

Relationship Between Employee Wellness Initiatives and Organizational Productivity: A Case of Disaster Management & Mitigation Unit in Zambia

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Abstract

The aim of this study was to assess the relationship between employee wellness initiatives and organizational productivity within Zambia's Disaster Management and Mitigation Unit (DMMU). The key objectives of the study included; to assess the applicability of wellness initiatives, examine how these initiatives influence productivity and analyze the relationship between employee engagement in wellness programs and productivity. The study adopted a mixed-method approach. A sample of 143 employees was selected using stratified random sampling for quantitative surveys, and 10 employees were purposively chosen for semi-structured interviews. The key findings reveal that wellness initiatives, including flexible working conditions, health safety programs, and work-life balance initiatives, significantly impacted employee productivity. Specifically, 60% of respondents reported reduced absenteeism, 65% experienced improved job satisfaction, and 55% noted increased task efficiency. The multiple regression analysis showed that flexible working conditions ($B = 0.385$, $p = 0.001$), health and safety programs ($B = 0.305$, $p = 0.015$), work-life balance ($B = 0.410$, $p = 0.020$), and employee engagement ($B = 0.489$, $p = 0.005$) were significant predictors of organizational productivity, explaining 67.2% of the variance in productivity ($R^2 = 0.672$). Additionally, greater engagement in wellness programs was positively correlated with higher job satisfaction and improved productivity. The study recommends expanding work-life balance programs, integrating mental health support, and increasing employee participation in wellness initiatives.

Keywords: Employee Wellness, Organizational Productivity, Disaster Management, Disaster Management and Mitigation Unit (DMMU), Employee Engagement.

Introduction

Employee wellness has gained global attention as organizations recognize its direct impact on productivity, absenteeism, and job satisfaction. Wellness initiatives, such as health programs, flexible working hours, and stress management training, had been shown to reduce turnover, enhance employee engagement, and improve overall performance (Goh & Lee, 2020). In high-stress industries, addressing the physical, emotional, and mental health of employees is crucial to mitigating burnout and improving workplace morale. During global challenges like the COVID-19 pandemic, wellness programs were vital in supporting employees through increased stress and uncertainty (Kniffin et al., 2020).

However, despite growing recognition, many African countries faced significant barriers in implementing comprehensive employee support programs, including limited resources, cultural stigma around mental health, and underdeveloped mental health services (Chanda & Chiluba, 2015).

In Zambia, while attention had been given to physical health, support for mental health and efforts to promote work-life balance remained insufficient, particularly in high-stress sectors like disaster management (Chanda & Chiluba, 2015). The Disaster Management and Mitigation Unit (DMMU), established in 1994 under Zambia's Office of the Vice President, plays a crucial role in disaster preparedness, response, and mitigation (Lungu, 2023). Despite its significance, employees at DMMU work under high-stress conditions, often experiencing long hours and emotionally taxing situations (UN-SPIDER, 2023). Although the Disaster Management Act of 2010 strengthened the unit's mandate, comprehensive wellness initiatives, especially regarding mental health, are still lacking (Chitondo et al., 2024). This gap contributes to burnout and reduced productivity during critical periods (Mwansa & Banda, 2021).

Furthermore, despite numerous studies demonstrating the positive impact of employee wellness on productivity, there remains a significant gap at DMMU. There is minimal focus on mental health and flexible working conditions within the unit, and with no out-right existing or documented employee wellness initiatives tailored to the high-stress nature of disaster management work. Mwansa and Banda (2021) in their works indicated that about 60% of employees in Zambia are reported absent due to stress-related issues, and many others are reported to lack proper mental health support in the workplace, DMMU inclusive. The referred to reports and many others motivated the researcher to investigate at DMMU, how employee wellness initiatives related with productivity in this sector.

Recent evidence further suggests that employee wellness initiatives tailored to specific high-risk professions not only improve individual performance but also organizational resilience and service delivery effectiveness (Kabwe & Tembo, 2024). Organizations engaged in emergency response and disaster management require holistic wellness frameworks that integrate mental health, emotional resilience training, and flexible support systems to ensure optimal functionality during crises. Failure to implement such targeted wellness initiatives can exacerbate employee fatigue, turnover, and operational inefficiencies, particularly during large-scale disaster responses (Kabwe & Tembo, 2024). Therefore, investigating and addressing employee wellness at DMMU is not only necessary for employee health but also for sustaining organizational productivity and national disaster preparedness. Thus, this study focused on examining the relationship between employee wellness initiatives and organizational productivity at DMMU.

Statement of the Problem

World - wide, employee wellness initiatives are critical for maintaining productivity, particularly in high-stress environments such as disaster management, where employees are frequently exposed to traumatic situations (Kniffin et al., 2020). At DMMU, which is

responsible for national disaster preparedness and response, the absence of structured wellness programs especially those focusing on mental health, stress management, and work-life balance poses a significant challenge to sustaining employee well-being and operational effectiveness (Chitondo et al., 2024). The implication of lack of a structured wellness at DMMU increases the risk of burnout, absenteeism, and reduced productivity, ultimately impairing DMMU's capacity to respond effectively during critical emergencies (UN-SPIDER, 2023), and this is a problem.

While general workplace wellness initiatives have been studied in Zambia, there is a notable absence of empirical research examining the link between employee wellness initiatives and organizational productivity specifically within African disaster management units (Lungu, 2023), thus, this current study. Existing internal reports at DMMU indicate high levels of stress-related absenteeism, estimated at 60%, yet the direct relationship between this absenteeism and organizational productivity remains unexplored (Mwansa & Banda, 2021; Chitondo et al., 2024). This research gap creates an urgent need for targeted studies that investigate how tailored wellness programs, such as mental health support services and flexible working arrangements, influence employee performance in disaster management contexts.

