

The strategic role of the Human Capital Management Function in the Disaster Risk Reduction Discourse in the 21st century work environment: The Zimbabwean context

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Abstract: - Disasters of varying magnitudes have left memorable historical catastrophic footprints, world over and workplaces are not exempt from these phenomena. As such, various initiatives and legislations have been put in place to curtail the impact of disasters. This study explores the strategic role of the Human Capital Management Function (HCM) in building Disaster Risk Reduction (DRR) management capability at workplaces in the backdrop of escalating disasters that threaten business continuity and livelihoods of employees globally. The study adopted a qualitative method approach, which influenced the subsequent usage of desktop review, and semi-structured questionnaires to collect qualitative data from a randomly selected sample of thirty one (31) participants (Human Resource Practitioners, Lecturers, Human Resource Management university students and Disaster Management experts). Study participants were drawn from Bulawayo, Midlands, and Matabeleland South provinces of Zimbabwe. Gathered data were thematically analysed and reported. The study found that both HCM and DRR practitioners concurred that DRR is key for ensuring the general Health and Safety of employees. The study observed that the DRR legislation of Zimbabwe (the Civil Protection Act [Chapter 10:06] of 1989) pays little or no attention to the HCM's function in DRR. However, despite this drawback, HCM was found to be key in building and promoting DRR capacities and capabilities at the workplace. This paper unravels the need to legislate the DRR process at workplace level so as to empower HCM practitioners in the same manner as other legislated HCM functions.

Key words: Disaster Risk Reduction, Human Capital Management, Sustainable Development Goals, Sendai Framework of DRR.

I. Introduction

The occurrence and frequency of disasters continue to rise unabated in unprecedented levels. This increase in the number of disasters has negatively affected the economies and livelihoods of people world over and has aroused keener interest amongst the general public and policy makers [17], at various levels of governance. Hence, the crafting of the Civil Protection Act [Chapter 10:06] of 1989 and the Disaster Management Act of Zimbabwe among others, to manage disaster phenomena. Meanwhile, international effort to manage disasters has given birth to renowned instruments such as, the Sustainable Development Goals (SDGs) and the Sendai Framework for Disaster Risk Reduction 2015-2030 among others. The continued presence of disasters harm and devastate millions of people world over [33]; [14]. The imminent threat of disasters to derail the achievement of the Sustainable Development Goals by 2030, cannot be overlooked. Disasters have the propensity to physically devastate companies, and ruin their financial stability and aspirations [9]. Thus, the need to make Disaster Risk Reduction central to Human Capital Management Function is critical. There is a need for strategic agility to cope with negative impacts of disasters on human capital, and Strategic Human Resource Management (SHRM) is well positioned to provide it [18]. [1] explain that SHRM is the horizontal coherence of the HRM functions and the vertical relationship between HRM functions and the company strategy. Conversely, the SHRM efficiently utilises human resources to serve the strategic needs of the organisation which include surviving turbulent times [4]. Therefore, organizations can come up with clearly tabulated plans for coordinating and distributing their resources to manage disasters. For example, Human Capital, infrastructure and finance among others. In this instance, the Human Capital Management Function is strategic in executing DRR in the workplace, and offers the first line defence to disasters, through the auspices of the Human Capital Management office. Conversely, this office can positively contribute to DRR in workplaces in the face of imminent disasters. For example, the 1926 Durban Navigation No. 2 Colliery (DNC) in the Republic of South Africa near Dannhauser in northern Natal and the 1972 the Wankie No. 2 Colliery disasters in the then Rhodesia (now Zimbabwe which resulted in serious injuries and loss of life [9]. [13] argues that the employee's safety at work is the responsibility of the employer. Therefore, HRM practitioners need to ensure that employees are not harmed physically or psychologically by hazards at work. Elsewhere, the advent of COVID-19 pandemic in 21st century posed a new major workplace and societal hazard and risk and a problem for managers and HRM professionals [23]; [20]. Hence, prompting the World Health Organisation to provide organizations with guidelines to safeguard the protection of their employees [Error! Reference source not found.]. However, controlling employees and enforcing covid-19 protocols proved to be difficult as some could choose to disobey. This called for the active involvement of HR practitioners like never before [11]. COVID

19's impact at the workplaces exposed their susceptibility to disasters, pointing to the need to mainstream DRR in the Human Capital Management Function and vice versa. It is against this backdrop that this study interrogates the strategic role of the Human Capital Management Function in the Disaster Risk Reduction discourse in the 21st century work environment.

