The Impact of Work Friendliness and Safety on Absenteeism of Healthcare Workers in Malawi

Innocencia Mnelemba and Benson Munyenyembe*
University of Malawi
Department of Management and Leadership Studies
P.O Box 280, Zomba, Malawi, Cell: +265885900999
Email: innocenciamnelemba@gmail.com

*Corresponding author
Cell: +265885258791
Email: bmunyenyembe@unima.ac.mw

ABSTRACT

This research examines the influence of work environment characteristics on the absenteeism of healthcare workers in Malawi. Within the context of challenging healthcare systems in Sub-Saharan Africa, particularly in Malawi, the study seeks to shed light on why absenteeism remains high among healthcare workers in Malawi. The research employs a quantitative approach where it collects data through a cross-sectional survey and analyzes it using linear regression. The study focuses on two main aspects of work environment characteristics: workplace friendliness (supervisor friendliness and coworker friendliness) and workplace safety (personal and coworker safety) to determine if they are predictors of health workers' absenteeism in Malawi. The results indicate that workplace friendliness—both supervisor (β = -0.292, $p<0.05$) and coworker friendliness (β = -0.123, $p<0.05$)—significantly impact the absenteeism of healthcare workers. The results also reveal that workplace safety—both personal (β = -0.168, $p<0.05$) and coworker safety (β = -0.101, $p<0.05$)—also significantly impact the absenteeism of healthcare workers. The study highlights the importance of fostering positive workplace relationships and ensuring a safe environment to mitigate absenteeism and ultimately enhance healthcare worker performance. Healthcare organizations should thus strive to achieve friendly work environments by rolling out training programs for supervisors and coworkers that emphasize effective communication and interpersonal skills. Furthermore, healthcare organisations should invest in measures to enhance employee safety, such as providing necessary materials and training to curb occupational hazards as well as promote a safety culture, and encourage healthcare workers to report safety concerns.

Keywords: Absenteeism, Healthcare workers, Work environment, Workplace friendliness, Workplace safety.

1.0 Introduction

The healthcare systems within Sub-Saharan African countries face significant challenges, such as fragile infrastructure and a serious shortage of healthcare workers (Palmer, 2006). A notable critical issue exacerbating this problem is the high rate of healthcare worker absenteeism, which refers to the proportion of scheduled health workers absent from duty at any given time (Sheffel et al., 2022). Different research studies have shown alarmingly high rates of absenteeism within the region, with Malawi experiencing a rate of 37%, a proportion that surpasses the Sub-Saharan African average (Sheffel et al., 2022). Healthcare workers' absenteeism has a detrimental impact on the performance of healthcare organizations. The patients who often find themselves victims of the issue face long wait times when healthcare workers are absent, which deters them from accessing healthcare services (Tomlinson et al., 2019; Zhang et al., 2021). Moreover, absenteeism creates a cycle of increased workload for those healthcare workers who are present, which leads to job dissatisfaction and a higher intention to leave the organization (Khan et al., 2021; Berman et al., 2021).

Several factors contribute to healthcare workers' absenteeism in Sub-Saharan Africa. Poor wages, delayed salaries, and corrupt employment practices are major drivers of absenteeism (Ackers et al., 2019; Onwujekwe et al., 2019). Sociocultural factors, such as important community events and domestic responsibilities, often lead to hesitancy in sanctioning absent health workers (Oche et al., 2018). Health reasons, transport-related challenges, understaffing, weak supervision, lack of security, and lack of employee engagement have also been cited as drivers of absenteeism (Di Giorgio et al., 2020; Tumilson et al., 2019). Although there is a high prevalence of healthcare workers' absenteeism, limited research has examined the relationship between work environment characteristics and absenteeism. Existing studies have not adequately explored the impact of specific attributes of the work environment, such as workplace friendliness and workplace safety, on the absenteeism of healthcare workers in Malawi (Sheffel et al., 2022; Edem et al., 2017; Tumilson et al., 2019; Di Giorgio et al., 2020). Understanding these factors is crucial in developing targeted solutions to address the underlying causes of absenteeism among health workers.

In this regard, this research explores the impact of work environment characteristics on the absenteeism of healthcare workers in Malawi. The primary research question guiding this study is: "Do work environment characteristics affect the absenteeism of healthcare workers in Malawi?" To address this question, two specific questions are explored: (1) Does workplace friendliness (supervisor friendliness and workmate friendliness) affect the absenteeism of healthcare workers in Malawi? (2) Does workplace safety (personal safety and coworker safety) affect the absenteeism of healthcare workers in Malawi?

This article's succeeding sections are in the following order: 1) literature review and hypothesis development, 2) methodology, and 3) results. Under the literature review and hypothesis development section, the article discusses the context of the Malawian

health system, previous studies on health workers' absenteeism, and the conceptual framework of the study. Under the methodology section, the article explains the study design, population, sampling technique, and data analysis method. Under the results section, the article discusses the findings of the study as well as their implications.

2.0 Literature Review and Hypotheses Development

2.1 Healthcare System in Malawi

The healthcare workforce in Malawi consists of all those who provide or help in the provision of health services or who aid in the operation of healthcare facilities (WHO, 2019). This comprises healthcare workers inside and outside the healthcare facility, such as registered nurses, physicians, clinicians, technicians, and doctors. In Malawi, the health sector faces challenges in keeping pace with the rising demand for healthcare services, given the three percent annual average population growth and high HIV prevalence (nine percent) (Shiroya et al., 2021). Shiroya and colleagues further argued that the health system of Sub-Saharan Africa, including Malawi, is fragile and is faced with severe problems in critical areas of human resources for health, including size, quantity, absorption of health workers, skill mix, the management capacity of health workforce and geographic and health facility level distribution of healthcare workers.

