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Work Outcomes of Occupational Health and Safety: The Role of Transformational Leadership and Public Service Motivation

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Abstract
Safety culture and unsafe behavior have been considered to be important factors in operational safety in various fields, including transportation systems. The study sought to analyze the relationship between occupational health and safety and employee work outcomes, the moderating role of public service motivation and employee work outcomes, and transformational leadership and employee work outcomes. A cross-sectional survey using convenience sampling technique was adopted with a sample of 300 public transport bus drivers from Takoradi Market Circle, Ghana. A five-point Likert scale integrated questionnaire was used. The study use SmartPLS software 3.2.8 to analyze the data. The study found Occupational Health and Safety to have direct positive and significant relationship with Employee Work Outcomes. Furthermore, the study found public service motivation also have positive and significant connection with Employee Work Outcomes. Also, the study found support for the relationship between Transformational Leadership and Employee Work Outcomes. Again, transformational leadership moderates the relationship occupational health and safety and employee work outcomes. In a similar fashion, public service motivation was found to moderate the relationship between occupational health and safety and employee work outcomes. It is recommended that workshops and training sessions on safety to enhance the alignment of safety practices for drivers as industrial employees responsible for transport operations. Also, employers should implement safety reward programs that enable drivers to follow good levels of health and safety.
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1.0 INTRODUCTION

Public transport is essential especially in big towns and cities in which nearly two million people are transported every day (Sahebi, Nassiri, & de Winter, 2019). In these places, people travel in significant numbers at the same time. For the majority of the population without personal vehicles, mass transit is therefore essential. For everyday activities, most of the passengers use the bus service such as VIP, Ford, and Intercity STC, etc. According to Amponsah-Tawiah & Mensah, 2016 big cities, with their highly skilled and non-expert drivers, cyclists, and pedestrians, as well as for road users, are at the most significant mortality rates due to road accidents. Driver's satisfaction has become an essential component and the leading cause of road traffic injury/accidents. Errors had already been described as "breakdowns of intended conduct to produce expected results." (Kheni, Dainty, & Gibb, 2008) However, misconduct (carefully orchestrated attitude) has been defined as "intentional (but not necessarily reprehensible) deviation from habits that are considered significant in keeping a highly hazardous system safe to navigate." Drivers could significantly raise their overall risk for accidents through unethical behavior, like dangerous offense, road violations, tumbles or mistakes, etc. (Graham, 2008). The findings of the Heinrich study (1985) indicate that over 80% of injuries were caused by unstable conduct. Traffic safety can also be active through motivational characteristics such as driving style, professional development, and safety culture. Corporate culture directly impacts the decision-making and conduct of workers in the company/workplace. This aspect represents universal principles-what is relevant and how things get done that work carefully to create behavioral expectations with organizational processes and management mechanisms. Although job safety and health promotion have increased over the past few decades, the number of deaths and injuries and diseases in jobs is still unacceptable. It is hugely detrimental to males, females, and their families.

The cost of accidents and illnesses is projected to be 4 percent of world GDP, and the economies are still losing out (ILO 2009).

In recent decades the endorsement of occupational Safety and health has increased, but casualties, injuries, and overall quality of life at work are still shockingly high. They are hitting men, women, and their families hugely. The overwhelming under-reportage of work-related accidents and illness, such as traffic deaths, gives a wrong picture of the problem's scope. The estimated cost of occupational injuries and diseases corresponds to approximately 4% of the world's economy (ILO, 2009). It is reported that 2,3 million people worldwide perish each year to work-related injuries or disorders, equivalent to over 6,000 deaths a day-approximately 340 million accidents at work globally and 160 million casualties of work-related illnesses each year (ILO, 2020). This is monitored in intervals by the ILO, and the reports show that injuries and health problems are rising.

In the Commonwealth of Independent States (CIS) countries, there are over 11,000 death accidents at work, compared to 5,850 recorded. In Ghana, The Ghana transport industry's health and safety management are an essential issue for decision-makers and the business community. According to accident data for 2016, deaths and significant injuries were up by 15.6%, respectively 6.77%, while the accidents decreased by 11.7% over 2015. The Traffic System Risk Index (TSR) has reached the single-digit (9.24 deaths/10,000 vehicles) for the third time in operation. Potentially deadly collapse rose by 7.6% in 2016. Still, at the regional level, the region of the Greater Accra registered the highest decrease in fatal collapse by -22.1%, followed by the Upper Western Region (-2.5%). All the rest of the regions reported increased in fatal crashes; North (34.9%), Volta (34.5%), East (30.0%), Brong Ahafo (26.1%), Upper East (20.5%), Central (18.8%), Ashanti (11.3%) and West (2.2%). As per preliminary data from the Department of Transport and Traffic of the country, road accidents claimed 2284 lives in 2019 (App news agency, 2020). It is a large rise compared to 2,020 deaths in 2018.

The numbers would be the highest figure by the National Road Safety Committee in the last couple of years if verified. The lowest possible fatal year in Ghana was 2015, with 1,802 deaths for road crashes in the last decade. With 449 fatalities, the Greater Accra region was the deadliest in 2019, followed by 448 deaths in the Ashanti region and 349 deaths in the Eastern region. Accords of Citi FM, the majority of deaths included commercial vehicles, where 925 deaths and 7,621 injuries were recorded (African Press Agency, 2020). And in all these, senior management in companies tends to concentrate more on improving productivity and safeguarding the company. At the same time, good health and Safety at work are more necessary to protect workers from injury and death, only secondary to preserve productivity and performance.

In the transport sector, there is a lack of awareness of occupational health and Safety; many health issues affecting the business are overlooked. Therefore, the need to analyse the workplace health and safety profile of the transport sector or industry. The oobjectives of the study are:

1. To determine the relationship between occupational health and safety and employee work outcomes.
2. To determine the moderating effect of public service motivation in the relationship between occupational health and safety and employee work outcomes.
3. To analyse the moderating role of transformational leadership in the relationship between the occupational health and safety and employee work outcomes.

