# Impact of Workforce Diversity on Employee Performance in Sri Lankan Construction Industry

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Abstract: Workforce diversitv provides heterogeneity to a workforce thereby making it a strategic capability to provide competitive advantage to organizations. Effective management of diverse human resource in the right manner can attract profitability to organizations as human diversity enhances the flow of novelty, creativity and innovation. This research study aims to investigate employee performance in construction industry in Southern and Western provinces of Sri Lanka. Out of numerous workforce diversity factors, age, educational background, work experience and attitudes were selected as the independent variables for the study. When conducting the research,120 questionnaires were distributed among employees engaged in the construction industry to collect data through simple random sampling technique. The results indicated that there's a positive impact of diversity in terms of age, educational background, attitudes and work experiences on employee performance. The outcome of this study would benefit organizations in providing potential considerations to the management and workforce from different perspectives which would enable the distinguishing of dimensions of workforce diversity variables to further improve employee work performance.

**Keywords:** Workforce diversity, Employee performance, Construction Industry

## Introduction

Work diversity is defined as similarities and differences among employees in terms of age, race, religion and cultural background, gender, physical abilities and disabilities and sexual orientation. The success of an organization is determined by its' driving force which is the workforce as it is them who are responsible in carrying out operations. The diversity among workforce could be a challenging factor as well as a strategic capability to the organization. Thus,work diversity could be considered a competitive necessity which should be managed well in order to achieve success and to be effective in performances for an organization.

Srivastava & Agarwal (2012) claimed that people with multiple talents who come from diverse backgrounds, are more capable in acknowledging and grasping business opportunities creatively and rapidly. Christian, Moffitt (2016) stated Porter & that interpersonal conflicts, miscommunication, interpersonal relations destructive and employee turnover would rise if the organizational environment hinders employee diversity thereby not supporting it.

Kurtulus & Amber (2011) postulated that a borderless viewpoint should be adhered by organizations to ensure workforce diversity be a part of everyday operations if they are planning to be more dynamic, profitable in the future sustainance of the organization. Inefficient management of diversity could ultimately enhance discrimination in terms of social, religious, ethnic and educational backgrounds which could result high dissatisfaction and turnover rate among employees.

Moreover, Erasmus (2007) revealed that workforce diversity can bring out negative as well as positive outcomes to an organization based on the approaches adopted by its





13<sup>th</sup> International Research Conference General Sir John Kotelawala Defence University management to manage the diversification of the employees.

Overall, the management requires to understand the ways of diversities in order to effectively deal with and to manage problems pertained to diversity. Individual differences should be recognized, addressed and respected thereby appreciating the individual uniqueness, as a means of encompassing variety to the organization.

Thus, this study is an attempt to bridge the impact of diversity variables and employee performance by developing a framework and to assess the degree of the impact of those variables on the dependent variable, employee performance. In order to conduct the study, executive and operational level employees from the construction industry were considered since the industry itself is endowed of a workforce which seem to have come from various social, economical. cultural and educational backgrounds. Construction industry has a workforce with diverse backgrounds such that it would also bring out various attitudes they have inculcated in them through experiences and learning. All such factors which represent workforce diversity could have a direct impact on their performance as well as the overall success of the organization. Hence, this study strives to analyse the nature of the impact of four workforce diversity elements with employee performance.

The general objective of this study was to identify the impact of the workforce diversity on employee performance in the field of construction in southern and western Provinces of Sri Lanka. The study attempted to achieve the following specific objectives.

To identify the impact of age diversity on employee performance.

To identify the impact of educational background diversity on employee performance.

To identify the impact of work experience diversity on employee performance.

Built Environment and Spatial Sciences Sessions To identify the impact of employees'attitude diversity on employee performance.

## **Methodology And Experimental Design**

Statistical analysis tools were used to examine the impact of workforce diversity on employee performance. The researcher adopted a quantitative approach and self administered questionnaires were used for data collection.

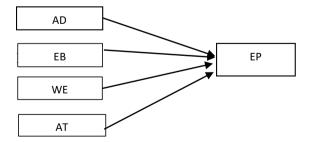
Under the category of 'descriptive research design' the population considered was executive and operational level employees of the construction industry in Sri Lanka. The study population endowed of two construction related organizations and 120 employees were taken as the sample derived from the population through simple random sampling technique. Under the probability sampling method, simple random sampling research technique was used. 5 point likert scale was used as a measurement of survey for the questionnaire and SPSS version 20 was used as the statistical tool for analysis of the responses.

