

Occupational Health and Safety and Employee Engagement: A Case of Solid Waste Employees in Urban Council in Ampara

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INTRODUCTION

Employees' contribution to the achievement of organisational goals is important. An organisation's care for its employees results in positive employee outcomes such as organisational citizenship behaviour, employee engagement and employee commitment. Employees who are enthusiastic and efficient contribute to increased productivity (Tagoe and Amponsah-Tawiah, 2019). Employee engagement is described as the level of dedication and involvement that employees show towards their organisation. Employees' positive emotional connection with the organisation reduces errors associated with given duties (Gyensare et al., 2019). Employee engagement scores for the employees who feel committed to the team are more concerned with safety, maintaining good relationships with their customers, lowering turnover, and being more productive. The level of trust and commitment increases when employees feel that their safety has been accounted for by the employer (Kincaid, 1996).

The absence of safety within the organisation causes job-related accidents, which lead to social and economic problems by sudden death and traumas, impacting on the well-being of individuals (McPhee, 2019). The degree to which a person is free of physical and mental disorders that weaken general and special activities can be characterised by the term health. Here, health refers to 'industrial health,' or the health of employees who work for a company. Alternative words for it include 'occupational health' and 'employee health'. (Opatha, 2009). A worker's health is a serious issue in industrialised countries; numerous organisations have taken major inquiries to determine the state of workers' health and the factors that influence it (Coupaud, 2017).

To look after employee welfare, employee safety has always been a big dilemma to managers, union leaders, and others charged with the responsibility (Morrow & Crum, 1998). In recent years, waste collection and disposal have become a serious issue in Sri Lanka, and everyday waste generation has increased (Fernando, 2018). Many developing countries in Asia are experiencing major challenges in

managing their communal waste with ever-increasing population, urbanisation, urbanisation, and scarce land for dumping their waste (Menikpura, 2010). The government governs municipal solid waste disposal oversees municipal solid waste disposal in Sri Lanka, and municipal solid waste management is one of the primary sources of labour in most urbanised towns (Bandara, 2011). The litter recognised “as other” Clinical waste, hazardous trash, drain cleaning waste, building & demolition garbage, and a few more miscellaneous waste products generated by industry and businesses are just a few examples (Karunarathna et al., 2019). Local authorities need to recruit employees for the high labour-intensive ‘dirty’ job of garbage collection, segregation, and composting and local authorities neglect work safety with inadequate protective gear (Vijayapala, 2017).

Solid Waste (SW) employees are left unprotected to several hygiene and safety problems. A study on health hazard reduction activities found that knowledge and alertness on workplace health hazards of solid waste collectors were low in many related industries (Phiman, 2011). Waste collectors are more susceptible to parasitic and enteric infections and viral infections such as Hepatitis and HIV due to the hazardous nature of waste handling and occupational health risks attached to the Municipal Solid Waste (MSW) management process, specifically during handling, processing, and disposal stages (Rajapaksha et al., 2017). According to research done in the Colombo municipal council, workers disclosed that gloves and boots were provided for 44% of solid waste collectors and only utilised by 25% (Mudalige & Dharmathilaka, 2000). Further, they found that despite the severity of the occupational health threats that solid waste collectors face, it is minimal, as is, because of provision and the use of Personal Protective Equipment (PPE).

Employees who work in the solid waste industry encounter various health challenges but have a low focus on health and safety procedures. However, with its rapidly growing population and expanding economic activity, there are still certain gaps in the literature relating to Solid Waste Management (SWM) in Local Authorities (LA) (Ihalagedara & Pinnawala, 2015). Nonetheless, their vocational role is critical in garbage collection, which is one of the most significant jobs in the SWM process of LAs for a clean environment (Ihalagedara & Pinnawala, 2015). Street sweepers and garbage collectors play a crucial role in keeping communities clean and healthy. However, they generally work in hazardous environments where they are exposed to a variety of pathological situations. Street sweepers and garbage collectors are aware of the occupational health hazards and diseases to which they are exposed and may be exposed to, according to Rahma et al. in 2009. Despite this, 41.4 per cent of them suffer a work-related health issue in the preceding year. They sweep the streets and collect garbage with their bare hands, wearing no protective gear. Furthermore, their attitudes toward taking preventative measures at work did not correspond to their understanding of the health hazards they faced at work. They’ve concluded that street sweepers and garbage collectors are a vulnerable group that requires pre-employment and in-service orientations, health education, immunisations, and