Therefore, this study seeks to fill this critical relational gap between employee wellness initiatives and productivity at DMMU. The research aligns with Zambia's 8th National Development Plan (8NDP), which prioritizes human capital development, and supports Sustainable Development Goal (SDG) #8, which advocates for decent work, economic growth, and supportive working environments (Ministry of National Development Planning, 2022).

This study addressed the following key objectives; (i) to assess the applicability of employee wellness initiatives at DMMU; (ii) to examine how employee wellness initiatives relate to productivity at DMMU, and (iii) to analyze the relationship between employee engagement in wellness initiatives and productivity at DMMU. To achieve the objectives, the following were key questions; (i) What is the applicability of employee wellness initiatives at DMMU in addressing the needs of employees in disaster management? (ii) How do employee wellness initiatives relate to productivity at DMMU and (iii) What is the relationship between employee engagement in wellness initiatives and productivity at DMMU?

Literature Review

Applicability of Employee Wellness Initiatives

Employee wellness initiatives are essential for addressing the physical, emotional, and mental health challenges employees face, particularly in high-stress environments like disaster management (Guest, 2017). Globally, programs such as health initiatives, stress management workshops, and flexible working arrangements have been shown to improve engagement, reduce absenteeism, and boost job satisfaction (Bakker & Demerouti, 2017). However, while studies in broader sectors confirm these benefits, fewer have specifically

analyzed their applicability in disaster management contexts, where the intensity and unpredictability of work demand tailored interventions (Goh & Lee, 2020). Schaufeli (2018) emphasizes that wellness programs yield the best outcomes when customized to sector-specific challenges, suggesting that for units like Zambia's DMMU, generic programs may be insufficient.

Relationship Between Employee Wellness Initiatives and Productivity

Employee engagement plays a pivotal role in enhancing productivity, particularly in demanding environments like disaster management (Bakker & Demerouti, 2007; Harter et al., 2021). Globally, research shows that employees who are actively involved in wellness programs report higher motivation, commitment, and performance (Schaufeli, 2018; Goh & Lee, 2020). However, Harter et al. (2021) caution that engagement levels often depend on how accessible and meaningful the programs are to employees' unique job contexts. In disaster management settings like DMMU, where rapid decision-making under pressure is crucial, active engagement in wellness initiatives can be a significant differentiator in employee performance (Saks, 2019). While some studies stress the general benefits of wellness engagement, others highlight that participation must be voluntary and culturally sensitive to sustain long-term impact (Lazarus & Folkman, 2020). By designing tailored wellness programs and fostering genuine employee buy-in, organizations like DMMU can enhance engagement, which in turn may drive productivity and operational efficiency during disaster response operations.

Employee Engagement in Wellness Initiatives and Productivity

Employee engagement plays a pivotal role in enhancing productivity, particularly in high-demand and high-stress environments like disaster management (Bakker & Demerouti, 2007; Harter et al., 2021). When employees are engaged in wellness initiatives, they tend to be more motivated, committed, and productive (Schaufeli, 2018). Research has shown that employees who actively participate in wellness programs, such as mental health support, stress management workshops, and flexible working arrangements, report higher levels of engagement, leading to improved job performance (Goh & Lee, 2020). In disaster management settings like DMMU, where quick decision-making and sustained effort are required, engagement in wellness initiatives can significantly influence an employee's ability to perform under pressure (Saks, 2019). By providing the necessary resources and support, such as wellness programs tailored to the unique needs of disaster management professionals, organizations can enhance employee engagement, which in turn drives productivity and efficiency in managing disasters (Lazarus & Folkman, 2020).

Empirical Review

A study by Wang & Walumbwa (2020) aimed to explore the impact of employee wellness initiatives on organizational productivity, particularly in high-stress environments such as disaster management. This quantitative survey involved 350 employees from disaster

management organizations across the globe. The research revealed a positive relationship between wellness initiatives and organizational productivity. Stress management and mental health support were particularly important for enhancing employee engagement and ensuring that employees could manage the intense pressures of disaster response. Employees who had access to these support systems were more equipped to handle the stress associated with their roles, leading to higher productivity. However, the study also noted a research gap in the context of developing nations' disaster management sectors, particularly highlighting the need for more localized studies to understand how employee wellness affects productivity in these regions.

Schaufeli's (2018) meta-analysis works, focused on reviewing the broader impact of employee wellness on organizational productivity across various industries. By synthesizing data from 50 global studies, Schaufeli (2018) found a strong correlation between employee wellness and improved job satisfaction, reduced absenteeism, and increased employee engagement. His research highlighted that wellness programs enhance motivation, reduce turnover, and positively affect organizational productivity. However, Schaufeli also identified a significant gap in research, particularly in high-risk sectors like disaster management. The study emphasized the need for targeted research to explore how wellness programs specifically influence employees in high-stress environments, where the demands are greater and wellness initiatives are crucial for sustaining performance.

Goh & Lee (2020) sought to evaluate the effectiveness of employee wellness programs in enhancing organizational productivity globally. The study utilized a cross-sectional survey of 500 employees across multiple sectors. The findings revealed that wellness programs, particularly flexible work arrangements and health safety programs, were highly correlated with increased job satisfaction, engagement, and productivity. These programs were particularly beneficial in demanding and stressful sectors, as they allowed employees to manage their work-life balance and mental health, which led to enhanced performance. However, the study identified a gap in research related to sectors such as disaster management, where the nature of work and employee wellness are uniquely intertwined. This gap points to the need for further research focused on disaster management organizations, such as DMMU, to assess the specific impacts of wellness programs in high-pressure crisis settings.