II. Disaster Risk Reduction (DRR) and Human Capital Management Function

The DRR paradigm was developed and adopted in 2002, to address inadequacies in the responses to disaster situations and to promote a culture of safety, prevention, preparedness and minimisation of vulnerabilities [27]. According to [2] the DRR paradigm's development was strongly influenced by the mass of research on vulnerability since the mid-1970s. Deducting from the above assertion, DRR takes a preventative approach to reduce the impact of disasters before their onset. Disasters disrupt services, cause widespread property damage, injuries, loss of life, or both, and necessitates the call for resources locally and without [29]. Disasters present in two folds, the natural and human made [8]. Natural disasters entail earthquakes, hurricanes, tornados, floods, wildfires, or severe winter storms, epidemics such as a pandemic influenza, while the man-made ones result from workplace errors for example, mass shooting, leak from a nuclear power plant, or bombings among others) [8]. Therefore, the continued escalation of disasters motivated the need to curtail the impact of disaster through disaster risk reduction initiatives. DRR is the concept and practice of reducing disaster risk through systematic efforts to analyse and manage the causal factor of disasters, including reduced exposure to hazard, lessened vulnerability of people and property, wise management of land and the improved preparedness for the adverse events [29]. Disaster risk dimensions are both idiosyncratic or covariate shocks that result in high income volatility [12]. Thus, idiosyncratic shocks are household level shocks such as death, injury or unemployment, while covariate shocks pertain to natural disasters, droughts or epidemics. Risk is the probability that a hazard will result in a specific type of damage to people or property, as specified by the risk equation: $R = f(V, H)$ [29] [255]. According to [7] risk is a function of the likelihood that a health effect will occur and how severe that effect will be as a result of dangers in the workplace, in food, and in household. Furthermore, [26] sums risk as the interaction between the likelihood that an event will occur and its effects. For example, there is obviously a very significant risk of death if someone is working on a platform that is 40 meters high without a safety harness and guard rail. [7] opines that risks can never be completely eliminated emphasizing that risks need to be managed rather than aiming to completely eliminate them. Thus, the key to efficient risk management is the ability to objectively qualify, measure, and eliminate risk elements to acceptable levels [19].

Since workplaces are not immune to disasters, the need for disaster risk reduction plans becomes paramount. Over 77 000 people die each year as a result of emergencies brought on by technology in and outside workplace including natural risks, affecting over 190 million people directly [33]. Oil and Gas sector is among the most dangerous in the world, and therefore emphasis on the importance of safety concerns in the field because of the high-risk operations involved in the sector and the potential for a single occurrence to turn into a natural disaster [21]. Some of the oil and gas related catastrophes bear reference to the BP Texas City refinery in 2005, the Exxon Valdez ship 24 March 1989, and the Deepwater Horizon drilling platform 20 April 2010 among others. In light of the mentioned disasters and many others it is critical to consider the function of human capital management in DRR in the workplace environment.

Embracing DRR at the workplace can promote the ideology of resilience. Resilience emphasizes the need to accept and embrace the unpredictability and uncertainty of natural hazards in an increasingly complex and interconnected world, placing a strong emphasis on improving community and individual adaptive capability [16]; [244]. Resilience is incorporated into a comprehensive definition of DRR and Mitigation [29]; [28] which also includes engineering methods, hazard-resistant structures, environmental and social policies, and public awareness. Conversely, resilience seeks to strengthen capacities to cope with anticipated and unforeseen threats in and outside the workplace. Through the DRR procedure organisations carefully manage the risks associated with their operations in an effort to provide long-term or sustainable benefits, [15]. Therefore, DRR help identify, control and monitor imminent threats through advancing organizational goals, risk management, and safeguarding employees while enhancing the organization's value to its stakeholders. Hence, the importance of DRR as a strategic management of risks in every organization. Deducting from the above assertions workplace involvement in DRR is paramount for three reasons namely: (i) it mitigates the physical, psychological, and business impact of disasters; (ii) it is a legal obligation to engage in such planning, and (iii) such activities have a positive impact on employees' relationships in the workplace.