medical examinations, as well as close monitoring of their attitudes and practices. They also stated that health issues, including back discomfort, traumatic injuries, itching rash, cough, wounds, and exposure to chemicals, are quite common among Municipal Waste Collectors in the Western Province. According to research conducted in Colombo, over 40% of waste collectors suffer from various ailments and diseases but are not documented as having gotten sufficient medical treatment (Silva, 1987 as in Rajapaksha, et al., 2017). Solid waste employees face a number of diseases their occupation causes that. Even though most of the researchers focused on highly urbanised areas such as Colombo, Galle etc., the areas like Ampara never have been focused on yet. According to the health report of the Urban Council in Ampara in 2018, employees have the following health issues: 98% have cholesterol, and 16% have diabetics. Therefore, the current study examines the impact of Occupational Health and Safety on employee engagement with special reference to solid waste employees in the Ampara zone in the Ampara district.

Even though employee engagement and its relationship with occupational health and safety have been extensively researched, surprisingly, no more systematic attempt has been made to explore the empirical relations between employee engagement and occupational health and safety. This study was designed to address this oversight. Even though employee engagement has been extensively researched and its relationship with occupational health and safety, surprisingly, no more systematic attempt has been made to explore the empirical relations in urban councils. This study was designed to address this gap. Hence, this study proposes the following research question: what is the nature of the relationship between Occupational Health and Safety on Employee engagement with special reference to solid waste employees in Urban Council Ampara? The objectives of this study are to find the relationship between occupational health and safety and employee engagement of SW employees in Urban Council Ampara, identify the level of occupational health and safety and employee engagement of SW employees in Urban Council Ampara, and determine whether the workplace health and safety impact on employee engagement of SW employees in Urban Council Ampara.

LITERATURE REVIEW

Occupational Health and Safety

Workers' health is a crucial topic in industrialised countries; assessing the level of health among the workers is a must. Major injuries have been taken into account to identify their determinants (Coupaud, 2017). Noise, dust, radiation, poor ventilation, low lighting, limited access, lack of personal protection equipment, and other work-related circumstances all harm the productivity of construction projects (Gurmu , 2019). This is the more crucial topic in the current working environment.

Workplace safety that isn't addressed can lead to workplace accidents, resulting in significant social and economic problems due to sudden death and traumas, affecting 'people's well-being (McPhee, 2019). Workers' well-being couldn't be predicted by rewards and incentives awarded by the organisation but through workplace safety and other working conditions.

It is important to maintain a minimum level of work-related accidents and the spread of diseases (Coupaud, 2017). Limited resources; limited knowledge of regulatory requirements; poor awareness of the economic advantages of health and safety; poor knowledge and understanding of safe working practices; short term economic pressure and competition; and inadequate enforcement and absence of preventive services has been identified as some reasons for their poor health and safety management performance (Frick, 1996). It is a practice for safety experts to treat safety, danger and accidents as technical issues feeding technical databases and event report systems to assess the organisational factors that determine the workers' safety (Ripamonti & Scaratti, 2015).

To measure the health and safety of the organisation safety management system plays a significant role. A safety management system combines policies, strategies, practices, procedures, roles, and functions related to safety and mechanisms integrated across the business so that hazards impacting 'employees' health and safety can be effectively controlled (Labodova, 2004). Employees may be exposed to various potentially hazardous conditions or dangers at work, resulting in harmful safety consequences to their bodily and mental health (Andel, et al., 2015). To lower the 'employees' risk behaviour, a safety management system positively influences the employees' risk attitudes and behaviours (Berih, Patnaik, & Mahapatra, 2012). It is managers' responsibility to establish an effective safety management system and get employee participation. Lack of management intervention leads to an increase in the rate of accidents and injuries.