This study would help to create awareness and literary works on workplace health and Safety. At the end of the study, findings would therefore enable policymakers and transport sector management to implement occupational and Safety issues in Ghana. It is important to lay the foundations for creating an effective health and safety policy that clearly specifies health and safety requirements that will eventually enhance the quality of the workers of any nation, particularly Ghana.

2.0 Theoretical Background of the Study

2.0.1 Social Exchange Theory

Theoretically, appropriate and efficient social interaction among management/manager and employees builds confidence and positive socio-emotional sentiments, leading to mutually advantageous behavioral reciprocity (Trinchero et al., 2019). Managers benefit from the input they get from staff for their decision-making. The organization is benefiting from improved productivity and effectiveness resulting from high rates of cooperation between the subordinates (Shore et al., 2011).

Based on the theory of social exchange (Blau, 1964), we suggest that the understanding of Health & safety management strategies and activities of transport employees' mental Health influences their level of commitment and ability to spend. However, employee performance will also promote this interaction so much because, regardless of the appropriate policies and procedures of OHS management, the happier transport employees are with their employers, the more likely their employer is to be involved, and the less likely they are to leave. The principle of social exchange thrives on the standard for trade, which refers to employees' propensity to react positively to gain and abused by harmful acts. For example, from two viewpoints, economic and social interaction Blau (1964) considers interpersonal relationships. Throughout this background, the principle of social change relates to examining the influence of workplace satisfaction in drivers' attitudes in terms of the

interaction between OHS directors, staff engagement, and the desire to perform at work.

When people give valuable services to others, social Exchange theory (Blau, 1960) suggests that other persons usually respond to and trade for useful functions with a degree of duty. Reciprocity refers to the situation that an entity expects to offer something in a 'mutually beneficial arrangement of goods and services' as it enters into a two-way tie (Gouldner, 1960, p. 170). The social exchange viewpoint indicates a passionate duty on workers to support their business with potential constructive reciprocity (Dejoy et al., 2004). It will encourage reciprocal actions in the context of employee adherence to corporate practices, whether companies provide programs that are perceived as voluntary. Under this context, a stronger contribution to the company and conformity with corporate rules and standards will be expected for the procurement of budgetary resources and/or rewards.

2.0.2 Organizational Support Theory

The organizational support theory considers improvements, dynamics, and implications of organizations' supposed contribution (Tan et al., 2019). The theory suggests that workforce build factors such as brand support in response to social and emotional preferences and willingness to compensate the corporation for the contributions it has made on its behalf (Kurtessis et al., 2017). A worldview is an approach to the employer-employee relationship in philosophy in social exchange. Thus, the theory of organization's support holds that workers' trade and loyalty to their company for material rewards such as compensation and fringed benefits and social-emotional benefits perceived as forecasts, appreciation, and care are based on the standard of reciprocity (Aselage & Eisenberger, 2003). Perceived organizational support (POS) is characterized as the "credences of employees regarding the importance and the wellbeing of the organization's contributions" (Aselage & Eisenberger, 2003). Corporate support research hypothesizes that the degree to which managers are obsessed with organizational orientation towards workers' health, for example, the organization that assesses employee efforts and concerns for their wellbeing, is a factor in company performance (Kurtessis et al., 2017). On one side, workers establish the identity of a corporation and investigate the services obtained at work. This awareness is vital for both company growth and safe and healthy workers (Tan et al., 2019).

On the other hand, social exchange theories claim that their organizations could make more of a success by having expanded welfare activities. Workers pay for significantly more excellent performance work through their executives (Tan et al., 2019). Rhoades and Eisenberger (2002), in a comprehensive analysis of 70 studies, found that positive organizational support linked to equal organizational practices, managers, and desirable incentives and conditions of employment contributes in turn to beneficial results for individuals as well as for the organization, including enhanced corporate effectiveness, improved success and a decrease in employment. A significant meta-analytic analysis involving 167 works was carried out by Riggle et al. (2009). The findings revealed that perceived organizational support is closely related to work satisfaction, company participation, and desire to leave, but only a small, optimistic influence on workers' performance. Analysis has shown that labor classes can be considered "employee expectations."

2.1 Hypotheses Development

2.1.1 Effect of OHS on Employee Work Outcomes

Liu et al. (2019) have examined the effects of occupational health and safety (OHS) on organizational performance with the mediating influence of Ghanaian power industry firms. The findings demonstrate that there is a strong connection between health and safety at work and job performance. Liu et al. (2019) contended that when the workforce is extremely pleased with its health and safety management, it has high employee turnover expectations and vice versa.

In order to achieve worldwide environment and employee standards, companies need a management framework. The interconnected service delivery system is also designed to remove or minimize catastrophic events to appropriate management units. Even though health-related education has an impact on patients' mental/better results, socio-cultural variables influence the connections one of its main objectives (Fallah, 2019). Fallah (2019) thus focuses on estimating the efficiency of the application of this program on metrics for measuring performance outcomes. The research shows that the introduction of an integrated approach will boost safety economic indicators and thus improve factory safety (Fallah, 2019).

On their part, Al musawi and Al Sayegh (2019) sought to examine and evaluate work-related accident reduction approaches. In fact, it aims to explain how the use of safety equipment, laws and legislation as well as workplace involvement and services are applied and enforced in industrial companies (Al musawi and al Sayegh 2019). The study focused on the steps that the organization has taken to handle and mitigate human employees' security from workplace hazards and the risks involved with their employment and to cope with the complexity of implementing the health and safety management policy that relies on them. It is essential for institutions to eliminate injuries and illnesses of commercial operation and to incorporate health management and work safety policies and to align guidelines and criteria and models of good practice, human resources, and technology (Al musawi and al Sayegh 2019).