[8] advocate for workplace policy statements that commit to and emphasize DRR. As such, these policy statements will provide direction to the organization's administrators and as well as planners. It can be beneficial to have a specialized policy, as it will offer support for strategic level planning. The organization strategy should not only acknowledge the significance of DRR, but also provide targets and deadlines for resolving the issue. [25] advances the quest to incorporate hazard, risk, and vulnerability questions into project planning guidelines. According to [9] it is necessary to increase human capacity in DRR by hiring specialists or equipping current employees with the necessary technical, planning, and managerial abilities. However, opting for these demands all stakeholder commitment in terms of time, money, and the presence of DRR champions, leaders, or focal persons. Therefore, innovation becomes inevitable when institutional structures and procedures support mainstreaming of DRR in workplace policy

statements. Discussion on the DRR and HCMF concepts would be incomplete without deliberating two key international initiatives out of the many that have been adopted to address disasters impacts.

III. Some Initiatives Taken to Address Disasters Impacts

Various initiatives have been taken to manage the impact of disasters on life, properties and infrastructure. For the purpose of this study the SDGs and the Sendai Framework for DRR will be discussed.

3.1 Sustainable Development Goals

Sustainable Development Goals are a global blue print for dignity, peace, and prosperity for the people and planet, now and in the future [32]. In September 2015, by the UN General Assembly adopted the 2030 Agenda for Sustainable Development that includes 17 Sustainable Development Goals (SDGs). This agenda was built on the principle of “*Leaving no one behind*”, emphasizing the holistic approach to achieving sustainable development for all, [311]. It is against this background that the researcher believes that the workplace structures operationalised by the Human Capital Management Function has a strategic role in DRR in the workplace thereby contributing to the achievement of SDGs.

3.2 The Sendai Framework for DRR

The Sendai Framework articulates the need for improved understanding of disaster risk in all its dimensions of exposure, vulnerability and hazard characteristics; the strengthening of disaster risk governance, including national platforms; accountability for disaster risk management; recognition of stakeholders and their roles; mobilization of risk-sensitive investment to avoid the creation of new risk; resilience of health infrastructure, cultural heritage and work-places, [30]. Furthermore, the Sendai Framework also shows the desire for businesses to integrate disaster risk into their management practices. This commitment of safe workplaces closely brings the Human Capital Function to the fore in DRR, as it is tasked with the Health and Safety function in most organisations, [3030]. The section that follows focuses on the purpose of the study and research questions.

IV. Research Purpose and Questions

This study set out to interrogate the strategic role that can be played by the Human Capital Management Function in the Disaster Risk Reduction Discourse in the 21st century in the workplace environment. This study was driven by the realisation that the Human resource practitioners are the core of health and safety function in the workplace environment. The workplace is not immune to hazards that have the propensity to progress to hazards, and cannot solicit for help from donor agencies and Non-governmental organizations. The questions below guided this study.

V. Research Questions

1. What does scholarly literature say about Disaster Risk Reduction and Human Capital Management?
2. How is Disaster Risk Reduction conceptualised in the workplace environment?
3. What role can the Human Capital Management function play in Disaster Risk Reduction processes in the 21st century workplace?

