	3.634259	1.32	0.186	-2.3327	11.95636
age_39	2.535141	3.611161	0.7	0.483	-4.56398	9.63426
age_40	7.04036	3.902627	1.8	0.072	-0.63175	14.71247
age_41	0.674674	3.778654	0.18	0.858	-6.75372	8.103065

age_42	2.372439	4.059286	0.58	0.559	-5.60764	10.35252
age_43	3.700332	3.938985	0.94	0.348	-4.04325	11.44391
age_44	5.678817	4.825823	1.18	0.24	-3.80819	15.16582
age_45	0.971388	3.796107	0.26	0.798	-6.49131	8.434088
age_46	0.560255	4.142851	0.14	0.892	-7.5841	8.704613
age_47	0.396434	4.014412	0.1	0.921	-7.49543	8.288297
age_48	3.761459	4.854354	0.77	0.439	-5.78163	13.30455
age_49	3.810255	4.774309	0.8	0.425	-5.57548	13.19599
age_50	3.087483	4.965385	0.62	0.534	-6.67388	12.84885
age_51	2.261459	4.854354	0.47	0.642	-7.28163	11.80455
age_54	5.479915	4.867815	1.13	0.261	-4.08964	15.04947
age_56	2.261459	4.854354	0.47	0.642	-7.28163	11.80455
age_59	0.969139	5.04472	0.19	0.848	-8.94819	10.88647
age_66	-2.67457	5.474047	-0.49	0.625	-13.4359	8.086763
						Sex
male	-0.31025	0.520338	-0.6	0.551	-1.33318	0.712669
						Job type
finance	-3.55123	2.632244	-1.35	0.178	-8.72591	1.623455
marketing & comm	-3.67076	3.280361	-1.12	0.264	-10.1196	2.778042
legal/risk & Compliance	-0.30008	3.00808	-0.1	0.921	-6.21362	5.613451
sales	-3.75013	2.561572	-1.46	0.144	-8.78588	1.285621
IT	0	(omitted)				
operations	-4.25907	2.537527	-1.68	0.094	-9.24755	0.729409
HR & admin	-0.82741	2.911797	-0.28	0.776	-6.55167	4.896837
business dev	-4.1588	2.695723	-1.54	0.124	-9.45827	1.140678
Support staff	1.234696	3.682909	0.34	0.738	-6.00547	8.474863
projects & procure	-4.46675	2.87456	-1.55	0.121	-10.1178	1.184297

						Employment level
supervisory	-0.86856	0.723544	-1.2	0.231	-2.29096	0.55384
manager	-2.94226	0.849189	-3.46	0.001	-4.61167	-1.27286
senior manager	0.269526	2.267403	0.12	0.905	-4.18792	4.726974
exco	-6.96997	3.595959	-1.94	0.053	-14.0392	0.099268
_constant	13.80102	4.227662	3.26	0.001	5.489928	22.1121

Appendix 10 – Sample South African EAP Training Brochure

ENTERPRISES
University of Pretoria

Employee Assistance Programmes (EAPs)

Presented by the Department of Social Work and Criminology, University of Pretoria in cooperation with Careways (a division of Life Health Care)

Pretoria	Port Elizabeth	Cape Town	Durban	Bloemfontein	East London
3–6 April 2018 3–6 July 2018 2–5 October 2018	22–25 October 2018	5–8 November 2018	19–22 November 2018	3–6 December 2018	15–18 October 2018

The **Employee Assistance Programmes (EAPs)** short course will provide you with the relevant knowledge, skills and attitudes to become an EAP practitioner within private companies, government departments and/or service provider organisations.

Course content

- Context and history of the EAP
- Definition of EAPs and related fields
- Rationale, functions and standards for EAPs
- Marketing of EAPs
- Therapeutic component of EAPs
- EAP management and supervisory training
- EAP consultation
- Monitoring and evaluation (M&E) of EAPs

Who should enrol?

This course is ideal for you if you are already working or intend to work in the field of EAP and/or wellness – whether you are professionally trained or not.

Course fees

R8 380.00 per delegate (VAT incl.)

Course fees include all course materials and refreshments during contact days. Travel and accommodation costs are for delegates own and/or their employers' account.

Course fees must be paid in full 14 days prior to course start dates. Proof of payment can be submitted to enrolments@enterprises.up.ac.za.

Admission requirements

Prospective delegates should have at least a relevant three-year bachelor's degree or equivalent qualification. A qualification in the fields of Social Work, Psychology, Nursing or Human Resources will be to your advantage.