Basu (2019) acknowledges that employee engagement and job satisfaction are two standard terms in today's companies and examines the role and relationship of employee engagement and employee satisfaction in specific organizations. The employee engagement test and satisfaction tests for the employees who participated voluntarily have been implemented (Basu, 2019). It was found in the data analysis that there is no such significant association between the variables but that they are both strongly related. Both variables, therefore, are, by definition, positive and related, which were seen in this analysis (Basu, 2019). Widyanty et al. (2020) conducted a study to evaluate the Innovative human resource development Paradigm as a business strategy in the construction field and define reasons directly for the acquisition of a strategic edge in the sector. Quantitative data were obtained by using a questionnaire approach from 174 building companies in Indonesia. Structural equation modeling methods were used to evaluate the constructed model relationships. The findings demonstrated that competitive edge could be gained by human resource management activities in the Indonesian building industry to promote and maintain a safety culture that would boost employee performance (Widyanty et al., 2020).

Organizations need to align human resource management activities with a safety management system as a business priority strategy. A safety climate can be a strategic source of financial gain for building companies in Indonesia based on the logical outcome (Widyanty et al., 2020). Employee dedication to work has played a significant role in deciding job efficiency (Widyanty et al., 2020). In organizations where much waste is by-products, health and safety considerations will be of considerable concern to staff. In a similar fashion, a suggestion was made that facility managers themselves should devote time and resources to improve their own expertise, experience, and other capabilities, for more effective professional safety professionals (Adnan et al., 2019). Quagraine et al. (2020) explored how health and safety issues impact workers' loyalty of sachet and bottled water firms. A convenience sampling methodology was employed to achieve a sample size of 150 respondents. The data were then evaluated using multiple regressions. The results indicate that workers' health, particular risks, workplace pressures, and safety considerations have a substantial impact on the contribution of employees to the workplace (Quagraine et al., 2020). The research also indicates that the particular hazard/threat had the most substantial adverse effect on the dedication of workers to their jobs. The report suggests that employers must put effective health and safety policies to improve their workers' wellbeing. This work is considered to be the first type in the sachet and bottled water market. More studies into this area will look more closely at aspects of health and safety impacting employee participation in the various professions (Quagraine et al., 2020).

Many companies still have no preventive services organized (Rodrigues et al., 2020). Stoffregen et al. (2019) argue that work and health differ significantly worldwide. Therefore, there is a lack of awareness of variables contributing to global safety at the micro and macro levels. Stoffregen et al. (2019) investigate which indicators, such as environmental contexts, are connected through 51 countries and regions worldwide with work-related fatality rates and death rates and severe occupational damage rates in 31 European countries. Structural equation modeling analysis found a significant correlation between universal healthcare and individualism with lower occupational deaths (Stoffregen et al., 2019).

Yanar et al. (2019) workers at higher risk of accident and chronic conditions who have been subjected to danger lacking adequate safeguards. Injury occurrence was also related to supervisor behavior. Yanar et al. (2019) explored the interaction between job accident and disease assistance for supervisor wellbeing and risk in workplace health and safety. The possibility of serious injury at work is elevated besides OHS weakness and lack of supervisory assistance. Crude and modified models have demonstrated that the probability of physical harm for individuals who encounter both an OHS deficiency and neglect of supervisory treatment has been at least 3.5 times greater than someone who has no OHS weakness and a caring director (Yanar et al., 2019).

We therefore hypothesize that:

H1: OHS makes a positive influence on Employee Work Outcomes

2.1.2 Moderating Effect of Transformational Leadership

According to Fulwiler (2011), a leader can enhance health and safety results through merely being transformational. When you become a transformation leader, staff would realize that you value them, their safety, and their welfare, so that they can function in a better and environmentally sustainable environment. Instead of stressing the safety management system, Fulwiler (2011) notes, a transformation leader emphasizes that what matters to them is individuals who could be affected. Persuading the workers that you appreciate them would encourage them to work openly in ways that prioritize their health. There is an unambiguous relationship between occupational health and safety, transformational leadership, and work outcomes (Fulwiler, 2011).

Safety practices, engagement, and adherence to human health and culture of protection are critical safety implications in sensitive organizations. For instance, archives' quest for leadership and protection reveals that the most commonly quoted forms of leadership are transformation and transactional leadership styles. This is because they are also linked to workers' conduct, and since their measurements include nearly all the leadership types tested thus far, they appear to be more critical. For instance, the transactional strategy requires the

attitudinal side of leadership, like system implementation, path objective, expectation analysis, and the lasses-fair management model. However, transformational leaders may require interaction as leading participants (Zacher, Pearce, Rooney, & McKenna, 2014), principles, and related forms of leadership (Öncüoğlu, 2013). Management of workplace health and safety is crucial since it helps minimize the costs of illness and disease for employees. These include medical insurance, sick leave (Tappura et al., 2015), and compensation payments for assistants' duty. Moreover, Hale et al. (2015) have claimed that the legislative grounds for OHS include protective, disciplinary, and countervailing consequences of laws protecting the welfare and health of workers. Therefore, any company needs to improve the health and well-being of its employees to enhance their performance (Gyensare et al., 2017).

Moreover, observational findings show that OHS management can forecast multiple workers' and organizations' outcomes successfully (Gyensare et al. 2017). For instance, utilizing a sample of 300 artisans at a woodworker's plant in Ghana (Mitchell et al. 2015), there is a significant correlation between the readiness of woodworkers to use personal protective equipment, and their knowledge of the health safety consequences for their job has been identified. A positive relationship between OHS management and company performance has been found elsewhere in Spain (Fernandez-Muniz et al., 2009). Amponsah-Tawiah & Mensah (2016) have also demonstrated a significant effect on the effective, regulatory, and continuing engagement in the mining sector by using a sample of 370 employees in Ghana. The scholars argued that Ghana's management in the mining sector must understand that employees who feel secure and safe in their activities develop emotional loyalty and a deep sense of responsibility to their company and are more likely to participate in it.