VI. Methodology

A qualitative approach guided this research to assure depth, scope and dependability of findings. A desktop study was conducted to collect data from secondary sources. It consisted of reading and extracting information from government reports, scientific journal articles, Statutory Instruments, WHO and United Nations reports, and policy briefs. Secondary data review was meant to determine and ascertain what scholarly literature says about Disaster Risk Reduction and Human Capital Management. The desktop review data was used to triangulate empirical data collected using key informants (KIs) to have robust data. Empirical data were collected through a semi-structured questionnaire. The survey's fieldwork was limited to non-probability purposively, and conveniently selected participants among HR postgraduate students, HR lecturers from the Midlands State University, practicing government HR practitioners and Disaster practitioners from Bulawayo Metropolitan Province, Matabeleland North and South in Zimbabwe. The participants were deliberately drawn from HR practitioners and disaster practitioners, thus providing rich opportunities to gain insight into the actual and perceived role of the Human Capital Function in DRR in the workplace. Considering the amount of time needed to collect the data, code data, transcribe it, and come up with emerging issues, it was determined that 31 participants are an appropriate sample, sufficient for the Central Limit Theorem (CLT) to hold, [10]. Questionnaires were administered to get diverse opinions from students in the HR field, practitioners both in Disaster field who were directly or indirectly involved in both HR and the disaster management field. With these participants, the researcher sought to understand the perceived and prevailing situation regarding disaster risk reduction in the workplace environment and the role of the Human Capital Management Function in the process. Primary data presentation was done according to the major themes predetermined as per the data collection instrument and emerging from the analysis. Where appropriate, data was also presented by use of appropriate tabulations computed through SPSS

version 21.0 to give it a visual graphical footprint and more importantly, verbatim quotations were clearly attributed to the selected interviewees among the major themes identified. Ethical standards were followed by explaining the purpose of the research and by giving participants the assurance that confidentiality would be maintained. Participants were assured that the information they provided would be used solely for academic purposes.

VII. Summary of the Findings

This part presents the findings and discussions related to the analysis of secondary and primary data sources on the role of human capital management function in disaster risk reduction in the work-place. A total of 31 respondents with five distinct age range categories participated in the study. Five (5) respondents were aged between 18 and 30 years, a further 5 were in the 31-40-year-old range, 11 were in the 41-50 years old range, 7 were in the 51-60 years old range and 3 were in the 61 years old and above age range. Gender representation in the study was 38.7% for females and 61.3% for males. Desktop study findings, as well as that of participants especially from the Human Resource Management Practitioners, Human Resource Management Lecturers, Human Resource Management Students and Disaster Management practitioners provided the primary data.

7.1 DRR and HCM linkages

Desktop study findings indicate that DRR has not been fully integrated among various sectors and within the structures of organisations, for example the HCM Function is not mentioned as a DRR player in the national disaster legislation in Zimbabwe. An observation by [5] when he was conducting an examination of the effects of and responses to Cyclone Idai demonstrates the participation of numerous institutions in Zimbabwe's disaster risk management (DRM) system including the private sector. [5] argue that the private sector response which went beyond donations to direct participation was novel and showed good practice since DRM has not yet been fully mainstreamed across all sectors, and agencies do not always operate in an integrated manner. However, [5] lamented that as disasters are becoming more frequent and national vulnerability is likely to worsen if the situation is coordinated in a disjointed manner. It can thus, be concluded that, organizations need to tap into the lead role of the Human Capital Management Function in their organizations, which has vast experience in overseeing employee welfare and health and safety. [1] affirms that responsibilities of the Human Capital Management Function provides, counselling, and provides psychosocial support to employees in times of crisis. According to [9] employees turn to the Human Resource Management Office as their first point of contact during disasters that affect their workplaces and the larger community, unquestionably placing the Human Capital Management Function at the centre of the Disaster Response process. Meanwhile, an observation by [15] indicates that Zimbabwe's Civil Protection Act [Chapter 10:06] of 1989 legislates DRM, paying little or no attention to the role of Human Capital Management Function in DRR at organisational level. According [6] every citizen of the country (Zimbabwe) should assist where possible to avert or limit the effects of disaster. The CPA covers all the organizations and people in charge of Zimbabwe's civil protection. Despite the above assertions, [19] indicated that Human Resource Managers at work places especially at mining environments face challenges of ensuring the existence of pro-active approaches to manage the health and safety of employees in the event of an emergency. Hence, the need for HCM to be capacitated so as to ensure an effective proactive approach to managing employee health and safety [19]. Furthermore, [19] added that contingency plans and the necessary supporting structures to deal with any emergency need to put the HCM practitioners in the centre of DRR in the workplace. This thinking is consonant with [3] contention, that disaster management issues should drift from being spearheaded by NGOs, UN agencies in general.