Assessment

In order to qualify for an official certificate issued by the University of Pretoria and endorsed by Careways (Life Health Care), you will be required to pass an examination written on the last day of the course. Successful Social Work delegates may qualify for 14 CPD points with the South African Council for Social Service Professions (SACSSP).

Accreditation and certification

Enterprises University of Pretoria (Pty) Ltd is wholly owned by the University of Pretoria. As a public higher education institution, the University of Pretoria functions in accordance to the Higher Education Act 101 of 1997. Enterprises University of Pretoria offers short courses on behalf of the University and these short courses are not credit-bearing, and do not lead to formal qualifications on the National Qualifications Framework (NQF) – unless stated otherwise. Delegates who successfully complete a short course and comply with the related assessment criteria (where applicable) are awarded certificates of successful completion and/or attendance by the University of Pretoria.

Registration and enquiries

Course coordinator
Samedah Davis
Tel: +27 (0)12 434 2562
Email: samedah.davis@enterprises.up.ac.za

Course leader
Prof Lourie Terblanche
Department of Social Work and Criminology
Tel: +27 (0)12 420 3292
Email: lourie.terblanche@up.ac.za

Careways is a well-known and leading service provider in the employee wellbeing field in southern Africa and is part of Life Health Care group. For more information, visit **www.carewaysgroup.com**

CAREWAYS
The way to wellness

Shifting knowledge to insight

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

www.enterprises.up.ac.za

+27 (0)12 434 2500 +27 (0)12 434 2505 info@enterprises.up.ac.za Private Bag X41, Hatfield, 0028

For quotations on in-house training, email **quote@enterprises.up.ac.za**

Appendix 11 – Letters

Appendix 11A – Request for Permission sent to Organization

Letters of Support and Permission

Letter 1 – Request for Permission Sent to Organization

Tuesday, July 10, 2018

[MACLEAN VOKHIWA - PI]
Master of Public Health (MPH)
College of Medicine

The Human Resources Executive
Oldmutual Malawi Limited/ MPICO Ltd
Blantyre

Dear Sir/ Madam

RE: Permission to Conduct an EAP Evaluation Research Study

I would like to ask your permission to allow me to conduct a survey among employees in your organization. This is in part of my academic thesis entitled "**Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context.**" I will be conducting the survey among employees who will access Employee Assistance Program (EAP) stress management training Blantyre, Lilongwe and Mzuzu. Attached herewith is the informed consent form (ICF) and survey questionnaire for this study.

This evaluation survey will involve an employee to complete a 2-page questionnaire which takes 10-15 minutes at the beginning of EAP training, attend a day-long EAP stress management session, and to again complete a follow-up questionnaire around 30 days after EAP training. The survey will be conveniently conducted as evaluation part of the current EAP, as such it will not disrupt work processes. Participation in the evaluation is entirely voluntary. A known risk is that, by participating, some employees might identify their emotional vulnerabilities and work-related stress challenges. Their benefits will include receiving immediate support and referral to existing EAP confidential individual counselling support. All information to be provided will be kept in utmost confidentiality and will be used only for academic purposes. Employee anonymity will be guaranteed by use of unique numbers and not names in the dataset. Employee names or the name of your organization will not appear in the thesis or any publication resulting from this study unless agreed to. Your organization will subsequently have access and the right to publish your data individually for your program reports. As such, your organization will directly benefit from the evaluation.

After the data have been analysed, you will receive a copy of the executive summary.

If you agree, kindly submit a signed letter of permission on your institution's letterhead acknowledging your consent and permission for me to conduct this survey/study at your organization. Please copy to the College of medicine Research Ethics Committee on address:

The Administrator,
College of Medicine Research and Ethics Committee (COMREC),
Private Bag 360, Chichiri Blantyre 3, Malawi,
Telephone: +265 1 874 377, Fax: +265 1 874 740, Email: comrec@medcol.mw
Copy to: The Head of Public Health Department, School of Public Health & Family Medicine, College of Medicine.

Your permission to conduct this study within your organization will be greatly appreciated. Thank you so much for your interest and assistance in this research.

Sincerely,

Maclean Vokhiwa

Master of Public Health (MPH)

Approved by
College of Medicine
28 SEP 2018
(COMREC)
Research and Ethics Committee

Appendix 11B – Support Letter from Department of Public Health

Letter 4 – Support from Department of Public Health

COLLEGE OF MEDICINE
Public Health

Chimutu Building
MahatmaGhandi Rd
Blantyre 3
Malawi
Telephone: 01 871911
01 874107
Fax: 01 874 700

Our Ref.:

Your Ref.:

24th July 2018

To: Chairperson COMREC

From: MPH course director

Submission of MPH research dissertation proposal

Please find attached the research proposal for MPH student:

Name: Maclean Vokhiwa

Title: Research Title:

Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context.