Establishing an active involvement became prominent after the seminal work (Kahn, 1990). Kahn described involvement and participation as "the exploitation of the organization members to their work roles ..." (p. 694). Therefore, as workers are hired by a dynamic boss, all three elements – cognitive, emotional, and physical – fulfill their roles. The abovementioned definitions of dedication, according to (Gyensare et al., 2017), suggest that a devoted employee is mentally and emotionally attached to the organization, is positive about its aims, and is determined to live up to its values. Thus, drivers/employees who view their workplaces as safe and stable are more likely to have a deep sense of commitment and engagement in their jobs.

We therefore hypothesize that:

H2: Transformational Leadership positively moderates the relationship between OHS and Employee Work Outcomes

2.1.3 The Moderating Effect of Public Service Motivation

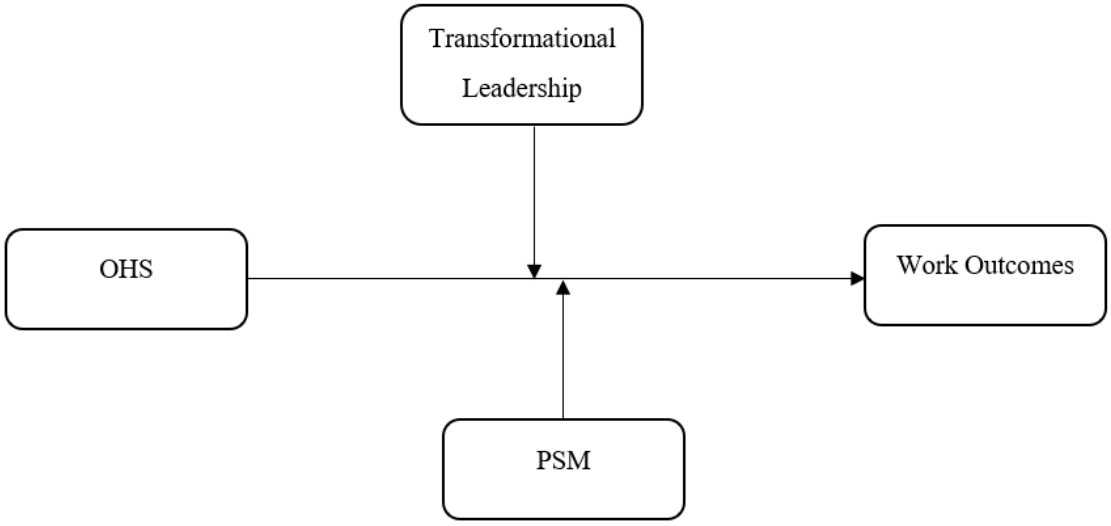
Public employees who enter the public sector with high PSM are naturally optimistic in their actions and organizational performance (Kim et al., 2015; Perry and Wise, 1990). Similarly, workers are often likely to be drawn with specific motivations for public service careers. Historically, the Korean government provided massive international motivators, which could lure public sector employees (Kim, 2012). Some analyses of Korean public workers suggest that, because of their guaranteed job protection, they prefer government employment instead of PSM or prosocial factors (Hahm, 2010; Kwon, 2013). Lee and Choi (2016) demonstrate that the preference of the public sector is not linked to PSM and prosocial behavior.

It was only because of the protection of work that university students decided to join the Korean public sector. Work safety in Korea, accompanied by an economically prosperous life, an attractive role, and a sense of mission in public service, is also regarded in a series of opinion polls as the most important factor in selecting a job. Thus, the Korean public sector has three central reward systems: safety at work, capital accumulation compensation, and PSM. Employment security implies the preservation of employee tenure, either by regulation, collective bargaining agreement, or statute. Capital accumulation compensation covers all wages and pensions and deferred benefit benefits (Perry, 2014). Economic benefits Multi-incentive research is useful as it provides a more comprehensive picture of the dynamics which influence the behavior of public workers. Still, the three incentives were not studied simultaneously (Perry, 2014). We may presume that the benefits are related to job success differently. PSM is predicted to significantly impact work performance in public organizations since public sector employees are fundamentally empowering people with strong PSMs (Perry and Wise, 1990).

The relationship between PSM and its perceived organizational efficacy in the United States is positive and significant (Brewer & Selden, 2000). Kim (2005) considers PSM to have a significant positive impact on the company's perceived success in Korea. Vandenabeele (2009) suggests that the PSM and the self-reported results have a positive and essential connection in Belgium. Bellé (2013) confirms the positive link between PSM and job performance after performing a field test in Italy. Therefore, the following hypothesis is proposed:

H3: Public Service Motivation positively moderates the relationship between OHS and Employee Work Outcomes

Figure 2.1 Conceptual Framework



Author Construct, (2022)

3.0 METHODOLOGY

The main objective is to establish the relationship between occupational health and safety and outcomes of work. It derives analytical, quantitative conclusions and the established connection to prior studies. Consequently, the related study design is an explanatory and descriptive sort that addresses how and why.

Responses on the safety culture are gathered from the perspective of public transport administrators and staff. A full-time employee, contract staff, and casual employees were respondents to the sample population. The survey included drivers/workers in the transport industry. This study considered all workers, irrespective of age, gender, or years of work experience. The total number of respondents was 300 intercity public transport drivers.

This cross-sectional survey using convenience sampling technique was adopted in this study to solicit data from 300 public transport bus drivers in Takoradi Market Circle, Ghana. Convenience sampling is characterized as a process adopted by investigators where market research data is obtained from a conveniently accessible sample of participants. It is the most widely accepted sampling technique because it is unbelievably fast, quick, and cost-effective. In certain instances, participants are eager to be part of the survey. Through a convenience sampling technique, workers, irrespective of age, gender, or years of work experience, were selected for the study. A pilot test was performed to test the validity of study instruments regarding workplace safety responses from public transport managers and employees in Kumasi Kejetia transport terminal. The composite reliability was (0.98) and the Cronbach alpha value was. (0.98)

Occupational health and safety were measured using already existing scales developed by Hayes et al. (1998), to measure employee work outcomes, measuring scales were adopted from Adnan et al. (2018), similarly, PSM was measured by adopting scales from Perry (1996), and transformational leadership was measured by relying on the scales developed by Bass and Avolio (1996). SPSS was used to analyze the biographic data of the respondents while SmartPLS was used to perform structural equation analysis.