7.2 Disaster Risk Reduction in the lenses of Human Capital Management

The finding on the view of Disaster Risk Reduction by Human Capital Management specialists' reveals diverging views. *See Figure 1.*

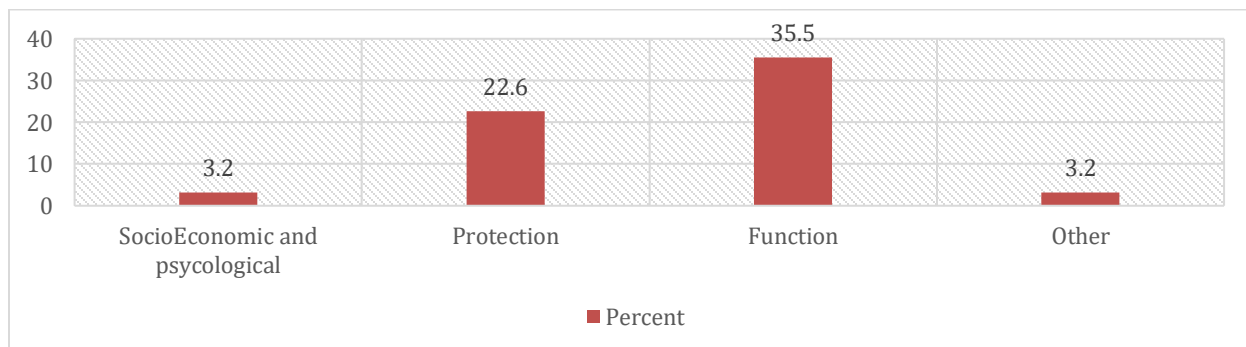


Figure 1: Disaster Risk Reduction in the lenses of Human Capital Management Practitioners

Source: Primary data

About 35.5 percent of the respondents among HCM practitioners viewed DRR as a function within the workplace, responsible for Health and Safety. One of HCM practitioner had this to say: *“DRR is a function responsible for containing and responding to disasters, however in the workplace this is generally referred to as health and safety management”* - (Respondent #27)

About 22.6 % of HCM practitioners viewed DRR as a means of protecting workers from disasters, while, 3.2per cent viewed DRR as a socio economic and psychosocial function. The other 3.2 % were clueless. Generally, the HCM practitioners had a fair understanding of the DRR process. Hence, its consonance with [1], that Human Capital Management Practitioners are responsible for Health and Safety of employees in the workplace.

7.3 Disaster Risk Reduction practitioners’ view about Human Capital Management

The study also established that DRR practitioners also had their own understanding of HCM in so far as its role in DRR. 55.4% of the respondents viewed HCM as an operational function responsible for health and safety of employees. One of the respondents expressed the view that, *“These are two sides of the same coin. They perform the same function with DRR practitioners but in different environments”* – (Respondent #28). The other hand 18.2% viewed HCM as a localised DRR mechanism in the workplace which is responsible for reduction of disaster impacts respectively. A total of 9.1% of the respondents did not have an opinion. The general view of the DRR specialists is consistent with the views of [22] and [1] who agree that the role played by HCM practitioners is of Health and Safety of employees as argued by the respondents. Figure 2 presents the role of the HCM Function in Promoting DRR in the workplace