Through an extended review of literature, four hypotheses were derived based on the results of the previously done researches. Age diversity is the calibre of a company to concede all different types of ages within an organization (Kumar & amp; Singh, 2017). Workforce stereotyping is prevalent in workstations involving a varied age group. According to researches, younger employees are viewed as highly qualified and having high potential (Darwin Joseph, 2014). Alghazo et al. (2016) revealed that increasing age exerts positive impacts on employee performance. Hence, the first hypothesis was derived from the previous findings as follows. H1: There is a positive impact of age diversity on employee performance. Most of the researchers including Elsaid (2012) postulated that educational diversity has a positive relation on employee performance. Pitts, Hicklin, Hawes and Melton (2010) found that employees who have come from diverse levels of educational backgrounds of the same workplace can create constructive associations and more interactive involvement. They further stated that it could also transcend levels of creativity and



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General Sir John Kotelawala Defence University innovation. Furthermore, Dainel (2017) claimed that level of productivity of an employee is reflected through his level of education and that education would also be discernible on his personality cognitive and capacities. Accordingly, the following hypothesis was thus formulated as H2: There is a positive impact of educational background diversity on employee performance. Most of the researchers including Lotur & Anbazhagan (2015) have further postulated that there is a positive relationship between diversity in employees' prior work experiences with their job performance. Consequently, a hypothesis was developed as follows based on the findings. H3: There is a positive impact of work experience diversity on employee performance. Findings of Millar and Tesser (2011) , concerned with the moderating role of affective cognitive consistency in the relationship between attitude and behaviour. Allport (1935) defines job attitude as a physiological or a neutral state for willingness, formulated through practice. Velnampy (2010) found that attitudes namely satisfaction involvement and performance are significantly correlated. Saeed et al. (2013) has proved that diversity in attitudes of employees have posititively impacted their performance. Based on the existing literature, the fouth hypothesis was derived accordingly .H4: There is a positive impact of attitude diversity on the employee performance.



AD= Age Diversity, EB= Educational Background diversity, WE= Work Experience diversity, AT= Attitude diversity, EP= Employee Performance.

Figure 1: Conceptual Framework

Source: researcher's construct, 2020

## Results

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**Built Environment and Spatial Sciences Sessions** When the demographic considering analysis, one hundred and twenty executive level employees were considered as the selected respondents in order to study the effects of workforce diversity on employee performance. Out of 120 responses, 62.3%were male employees while 37.7% were female employees. When considering the Sri Lankan construction industry, it was observable that the construction industry has highly attracted male employees more than female employees. Based on the results of the descriptive statistics of this study, it was also observed that the sample was a representative portrayal of the composition of quintessential Sri Lankan construction industry which confines of more male employees than female employees.

Reliability Analysis is defined as gaining of proportion of systematic variation in a scale which will measure the degree of being free from error thereby yielding consistent results.George and Mallery (2003) have defined the following rules for alpha values. If alpha value exceeds 0.9 it is considered an excellent value. Alpha values that exceed 0.8 is considered a good value. An Alpha value that exceeds 0.7 is considered an acceptable value. Alpha values which exceed 0.6 are questionable, An alpha value that exceeds 0.5 are considered a poor value, alpha values below 0.5 are considered to be unacceptable. Thus, a reliability test was done to measure the internal constancy of the variables used in this study. Since the reliability coefficient attained by all the constructs were above 0.06, it could be proved that the reliability of the measurements used in this research study were high as depicted by the table 1 below.

Table 1: Reliability analysi
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Variable	Cronbach's alpha	No.of items
Age diversity	0.720	6
Educational background	0.735	5
diversity		
Work experience	0.810	6
diversity		
Attitude diversity	0.705	6
Employee performance	0.740	10

Under bivariate analysis, correlation is used to determine the relationship between the independent variables and the dependent variable including the direction of the relationship. For this study, Pearson's correlation coefficient was used to show the direction and the significance of the relationship. Based on the findings, it was evident that there was a positive association of the independent variables in terms of age diversity, education background diversity, work experience diversity and attitude diversity on variable.employee the dependent iob performance.