All issues pertaining to ethics were duly followed. Steps to ensure anonymity and confidentiality were followed. Also, the researcher was granted prior permission from the target respondents before carrying out the research.

4.0 Results and Discussion

4.0.1 Demographic Characteristics of Respondents

The respondents' demographic characteristics in terms of gender, age, and education level were carefully evaluated.

All 300 sampled respondents were male; this indicates that men are dominant in the industry. In comparison, most of our respondents (almost 44%) belonged to 36 to 40 years. Data on overall work experience have shown that 46 % of respondents have a work history of 6-10 years, and only 15% had 11-15 years. 52% of the people working on a work and pay basis, followed by 20% who are on daily sales (i.e., pay the owners a fixed price every day, normally five to six days a week) and 28% had a parent, rich uncle, or a wealthy sibling buying the car for them. The respondents were also questioned about their academic history, which showed 28% elementary, 52% high school, and 19% post-secondary school qualifications. Further specific details about the demographic characteristics of the respondents are also given in Table 4.1.

Table 4.1 Demographic Variables

Variables	Frequency	Percent (%)
Gender		
Male	300	100
Marital Status		
Married	170	56.7
Single	131	43.3
Age		
Under 25 years	27	9
26-30 years	32	10.7
31–35 years	58	19.3
36-40 years	130	43.3
Above 40 years	53	17.7
Education		
Primary	86	28.7
Senior High School	156	52
Post-secondary/Tertiary	58	19.3
Driving experience		
Under 5 years	51	17
6-10 years	140	46.7
11–15 years	45	15
16-20 years	31	10.3
Above 20 years	33	11
Ownership		
Work and Pay	156	52
Ownership		
Daily Sales	60	20
Parents, Siblings, Uncles	84	28

Source: Field data, 2020

4.0.2 Validity and Reliability Analysis of measurement models

As all the measurements in this analysis used standard scales, a measuring experiment could be evaluated without investigating any factors (Anning-Dorson, 2017). The PLS bootstrapping approach has been stated to be a basic test used to analyze all constructs. As described earlier, this research covered four constructs that are modeled reflectively (i.e., organizational health and safety, public service motivation, transformational leadership, and employee outcomes). All reflective constructs have been tested for their reliability and authenticity in observing Hair et al. (2017). Firstly, the criterion for assessing the significance of factor loadings was followed as established by Hair et al. (2014). The factor loading results were tested, which were reasonably appropriate, varying from 0.60 to 0.90.

Table 4.2: Measurement Model Analysis

Constructs	Items	Loadings
OHS	OHS 1	0.625
	OHS 2	0.694
	OHS 3	0.865
	OHS 4	0.887
	OHS 5	0.877
	OHS 6	0.837
OHS	OHS7	0.801
	OHS8	0.710
TLEADER	TLEADER1	0.806
	TLEADER2	0.841
	TLEADER3	0.802
	TLEADER4	0.770
	TLEADER5	0.763
	TLEADER6	0.791

Constructs	Items	Loadings
PSM	ATMP	0.840
	COTP	0.648
	COMP	0.829
	SELFSA	0.788
	CULF3	0.883
	CULF4	0.914
	CULF5	0.906
PSM	PSM_MOD	0.113
TLEAD	TLEAD_MOD	0.100
WRKC	WRKC1	0.722
	WRKC2	0.737
	WRKC3	0.639
	WRKC4	0.709
WRKC	WRKC5	0.817
	WRKC6	0.859
	WRKC7	0.865

Source: Author's Calculation: OHS=Organizational Health and Safety, PSM=Public service motivation, PSM_MOD=Moderation of public service motivation, TLEADER=Transformational leader, TLEAD_MOD=Transformational moderation, and WRKC=Work outcomes

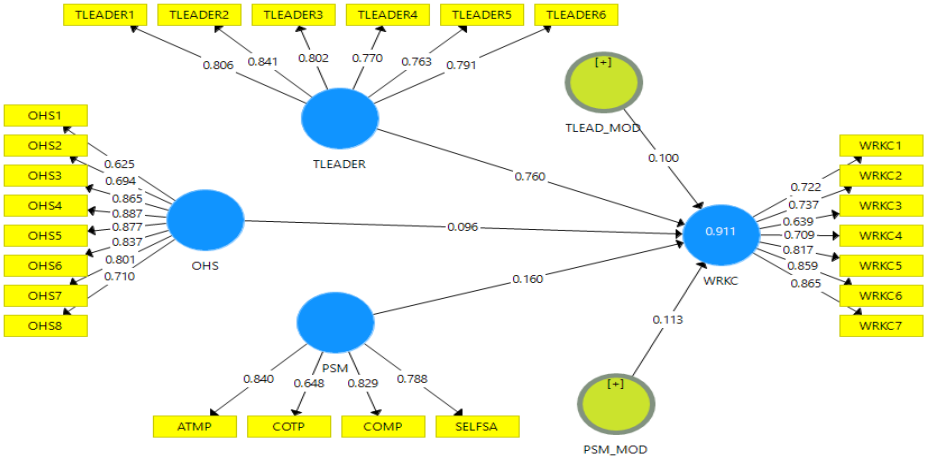


Figure 4.1 Measurement Model

Furthermore, the Cronbach's alpha and composite reliability (CR) parameters were also evaluated above Cohen's (1998) suggested the threshold level of 0.70. All variables were also tested for the average variance extracted (AVE) figures above the 0.50 Hair et al. (2017) threshold range. Table 4.3 provides the full findings of reliability, validity, and correlation between all latent variables.