In a thriving workplace, health and safety programs training plays a significant role as an essential component (Dodge, 1998). It is commonly believed that effective training is a crucial element to achieve successful healthy, and safe management (Cooper, 1998). To demonstrate the safety levels of employees, safety training is often used as measurement criteria (Human Resource Management International Digest, 2019). To increase employee productivity, providing safety and health training and conducting safety meetings could be some of the crucial practices in construction projects (Gurmu, 2019). Training drives to reduce occupational injuries and enhance workers' health and safety (Freitas & Silva, 2017). A good health and safety training program can influence decisions that lead to safe and healthy workplaces (Ricci, et al., 2016). Employees can be instructed in safe work procedures so that they are aware of potential hazards and how to avoid accidents and injuries in the workplace (York, 2010).

According to Neal et al. (2000), the term "safety compliance" refers to following safety procedures and safely performing work. Organizations can learn from health and safety incidents within the

workplace (Lukic et al., 2010). To do the works efficiently and safely, compliance with safety requirements is essential to any organisation (Zin & Ismail, 2011). They further explained that when organisations comply, poorly there is poor safety compliance and more comply means there is good safety compliance (Zin, & Ismai, 2011). Workers are well aware that they frequently flout safety guidelines; nevertheless, little research has been done to explain why workers engage in risky work activities from their perspective (Choudhry & Fang, 2008). The workers' lack of compliance with safety regulations represents an enduring problem that often involves first-level managers, who are willing to turn a blind eye toward divergent practices. The implementation of safety routines corresponds to an organisational change effort. Safety routines and safety learning can play a critical role in creating new collective practices and establishing ownership over them, shaping the object of the workers' activity. Health and safety management within organisations is still primarily considered a science. In many organisations, occupational health and safety are increasingly developed upon statutory regulations, health and safety workplace manuals and bureaucratic control. And also, worker participation is employee representation that can be shown to provide fruitful outcomes in upgrading health and safety in the industry (Walters, 1998). Managers and supervisors of operational departments are critical to the success of a safety program, as are safety communication and training programs, the maintenance of safety records, and working closely with managers and supervisors in a cooperative effort to make the program successful (Snell, et al., 2007).

Implementation of preventive mechanism is a vital part for any organisation to gain the better advantages of prevention over cure, conducting regular basis health education programs for both the workers and the relevant authorities concerning occupational health diseases and health hazards is crucial. Workers should be responsible, learn, and encourage using safety equipment provided by the employers (Mudalige and Dharmathilake, 2000). It is more beneficial to perform various forms of support such as training and non-training interventions to enhance adoption of self-protective behaviours among the municipal waste collectors engaged in the municipal solid waste management (Rajapaksha, e. al., 2017). To reduce the death rates and diseases caused by work, an organisation can apply safety culture within the organisation with effective occupational health practices (ILO, nd).

Maintaining the environmental conditions for safety work, workers', management, unions', and safety experts' actions and procedures are critical (Ricci, Chiesi, Bisio, Panari, & Pelosi, 2016). Collective participation in safety routines and protection learning can play an important part in building ownership of things and shaping the focus of the workers' efforts (Ripamonti & Scaratti, 2015). Good safety and health practices could lessen the negative effects of safety-related problems on productivity. According to Sawacha et al. (1999), the organisational safety strategy influences the safety performance of building projects in the United Kingdom. Contractors with five or more employees are required to establish a safety policy (Jergeas, 2009).

In small enterprises, to improve the overall health and safety of the industry, employee representation in implementing safety rules and procedures can be treated as one form of worker participation (Walters D., 1998).

Improving health and safety performance is a challengeable task. Through training, learning and knowledge transferring organisations are seeking to improve health and safety performance (Bahn, 2013). The absence of ergonomic skills and training and communication and resource availability and communication and resource availability are the causes of poor ergonomic conditions and the resulting loss of worker productivity and compromised health and safety (Ashraf et al., 2003).