Name of Supervisor: Dr. Susan Carnes Chichlowska

The initial and full proposal was reviewed by the research supervisor and MPH course director and as such is accepted for presentation to COMREC by the Public Health Research and Postgraduate committee.

Yours sincerely

Susan Carnes Chichlowska PhD.

Senior Lecturer in Public Health

MPH Tutor/Course Director, College of Medicine, University of Malawi.

Telephone: 0888300905 Email: mphcoursedirector@medcol.mw

Approved by
College of Medicine
28 SEP 2018
(COMREC)
Research and Ethics Committee

Appendix 11C – Letter of commitment to sponsor MPH Dissertation Research

CORPORATE WELLNESS SOLUTIONS

108 Kidney Crescent
P.O. Box 3045
Blantyre
+265 1 910 088/ +265 888 595 888/ +265 999 080 096
eapwellness@gmail.com

Monday, 06 August 2018

To: Chairperson (COMREC)

LETTER OF COMMITMENT TO SPONSOR THE MPH RESEARCH BUDGET

The above subject refers.

This is to confirm that CORPORATE WELLNESS SOLUTIONS is funding Maclean Vokhiwa's study of the Masters of Public Health (MPH) program. It is funding the MPH Dissertation research project titled:

Measuring the Value of an Employee Assistance Program (EAP) Intervention Using the Workplace Outcome Suite (WOS) Wellbeing Scales in a Malawian Organization Context.

To the amount and resources as specified in the proposal.

Thank you for your consideration.

Yours sincerely,

MR BONNIE ZAMADUNGA
MANAGER - FINANCIAL WELLNESS
CORPORATE WELLNESS SOLUTIONS

CORPORATE WELLNESS SOLUTIONS
06 AUG 2018
P.O. BOX 3045, BT./LL./MZ.
CELL: +265 999080096,
+265 883595888

Employee Assistance Programme (EAP) Wellness

Appendix 12 – Investigator CV and EAP Certificates

29 July 2018

MACLEAN VOKHIWA

CORPORATE WELLNESS SOLUTIONS

108 Kidney Crescent Road, P.O. Box 3045, Blantyre, Malawi

Email: mvokhiwa@gmail.com, website: www.wellnesseap.com

Cel: +265 (0) 999 080 096 +265 (0) 883 595 888 Tanzania mobile: +255754979841

02-May-1980 Male Malawian Languages: **English, Chichewa, Kiswahili**

EAPA-SA Member No: SA/G/J/0975, Jacaranda Chapter, 2015

Maclean Vokhiwa is enjoying an active scientific career in developmental, behavioral-related research, clinical, well-being, health, organizational wellness and Employee Assistance Programmes (EAP) services. Special scientific interest on developmental psychological assessments of human functioning and support intervention assistance for both children and adults. Leader of Malawi EAP Infrastructure.

Current Objective: in the next 5 years, I am determined to contribute through quantifying application of outcomes from developmental research (especially relating to HIV/AIDS, malaria and child health) into local and global health systems at policy level. I intend to achieve this objective by acquiring more skills, through postgraduate training, to analyze health problems, implement relevant programs, and evaluate actions to improve such interventions.

A. EDUCATION/TRAINING

Currently Studying: Master of Public Health (MPH); School of Public Health and Family Medicine, College of Medicine, University of Malawi

Research Support Centre, College of Medicine, University of Malawi	Certificate	2011	Good Clinical Practice (GCP)
The Steve Biko Center for Bioethics, University of Witwatersrand (WITS) Johannesburg and Pfizer (US)	Certificate	2010	Research Ethics
University of Pretoria, Postgraduate Continuing Education Centre	Professional Certificate	2011	Advanced Employee Assistance Programs
University of Pretoria, Postgraduate Continuing Education Centre	Professional Certificate	2010	Employee Assistance Programs
Statistical Issues in the Design and Analysis of Research Projects: course for PhD students and research staff within the College of Medicine, Blantyre; modified - Centre for Medical Statistics and Health Evaluation, University of Liverpool		2010	General Statistical Issues - Introduction
University of Malawi, Chancellor College	BA	2003	Psychology/Philosophy
Psychology Department, Chancellor College, University of Malawi	Graduate Certificate	2003	Health Psychology: Professional Counseling

Professional Affiliation:- International Society for the Study of Behavioral Development (ISSBD) www.issbd.org

- Employee Assistance Professionals Association South Africa – EAPA SA http://www.eapasa.co.za/
- International Association For The Scientific Study Of Intellectual And Developmental Disability (IASSIDD) www.iassidd.org