Bakker and Demerouti (2017) explored the relationship between job resources (including wellness initiatives) and employee engagement, productivity, and performance through a systematic review and meta-analysis of employee surveys from various sectors. The study found that job resources, such as social support, training, and autonomy, helped employees manage job demands and reduced burnout, leading to enhanced productivity. Wellness initiatives, in particular, were crucial in improving employee engagement, which subsequently boosted organizational performance. Despite these positive findings, the study revealed a research gap in that disaster management settings, where employees experience extreme stress, were not specifically addressed. The authors suggested that

further research is needed to examine how wellness initiatives can support employees working in disaster response roles, where the intensity of job demands is particularly high. Pfeifer (2021) aimed to analyze the impact of employee wellness on performance, especially in high-risk jobs such as emergency and rescue operations. The study surveyed 150 employees in emergency response units to assess how mental health support and flexible working conditions influenced job performance. The research found that employees who had access to mental health support and flexible work conditions exhibited better decision-making under stress and higher productivity. These findings are particularly relevant for sectors like disaster management, where workers must make quick decisions in highly stressful situations. However, the study identified a research gap in the lack of longitudinal studies that track the long-term effects of wellness initiatives on employee performance in disaster management contexts. Further research is needed to assess the sustained impact of these programs over time, especially in high-pressure environments.

Wu *et al.* (2021) conducted a longitudinal study with 200 employees in emergency response units to assess the effectiveness of wellness initiatives in high-stress professions like disaster management. The study found that wellness programs, particularly those offering mental health support, significantly improved job performance, reduced burnout, and enhanced employees' ability to focus during crises. Employees participating in wellness programs were better equipped to handle the physical and emotional demands of disaster response, leading to improved decision-making and more efficient operations. Leadership was identified as a key factor in supporting employees' mental health and engagement, yet this aspect remains underexplored in disaster management settings, suggesting an area for future investigation.

Nyambegera (2020) conducted a study to examine employee wellness in sub-Saharan Africa and its implications for human resource practices. The study surveyed 250 employees in high-risk jobs across five African countries, including Zambia. The findings revealed that wellness initiatives, such as health and wellness programs, positively impacted both organizational performance and job satisfaction. Employees who felt supported through these initiatives reported being more engaged, exhibiting higher levels of job satisfaction, and showing better overall performance. However, the study also highlighted a research gap in the lack of sector-specific wellness initiatives in industries like disaster management. This suggests a need for more research into how wellness programs can be designed and implemented in high-risk sectors like disaster management, where employees face unique emotional and physical challenges.

Chitondo *et al.* (2024) investigated the relationship between disaster management policies and employee wellness in Zambia, using qualitative interviews with 20 disaster management professionals. The study found that employee wellness is often overlooked in disaster management policies, leading to burnout and disengagement among workers. The lack of structured wellness initiatives was identified as a key factor contributing to employee stress, reduced productivity, and increased turnover in disaster management organizations. The study highlighted a research gap in that no research had been done to

link wellness initiatives directly to productivity within disaster management sectors. This points to the need for focused research to explore how wellness programs could improve employee performance and overall organizational effectiveness in disaster management settings like DMMU.

Phiri (2020) aimed to study the impact of employee wellness on performance in Zambia's healthcare sector. The study used a survey of 120 healthcare professionals, focusing on the effectiveness of health and wellness programs. The key findings showed that these programs led to significant improvements in employee job satisfaction, with participants reporting higher levels of engagement and motivation in their roles. The study also found that wellness initiatives contributed to reduced absenteeism, as employees were better equipped to manage stress and workload. However, there was a research gap identified, particularly in the lack of exploration on the application of these findings to disaster management sectors. This suggests that similar wellness interventions could be beneficial for employees working under high-stress conditions, like those in disaster management, but such research has yet to be conducted.

The study by Mwanza & Banda (2021) sought to analyze the role of employee wellness initiatives in Zambia's public sector. The researchers conducted a survey of 150 public sector employees, focusing on the impact of wellness programs such as flexible working conditions and stress management. The study found that these initiatives were strongly linked to improved employee engagement and enhanced productivity. Employees reported feeling more supported and capable of balancing their work and personal responsibilities, which helped reduce burnout and improved their overall performance. However, the study identified a research gap, noting that there was no specific focus on disaster management contexts, particularly within the DMMU. This gap calls for further investigation into how wellness initiatives could be tailored to meet the specific needs of disaster management professionals.

Lungu (2023) explored the role of wellness programs in enhancing employee performance within Zambia's public service. The study surveyed 200 employees across multiple government ministries. The research found that wellness programs, including mental health support, physical wellness activities, and work-life balance initiatives, were linked to higher job satisfaction and lower turnover rates. Employees who participated in these programs were more engaged, showed better job performance, and were less likely to leave their positions. However, the study also pointed out a gap in the research, as it did not specifically explore the application of these findings to disaster management organizations like DMMU. This suggests the need for further research on the specific benefits of wellness programs within Zambia's disaster management context, where the demands on employees are unique and intense.

Theoretical and Conceptual Framework

This study was grounded in two key theoretical frameworks and one theoretical model: Organizational Support Theory (OST), Institutional Theory, and the Job Demands-Resources (JD-R) Model respectively, which collectively provide a comprehensive understanding of the relationship between employee wellness initiatives and organizational productivity at DMMU in Zambia. OST, developed by Eisenberger *et al.* (1986), emphasizes that when employees perceive high levels of organizational support, including wellness initiatives, they are more likely to feel motivated and engaged, leading to improved performance. In the context of disaster management, wellness programs such as mental health support and flexible work arrangements are crucial for enhancing employee engagement, which, in turn, boosts productivity during high-stress disaster response situations (Eisenberger *et al.*, 1986).

Institutional Theory, as explained by DiMaggio and Powell (1983), elucidates how external societal pressures, such as Zambia's 8th National Development Plan (8NDP) and Sustainable Development Goal (SDG) #8, encourage organizations like DMMU to adopt wellness initiatives. These external expectations help ensure compliance with national and global standards while enhancing DMMU's legitimacy (DiMaggio & Powell, 1983). The JD-R Model, proposed by Bakker and Demerouti (2017), further complements these theories by explaining how wellness initiatives serve as job resources, mitigating the negative effects of high job demands in high-stress environments. Together, these theories form a robust framework for understanding how support, external pressures, and job resources influence employee wellness and productivity at DMMU.