According to studies on safety signs, some indicators do not adequately communicate safety information (Liu, Hoelscher, & Gruchman, 2005). Failure to obtain adequate comprehension and properly communicate warning information might result in damage or death (Lesch, 2003). As a result, to reduce the danger of misunderstanding and increase sign knowledge, it is necessary to investigate the effects of user factors on sign comprehension and create safety signs with a high degree of usability (Chan & Chan, 2011). The research of industrial safety sign comprehensibility is crucial because there are currently no local norms, rules, or guidelines controlling the design and use of such signs (Chan & Chan, 2011). Of course, the broad understanding of safety indicators by employees working in various industrial situations is of interest. However, the authors believe that safety officers should be used in this study since they are safety specialists with experience in various industries and work contexts (Chan & Chan, 2011).

The actions and practices of workers, management, unions and safety specialists create, change and maintain many environmental conditions for safety work. The sheer imposition of legal restrictions has been found to be ineffective in reducing non-fatal and fatal injuries: other techniques are required to promote employer and worker compliance with the safety measures mandated by law (Ricci, Chiesi, Bisio, Panari, & Pelosi, 2016). A genuine transfer of authority demonstrates employee involvement in OSH (e.g., when managers act on employee recommendations) and the sharing of safety and health information with employees with 'management's participation (Farouk, 2017). Industries that are involved in environmental pollution, labor exploitation, and occupational-related illnesses and injuries confront challenges in surviving the marketplace as a result of growing societal pressure and increased public awareness about health and safety.

According to a study of Colombo municipal council staff, gloves and boots were accessible for 44 per cent of solid trash collectors, but only 25% were used (Mudalige & Dharmathilaka, 2000). According to a study conducted in Hebron and Bethlehem, the majority of solid waste collectors do not use PPE, including 98.6% who do not wear a face mask, 78.9% who do not wear rubber boots, 45 per cent who do not wear protective gloves, and 85.5 per cent who do not wear over all protective materials (Ahmed, 2004). According to research conducted in Addis Ababa, only 43.6 per cent of solid waste

collectors used PPE while on duty, and only 22.5 per cent of them said they did not use it consistently while on duty. They cited a lack of access (83.7 per cent), discomfort (25.6 per cent), and a desire to save time (12.8 per cent) as the top reasons for not utilising the PPE (Bogale, 2012). According to a study conducted in Nigeria's Port Hartcourt Metropolis on solid waste 'collectors' attitudes toward safe occupational practice, 76.3 per cent agreed that they had been injured by sharp objects while packing refuse with their bare hands, and 26.2 per cent agreed that their PPE was of adequate quality and fit for the task (Inyang, 2009).

Employee Engagement

Job engagement creates positive consequences to any organisation. As a result of that this concept is very popular. Engaged employees highly concentrate on their work (Chhetri, 2017). Employee engagement has been focused more in both the educational and professional literature (Cole et al., 2012; Saks, 2006). Employee involvement is linked to the organisation's vision and mission (Rao, 2017). Further employee engagement is invisible and it can be seen when employees work enthusiastically and being loyal to organisations to improve organisational goals and objectives. In other terms, employee engagement refers to an 'employee's level of dedication and connection with their company and its principles (Anitha, 2014). Further when an employee is willing to take responsibilities and self-motivated and motivates colleagues towards the achievement of organisational goal and objectives is an engaged employee. Engagement is "a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption." (Schaufeli et al. 2002; Guan & Frenkel, 2018). Employees with vigor have a high spirit, emotional well-being, and a desire to complete tasks. Dedication is a strong commitment to complete a task. Absorption refers to a high level of focus on one's work to the point where the employee loses track of time and finds it difficult to separate from it.

In the past decade, work engagement has been emerged as a positive concept of organisational behaviour (Al-Weshah , 2019). To foster individual loyalty and satisfaction work engagement has captured the attention of business practitioners and academic researchers, as it is considered as an optimal relationship between individuals and organisations. Employee engagement is considered as an important asset that is recognised by employers (Al-Weshah , 2019). Engagement goes beyond satisfaction at work environment (Guest & Conway, 2004). When employees are engaged it emphasizes that deep-rooted passion, devotion and willingness at an employee's personal level to invest more and use discretionary effort to help the employer succeed (Al-Weshah , 2019). Many service organisations and practitioners are taking actions to identifying ways to raise the level of engagement among their employees (Valdivia, Montes, & Moreno , 2018).