There are fewer than 23 health professionals per 10,000 inhabitants in Malawi, a key level below which it is impossible to provide necessary health services. Inadequate and uneven distribution of health professionals is a critical impediment to the provision of vital health services in Malawi, according to Berman et al. (2019). In addition, the country has a healthcare workforce shortage of 48% compared to its national targets, with only 1.48 healthcare workers per 1,000 individuals within the population, which is far below the World Health Organization's recommended minimum density of 4.45 doctors, nurses, and midwives per 1,000 population for nations to achieve the Sustainable Development Goals (WHO, 2019). In rural regions, where eighty-four percent of Malawi's population lives, labour shortages are especially severe, resulting in inequities in healthcare services and health outcomes between rural and urban areas. For instance, there were 0.7 doctors per 1,000 people in rural locations in 2014 compared to 1.8 clinicians per 1,000 people in metropolitan areas. This means the country has a long way to go to meet the threshold and be the best in balancing the healthcare professionals with the population.

The problem also exists in South Africa. Ilha (2023) reported that the case was worse between 2011 and 2015, with a high trend associated with resignation in the medical field due to challenging working conditions in public hospitals. Sadly, after resignation, these professionals never returned to serve the public sector as they often relocated to other provinces, private sectors, or abroad. This only highlights a few countries, but it is clear that most countries in Sub-Saharan Africa are below the minimum threshold stated. Others have achieved the target of having a minimum of two hospitals per 100,000 population nationally. This is yet to be achieved regionally.

2.2 Workplace Friendliness and Absenteeism of Healthcare Workers

Friendliness is a voluntary, personal relationship that is characterized by the provision of intimacy and assistance (Fehr, 1996). The definition of workplace friendliness (WF), however, is different from general types of friendliness because WF is focused on friendliness that occurs in the workplace (Song, 2005). As social structures, organizations are always composed of individuals, which consequently generates some social connections. Friendship at work extends beyond the social platform recognized in official organizational structures due to a variety of variables, including shared personal interests, style of life, and cultures. Thus, friendship on the job is a natural occurrence (Han et al., 2020). The relevance of workplace friendliness has received great attention in the global literature because of its positive association with several employee behaviors, such as employee performance, organizational commitment, job satisfaction, and turnover (Mao et al., 2012; Markiewicz et al., 2000; Song and Olshfski, 2008). Although many studies have investigated the impact of work friendliness in organizations, such studies have not tackled several important specific questions about work friendliness, two of which are 1) To what extent does supervisor friendliness influence the absenteeism of healthcare workers? and 2) To what extent does coworker friendliness influence the absenteeism of healthcare workers?

Employees who have best friends at work are committed to their work, tend to get more work done in a short period, have fun in their work, have a safe workplace with few accidents, are more innovative, and easily share new ideas (Rath, 2006). Workplace friendliness has been considered a very important phenomenon for both individuals and organizations. Workplace friendliness increases support and resources that help individuals accomplish their jobs, reduce work stress, and provide increased communication, cooperation, and energy (Choi and Ko, 2020; Dartey-Baah and Amoako, 2011; Fine, 1986). Hamilton (2007) also suggested that when in a friendly workplace, employees will feel comfortable with their workplace friends and reduce feelings of insecurity and uncertainty. They also share more information and empathize with workplace friends about work-related problems and concerns. Jehn and Shah (1997) further argued that employees who share friendship exchange words of encouragement, confidence, trust, respect, and critical feedback, which may increase enthusiasm and a positive attitude.

Because the health system of low-income countries like Malawi is already understaffed (Berman et al., 2019), we must understand the triggers of absenteeism. The global literature, though it has a corpus of studies examining the importance of workplace friendliness, still lacks insights when it comes to demonstrating which attributes of workplace friendliness impact the absenteeism of health workers. Since supervisor friendliness and workmate friendliness are all attributes of workplace friendliness, the current study sought to explore how each of them specifically impacts the absenteeism of health workers in Malawi. To achieve such an aim, the following two hypotheses were proposed for testing in this study:

H1: Perceived supervisor friendliness has a significant impact on absenteeism among healthcare workers.

H2: Perceived coworker friendliness has a significant impact on absenteeism among healthcare workers.

2.3 Workplace Safety and Absenteeism of Healthcare Workers

Workplace safety is defined as an attribute of work systems reflecting the (low) likelihood of physical harm—whether immediate or delayed—to persons, property, or the environment during the performance of work (Beus et al., 2016). Employees will always have a coherent set of perceptions and expectations regarding safety in their organisation. According to McQuerrey (2022), safety and absenteeism in an organization may easily become a vicious cycle. This is because when an organization is prone to accidents and workplace injuries, employees may react by shunning work hence leading to an increase in absenteeism. Previous studies have established a correlation between job safety and the incidence of absenteeism among healthcare workers (Kaburi et al., 2019). Higher absenteeism has been linked to factors such as injuries and accidents, exposure to dangerous products, and general views of workplace safety. This is further confirmed by the fact that workers who feel comfortable at work are less likely to miss work due to stress, sickness, or injury (Kaburi et al., 2019). In addition, research indicates that facilities with strong safety procedures have reduced absenteeism. This is the case because effective safety programs foster a culture of safety that encourages workers to report dangers and incidents, as well as collaborate to enhance workplace safety. In sectors where mental acuity is essential for the execution of job responsibility, a considerable decrease in workplace safety may result in poor morale among employees which in turn would increase their absenteeism (McQuerrey, 2022).