Table 2: Correlation analysis Source: Survey Data (2020)

	Standardized	t	Sig.
	Coefficients		
	Beta		
(Constant)		.186	.852
AD	0.378	3.105	.004
EB	0.369	3.068	.003
WE	0.143	2.348	.022
AT	0.231	2.364	.036

AD= Age Diversity, EB= Educational Background diversity, WE= Work Experience diversity, AT= Attitude diversity, EP= Employee Performance.

Furthermore, under predictive modelling, standardized regression coefficients were also considered to test the variance in employee performance which explained is by age, educational background, work experiences and attitudes.When considering the standardized beta value of the four independent variables, the significance values need to be less than 0.05 in order to be accepted as significant. Further, the result value of beta was found positive which depicts that the impact exerted is positive. The value derived for the impact of age diversity on employee performance was 0.378. A significant value of 0.004 was obtained. When considering the results of the second independent variable, it was evident that increase in educational background diversity would affect employee performance by 0.369. This impact was found to be significant with a significant value of 0.003. Moreover, the value derived for the impact of work experience



Built Environment and Spatial Sciences Sessions diversity on employee performance was 0.143 with a significant value of 0.022. The value obtained for the impact of attitude diversity on employee performance was 0.231 and was also found to be significant with a value of 0.036. When further explained, it could be identified that variation in one unit of attitude diversity would result 0.378 variations in employee performance, variation in one unit of education background would result 0.369 variations in employee performance, variation in one unit of work experience would result 0.143 variations in employee performance and variation in one unit of attitudes would result 0.231 variations in employee performance. Thereby it was manifested that these four variables exerted a positive and a significant impact on employee performance. Hence all four hypotheses were accepted. The obtained results are displayed in the following table.

Table 3: Coefficients of variables Source: Survey Data (2020)

	AD	EB	WE	AT	EP
AD	1				
EB	-307*	1			
WE	.210	230	1		
AT	.406**	067	.075	1	
EP	.543	.086	.268	.512**	1

Since the model is derived to analyse the level of assurance for employee performance, it was also required to investigate the overall predictive fit of the model. The predictive fit capacity is derived from the R 2 value, which obtained the value 0.443 for the model. In order to obtain the R2 value, the R value or the correlation coefficient was considered.The result for the correlation coefficient R for this model was 0 .688 a. This value speculates the degree of the association between the employee performance with the four independent variables of age diversity. educational background diversity, work experience diversity and attitude diversity.

Furthermore, the adjusted R 2 is taken in to consideration in order to reduce the inflation of the R 2 when more independent variables are added to the model. Based on the results as per depicted by Table 4 it was evident that the Adjusted R square value was 0.409. Hence it reflected that 40.9% of employee performance

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General Sir John Kotelawala Defence University is explained by the four independent variables and that there is a variance of 40.9% in the dependent variable due to the effects of the four independent variables used in the study.

Table 4: Model Summary

Source: Survey Data (2020)

Model	R	R square	Adjusted	Std. error	
			R square	of the	
				estimate	
1	0.688a	.443	.409	.18752	

Analysis of variance (ANOVA) is a statistical technique performed to test whether the means of two or more groups are significantly different from each other. It also measures if the regression model used was good in predicting variables that influence the dependent variable. The results of the findings of this study indicated the significant value to be 0.000 which was less than 0.05. Thus, the model is overall fit of data and was good in predicting how the effects of four independent variables impact on employee performance. The results are shown in the table 5 below.

Table 5: ANOVA test

Source: Survey Data (2020)

Model	Sum of	df	Mean	F	.Sig
	Squares		Square		
1. Regression	2.387	8	.458	22.11	.000b
Residual	4.275	91	.029	2	
Total	6.486	99			

#### a. Dependent Variable: Employee Performance

b. Predictors: (constant), Age diversity, Educational background, Work experiences, Attitudes

#### DISCUSSION

Effective management of a diversified workforce is a challenge and a persistent need for any organization. In a dynamic globalized market diversity is recognized as an element of strength and uniqueness for organizations to stand out from the rival companies. Despite the complexity of the context, workforce diversity is paramount for any form of industry in determing overall success and performance. Taking this importance in to consideration, this study was conducted to investigate the effects of Built Environment and Spatial Sciences Sessions workforce diversity on the work performance of employees with special reference to construction industry in Sri Lanka.