Safety managers who completed the survey were asked to assess the level of employee involvement in their respective workplace. To measure the level of worker emotional and cognitive involvement, two questions were developed from the measures supplied by (Rich, Lepine, & Crawford, 2010).

RESEARCH MODEL AND HYPOTHESES

The level of satisfaction increases when organisation takes care of their employees and executes right safety and health practices within the organisation (Bottani et al., 2009). Safety and health had a beneficial impact on job satisfaction among field workers (Kularathna & Perera, 2016). Considering, social exchange theory, this study focuses how occupational health safety relates to employee engagement. Cole (2002) suggests that employees who are fit to the jobs and experience safe at work are committed to their work Occupational health and safety management was found to be favorably connected to affective engagement in Ghanaian small and medium-sized businesses (Gyensare et.al., 2019).

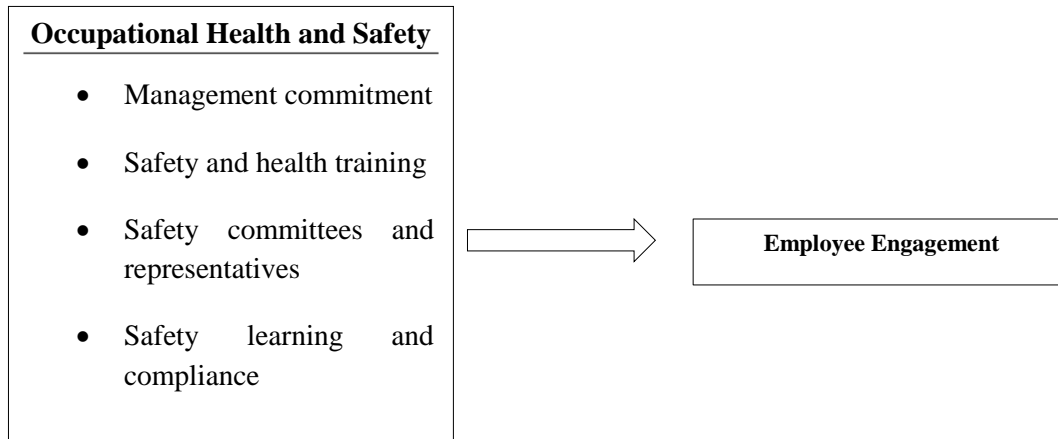
Accordingly, the following hypothesis was developed;

H1: There is a positive relationship between occupational health and safety and employee engagement.

Following theoretical framework can be developed based on above hypothesis (see figure 1).

Figure: 1 explains the relevant schematic diagram. Occupational health and safety is tagged as the independent variable and employee engagement is tagged as the dependent variable.

Figure 1: Conceptual framework



RESEARCH METHOD / METHODOLOGY

The major goal of this study is to see if there is a link between occupational health and safety and employee engagement in the Ampara Urban Council. The authors also attempt to establish the amount of occupational health and safety and employee engagement among SW employees and whether OHS has an impact on employee engagement.

The unit of the study was individual: solid waste employee who is working in Urban Council, Ampara. A self-administered questionnaire in Sinhala and Tamil medium was designed to collect data. The questionnaire was designed by the authors for this study purpose. 20 questions were made up to operationalise the occupational health and safety, and 8 questions were generated to operationalise the employee engagement. This questionnaire was given to sample of solid waste collectors in the population.

Study Sampling Procedure

The population for the study comprised of solid waste employees in Urban Council Ampara. The population is eighty-five employees who are solid waste employees, attached all categories of solid waste employees in Urban Council Ampara. This study used the entire population because the size of the population is relatively small.