Despite increasing focus on safety by many organizations, several employees continue to be seriously injured at work with some even dying from work-related injuries (Thurston and Glendon, 2018). Risk exposure influences employee attitudes about safety in their organization (Ford and Wiggins, 2012; Henning et al., 2009; Itoh et al., 2004). There, however, have been conflicting results regarding the association between workplace safety and absenteeism which have been either positive (Harrison and Martocchio, 1998), or negative (Ose, 2005), or have shown a null effect (Roelen et al., 2008). Also, all such studies had been conducted in Western countries without any from sub-Saharan Africa, let alone Malawi. It thus remains unknown how workplace safety impacts the absenteeism of healthcare workers in Malawi. Since personal safety and coworker safety are all attributes of workplace safety, the current study sought to explore how each of them specifically impacts the absenteeism of health workers in Malawi. To achieve such an aim, the following two hypotheses were proposed for testing in this study;

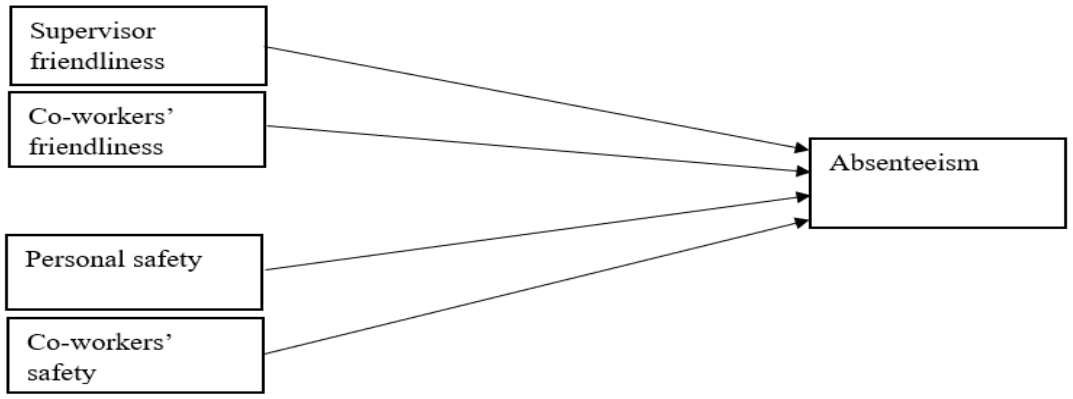
H3: Perceived personal safety has a significant impact on absenteeism among healthcare workers

H4: Perceived coworker safety has a significant impact on absenteeism among healthcare workers

2.4 Study Conceptual Framework

This study's conceptual framework grasps the relationship between four independent variables (supervisor friendliness, coworker friendliness, personal safety, and coworker safety) and one dependent variable (absenteeism). Only four independent variables are included in this study because based on past research their statistical linkage with absenteeism has been under-researched.

Figure 1: Research conceptual framework



3.0 Methodology

3.1 Research Approach and Design

This research study adopted a quantitative approach where data was collected through a cross-sectional survey. Cross-sectional surveys acquire data from a representative sample of a population at a single time point (Wang and Cheng, 2020). This type of research approach is beneficial for evaluating the prevalence of a specific condition or behavior in a community and identifying possible risk factors connected with that condition or behavior.

3.2 Study Population and Sample

The population of interest for the study included healthcare workers, such as physicians, nurses, clinicians, doctors, and other medical personnel. These individuals were selected based on their employment and work settings, such as hospitals or primary care clinics. The research used purposive sampling to draw its sample. Purposive sampling is a non-random sampling strategy where the researcher picks specified persons or groups to participate in the study based on specific criteria (Campbell et al., 2020). Purposive sampling was used because the study involved healthcare workers from across hospitals and primary care clinics in Malawi where the sampling frame (list of all people forming a population) was unknown to the researcher due to HR data unavailability. Only when the sampling frame is known can

random sampling be done and in the case of this study such a sampling frame was and remains unavailable. A total of 158 healthcare workers participated in this research.

3.3 Measures

A structured questionnaire was used to measure the 5 variables involved in this research. According to Roopa and Rani (2012), a structured questionnaire is a group of predetermined quizzes intended to extract specific data and information from the respondents. These questions were pre-written, and responders were given a list of predetermined answer possibilities. The questions in the following survey were meant to evaluate particular variables (supervisor friendliness, coworker friendliness, personal safety, coworker safety, and absenteeism) and ask participants for specific types of information (experiences and perceptions). Additionally, the answer possibilities were specified using the Likert scale of 1 to 5. All the questions were adopted from previous research. Table 1 summarizes the construct measures used in this research.

Table 1: Construct Measures

Measure	Survey Questions	Source
Supervisor Friendliness	How often do you feel that your supervisor treats you with respect? How often do you feel that your supervisor listens to your ideas and concerns? How satisfied are you with the level of support provided by your supervisor?	Singh et al., 2017
Coworker Friendliness	How often do you feel that your coworkers treat you with respect? How often do you feel that your coworkers are supportive of your ideas and concerns? How satisfied are you with the level of camaraderie and teamwork among your coworkers?	Al-Shammari et al., 2011
Personal Safety	How safe do you feel while performing your job duties? How often do you feel physically threatened while at work? How often do you feel emotionally stressed while at work?	Kim et al., 2018
Coworker Safety	On a scale of 1 to 5, how often do you feel your coworkers practice safe work habits? On a scale of 1 to 5, how often do you feel your coworkers put your safety at risk?	O'Brien-Pallas et al., 2010