The conceptual framework of this study in the figure below highlights the relationship between employee wellness initiatives and organizational productivity, with employee engagement serving as a mediating variable. The framework identifies four key components of wellness initiatives: Flexible Working Conditions (FWC), Health Safety Programs (HSP), Training and Development (TAD), and Work-Life Balance (WLB).

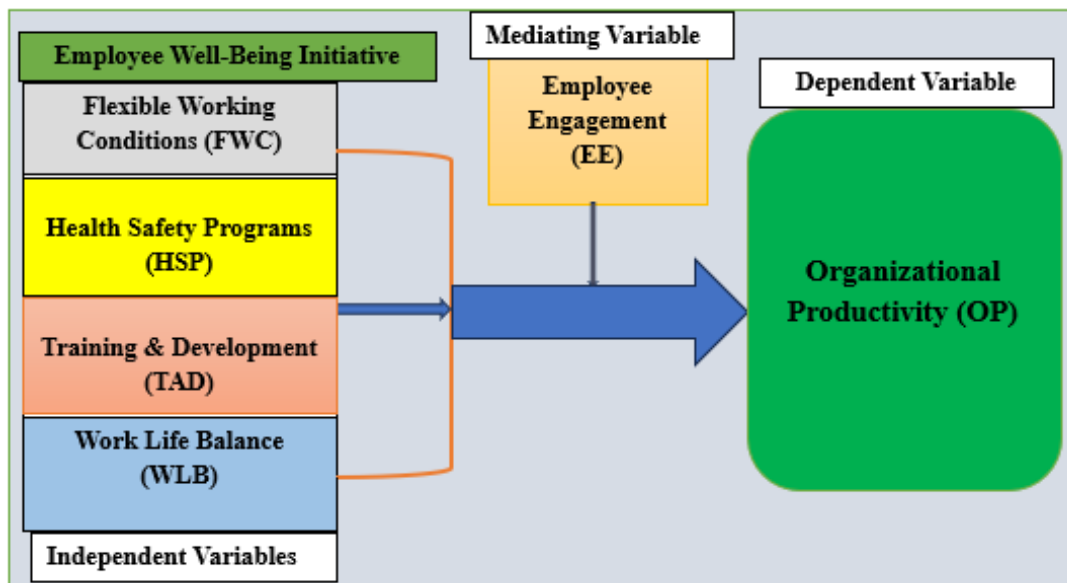


Figure 1: Conceptual Model of Study

Source; Author's Compilation, 2025

Research Methodology

This article is an excerpt of the researcher's Master's dissertation whose data were collected in the year 2024. A pragmatic research paradigm was adopted, integrating both qualitative and quantitative methods to provide a comprehensive understanding of the relationship between employee wellness initiatives and organizational productivity at DMMU in Zambia. The pragmatic paradigm is ideal for addressing complex research problems by combining empirical data and personal experiences to offer actionable insights (Creswell & Plano Clark, 2018). This approach enabled the study to measure the effectiveness of wellness initiatives through quantitative surveys while also capturing employees' subjective experiences through qualitative interviews. By using both methods, the research gained a fuller, more nuanced perspective on how wellness initiatives impact employee engagement and productivity, particularly in the high-stress context of disaster management (Tashakkori & Teddlie, 2010). However, a limitation of using a mixed-methods design is the potential challenge of integrating and interpreting quantitative and qualitative findings cohesively, which may introduce complexity into the analysis phase.

The study adopted a sequential explanatory research design, which is particularly suited for exploring and explaining relationships between variables. This design allowed the study to first collect quantitative data and then follow up with qualitative data, offering a comprehensive approach to assessing the applicability and effectiveness of employee wellness initiatives at DMMU and examining their impact on employee productivity. In the initial quantitative phase, structured surveys were used to gather measurable data on employees' perceptions of wellness initiatives. Following this, the qualitative phase employed semi-structured interviews to gain deeper insights into employees' personal

experiences. By combining these two data collection methods, the design enabled the study to address the research questions thoroughly, capturing both statistical trends and rich, contextual narratives (Creswell, 2014). It is important to acknowledge that regression analysis, used in the quantitative phase, assumes linearity, independence of errors, and normal distribution of residuals, which may not always perfectly align with real-world data. The study was conducted at DMMU's in Zambia, an organization responsible for disaster preparedness, response, and mitigation in the country. DMMU was purposefully selected due to its critical national role in disaster management, where employee wellness is crucial to sustaining productivity during high-pressure disaster situations. The study population consisted of 222 employees directly involved in disaster management tasks, including front-line staff, mid-level managers, and senior leadership. This broad population base was selected to ensure a comprehensive understanding of how wellness initiatives affect employees across different organizational tiers, recognizing that engagement with wellness programs can vary according to job roles and responsibilities.

The sample size was calculated using the Yamane formula, resulting in approximately 143 participants, providing sufficient statistical reliability with a margin of error of 5%. This sample size was deemed appropriate for ensuring the validity and generalizability of the findings (Creswell & Creswell, 2017). Stratified random sampling was employed for the quantitative survey to ensure proportional representation from the different management levels at DMMU (front-line staff, mid-level managers, and senior leadership). For the qualitative phase, purposive sampling was used to select 10 participants (5 senior managers and 5 front-line employees) with extensive experience in employee wellness initiatives at DMMU. This approach ensured rich, detailed perspectives were obtained from both operational and strategic levels within the organization (Saunders et al., 2019). To mitigate potential non-response bias, follow-up reminders were issued during data collection, and participation incentives (such as anonymous feedback summaries) were offered to encourage full participation.