Table 1: Categories of labors in Urban Council Ampara

No	Category	No. of laborers
01	Health laborers	31
02	Working laborers	17
03	Drivers	19

04	Temporary substitute laborers	18
Total		85

Source: Survey data

MEASURES

Occupational Health and Safety

Occupational health and safety was operationalised into four major dimensions: management commitment, health and safety training, safety committees and representatives, and safety learning and compliance (Neal et al. 2000; Zin, & Ismail, 2011). The questionnaire assesses dimensions of occupational health and safety and employee engagement. The 20 question items were developed regarding these dimensions of occupational health and safety using 5-point Likert scale.

Employee Engagement

The employee engagement was operationalised into three dimensions such as vigor, dedication and absorption (Schaufeli et. al., 2006). Based on these dimensions of employee engagement a questionnaire with 8 questions items was developed using 5 point likert scale.

Techniques of Data Analysis

Univariate analysis (involving one variable at a time) and Bivariate analysis (involving two variables at a time) was employed to analyse the data. Frequencies, central tendencies and dispersions of the dependent and independent variables were measured by using descriptive statistical techniques under univariate analysis. The authors used frequency distribution to analyse how the responses were spread or distributed in the various subcategories of each variable. By computing the means of the response categories, central tendencies of the data sets of the dependent variable and the independent variables were measured. The dispersions of the datasets of the dependent and independent variables were measured by using standard deviation. One objective of the study is to find out how the dependent variable is changed by the independent variable. By applying the Bivariate analysis (involving two variables at a time) the authors measured the connection between the dependent variable and the independent variables. Hence, the researchers used Pearson correlation coefficient to reveal the strength of two variables for interval scale.

In order to determine the association between occupational health and safety and employee engagement, correlation analysis (bivariate, 2-tailed test) was done. The results of the statistical test of correlation was shown in the table 2 which was performed to find out the relationship between dependent and independent variables involved in the study.

Reliability and Validity

The Cronbach's Alpha analysis used to measure the reliability of the instrument which measures the internal consistency of the instrument. Cronbach's Alpha Coefficient (CAC) is calculated for dependent (EE) and independent (OHS) variables. The validity of the instrument in the study was measured by factor analysis to measure occupational health and safety and employee engagement.

In the pilot study, to evaluate the reliability of the variables & statements, 30 questionnaires were issued & all questionnaires were collected & reliability test was done. The total reliability for the collected data in pilot study was acceptable where the CAC is greater than 0.7. Finally, the reliability of the construct interaction is also acceptable where the CAC is greater than 0.7.

RESULTS AND DISCUSSIONS

The measures of central tendency such as mean value and standard deviations of each dimension of occupational health and safety and employee engagement were tabulated in table 2:

Table 2: Descriptive statistics of occupational health and safety and Employee Engagement

Variables	Mean	Std. Deviation	Level
Occupational Health and Safety	4.0305	0.16699	High
Employee Engagement	3.8902	0.18880	Moderate
Management Commitment	4.1415	0.26008	High
Health and Safety Training	3.6057	0.40952	Moderate
Safety Committees and Representatives	4.0749	0.30879	High
Safety Learning and Compliance	4.1122	0.28126	High

Source: SPSS output data

As indicated by the table 2, the mean value of the overall OHS is 4.0305. Since the mean value is between 4 and 4.90 there is a high level of occupational health and safety among the respondents. They perceived the occupational health and safety has impact on employee engagement significantly. The standard deviation is 0.16699, showed that there was low variation in the level of occupational health and safety among the respondents. Although there is no a big difference between the mean values of dimensions of occupational health and safety, management commitment and safety learning and compliance were high among the respondents as these dimensions yielded a mean value of 4.1415 and 4.1122 respectively. The standard deviations are 0.26008 and 0.28126, respectively,

showed low variations in the level of management commitment and safety learning and compliance among the respondents. Compared to these two dimensions, respondent's health and safety training and safety committees and representatives were slightly less, yielded a mean value of 3.6057 and 4.0749 respectively. Standard deviations were 0.40952 and 0.30879 respectively, implying significant variations among the respondents comparatively.

The mean value of employee engagement is 3.8902; this implies a moderate level of employee engagement among the respondents because the mean value of employee engagement is in between 3-3.90. The standard deviation is 0.18880, showing that there was low variation in employee engagement among the respondents.