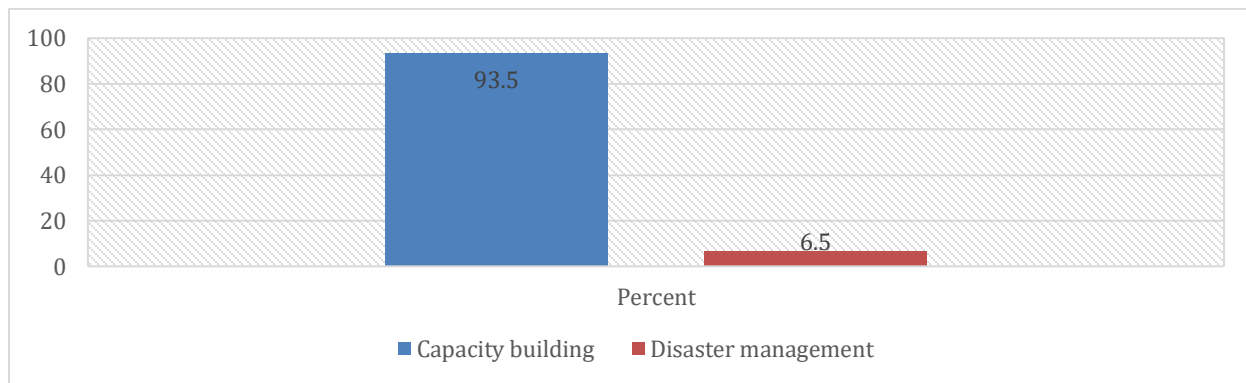


Figure 2: The role of the HCM and DRR in the workplace

Source: Primary Data

A total of 93.5% of the respondents viewed the role of the Human Capital Management in the promotion of DRR in the workplace as capacity building which involves a plethora of activities as suggested by one respondent who indicated that HCM involves, *“training and education of employees, playing the lead role and mobilization of the response resources”*- (Respondent # 9). On the other hand, 6.5% of the respondents viewed the role of the HCM in DRR as disaster management which involves hazard identification, response, mitigation and recovery. The findings of the study conform to suggestions of [9] and [222] that HCM play the role of training, education and lead role among others in Health and Safety activities in the workplace.

7.4 The relationship between DRR and HCM

About 74 percent of the participants were in agreement that there is a strong relationship between DRR and HCM. One of the participants who shared similar view had this to say, *“The HCM function plays a similar role like DRR except that this is in a localised environment (workplace).”*- (Respondent #22). Meanwhile, one of the 16 who shared the different view had this to say, *“I suppose these two professions are separated by scope of work they do. The HCM are confined to the workplace environment whereas the DRR specialists operate at a large scale”* – (Respondent #20). The majority of the participants’ understanding on the relationship between HCM and DRR resonates with [1] and [22] who recognise the HCM’s role as that of Health and Safety. The section that follows interrogates the participants’ opinion on the inclusion of DRR components in the HCM legislation

7.5 Opinion on the inclusion of DRR components in the HCM legislation

A total of 100% of the respondents were of the view that DRR should be included in the HCM legislation. The respondents justified their views as follows; 9.7% of the respondents advanced protection of workers as the major reason, with 35.5% as the need to empower the HCM in DRR and create an obligation for active execution of DRR, 38.7% of the respondents viewed the need to legislate the workplace DRR as the major reason, one of the respondents commented as follows. One respondent had this to say,

“DRR is critical in labour legislations. Workers need to be protected from disaster induced deaths”- (Respondent #6). Meanwhile, 16.1% of those who agreed did not give reasons for agreeing. The findings of the study are consistent with [2] view that Health and safety activities need to be legislated.