	On a scale of 1 to 5, how satisfied are you with the level of safety training provided by your employer?	
Absenteeism	How likely is it that you would be voluntarily absent from work because you are feeling depressed? How likely is it that you would be voluntarily absent from work because you had a fallout with your workmates or supervisor? How likely is it that you would be voluntarily absent from work because the schedule of a personal activity conflicts with your work schedule? How likely is it that you would be voluntarily absent from work because you did not wake up on time to go to work? How likely is it that you would be voluntarily absent from work because you are experiencing minor domestic problems?	Munyenyembe and Chen, 2021

3.4 Data Analysis

The collected data was analyzed using linear regression in the SPSS. The questionnaire results were used to generate a data set containing many observations (responses) for each dependent and independent variable. The linear regression analysis was then used to evaluate the strength and direction of the connection between the dependent and independent variables and to predict the value of the dependent variable based on the values of the independent variables.

4.0 Results

Preliminary tests were first conducted to ensure the validity and reliability of the data. These tests included the Kaiser-Meyer-Olkin (KMO) and Bartlett's test for sampling adequacy, Harman's single factor test (to assess common method bias), Cronbach's alpha test (to measure internal consistency), and multicollinearity assessment. After the data had passed all preliminary tests, a regression analysis was run in SPSS.

4.1 KMO and Bartlett's Tests

The Kaiser-Meyer-Olkin (KMO) test and Bartlett's test are common tests used in quantitative data analysis. They are used in the context of factor analysis to determine

data suitability for subsequent analysis. In particular, the Kaiser-Meyer-Olkin (KMO) test is used to measure the adequacy of the data sampling to determine whether the variables included in the analysis are relevant for factor analysis (Nasution et al., 2023). Values closer to 1 indicate that the data are highly suitable for factor analysis. At the same time, a value above 0.5 is generally considered acceptable. On the other hand, Bartlett's Test of Sphericity assesses whether the variables' correlation matrix significantly varies from an identity matrix. This means that the test helps determine if there are significant relationships among the variables. When variables are correlated, significant results are obtained (Nasution et al., 2023). This indicates that factor analysis or other related multivariate strategies are appropriate. In this research, KMO values for all 5 variables were above 0.5 and significant at a 95% confidence level.

4.2 Cronbach Alpha Tests

Cronbach's alpha test of all variables is significant in evaluating the reliability of the scale or questionnaire. A high Cronbach's alpha value shows strong internal consistency, suggesting that the items within the scale are highly correlated and reliably measure the intended construct. On the other hand, a low Cronbach's alpha value suggests poor internal consistency, indicating that the items may not be measuring the construct consistently or reliably. Interpreting the results of Cronbach's alpha test involves considering the value of Cronbach's alpha, which ranges from 0 to 1. A value of 0.70 or higher in Cronbach's alpha is considered acceptable for most research purposes, suggesting satisfactory internal consistency (Taber, 2018). In this research, Cronbach alphas for all 5 variables were above 0.7.

4.3. Common Method Bias

Harman's single-factor test is used to assess the presence of common method bias in a dataset. Common method bias is the potential bias that arises when the same method or source of information is used to measure multiple variables, leading to inflated relationships among the items or the variables. Harman's single-factor test helps researchers identify this bias by examining whether a single factor accounts for a substantial variance in the measured variables (Aguirre-Urreta and Hu, 2019). Interpreting the results of Harman's single-factor test involves assessing the proportion of variance explained by the single factor. If a single factor accounts for a large portion of the variance (i.e., more than 50%), it suggests the presence of common method bias. In this research, the test showed that no single factor accounted for more than 50% of the extracted variance and therefore no common method bias was detected.

4.4. Multicollinearity Assessment

Conducting a multicollinearity assessment is significant in determining the presence and severity of multicollinearity among the predictor variables in a regression or multivariate analysis. Multicollinearity refers to a high degree of correlation between

two or more predictor variables, which can distort the analysis results and make it difficult to interpret the individual effects of the predictors. Assessing multicollinearity helps researchers identify problematic relationships between predictors and take appropriate steps to address or mitigate them. Researchers can learn about potential issues such as redundant predictors, unstable coefficient estimates, and inflated standard errors. The cutoff point for VIFs is often chosen considering the general guidelines and heuristics. Although there is no universally agreed-upon cutoff, the commonly used threshold is a VIF value of 10. If the VIF for a predictor exceeds 10, it suggests a high degree of multicollinearity, indicating that the predictor is highly correlated with other predictors in the model. In this research, the test showed that there were no VIFs above 10 hence no multicollinearity was detected.

4.5 Regression Analysis Output

Linear regression was conducted to test the impact of four independent variables (supervisor friendliness, coworker friendliness, personal safety, and coworker safety) on one dependent variable (absenteeism) translating to a total of four hypotheses tests. The impact of perceived supervisor friendliness on the absenteeism of healthcare workers is captured by hypothesis 1. The impact of perceived coworker friendliness on the absenteeism of healthcare workers is captured by Hypothesis 2. Hypotheses 1 and 2 relate to how social needs affect the absenteeism of healthcare workers. On the other hand, the impact of perceived personal safety on the absenteeism of healthcare workers is captured by Hypothesis 3. The impact of perceived coworker safety on the absenteeism of healthcare workers is captured by hypothesis 4. Hypotheses 3 and 4 relate to how safety needs affect the absenteeism of healthcare workers.