When assessing the relationship between occupational health and safety and employee engagement, correlation analysis (bivariate, 2-tailed test) was done. Table 3 shows the outputs of the statistical test of correlation which was performed to find out the association between dependent and independent variables involved in the study. Correlation coefficient between the two variables is 0.736 which shows that there is a strong positive association between occupational health and safety and employee engagement, followed by the significance level 0.000.

Table 3: Correlation between Occupational Health and Safety and Employee Engagement

Variables	Employee engagement	
Occupational health and safety	Pearson correlation	0.736**
	Sig. (2-tailed)	0.000
	N	82

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

Source: SPSS output data

Pearson Correlation Coefficient of occupational health and safety and employee engagement is 0.736, indicating a positive ($r > 1$) correlation exists. Hence H_1 of main hypothesis is accepted.

Hypothesis Testing

According to (Malhotra & Dash, 2011) Regression analysis is a powerful and flexible procedure for analysing associative relationships between a metric dependent Variable and one or more independent Variables. (Malhotra & Dash, 2011). Therefore, regression analysis was used to test the hypotheses of the study.

Table 4: Model Summary of Simple Linear Regression

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.736 ^a	0.542	0.537	0.12852

Source: SPSS Output Data

a. Predictors: (Constant), Occupational health and safety

b. Dependent Variable: Employee Engagement

Model summary is tabulated in table 4. In terms of the model summary table, R square and adjusted R square revealed the values as 0.542 and 0.537 respectively. The key information from the table above is the adjusted R² value of 0.542. This indicates that nearly 54% of the variation in employee engagement can be explained by the model containing occupational health and safety.

DISCUSSION

In order to attain the objectives of this paper, data were collected from 82 employees who are working in Urban Council in Ampara, ensured nearly 96% of response rate for the study. In addition to the research information, sample respondents' personal information was also gathered, analysed and used to obtain general understanding about the realised sample.

Based on the data analysis, research objectives of the study were attained. The first objective is to identify the relationship between workplace health and safety and employee engagement. Correlation study was done to find out the relationship. Correlation coefficient between OHS and EE is 0.736 (p=0.000). This result well expresses a strong positive relationship between occupational health and safety and employee engagement of employees in Urban Council in Ampara. The second objective is to examine the level of occupational health and safety of employees in Urban Council in Ampara. The study findings show that mean value of OHS is 4.0305 and standard deviation 0.16699. This implies that occupational health and safety system has high level in the urban council. The third objective is to study the level of employee engagement of employees in Urban Council in Ampara. The study findings show that mean value of employee engagement is 3.8902 and standard deviation 0.18880. This implies that employees have moderate level of employee engagement. The fourth and primary aim of the study is to examine whether the occupational health and safety impact on employee engagement. For this intention simple linear regression technique is used. Regression analysis indicates that a single unit change in occupational health and safety will increase employee engagement by 0.833. In other words, if occupational health and safety of employees increased by one unit, their employee engagement increased by 0.833 unit. This result confirms fairly a significant

positive impact of occupational health and safety on employee engagement of employees in Urban Council in Ampara.

The output of this study show that major components of occupational health and safety are management commitment, health and safety training, safety committees and representatives and safety learning and compliance. The health and safety training is moderate level and other all dimensions are high level (See Table: 1). Accordingly, solid waste management can be developed to improve the levels of these dimensions to ensure a very high level of OHS so that employee engagement can also be upgraded into a very high level.

IMPLICATION AND CONCLUSION

Laborers are the people who involve in solid waste management process as waste collectors. In the context of society, they play a major role to keep our environment clean and safe place. Therefore, their engagement with the workplace is considered as the most important to the society. Though, there is no more study that aimed at exploring the occupational health and safety and employee engagement of employees in Urban or Municipal Councils, especially in Sri Lankan context.

Laborers or solid waste collectors job involve various challenges such as handling chemical substances, high probability of getting sick, work life balance etc. which cause to occupational diseases in them. Therefore, they need to be safer in terms of physically as well as psychologically. When handling such challenges and issues effectively occupational health and safety play an important role.