Data were collected using both quantitative surveys and qualitative interviews. The quantitative surveys included structured questionnaires designed to capture employees' perceptions of wellness initiatives such as mental health support, stress management, and work-life balance programs. Surveys consisted of Likert-scale questions to quantify employee satisfaction, engagement, and perceived productivity, supplemented by a few open-ended questions to allow nuanced responses. For the qualitative component, semi-structured interviews were conducted with purposively selected employees to explore deeper perceptions and lived experiences regarding wellness initiatives. The qualitative data were transcribed and analyzed using thematic analysis (Braun & Clarke, 2006), allowing the identification of recurring patterns and themes. Quantitative data were analyzed using SPSS (Statistical Package for the Social Sciences), conducting descriptive statistics and inferential analyses, including correlation and regression analysis, to examine the relationships between wellness initiatives and productivity (Pallant, 2020).

To ensure the reliability and validity of the study, several strategies were employed. A pilot study was conducted with a small sample of DMMU employees prior to full-scale data collection to test the clarity and effectiveness of the survey instrument. Cronbach's alpha was used to assess the internal consistency of the survey scales, with values of 0.70 or higher considered acceptable (Tavakol & Dennick, 2011). Content validity was established by seeking feedback from subject matter experts in disaster management and human resources. Construct validity was further enhanced by adopting well-established measures for employee wellness and productivity. For qualitative interviews, validity was ensured by selecting participants with relevant expertise and experience, enriching the credibility and depth of collected data.

Ethical considerations were integral to the research process. Informed consent was obtained from all participants, ensuring they were fully aware of the study's purpose, the voluntary nature of participation, and their right to withdraw at any time without penalty (Creswell & Creswell, 2017). Anonymity was safeguarded by assigning unique codes to survey and interview responses, while data security measures were implemented to restrict access to only the research team. Given the sensitivity of discussing mental health and wellness topics, participants were also provided with access to mental health resources in case of distress during or after participation (American Psychological Association, 2020). These measures ensured that the study adhered to ethical research standards, enhancing its credibility and protecting participants' welfare.

Results and Discussion

Demographic Characteristics

The gender distribution at DMMU shows that 64.4% of respondents were male, while 35.6% are female, reflecting the broader trend in disaster management, where men are traditionally overrepresented (Barker, 2015). Despite this, the significant proportion of female employees provides a valuable perspective on the effectiveness of wellness initiatives in male-dominated sectors. Gender inclusivity in the workplace is crucial for improving employee engagement and productivity (Jain, 2020). Moreover, fostering an inclusive environment can enhance overall job satisfaction and help address specific needs of underrepresented groups in the workplace.

The largest age group at DMMU is 26-35 years, comprising 39.4% of respondents, followed by 36-45 years at 23.6%. Research indicates that younger employees prioritize work-life balance and mental health support (Koh & Lee, 2020). Given the high-stress nature of disaster management, tailored wellness programs are essential for fostering engagement and resilience among younger workers. By addressing their specific needs, DMMU can cultivate a more committed and motivated workforce that is better equipped to handle the demands of disaster response.