B. PROFESSIONAL SPEAKING ACTIVITY

15 Sept 2016	Cape Town, SA EAPA-SA NH Lord Charles Hotel	*18th Annual Conference EAPA-SA 2016* Plenary Speech: *Reliability and Validity of financial Wellness EAP-related metrics measurement in a low-income country setting*
15 August 2016	2016 IASSIDD World Congress in Melbourne, Austraria	Session: Research Partnerships in Low and Middle Income Countries Topic: *Can we measure cognitive constructs consistently within and across cultures in low income countries?*
10 Sept 2015	**Coastlands Umhlanga, KZN, South Africa**	**17th Annual EAPA-SA Conference 2015 Keynote Speech:**

		Can We Measure The Development of Employee Assistance Consistently Within and Across Cultures in Africa
Currently	Onsite sessions	Executive EAP Information Sessions and wellbeing trainings in Malawi organizations including: Malawi Savings Bank, Malawi Communications Regulatory Authority (MACRA), Malawi Telecommunications Limited (MTL), Press Corporation Limited (PCL), Agricultural Development and Marketing Corporation (ADMARC), PUMA Energy, Toyota Malawi Limited, Telekom Networks Malawi, Malawi Housing Corporation (MHC), etc
18 February 2015,	Oldmutual Auditorium, Blantyre, Malawi,	'2nd Malawi EAP for Africa Information Sharing Session'
1 December 2014, ,	Commesa Hall, Trade fair grounds, Blantyre, Malawi	*'Diabetes, Hypertension, And Nutrition for Employee Healthy Living* at World AIDS Day commemoration', Audience Size: over 2,000; Press Group of Companies and Malawi Business Coalition against HIV/AIDS
7 September 2012,	Oldmutual Auditorium, Blantyre, Malawi,	*'Contextualization of Employee Assistance in Malawi* at the 1st EAP for Africa Information Sharing Session'

Role in current projects: **Key Personnel**

C. POSITIONS

2006 - Present	Wellness Facilitator Employee Assistance Programmes - EAP	CORPORATE WELLNESS SOLUTIONS & PSYCONSULT www.wellnesseap.com - Overall Employee Assistance oversight with Client Organizations - Facilitating Employee Wellness Services including stress management and & 24hr counseling, training, etc
July 2012 - 2015	Co-Investigator Psychologist, Researcher position	Early Treatment with Rectal Artesunate to Halt Disease Progression and Reduce Disability in Survivors: The Neurocognitive Assessment of Children in Study 13 Mahidol-Oxford tropical Medicine Research Unit (MORU), Bangkok **Thailand** World Health Organization, TDR National Institute of Medical Research (NIMR) **Tanzania** Malaria Research Group (MRG), Chittagong, **Bangladesh**
July 2012 - Current	Affiliate researcher	International Centre for Behavioral Studies (ICBS) www.icbstudies.org network of research and applied scientists working in the fields of Psychology, medicine, and Special Education
Jan 2010-July2012	Study Manager/ Researcher	Neurocognitive and psychosocial effects of cerebral malaria: establishing the exposure/control cohort Blantyre Malaria Project and Department of Paediatrics: University of Malawi, College of Medicine Departments of Psychiatry, Psychology, Neurology and Internal Medicine, College of Osteopathic Medicine, Michigan State University
May 2008 – July2012	Study Manager/ Investigator	Cognitive Outcomes & Psychiatric Symptoms (COPS) of Cerebral Malaria Blantyre Malaria Project, Queen Elizabeth Central Hospital, Blantyre Malawi Responsibilities: - Neuro-cognitive assessments – Test of variables of Attention (TOVA), Kaufman Assessment Battery for Children (KABC-II), Malawi Developmental Assessment Inventory (MDAT) and Child Behavioral Checklist (CBCL) - Data management & basic analysis - Overall onsite study management
Oct 2005 – 2008	Clinical Intern (Clinical Experience)	Zomba Mental Hospital: *mental health* clinical familiarization, psychological assessments, mental state examinations (MSE) and psychological interventions
October 2005 – May 2006	Investigator	*The Association between Maternal Mental Health (Depression) and Infant Nutrition research* - Dr. Robert Stewart's (College of Medicine, Malawi/ Manchester University, UK)

2004 Jan – 2005	*Senior Social Worker*	The Samaritan Trust: street children assessment rehabilitation and reintegration
2004	*Assistant Coordinator/ Supervisor*	The Malawi Orphans and Vulnerable Children (OVC) Pilot Survey – Street (MOPS) – **UNICEF** - Sampling, Quality control, Monitoring & Evaluation - Respondent assessment