Table 4.3: Tests of Construct Reliability and Validity

Constructs	Cronbach alpha	Composite Reliability	AVE
OHS	0.913	0.930	0.628
PSM	0.782	0.860	0.609
PSM_MOD	0.979	0.980	0.605
TLEADER	0.885	0.912	0.634
TLEAD_MOD	0.983	0.984	0.569
WRKC	0.882	0.909	0.590

Source: Author's Calculation: OHS=Organizational Health and Safety, PSM=Public service motivation, PSM_MOD=Moderation of public service motivation, TLEADER=Transformational leader, TLEAD_MOD=Transformational moderation, and WRKC=Work outcomes

4.0.3 Analysis of structural model (Model Fitness Index)

The proposed conceptual model of this analysis was tested for its general explanatory power R^2 value. Q^2 value,

which is the predictive relevance/statistical significance (i.e., Stone-Geisser's (1974), path coefficient β-values, *t*-values of the bootstrapping process, and Goodness of Fit (GoF) Index. A short rundown of the proposed structural model results is also provided in Fig. 2. These results showed the theoretical structural model with an explanatory power of 91.1 % for employee work outcomes and an R^2 value of 0.911.

Table 4.4 Result of R^2 and Q^2

Constructs	R-Square	R-Square Adjusted	Q^2	Effect Size
OHS			0.504	Large
PSM			0.354	Large
PSM_MOD			0.632	Large
TLEADER			0.473	Large
TLEAD_MOD			0.055	Small
WRKC	0.911	0.911	0.448	Large

Source: Author's Calculation: Small: 0.0 < Q^2 effect size < 0.15; Medium: 0.15 < Q^2 effect size < 0.35; Large: Q^2 effect size > 0.35

Various research projects in recent years, therefore, have employed a novel diagnostic instrument (GoF = √ (AVE × R2), as suggested by Tenenhaus et al. (2005) for the PLS-SEM Goodness of Fit index (GoF). Considering the Tenenhaus et al. (2005), recommendations, this analysis also utilized the same estimation technique, provided in Table 4.5, of the Goodness of Fit (GoF) index. The Goodness of Fit (GoF) value higher than 0.1, 0.25, and 0.36, according to Wetzels et al. (2009), suggests GoF_{small}, GoF_{medium}, and GoF_{large}, respectively. As seen in Table 4.5, our proposed structural model has a fitness of 0.828 (GoF), representing a strong GoF_{large} fit model.

Table 4.5 Calculation of Goodness of Fit (GoF) Index.

Constructs	AVE	R^2
OHS	0.628	
PSM	0.609	
PSM_MOD	0.605	
TLEADER	0.634	
TLEAD_MOD	0.569	
WRKC	0.590	0.911
Average Scores	0.606	0.911
AVE * R^2	0.552	
GoF = √ (AVE X R^2)	0.743	

***Note*:** GoF_{small} = 0.1; GoF_{medium} = 0.25; GoF_{large} = 0.36.

As seen in Table 7, the originally proposed structural model has a value of 0.743 Goodness of Fit (GoF) suggesting a strong GoF_{large} model.

Table 4.6 Discriminant Validity

	1	2	3	4	5	6
OHS	**0.792**					
PSM	0.386	**0.780**				
PSM_MOD	0.561	0.550	**0.778**			
TLEADER	0.609	0.418	0.610	**0.796**		
TLEAD_MOD	0.577	0.376	0.576	0.801	**0.754**	
WRKC	-0.376	-0.409	-0.380	-0.363	0.321	**0.768**

Source: Author's Calculation: OHS=Human skills, PSM=Public service motivation, PSM_MOD=Moderation of public service motivation, TLEADER=Transformational leader, TLEAD_MOD=Transformational moderation, and WRKC=Work outcomes

Table 4.6 indicates an acceptable degree of discriminant validity with an overall variance between the items of the construct above the average shared deviation/variance for two variables (Fornell and Larcker, 1981). The Fornell-Lacker criterion (Fornell & Larcker, 1981) was employed to measured discriminant validity. Table 4.6 indicates that the square root of AVE of reflective constructs are greater than the related latent variables. The constructs are therefore met with discriminant validity. Table 4.6 indicates an acceptable degree of discriminant validity with an overall variance between the items of the construct above the average shared deviation/variance for two variables (Fornell & Larcker, 1981).

Table 4.7 Results of f^2

Constructs	f^2	Effect Size
OHS	0.045	Small
PSM	0.059	Small
PSM_MOD	0.015	Small
TLEADER	1.774	Large
TLEAD_MOD	0.009	Small
WRKC		

Source: Author's Calculation small: 0.0 < f ^{2} effect size < 0.15; Medium: 0.15 < f ^{2} effect size < 0.35; Large: f ^{2} effect size> 0.35

The effect size (f^2) is interpreted as the independent variable actual contribution to the dependent variable (Cohen, 1988). The f^2 value 0.02 is small, 0.15 is medium and 0.35 is high.