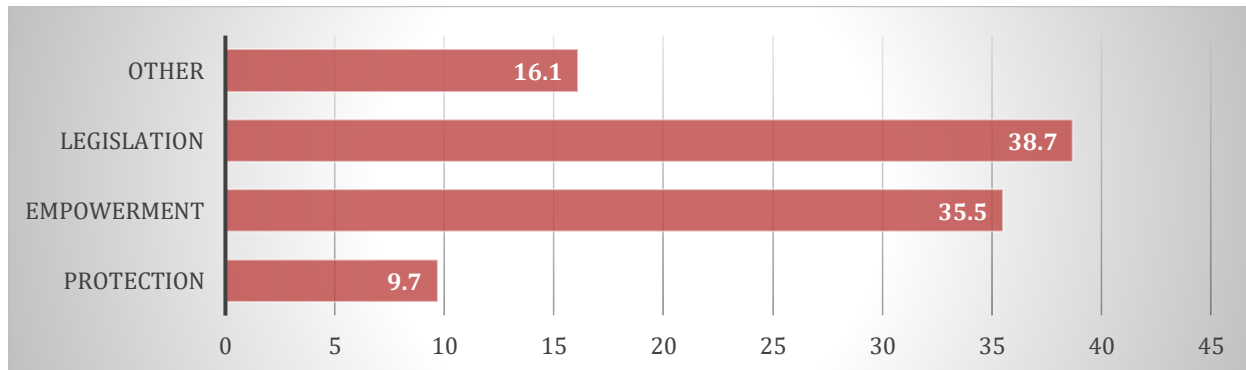


Figure 3: Inclusion of DRR components in the HCM legislation

Source: Primary data

The section below focuses on the DRR components that respondents proposed to be include in the HCM legislation.

7.6 Suggested components of DRR for inclusion in the HCM legislation

The major themes that came out were only two, namely preparedness and hazards and risks identification. About 39% of the respondents were of the opinion that disaster preparedness should be included in the labour legislations, while about 55% advocated for the inclusion of hazards and risks identification. One of those who advocated for the inclusion of hazard and risk inclusion had this to say. “Risk identification, prevention, or mitigation and recovery from disasters should be legislated”- (Respondent #27). Meanwhile, about 6% of the respondents declined to express their views on the subject. Generally, the study findings are consonant with [8] call for the inclusion of DRR in workplace policies.

VIII. Conclusions

Drawing from the review of related literature the researchers established that the Zimbabwe’s Civil Protection Act [Chapter 10:06] of 1989 serves as the sole legislative basis for DRM in the country and pays little or no attention to the Human Capital Management Function. Therefore, DRR has not been fully integrated in HCM and within the structures of organisations. Humanitarian agencies also do not always operate in an integrated manner. For instance, the HCM Function is not mentioned as a DRR player in the national disaster legislation in Zimbabwe. DRR function while it exists within the workplace it aimed to ensure Health and safety of workers, by promoting a risk free environment thereby protecting workers from adverse impacts of disasters. The HCM function was found to play a similar role like DRR except that this was in done in a localised environment (workplace).

Another view raised was that Human Capital Management function plays various roles in Disaster Risk Reduction processes in the 21st century workplace. These bear reference to building the capacity of workers through training and education, playing the lead role in the mobilization of DRR resources. Meanwhile, DRR is variedly understood transdisciplinary, ranging from being responsible for health and safety of employees and strong relationship between DRR and HCM does exist. The general consensus was that DRR should be included in HCM legislation because it promotes the protection of workers, empowers the HCMF in DRR and creating an obligation for its active execution.

DRR is variedly understood transdisciplinary, ranging from being responsible for health and safety of employees in the workplace as such a strong relationship between DRR and HCM does exist. The major reasons put forward for the justification of the existence of the relationship hinges on the influence and interdependency which exists between the two disciplines. The general consensus that DRR should be included in HCM legislation is that it promotes the protection of workers, empowers the HCMF in DRR and creates an obligation for active execution of DRR in the workplace. The components were viewed as major aspects to be included in legislation governing the HCM function. The section that follows focusses on the recommendations of the study.

IX. Recommendations

In light of the study findings and conclusions the following recommendations are made:

- i) The government of Zimbabwe should enact legislation which operationalise the DRR process in the workplace similar to Occupational Health and Safety which is legislated through the Labour Act chapter 28:01 among other acts.

- ii) The government should consider including and mainstream DRR components such as Risk Identification, prevention, mitigation and recovery in Labour Legislation so as to guide HCM on their specific roles in DRR.
- iii) Capacitation of HCM in DRR through their involvement in National Disaster Management trainings and workshops.
- iv) Opening up space and recognition of the private sector organisations as key stakeholders in DRR by the government, to harness all resources and commitment towards DRR activities in the workplace and without.

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