Hypothesis 1 predicted that perceived supervisor friendliness has a significant impact on absenteeism among healthcare workers. The results revealed a statistically significant negative regression coefficient ($\beta = -0.292$, $p<0.05$). Therefore hypothesis 1 is supported based on the aforementioned results. The interpretation of this statistical result is that when employees' perceptions regarding supervisor friendliness increase by 1 unit, their absenteeism declines by 0.292 units. More positive perceptions regarding supervisor friendliness are thus associated with lower absenteeism incidents. This highlights how important the friendliness of a supervisor is in mitigating negative employee-related behaviors such as absenteeism.

Hypothesis 2 predicted that perceived coworker friendliness has a significant impact on absenteeism among healthcare workers. The result revealed a negative coefficient ($\beta = -0.123$, $p< 0.05$). Therefore hypothesis 2 is supported based on the aforementioned results. The interpretation of this statistical result is that when employees' perceptions regarding coworker friendliness increase by 1 unit, their absenteeism declines by 0.123 units. More positive perceptions regarding coworker friendliness are thus associated with lower absenteeism incidents. This highlights how important the friendliness of coworkers is in mitigating negative employee-related behaviors such as absenteeism.

The results of hypotheses 1 and 2 which show a significant negative association between supervisor friendliness and absenteeism as well as coworker friendliness and absenteeism support Abraham Maslow's hierarchy of needs theory. Abraham Maslow proposed that humans have five sets of needs that act as a source of their motivation, with one set of needs being social needs (Baridam, 2002). The social needs comprise companionship, affection, and friendship. Social needs refer to the need to have relationships with others. Maslow considered the social stage an important part of psychological development because employees' relationships with others help them reduce their emotional concerns such as depression or anxiety. The absence of supervisor friendliness and coworker friendliness will thus lead to a situation where employees feel a lack of the fulfillment of social needs, a void that easily triggers negative behaviors such as absenteeism from work.

Hypothesis 3 predicted that perceived personal safety has a significant impact on absenteeism among healthcare workers. The results revealed a negative regression coefficient ($\beta = -0.168$, $p < 0.05$). Therefore hypothesis 3 is supported. The interpretation of this statistical result is that when employees' perceptions regarding their personal safety increase by 1 unit, their absenteeism declines by 0.168 units. More positive perceptions regarding personal safety are thus associated with lower absenteeism incidents. This highlights the importance of personal safety in mitigating negative employee-related behaviors such as absenteeism.

Hypothesis 4 predicted that perceived coworker safety has a significant impact on absenteeism among healthcare workers. This showed a significant negative association with absenteeism ($\beta = -0.101$, $p < 0.05$), indicating that when health workers feel that their colleagues are working in a safe environment, it lowers their absenteeism. Hypothesis 4 is thus supported. The interpretation of this statistical result is that when employees' perceptions regarding coworker safety increase by 1 unit, their absenteeism declines by 0.101 units. More positive perceptions regarding coworker safety are thus associated with lower absenteeism incidents. This result underscores the importance of coworker safety in mitigating negative employee-related behaviors such as absenteeism.

The results of hypotheses 3 and 4 which show a negative association between perceived personal safety and absenteeism as well as perceived coworker safety and absenteeism also offer credence to Abraham Maslow's hierarchy of needs theory. Abraham Maslow proposed that humans have five sets of needs that act as a source of their motivation, with one set of needs being safety needs (Baridam, 2002). Safety is an evolutionary need, which is often manifested in what employees refer to as the "fight or flight" response. Employees use environmental information to determine whether they are safe – in which case, they will usually stay – or unsafe – which will typically encourage them to leave (i.e. flight) or attempt to change their current circumstance (i.e. fight). When environmental information suggests there is some potential threat to employees, they experience an emotional response, which sensitizes them so that they are ready for action. In this regard, absenteeism can be looked at as

a "flight" response where they are trying to change their current circumstance after perceiving poor work safety.

5.0 Conclusion

The results of the research align with previous studies highlighting the importance of good work environments (work friendliness and safety) in shaping positive employee behavior (Alfayad and Arif, 2017; Choi and Ko, 2020). In healthcare, where teamwork and collaboration are essential, a friendly and safe work environment fosters job satisfaction and engagement and reduces absenteeism. These findings suggest that healthcare organizations in Malawi should prioritize strategies that boost work friendliness and safety to mitigate the problem of absenteeism among healthcare workers.

A friendly work environment can be achieved through training programs for supervisors and coworkers that emphasize effective communication and interpersonal skills (Kaburi et al., 2019). Also, creating opportunities for team-building activities and fostering a positive culture can promote coworker friendliness and collaboration among colleagues. On the other hand, ensuring workplace safety is necessary for the effective functioning of the health facilities. Healthcare organizations should invest in measures to enhance employee safety, such as providing necessary materials and training to curb occupational hazards. Additionally, promoting a safety culture and encouraging healthcare workers to report safety concerns will contribute to personal and coworker safety (Ackers et al., 2016).

References

Abbas, S., AL-Abrrow, H., Abdullah, H. O., Alnoor, A., Khattak, Z. Z., and Khaw, K. W. (2022), "Encountering COVID-19 and perceived stress and the role of a health climate among medical workers", *Current Psychology (New Brunswick, N.J.)*, Vol. 41, No. 12, 9109–9122. https://doi.org/10.1007/s12144-021-01381-8

Ackers, L., Loannou, E. and Ackers-Johnson, J. (2016), "The impact of delays on maternal and neonatal outcomes in Ugandan public health facilities: The role of absenteeism," *Health Policy and Planning,* Vol. 31, No. 9, 1152–1161.

Aguirre-Urreta, M. I., and Hu, J. (2019), "Detecting common method bias: Performance of the Harman's single-factor test", *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, Vol. 50, No. 2, 45-70.