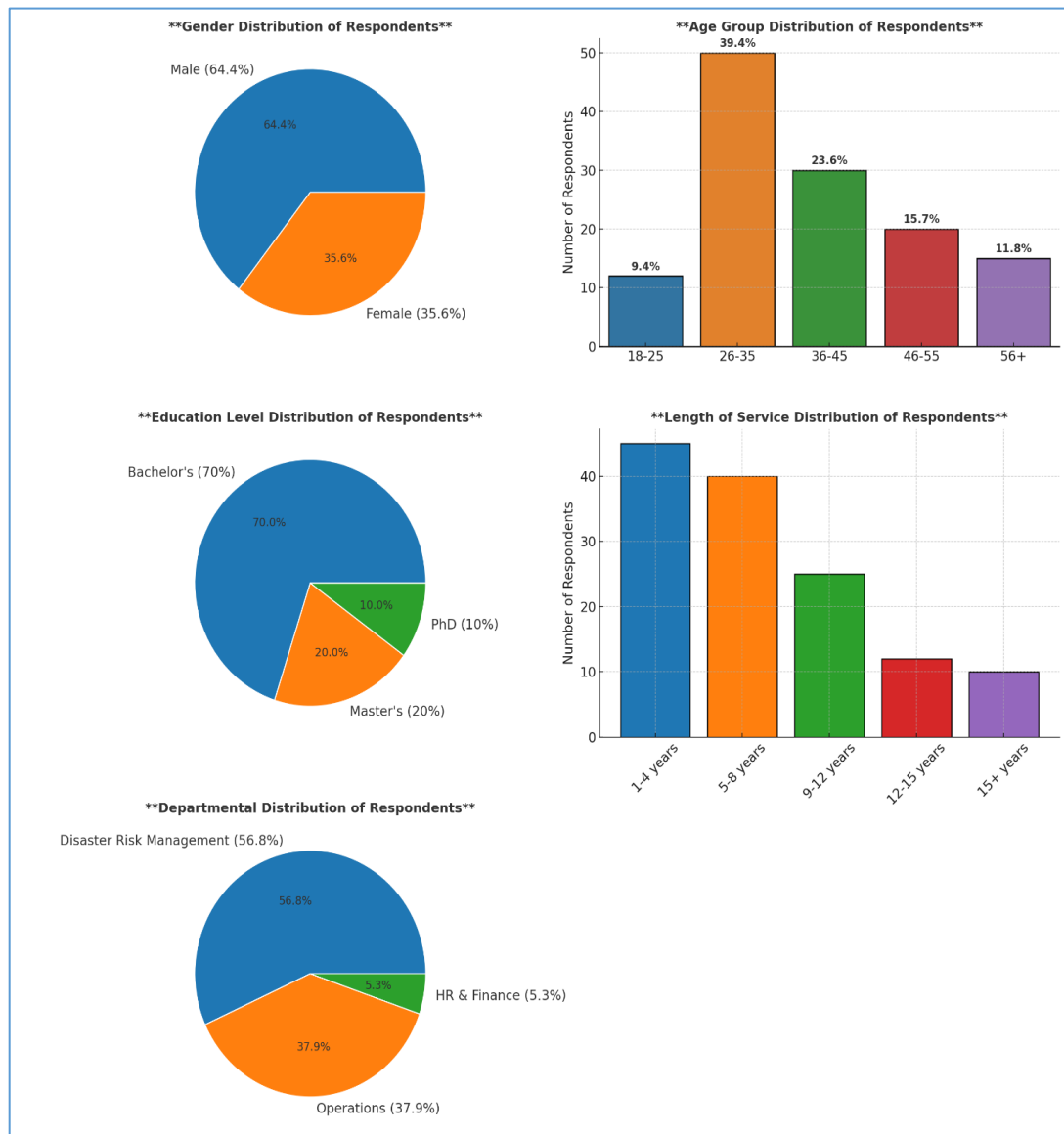


Figure 2: Demographic Characteristics Distribution at DMMU

Source: Author's Compilation from Field Data, 2025

Results in Figure 2 show that 70% of respondents hold a Bachelor's degree, 20% have a Master's degree, and 10% possess a PhD. Highly educated employees face unique stressors related to high performance expectations and complex tasks, making stress management and mental health support crucial for this group (Goh & Lee, 2020). Providing targeted wellness initiatives for educated employees can lead to improved job satisfaction, increased retention, and better overall performance in high-stress environments like disaster management.

Regarding length of service, 34.1% of respondents worked at DMMU for 1-4 years, followed by 30.3% with 5-8 years. This relatively new workforce brought fresh perspectives but faced challenges in adapting to the high demands of disaster management, underscoring the need for wellness initiatives to manage stress and enhance engagement (Harten *et al.*,

2020). Supporting newer employees through wellness programs could ease their transition into the role and promote long-term career satisfaction and productivity. In terms of departmental distribution, 56.8% of respondents work in the Disaster Risk Management department, with 37.9% in Operations. Given the high-pressure nature of disaster response, wellness initiatives are critical to ensure employee resilience and organizational effectiveness during crisis situations (Schaufeli, 2018). These initiatives play a vital role in helping employees manage stress and remain focused, ensuring they are equipped to perform optimally in high-stress disaster response scenarios.

Applicability of Employee Wellness Initiatives

The results presented in Table 1 demonstrate that Flexible Working Conditions (FWC) had the highest applicability among employees at DMMU, with 75% (95 out of 127) recognizing its relevance. This empirical outcome confirms theoretical expectations from Goh and Lee (2020), who argue that flexible work arrangements significantly enhance job satisfaction and employee engagement, particularly in high-demand environments like disaster management. In the DMMU context, where employees often face unpredictable workloads, the strong preference for flexible working arrangements suggests that adaptability directly supports employee wellness and operational resilience. Similarly, Health Safety Programs (HSP) were applicable to 70% of respondents (89 out of 127), aligning with Schaufeli's (2018) findings that robust health programs reduce burnout and enhance overall employee well-being. At DMMU, where the physical and emotional risks of disaster response are high, these programs appear to provide not only health benefits but also psychological safety, which may indirectly contribute to organizational stability during emergencies.

Training and Development (TAD) initiatives were seen as applicable by 55% of respondents (70 out of 127). This relatively lower score suggests partial alignment with Bakker et al.'s (2020) assertion that training boosts job performance and confidence. While DMMU employees value skill development, the findings imply that current programs may not be sufficiently comprehensive or targeted to disaster management challenges, highlighting a gap between theoretical best practices and practical execution. Finally, Work-Life Balance (WLB) initiatives were applicable to 50% (63 out of 127), indicating a moderate but critical need for more effective strategies. Although WLB is theoretically linked to improved engagement and lower turnover (Goh & Lee, 2020), the DMMU results suggest that in high-pressure environments, traditional WLB initiatives may require adaptation (e.g., offering mental health days or emergency support) to be fully effective.

Table 3: Employee Wellness Initiatives Exercised at DMMU Results

Employee Wellness Initiatives	Percentage of Employees Reporting Applicability
Flexible Working Conditions (FWC)	75%
Health Safety Programs (HSP)	70%
Training & Development (TAD)	55%
Working Life Balance (WLB)	50%

Source: Author's Compilation from Field Data, 2025

Relationship Between Employee Wellness Initiatives and Productivity

The findings in Table 2 show that 60% of respondents (76 out of 127) reported reduced absenteeism due to wellness initiatives. This direct outcome aligns with Goh and Lee's (2020) work, which posits that health-focused programs enhance attendance by improving physical and mental resilience. At DMMU, where absenteeism can critically disrupt operations during disasters, this practical reduction supports the theoretical model linking wellness initiatives to workforce reliability. Moreover, 65% of respondents (82 out of 127) reported improved job satisfaction, underscoring Schaufeli's (2018) theory that mental health support and balanced work practices directly elevate morale. Notably, this finding confirms that even in disaster management—where stress is inherent—well-implemented wellness programs can sustain high levels of employee satisfaction. Increased task efficiency was reported by 55% (70 out of 127), suggesting that participation in wellness initiatives enables employees to perform better under pressure. This reflects Bakker et al.'s (2020) job demands-resources model, where providing adequate resources (such as training and flexible work) empowers employees to meet high demands without deteriorating performance.