There are numerous studies were conducted all over the world as an attempt to identify the factors affecting employee engagement in various settings. Further various independent variables were tested with employee engagement in order to determine the relationship between them. Even supposing that there less study in respect to the occupational health and safety in identifying its relationship with employee engagement, in particular in Sri Lankan context. Therefore, the researcher intended to fulfil this research gap through this study.

The current study investigated whether occupational health and safety impact on employee engagement of employees in Urban Council in Ampara. Total population sampling was used as sampling method. Data was gathered from 82 employees using self-assessment questionnaire. Reliability and validity of the scale was tested and collected data were analysed using SPSS 20.0.

The findings of the study concluded that there is a significant and strong positive relationship ($r=0.736$) between occupational health and safety and employee engagement of employees in Urban Council in Ampara. This implies that while the occupational health safety system develops in the

urban council, employee engagement will also increase. Accordingly, the urban council can thoroughly study the occupational health and safety system by focusing management commitment, health and safety training, safety committees and representatives and safety learning and compliance to develop further the safety system. Waste handling practices could be influenced by the workers' knowledge on occupational health risks (Asibey, Amponsah, & Yeboah, 2019). Hence, the safety learning and compliance lead to improve the employee engagement. According to the study, engaged business units experienced 62% fewer safety incidents than units with lower employee engagement (Wachter & Yorrio, 2013). When safety rules and procedures are implemented well in the organisation through regular safety inspections and enforcement of safe working procedures, employees are compelled to work safely (Subramaniam, Shamsudin, Zin, Ramalu, & Hassan, 2016).

It will able to generate valuable behaviors among HR people of the local government authorities or the concerned parties who are constantly seeking ways to improve their HRM practices such as recruitment, selection, training and development to enhance their employees' engagement and to acquire the employees with occupational health and safety in order to obtain higher contribution from them to achieve the goals of the organisation. Further it induces the employees' and other employees to identify their level of OHS and to take step to improve their OHS. There is no more study under this topic in Sri Lankan context. This study will fill this research gap. Moreover, major findings of this research were consistent with those of previous studies, thus this study provide a contribution to the existing body of knowledge.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study is subject to a number of limitations which in turn provide some suggestions that need to be addressed in future researches. The first limitation is the study results were derived from small sample size. Due to the time constraints the study was decided to conduct only in Ampara Urban Council in the study. Although the study used the total population sampling method, size of the sample is relatively small. Therefore, future researchers can replicate this study with a large sample to conduct the study in other provinces of Sri Lanka or by covering more areas under the Ampara district to increase the validity of the research and better understand the relationship between OHS and EE among employees.

Second, the major objective of the study was to identify the impact of occupational health and safety on employee engagement. Employees in Urban Council in Ampara were considered as the population in this study where the population did not include other employees such as managerial level. For that, future studies that focus on employees at different level would make more worthwhile contribution for such objective.

Third, in this study sample was drawn only from Urban Council in Ampara. This restricts the applicability of findings to other settings. On that account, future studies can focus on other districts or provinces to enhance the generalizability of the findings.

Forth, the study considered only one dependent variable to see the effect of occupational health and safety of the respondents. In other words, impact of occupational health and safety examined with only one organisational outcome. Further researches that incorporate different dependent variables apart from employee engagement like job performance, organisational productivity, employee well-being, employee retention may be more worthwhile.

The next limitation is, the current study only focused on local authority sector. Therefore, further researches can be carried out to check the impact of occupational health and safety on employee engagement in various other sectors in Sri Lanka.

Another major limitation is that both occupational health and safety and employee engagement were measured with use of self-rating scale. Although the respondents were requested to provide genuine responses frankly, there are high possibilities for potential bias. In other words, leniency on the part of the respondents themselves better. Since, the results of the study depended on the responses given in the self-reported questionnaire; it became a limitation in this study. Therefore, future studies can use different rates or 360-degree rating scale in order to obtain accurate and precise findings with regard to the occupational health and safety and employee engagement of respondents as well as the relationship between them. Moreover, data collection of this study only based on the questionnaire, any study involves other types of data collection such as interview and observation may provide different results.

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