Alfayad, Z., and Arif, L. S. M. (2017), "Employee voice and job satisfaction: An application of Herzberg's two-factor theory," *International Review of Management and Marketing*, Vol. 7, No.1, 150-156.

Al-Shammari, E. A., Al-Jahdali, A., and Al-Jahdali, Y. (2011), "The impact of work environment on absenteeism among nurses: A cross-sectional study", *Journal of Nursing Education and Practice,* Vol.1, No. 1, 20-28.

Alshmemri, M., Shahwan-Akl, L., and Maude, P. (2017), "Herzberg's two-factor theory", *Life Science Journal*, Vol. 14, No. 5, 12–16.

Baridam, M.D. (2002). *Management and organizational theory*, Sherbrooke Associates. PH.

Belita, A., Mbindyo, P., and English, M. (2013), "Absenteeism amongst health workers – developing a typology to support empiric work in low-income countries and characterising reported associations," *Human Resources For Health*, Vol. 11, No. 1, 1-10. https://doi.org/10.1186/1478-4491-11-34.

Berman, L., Nkhoma, L., Prust, M., McKay, C., Teshome, M., Banda, D., Kabambe, D., and Gunda, A. (2021), "Analysis of policy interventions to attract and retain nurse midwives in rural areas of Malawi: A discrete choice experiment," *PLoS ONE*, Vol. 16, No. 6, e0253518. https://doi.org/10.1371/journal.pone.0253518.

Beus, J. M., McCord, M. A., and Zohar, D. (2016), "Workplace safety: A review and research synthesis", *Organizational Psychology Review*, Vol. 6, No. 4, 352-381.

https://doi.org/10.1177/2041386615626243

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., and Walker, K. (2020), "Purposive sampling: Complex or simple? Research case examples", *Journal of Research in Nursing: JRN*, Vol. 25, No. 8, 652-661. https://doi.org/10.1177/1744987120927206

Chibwana, A. I., Mathanga, D. P., Chinkhumba, J., and Campbell, C. H. (2009), "Socio-cultural predictors of health-seeking behaviour for febrile under-five children in Mwanza-Neno district, Malawi", *Malaria journal*, Vol. 8, No. 1, 1-8.

Choi, Y., and Ko, S. H. (2020), "Roses with or without thorns? A theoretical model of workplace friendship", *Cogent Psychology*, Vol. 7, No. 1, 1761041.

Daniel, C. O. (2019), "Effects of job stress on employee's performance", *International Journal of Business, Management and Social Research*, Vol. 6, No. 02, 375-382.

Dartey-Baah, K., and Amoako, G. K. (2011), "Application of Frederick Herzberg's Two-Factor theory in assessing and understanding employee motivation at work: a Ghanaian Perspective", *European Journal of Business and Management*, Vol. 3, No. 9, 1-8.

de Paiva, L. G., Dalmolin, G. L., and Dos Santos, W. M. (2021), "Absenteeism-disease in healthcare workers in a hospital context in southern Brazil", *Revista brasileira de medicina do trabalho: publicacao oficial da Associacao Nacional de Medicina do Trabalho-ANAMT*, *18*(4), 399–406. https://doi.org/10.47626/1679-4435-2020-521

Di Giorgio, L., Evans, D. K., Lindelow, M., Nguyen, S. N., Svensson, J., Wane, W., and Welander Tärneberg, A. (2020), "Analysis of clinical knowledge, absenteeism and availability of resources for maternal and child health: a cross-sectional quality of care study in 10 African countries" *BMJ Global Health,* Vol. *5* (2020), https://doi.org/10.1136/bmjgh-2020-003377.

Dubale, B. W., Friedman, L. E., Chemali, Z., Denninger, J. W., Mehta, D. H., Alem, A., Fricchione, G. L., Dossett, M. L., and Gelaye, B. (2019), "Systematic review of burnout among healthcare providers in sub-Saharan Africa" *BMC Public Health*, Vol. 19. No. 1, https://doi.org/10.1186/s12889-019-7566-7

Duncombe, D. C. (2019), "Factors influencing voluntary absenteeism among healthcare workers in the Bahamas," *Nursing Economics*, Vol. 37, No. 2, 92-109.

Edem, M. J., Akpan, E. U., and Pepple, N. M. (2017), "Impact of Workplace Environment on Health Workers", *Occupational Medicine and Health Affairs*, Vol. 05, No. 02, https://doi.org/10.4172/2329-6879.1000261.

Fehr, B. (1996), *Friendliness processes*, Thousand Oaks, CA: Sage.

Fine, G. (1986), *Friendliness in the workplace*, in V.J. Derlega, and B.A. Winstead (Eds.). Friendliness and social interaction (pp. 185-206), New York, NY: Springer-Verlag.

Fleming, J., and Zegwaard, K. E. (2018), "Methodologies, methods and ethical considerations for conducting research in work-integrated learning", *International Journal of Work-Integrated Learning*, Vol. 19, No. 3, 205-213.

Ford, M. T., and Wiggins, B. K. (2012), "Occupational-level interactions between physical hazards and cognitive ability and skill requirements in predicting injury incidence rates", *Journal of Occupational Health Psychology, Vol. 17, No.* 3, 268–278. https://doi.org/10.1037/a0028143

Haldane, V., De Foo, C., Abdalla, S. M., Jung, A. S., Tan, M., Wu, S., ... and Legido-Quigley, H. (2021), "Health systems resilience in managing the COVID-19 pandemic: lessons from 28 countries", *Nature Medicine*, Vol. 27, No. 6, 964-980.