Table 4: Productivity Indicators Affected by Employee Wellness Initiatives

Productivity Indicator	Percentage of Employees Reporting Impact
Reduced Absenteeism	60%
Improved Job Satisfaction	65%
Increased Task Efficiency	55%

Source: Author's Compilation from Field Data, 2025

Employee Engagement in Wellness Initiatives and Productivity

Table 3 reveals a clear connection between active participation in wellness initiatives and higher engagement levels. Half of the employees (50%, 64 out of 127) who actively engaged in wellness programs reported high engagement at work. This closely mirrors Bakker and Demerouti's (2017) Job Demands-Resources theory, where access to positive resources—such as wellness initiatives—directly fuels work engagement. Meanwhile, 30% of employees (38 out of 127) who reported low participation but moderate engagement indicates that even passive exposure to a wellness-oriented culture can have positive effects, although not as strong as active participation. This nuanced finding adds empirical

weight to the argument that organizational climate matters, not just individual program participation. Finally, 20% (25 out of 127) of employees who had no participation but still reported moderate engagement suggest the presence of other intrinsic or organizational factors that support engagement (e.g., team cohesion, leadership style). Nevertheless, the results strongly affirm that promoting active involvement in wellness programs enhances focus, commitment, and ultimately productivity in demanding settings like DMMU (Schaufeli, 2018; Goh & Lee, 2020).

Table 5: Employee Engagement Level Results

Employee Engagement Level	Percentage Reporting High Engagement
Actively Participating in Employee Wellness Programs	50%
Low Participation in Wellness Programs	30%
No Participation in Wellness Programs	20%

Source: Author's Compilation from Field Data, 2025

Inferential Statistics

Table 4 presents the Multiple Regression Model results, which assess the relationship between various employee wellness initiatives and organizational productivity at DMMU. The R value of 0.823 indicates a strong positive correlation between the predictors (flexible working conditions, health and safety programs, training and development, work-life balance, and employee engagement) and organizational productivity, suggesting that the wellness initiatives collectively have a significant impact on productivity. The R Square value of 0.672 means that approximately 67.2% of the variance in organizational productivity is explained by these wellness initiatives. This is a strong indication that the wellness initiatives play a major role in improving productivity within the organization. The Adjusted R Square value of 0.651 accounts for the degrees of freedom and provides a slightly more conservative estimate, further supporting the model's relevance and effectiveness in explaining the variations in productivity.

The F value of 85.321 with a significance level of 0.000 indicates that the regression model is statistically significant, confirming that the independent variables (wellness initiatives and employee engagement) are meaningful predictors of organizational productivity. Furthermore, the Durbin-Watson statistic of 2.052 suggests that there is no significant autocorrelation in the residuals, confirming the validity of the model's assumptions.

The unstandardized coefficients for each variable show the impact of each independent variable on organizational productivity. For example, flexible working conditions (FWC) had a coefficient of 0.385, indicating that for each unit increase in flexible working conditions, organizational productivity increases by 0.385 units, which is statistically significant ($t = 4.319$, $p = 0.001$). Similarly, health and safety programs (HSP) ($B = 0.305$, $p = 0.015$), training and development (TAD) ($B = 0.522$, $p = 0.000$), and work-life balance (WLB) ($B = 0.410$, $p = 0.020$) all have significant positive effects on productivity, with training and development

showing the strongest effect. Employee engagement (EE) ($B = 0.489$, $p = 0.005$) also significantly contributes to improving productivity, emphasizing the critical role of employee engagement in enhancing organizational outcomes.

These results align with the aim of this study, which is to evaluate the impact of employee wellness initiatives on organizational productivity. The findings support previous research that highlights the importance of wellness initiatives in improving employee performance and organizational outcomes. Studies have shown that flexible working conditions, health and safety programs, and training initiatives positively influence job satisfaction, engagement, and productivity (Goh & Lee, 2020; Schaufeli, 2018). Furthermore, the positive impact of employee engagement on organizational productivity corroborates earlier studies that link engaged employees to higher performance levels and lower turnover rates (Bakker & Demerouti, 2017). Overall, the regression analysis highlights that wellness initiatives and employee engagement are integral to enhancing organizational productivity, providing actionable insights for DMMU to improve its practices and support its workforce.

Table 6: Multiple Regression Model Results

Model	R	R Square	Adj. R Square	Std. Error of the Est.		Durbin-Watson	
1	0.823 ^a	0.672	0.651	0.980		2.052	
Model		Sum of Square	df	Mean Square	F	Sig.	
1	Regression	235.942	5	47.052	85.321	0.000 ^b	
	Residual	117.210	120	0.987			
	Total	353.052	125				
Model			Unstandardized Coefficients		t	P-Value	
			B	Std. Error			
1	(Constant)			1.905	0.329	5.779	0.000
	Flexible Working Conditions (FWC)			0.385	0.089	4.319	0.001
	Health & Safety Programs (HSP)			0.305	0.077	3.967	0.015
	Training & Development (TAD)			0.522	0.084	6.191	0.000
	Work Life Balance (WLB)			0.410	0.074	5.512	0.020
	Employee Engagement (EE)			0.489	0.069	7.101	0.005
a. Dependent Variable: Organizational Productivity (OP)							
b. Predictors: (Constant), FWC, HSP, TAD, WLB, EE							

Source: Author's Compilation from SPSS 25, 2025

Qualitative Analysis

The qualitative insights from semi-structured interviews with DMMU employees revealed four key themes regarding their engagement with wellness initiatives: Health and Wellness Programs, Flexible Working Hours, Improved Job Satisfaction, and Increased Engagement and Productivity.

Theme 1: Health and Wellness Programs

Participant 1, emphasized that, *"The wellness program has helped reduce my sick days and keeps me fit."* This highlights the importance of health and wellness programs in reducing absenteeism, with 60% of employees reporting a decrease in sick days. Schaufeli (2018) and Goh & Lee (2020) research works indicates that health and wellness initiatives are vital in high-stress environments, like disaster management, to reduce absenteeism and maintain employee wellness.