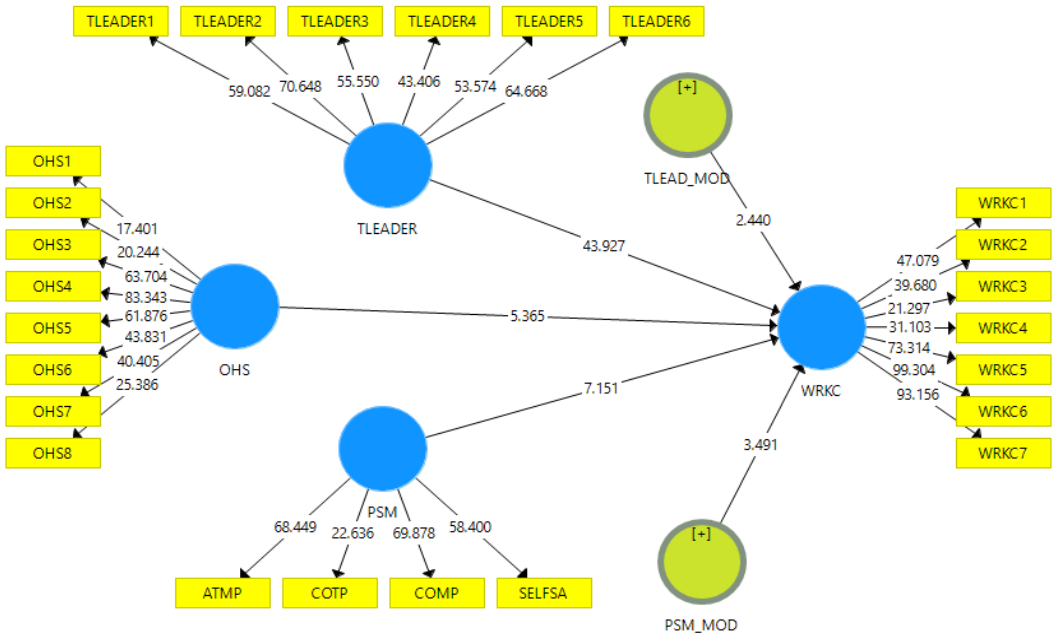


Figure 4.2 Measurement Results

4.0.4 Testing of hypothesis (Testing of Direct Effect)

The direct path coefficients along with the t-values and p-values resulting from the structural analysis are given in Table 4.8.

Table 4.8 Structural Model Results

Hypotheses	Original Sample (O)	Sample Mean (M)	Standard Deviation	T-Statistics	P-Value
OHS→WRKC	0.096	0.097	0.018	5.365	0.000
PSM→WRKC	0.160	0.158	0.022	7.151	0.000
PSM_MOD→WRKC	0.113	0.111	0.032	3.491	0.001
TLEADER→WRKC	0.760	0.760	0.017	43.927	0.000
TLEAD_MOD→WRKC	0.100	0.099	0.041	2.440	0.016

First of all, all directions are statistically significant at the 0.05 level. The study sought to analyze the work outcomes of occupational health and safety by exploring the role of transformational leadership and public service motivation of drivers of intercity public buses. As shown in the Figure 2 and Table 4.8, occupational health and safety was operationalized as the independent variable while employee work outcomes as the dependent variable with transformational leadership and public service motivation as the moderating variables. Further, it is found that, proposed relationship between OHS and employee work outcomes (β = 0.096; t-value = 5.365; p < 0.000) is positive and significant, which is providing support for hypothesis1. Similarly, hypothesis 2 which represents relationship between Public Service Motivation and Employee Work Outcomes is also positive and significant (β = 0.160; t-value = 7.151; p < 0.000). Moreover, proposed relationship between Transformational Leadership and Employee Work Outcomes (β = 0.760; t-value = 43.927; p < 0.000) also provides support for H3.

4.0.5 Test for Moderation

Furthermore, the study tested the moderating effect of Public Service Motivation in the relationship between Occupational Health and Safety and Employee Work Outcomes, which is positive and significant (β=0.113; t-value=3.491; p=0.001). By the same token, the study analyzed the moderating role of Transformational Leadership in the relationship between Occupational Leadership and Employee Work Outcomes, which is significant and positive (β=0.100; t-value=2.440; p=0.016).

The moderating role of Public service motivation in the relationship between Occupational Health and Safety

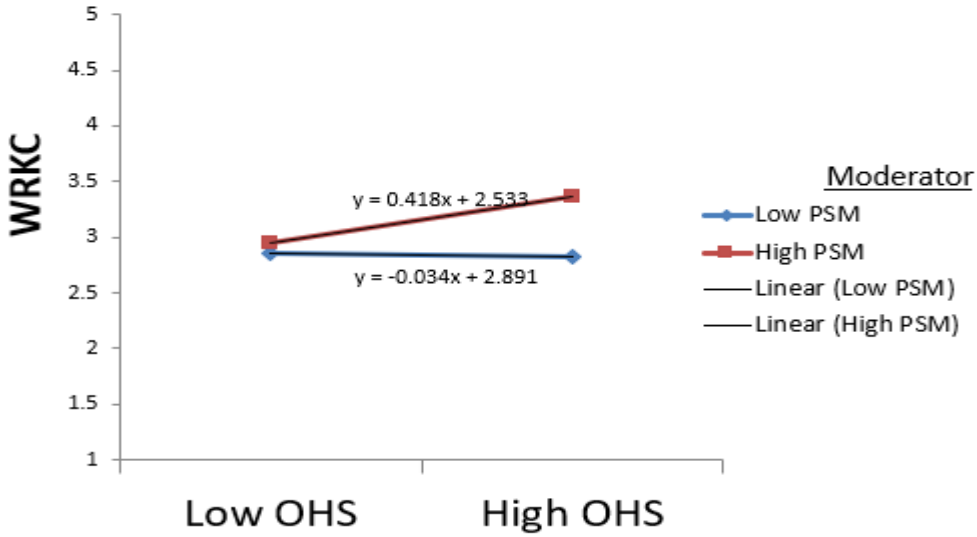


Figure 4.3 The interaction between PSM and OHS.

PSM strengthens the positive relationship between OHS and Employee work outcomes.

The moderating effect of Transformational Leadership in the relationship between Occupational Health and Safety and Employee Workoutcomes.