Hamilton, E. A. (2007). *Firm friendliness: Examining functions and outcomes of WF among law firm associates* (Unpublished doctoral dissertation). Boston College. Boston, MA.

Han, S. H., Yoon, S. W., and Chae, C. (2020), "Building social capital and learning relationships through knowledge sharing: a social network approach of management students' cases", *Journal of Knowledge Management*, Vol. 24, No. 4, 921–939. https://doi.org/10.1108/jkm-11-2019-0641

Henning, J. B., Stufft, C. J., Payne, S. C., Bergman, M. E., Mannan, M. S., and Keren, N. (2009), "The influence of individual differences on organizational safety

attitudes", *Safety Science*, Vol. 47, No. 3, 337–345. https://doi.org/10.1016/j.ssci.2008.05.003

Hoke, M. K., Stumo, S. R., Leatherman, T. L., Hannig, A., Mattingly, C., Janzen, J. M., ... and Wendland, C. (2022), *The Work of Hospitals: Global Medicine in Local Cultures*, Rutgers University Press.

Ilha N. (2023), "Healthcare and Disease Burden in Africa", In *Springer eBooks*. https://doi.org/10.1007/978-3-031-19719-2

Jehn, K. A., and Shah, P. P. (1997), "Interpersonal relationships and task performance: An examination of mediating processes in friendliness and acquaintance groups", *Journal of Personality and Social Psychology*, Vol. 72, 775-790.

Kaburi, B. B., Bio, F. Y., Kubio, C., Ameme, D. K., Kenu, E., Sackey, S. O., and Afari, E. A. (2019), "Psychological working conditions and predictors of occupational stress among nurses, Salaga Government Hospital, Ghana, 2016", *The Pan African Medical Journal*, Vol. *33*.

Khan, M. H., Yaqoob, A., Said, A., and Riaz, H. U. (2021), "Nurse absenteeism and turnover in tertiary care setting of Lahore, Punjab", *Saudi Journal of Nursing and Health Care*, Vol. 4, No. 5, 134-138.

Kim, S. H., Kim, J. H., and Kim, H. S. (2018), "The impact of work environment on the absenteeism of health workers: A cross-sectional study", *Journal of Occupational Health*, Vol. 60, No. 1, 10-17.

Kumari, K., and Yadav, S. (2018), "Linear regression analysis study", *Journal of the Practice of Cardiovascular Sciences*, Vol. *4*, No. 1, 33.

Li, Y., and Itoh, K. (2014), "Safety climate in trucking industry and its effects on safety outcomes", *Cognition, Technology and Work*, Vol. 16, No. 2, 131–142. https://doi.org/10.1007/s10111-013-0252-0

Machin, D., Campbell, M. J., Tan, S. B., and Tan, S. H. (2011), *Sample Size Tables for Clinical Studies*, John Wiley and Sons.

Mao, H. Y., Hsieh, A. T., and Chen, C. Y. (2012), "The relationship between WF and perceived job significance", *Journal of Management and Organization*, Vol. 18, No. 2, 247–262.

Markiewicz, D., Devine, I., and Kausilas, D. (2000), "Friendliness of women and men at work: Job satisfaction and resource implications," *Journal of Managerial Psychology*, Vol. 15, No.2, 161–184.

McQuerrey, L. (2022), *How does absenteeism affect safety in the workplace?* https://smallbusiness.chron.com/absenteeism-affect-safety-workplace-62089.html

Munyenyembe, B. (2022), "Managerial use of disciplinary measures and absenteeism among frontline health workers: The moderating roles of job resources and job demands," *Journal of Behavioural Science* Vol. 17, No. 3, https://so06.tci-thaijo.org/index.php/IJBS/article/view/256003

Nasution, S. T. A., Putri, D. A., and Hasibuan, T. F. H. (2023), "An analysis factor through kaiser-meyer-olkin: disclosing audit tenure in banking companies listed on Indonesia stock exchange 2019–2022," *Jurnal Ekonomi*, Vol. 12, No. 01, 1694-1700.

O'Brien-Pallas, L., Duffield, C., and Neufeld, J. (2010), "Work environment, health, and absenteeism among nurses: a cross-sectional study", *Journal of Nursing Management, Vol. 18, No.* 6, 727-737.

Oche, M. O., Oladigbolu, R. A., Ango, J. T., Okafoagu, N. C. and Ango, U. M. (2018), "Work absenteeism amongst health care workers in a tertiary health institution in Sokoto, Nigeria", *Journal of Advances in Medicine and Medical Research,* Vol. 26, 1-9.

Onwujekwe, O., Odii, A., Agwu, P., Oejiakor, C., Ogbozor, P., Hutchinsom, E., McKee, M., Obi, U., Mbachu, C., and Balabanova, D. (2019), "Exploring health-sector absenteeism and feasible solutions: Evidence from the primary healthcare level in Enugu, Southeast Nigeria", Working Paper. SOAS, London. https://researchonline.lshtm.ac.uk/id/eprint/4659908.

Ozili, P. K. (2023), "The acceptable R-square in empirical modelling for social science research", in *Social research methodology and publishing results: A guide to Non-native English speakers* (pp. 134-143). IGI Global.

Palmer, D. (2006), "Tackling Malawi's human resources crisis", *Reproductive Health Matters,* Vol. 14, No. 27, 27-39.

Renzaho, A. M. (2020), "The need for the right socio-economic and cultural fit in the COVID-19 response in sub-Saharan Africa: examining demographic, economic political, health, and socio-cultural differentials in COVID-19 morbidity and mortality", *International journal of environmental research and public health*, Vol. 17, No. 10, 3445.