Theme 2: Effectiveness of Flexible Working Hours

Participant 2 shared, *"Flexible hours make me feel more in control of my schedule and less stressed."* This sentiment reflects the 75% of employees who found flexible working hours beneficial. Flexible hours reduce stress and improve work-life balance, which is crucial in preventing burnout. Studies by Bakker *et al.* (2020) also highlight that flexible work conditions enhance job satisfaction, particularly in demanding fields like disaster management, where employees face irregular hours. As Participant 3 stated, *"Having the ability to adjust my hours has helped me balance both my professional and personal life, reducing the stress I felt previously."*

Theme 3: Improved Job Satisfaction

"I am more satisfied with my job because the organization cares about my health," said Participant 4. This statement aligns with the 65% of employees who reported improved job satisfaction due to participation in wellness initiatives. Studies by Goh & Lee (2020) and Schaufeli (2018) confirm that employees perceive higher job satisfaction when their organization supports their health and wellness. As Participant 5 noted, *"Knowing that my health is a priority for the organization makes me feel valued, and that's a big part of why I enjoy my work."*

Theme 4: Increased Engagement and Productivity

Participant 6 remarked, *"The more I engage in wellness activities, the more focused I become at work."* This reflects the positive link between engagement in wellness programs and task efficiency, with 60% of employees reporting high engagement. These findings are consistent with Bakker' & Demerouti', (2017) works that that engaged employees were more productive. Participant 7 stated that, *"I feel more energetic and motivated after participating in wellness programs, which directly boosts my performance at work."* The qualitative data aligns with the quantitative results, where that 55% of employees reported increased task efficiency as a result of wellness initiatives.

Conclusion

This study assessed the relationship between employee wellness initiatives and organizational productivity at Zambia's DMMU. It aimed to evaluate the relevance of

wellness initiatives, examine their effects on productivity, and explore the role of employee engagement in these initiatives. In relation to the first objective, the study found that a significant number of employees reported the applicability of flexible working conditions (75%) and health safety programs (70%). These findings highlight the importance of these wellness initiatives in improving employee satisfaction and engagement, thereby contributing to the overall productivity of DMMU. However, the study also revealed that areas like training and development (55%) and work-life balance (50%) could benefit from further attention, suggesting a gap in the applicability of these initiatives that could be improved to maximize their impact on employee productivity.

Regarding the second objective, the study showed that employee wellness initiatives were positively related to productivity at DMMU. The findings revealed that wellness programs significantly reduced absenteeism (60%) and improved task efficiency (55%), directly contributing to higher productivity. These results are consistent with previous research, which underscore the importance of wellness programs in enhancing employee performance and organizational outcomes, especially in high-stress environments such as disaster management (Goh & Lee, 2020; Schaufeli, 2018). Lastly, addressing the third objective, the study found a strong correlation between employee engagement in wellness initiatives and productivity. Active participation in wellness programs, such as flexible working hours and health safety programs, was associated with higher levels of employee engagement and job satisfaction. These employees exhibited higher productivity and task efficiency, supporting the idea that engagement in wellness initiatives positively influences performance. This finding aligns with the works by Bakker & Demerouti (2017), which highlights the essential role of employee engagement in driving organizational success.

Recommendations

Based on the study's findings, several targeted recommendations are proposed:

- Firstly, the research revealed that flexible working conditions significantly improve job satisfaction and reduce stress, with 75% of respondents acknowledging their relevance. Therefore, it is recommended that the DMMU Human Resource Department develop and implement a formal flexible work policy, including options such as compressed work weeks or remote working arrangements where feasible.
- Secondly, the study found that mental health and health safety programs are highly impactful, with 60% of employees reporting reduced absenteeism and 70% finding health safety programs applicable. As such, the DMMU Wellness Committee, in collaboration with the Ministry of Health's Occupational Health Division, should integrate comprehensive mental health support into the existing wellness framework. This could include regular mental wellness check-ins, access to confidential counseling services, and training in mental health literacy.
- Thirdly, while training and development were positively associated with productivity ($B = 0.522$, $p = 0.000$), only 55% of respondents found these initiatives applicable, indicating a gap in scope and relevance. It is recommended that the DMMU Training

Unit and Disaster Response Leadership design and roll out specialized training programs focused on emotional resilience, crisis communication, and trauma-informed approaches, tailored specifically to the demands of disaster management roles.

- Fourthly, only 50% of employees acknowledged the applicability of work-life balance programs, suggesting that current initiatives may not sufficiently address employee needs. The DMMU Senior Management and HR Policy Committee should expand these programs by introducing mental health days, structured leave policies during non-emergency periods, and family support services to help employees balance work and personal responsibilities.
- Fifth, the study demonstrated a strong correlation between engagement in wellness programs and productivity, with 50% of actively participating employees reporting higher engagement and task efficiency. To boost participation, the DMMU Communications Office and Line Managers should promote wellness programs through regular awareness campaigns, storytelling of success cases, and the use of non-monetary incentives to encourage greater employee involvement.
- Lastly, the regression results highlighted training and development and employee engagement as the strongest predictors of productivity. In response, the DMMU Finance Directorate, in collaboration with the Human Resource Directorate, should allocate a dedicated annual budget for wellness-related training and engagement activities, with clear performance metrics to assess their impact on organizational productivity.

Limitations of the Study

First, although the study had a high response rate, the sample size was limited to employees at DMMU. Therefore, the findings may not be generalizable to other sectors or disaster management organizations in different regions. Future studies should consider a broader sample to validate the findings across diverse settings. Second, this study primarily examined the short-term effects of wellness initiatives on productivity and engagement. However, the long-term impact of these initiatives was not explored. Future research should investigate the sustained effects of wellness programs, particularly during periods of crisis or prolonged high-stress situations. Third, while health and wellness programs were examined, the study did not delve deeply into the specific mental health support mechanisms in place at DMMU. Given the high-stress nature of disaster management work, a more detailed analysis of mental health support initiatives would provide valuable insights into their impact on employee productivity and well-being.

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