D. Selected peer-reviewed publications

1. **Maclean Vokhiwa**; *Reliability & Validity of Financial Wellness EAP-Related Metrics Measurement in A Low-Income Setting*, 18th EAPA-SA[1] 2016; Cape Town, South Africa, 15 September 2016

2. Holding, Penny, Adote Anum, Fons JR van de Vijver, **Maclean Vokhiwa**, Nancy Bugase, Toffajjal Hossen, Charles Makasi et al. *"Can we measure cognitive constructs consistently within and across cultures? Evidence from a test battery in Bangladesh, Ghana, and Tanzania."* Applied Neuropsychology: Child (July 2016): 1-13., PMID:27463827

3. **Maclean Vokhiwa**; *Can we measure the Development of EAPs consistently within and Across cultures in Africa?* 17th EAPA-SA 2015; Durban South Africa, 10 September 2015.

4. Boivin M.J., **Vokhiwa M**., Sikorskii A., Magen J.G., & Beare N.A., *Cerebral Malaria Retinopathy Predictors of Persisting Neurocognitive Outcomes in Malawian Children*; Pediatric Infectious Deseases Journal, April 2014, PMID24763139

5. Boivin M.J, **Maclean Vokhiwa**, Magen J.G., *The Correspondence Validity of Malawian Preschool Developmental Assessment and School-age neurocognitive Performance in the Longitudinal Assessment of Severe Malaria*, The Lancet, published online June 17, 2013; Global Health Metrics & Evaluation: Data, Debates & Directions, June 2013

6. Boivin, M.J., Gladstone M.J., **Vokhiwa M**., Magen J.G., Taylor T.E., Kauye F.C., Semrud-Clikeman M., Birbeck G.L., & Page C., *Developmental Outcomes in Malawian Children With Retinopathy-Confirmed Cerebral Malaria in Malawian Children*, Tropical Medicine and International Health, volume 16 no 3 pp 263–271 march 2011

7. R. C. Stewart, J. Bunn, **M. Vokhiwa**, E. Umar, F. Kauye, B. Tomenson, A. Rahman and F. Creed, *A prospective study of psychological distress among mothers of children admitted to a nutritional rehabilitation unit in Malawi*, Child: care, health and development, 1365-2214.2010

8. Stewart R.C., Bunn J, **Vokhiwa M**., Umar E., Kauye F.C., Fitzgerald M, Tomenson B, Rahman A, Creed F., *Common Mental Disorder And Associated Factors Amongst Women With Young Infants In Rural Malawi*, Social Psychiatry and Psychiatric Epidemiology, 2009 Jul 17.

9. R. Stewart, F. Kauye, E. Umar, **M. Vokhiwa**, J. Bunn, M. Fitzgerald, B. Tomenson, A. Rahman, F. Creed, *Validation of a Chichewa version of the Self-Reporting Questionnaire (SRQ) as a brief screening measure for maternal depressive disorder in Malawi, Africa*, Journal of Affective Disorders, 2008, Volume 112, Issue 1, Pages 126-134

10. Robert C. Stewart, Eric Umar, Felix Kauye, James Bunn, **Maclean Vokhiwa**, Margaret Fitzgerald, Barbara Tomenson , Atif Rahman and Francis Creed, *Maternal common mental disorder and infant growth – a cross-sectional study from Malawi*, Martenal & Child Nutrition, 2008 Volume 4 Issue 3, Pages 209 – 219

11. The United Nations Children's Fund (Unicef), Guide To Monitoring And Evaluation Of The National Response for Children Orphaned and Made Vulnerable By Hiv/Aids, Feb 2005, UNICEF), New York

E. Completed Research Support

[1] EAPA-SA: Employee Assistance Professionals Association South Africa

University of Pretoria

Faculty of Humanities

Department of Social Work and Criminology

This is to certify that

M Vokhiwa

has successfully completed the

Short Course on

Employee Assistance Programmes

offered jointly by the University of Pretoria and
The Careways Group

25 to 29 October 2010

Course Leader

General Manager: CE at UP

THE CAREWAYS GROUP

AFRICA'S LEADING EMPLOYEE WELLBEING PARTNER

131916 2011/02/23 ID: MA015947 P000005-04-2010

University of Pretoria

Faculty of Humanities

Department of Social Work and Criminology

This is to certify that

M Vokhiwa

has successfully completed the

Advanced Course on

Employee Assistance Programmes

22 to 24 November 2011

This certificate is awarded with distinction

Course Leader

General Manager: CE at UP

169878 2012-02-03 ID/Passport: MA015947 P001972-004-2011