Rocha, F. P., Saito, C. A., and Outeiro Pinto, T. C. N. (2020), "Sickness absenteeism among health care workers in a public hospital in São Paulo, Brazil", *Revista brasileira de medicina do trabalho: publicacao oficial da Associacao Nacional de Medicina do Trabalho-ANAMT*, Vol. 17, No. 3, 355–362. https://doi.org/10.5327/Z1679443520190333

Roopa, S., and Rani, M. S. (2012), "Questionnaire designing for a survey", *Journal of Indian Orthodontic Society*, Vol. 46, No. 4_suppl1, 273-277.

Saeed, S., Haron, H., Jhanjhi, N. Z., Naqvi, M., Alhumyani, H. A., and Masud, M. (2022), "Improve correlation matrix of Discrete Fourier Transformation technique for

finding the missing values of MRI images", *Mathematical Biosciences and Engineering*, Vol. 19, No. 9, 9039-9059.

Sarstedt, M., and Mooi, E. (2019), "Regression analysis", *A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS Statistics*, 209-256.

Saunes, I. S., Karanikolos, M., and Sagan, A. (2020), "Norway: Health system review", *Health Systems in Transition*, Vol. *22*, No. 1, 1–163. https://researchonline.lshtm.ac.uk/id/eprint/4658828/

Serapelwane, M. G., and Manyedi, E. M. (2022), "Unfair labour practice on staff in primary health care facilities, North West province, South Africa: A qualitative study", *Curationis*, Vol. *45*, No. 1, e1–e10. https://doi.org/10.4102/curationis.v45i1.2171

Sheffel, A., Andrews, K. G., Conner, R., Di Giorgio, L., Evans, D. K., Gatti, R., Lindelow, M., Sharma, J., Svensson, J., and Tarneberg, A. W. (2022), "Rethinking the human resource crisis in Africa's health systems: Evidence across ten countries", *BMJ Yale, 2022*, 1-67. https://doi.org/10.1101/2022.06.17.22276571.

Shiroya, V., Shawa, N., Matanje, B., Haloka, J., Safary, E., Nkhweliwa, C., Mueller, O., Phiri, S., Neuhann, F., and Deckert, A. (2021), "Reorienting primary health care services for non-communicable diseases: A comparative preparedness assessment of two healthcare networks in Malawi and Zambia", *International Journal of Environmental Research and Public Health*, Vol. 18, No. 9, 5044. https://doi.org/10.3390/ijerph18095044

Singh, S., and Chaudhary, R. K. (2017), "The impact of work environment characteristics on absenteeism of health workers: A cross-sectional study", *Journal of Health Management*, Vol. 19, No. 3, 343-357

Singh, S., and Sagar, R. (2021), "A critical look at online survey or questionnaire-based research studies during COVID-19, *Asian Journal of Psychiatry*, Vol. 65, No. 1, 102850. https://doi.org/10.1016/j.ajp.2021.102850

Song, S. (2005), *WF and its impact on employees' positive work attitudes: A comparative study of Seoul City and New Jersey State government public officials* (unpublished doctoral dissertation), Rutgers, The State University of New Jersey. Newark, NJ.

Taber, K. S. (2018), "The use of Cronbach's alpha when developing and reporting research instruments in science education", *Research in Science Education*, Vol. 48, No.1, 1273-1296.

Thurston, E., and Glendon, A. I. (2018), "Association of risk exposure, organizational identification, and empowerment, with safety participation, intention to quit, and absenteeism," *Safety Science*, Vol. 105, 212–221, https://doi.org/10.1016/j.ssci.2018.02.012

Tumlinson, K., Gichane, M. W., Curtis, S. L., and Lemasters, K. (2019), "Understanding healthcare provider absenteeism in Kenya: A qualitative analysis," *BMC Health Services Research*, Vol. 19, No. 660, https://doi.org/10.1186/s12913-019-4435-0.

Tweheyo, R., Reed, C., Campbell, S., Davies, L., and Daker-White, G. (2019). "'I have no love for such people because they leave us to suffer': A qualitative study of health workers responses and institutional adaptations to absenteeism in rural Uganda", *BMJ Global Health*, Vol. 4, No. 3, e001376.

Wang, X., and Cheng, Z. (2020), "Cross-sectional studies: Strengths, weaknesses, and recommendations", *Chest*, Vol. *158, No.* 1S, S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

WHO. (2019), *WHO guideline recommendations on digital interventions for health system strengthening*, https://apps.who.int/iris/bitstream/handle/10665/324998/WHO-RHR-19.7-eng.pdf

Zhang, H., Fink, G., and Cohen, J. (2021), "The impact of health worker absenteeism on patient health care seeking behavior, testing, and treatment: A longitudinal analysis in Uganda", *PLoS ONE,* Vol. 16, No. 8, e0256437. https://doi.org/10.1371/journal.pone.0256437.

Harrison, D. A., and Martocchio, J. J. (1998), "Time for Absenteeism: A 20-Year Review of Origins, Offshoots, and Outcomes", *Journal of Management*, Vol. 24, No. 3, 305–350. https://doi.org/10.1177/014920639802400303 .

Ose, S. O. (2005), "Working conditions, compensation and absenteeism", *Journal of Health Economics,* Vol. 24, No. 1, 161–188. https://doi.org/10.1016/j.jhealeco.2004.07.001

Roelen, A.M., Weites, H.S., Koopmans, C.P., Jac J. L., and Groothoff, J. (2006), "Sickness absence and psychosocial work conditions: A multilevel study", *Occupational Medicine*, Vol. 58, No. 6, 425–430. https://doi.org/10.1093/occmed/kqn073.