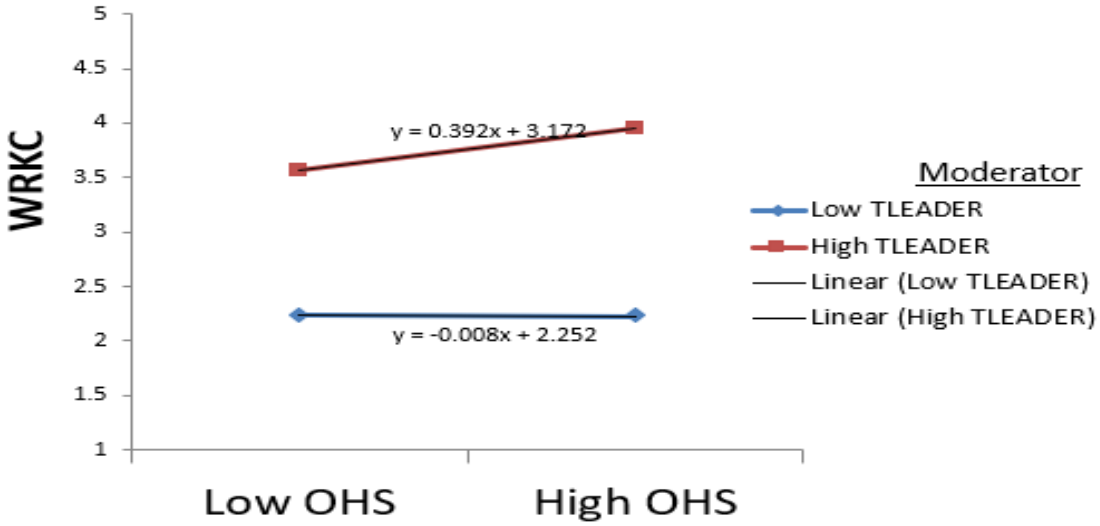


Figure 4.4 The interaction between TLEAD and OHS.

Transformational Leadership strengthens the positive relationship between Occupational Health and Safety and Employee Work Outcomes.

5.0 Discussion

Driver's satisfaction has become an essential component and the leading cause of road traffic injuries/accidents. The study sought to analyze the work outcomes of occupational health and safety by exploring the role of transformational leadership and public service motivation of drivers of intercity public buses.

From the study, all the five hypothesized relationships were confirmed and the study provided transport businesses with the impact of occupational health and safety along with moderating effects of public service motivation and transformational leadership that could facilitate employee work outcomes. The study found

Occupational Health and Safety to have direct positive and significant relationship with Employee Work Outcomes. This is in harmony with the study of Stoffregen et al. (2019) who investigated the indicators, such as environmental contexts, which were connected through 51 countries and regions worldwide with work-related fatality rates and death rates and severe occupational damage rates in 31 European countries. The structural equation modeling analysis found a significant correlation between universal healthcare and individualism with lower occupational deaths (Stoffregen et al., 2019). This indicate that promotion of occupational health and safety improves employee work outcomes in the transport industry. In the same token, Liu et al. (2019) examined the effects of occupational health and safety (OHS) on organizational performance with the mediating influence of Ghanaian power industry firms. The findings demonstrate that there is a strong connection between health and safety at work and job performance. Base on this assertion, Liu et al. (2019) contended that when the workforce is extremely pleased with its health and safety management, it has high employee turnover expectations and vice versa.

Regarding public service motivation, the study found positive and significant connection with Employee Work Outcomes. This is consistent with the work of Kim et al. (2015) who argue that public employees who enter the public sector with high PSM are naturally optimistic in their actions and organizational performance. Similarly, workers are often likely to be drawn with specific motivations for public service careers. PSM is predicted to significantly impact work performance in public organizations since public sector employees are fundamentally empowering people with strong PSMs (Perry and Wise, 1990). This finding supports the work of Bellé (2013) who found the positive link between PSM and job performance after performing a field test in Italy.

On Transformational Leadership, the study found support for the relationship between Transformational Leadership and Employee Work Outcomes. This finding corroborates the work of Amponsah-Tawiah & Mensah (2016) who demonstrated a significant effect on the effective, regulatory, and continuing engagement in the mining sector by using a sample of 370 employees in Ghana. The authors argued that Ghana's management in the mining sector must understand that employees who feel secure and safe in their activities develop emotional loyalty and a deep sense of responsibility to their company and are more likely to participate in it. Again, this finding resonates with the study of Tappura et al. (2015) who argue that management of workplace health and safety is crucial since it helps minimize the costs of illness and disease for employees. These include medical insurance, sick leave and compensation payments for assistants' duty. Therefore, any company needs to improve the health and well-being of its employees to enhance their performance (Gyensare et al., 2017).

Public service motivation was found to moderate the relationship between occupational health and safety and employee work outcomes. The finding is in line with Nguyen et al. (2019). They found that the availability of materials and psychological tools are necessary to increase employee productive work environment concerning victimization in the workplace.

In a similar fashion, the study found the relationship between Occupational Leadership and Employee Work Outcomes to be moderated by Transformational Leadership. This is in tandem with the work of Fulwiler (2011) who argued that persuading the workers that you appreciate them would encourage them to work openly in ways that prioritize their health.

6.0 Conclusions

The study sought to analyze the relationship occupational health and safety and employee work outcomes, the moderating role of public service motivation and employee work outcomes, and transformational leadership and employee work outcomes.

The SmartPLS structural equation modelling analysis revealed that the parameter estimates of occupational health and safety, transformational leadership, and public service motivation were significant. The study found Occupational Health and Safety to have direct positive and significant relationship with Employee Work Outcomes. Furthermore, the study found public service motivation to have positive and significant connection with Employee Work Outcomes. Also, the study found support for the relationship between Transformational Leadership and Employee Work Outcomes. Again, transformational leadership moderates the relationship occupational health and safety and employee work outcomes. In a similar fashion, public service motivation was found to moderate the relationship between occupational health and safety and employee work outcomes.

It is recommended that:

1. Workshops and training sessions on safety to enhance the alignment of safety practices for drivers as industrial employees responsible for transport operations.
2. Employers should implement safety reward programs that enable drivers to follow good levels of health and safety.
3. A motivational framework that affects the job and professional growth of the transport industry should be developed. The study described training and development as a place where workers are well encouraged since most staff do not want to be confined to one part of their work. The transport industry should create a training and development strategy and award programs based on results, which will allow drivers to

enhance their skills and experience in their sector.

4. OHS issues should be minimized, and the public service's motivation improved to boost drivers' efficiency and service quality. Public transportation administrators should build a workforce atmosphere minimizing OHS drivers' problems.

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