After studying previous literature, out of many independent variables of work diversity which have proven to have effects on employee performance, four variables were selected. Workforce diversity in terms of age, educational background, prior work experiences and attitudes were the indepedent variables used to measure their impact on employee job performance. According to the results obtained from the regression analysis of this study, it was revealed that there was a positive as well as a significant impact of workforce diversity on employee performance. When considering the results derived, the findings revealed that there was a positive and significant relationship diversitv and between age employee performance. The results of prior research work also proved how the increase in age diversity positively impacted on employee performance. Age diversity if managed properly would bring positive outcomes to the organizations since different aged employees would stimulate and share diverse perceptions and understanings among each other. This feature could be positively employed in assigning and managing team work.

The results of this research study indicated that there was a significant and a positive relationship between educational background diversity and employee performance. Prior research work depicted by Odhiambo (2014) arrived at the same conclusions stating that there is a positive and a significant relation between educational diversity and employee performance. Hence the hypothesis made based on the prior research findings were further proved and established through the results of this study. An employee's level of education is determined through knowledge, skills and attitudes acquired through learning. Hence, an educated employee is an asset and a human capital. Similarly, a workforce with diverse knowledge on various fields of education would bring multiple rewards to an organization. Human resource managers should contemplate



General Sir John Kotelawala Defence University on enhancing diverse levels of education in employees by providing continuous training and development to enhance multiple knowledge in them.

Moreover, the findings also revealed a positive and a significant relation of work experience diversity on employee performance. Previous research work conducted by Dokko, Wilk, and Rothbard (2009) also proved the positive relationship between the independent and dependent variables mentioned above. The management of the organizations can employ the diversity of work experience of employees through mutual learning by allowing the employees to share their expertise and experience with each other to improve themselves.

The results of the analysis further indicated that there was a significant and positive impact of attitude diversity on employee performance. The results obtained through regression supported this implication. In addition, it further established the findings of previous research work, postulating that there was a positive impact of attitude diversity on the job in terms of employee performance. Attitude is one of the hardest features to be managed and one of the most diverse factors that could be identified in an individual. Effective use of this feature can be successfully employed in creating a positive work culture, employee motivation and enhancing team work in an organization.

Finally, the results stipulated from this research could be utilized in providing recommendations to the senior management of the organization regarding the need to focus more on diversity management to improve the employee performance within the organization. It is also suggested that organizational leaders should formulate policies, laws and procedures on equal employment, regardless of employees' socio cultural background, ethnic group, sexual orientation and gender in order to reinforce mutual respect, creative thinking and innovation within the organization. The deployment of gender heterogenous groups instead of gender homogenous groups would also add creativity and smooth functioning to an



Built Environment and Spatial Sciences Sessions organization. Moreover, it should also be ensured that the most qualified employees are recruited.The diversity among employees should be taken into consideration to improve the variety thereby improving an ingenious organizational culture and an environment. This could be adopted by relevant authorities inorder to make employees feel valued by the organization whilst enhancing their performance.

### Conclusion

This research study aimed to identify the impact of workforce diversity employee on performance in executive level employees of the construction industry. In order to prepare the framework of the research, prior research findings and literature were used as the theoretical basement. The conceptual framework was developed accordingly selecting four independent variables with the dependent variable. the final results, the independent variables in terms of age diversity, educational background diversity, work experience diversity, attitude diversity on the job were proved to have a positive and a significant impact on employee performance. This research provided strong evidence to manifest the impacts of the aforementioned four variables on the dependant factor employee performance. The results of existing literature were further verified and supported through this study. However, this research was conducted limiting to two organizations thus the sample size could have beein increaded otherwise. More studies should be conducted focusing on the impact exerted on other industries too, apart from construction industry. Also, this study recommends future researchers to deploy different other variables to explore their impact on the variance of the dependent variable. The findings of this research could be referred and applied by the management of organizations in effectively managing workforce diversity to derive optimum levels of employee performance.

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Abbreviations and specific symbols



EB= Educational Background diversity

WE= Work Experience diversity

AT= Attitude diversity

EP= Employee Performance

#### Acknowledgment

I would like to express my sincere gratitude to the employees and the managers of the two construction related organizations who took an interest and took part in this research study. Furthermore, I would like to acknowledge my appreciation to my lecturers, friends and colleagues for their insightful comments and encouragement.



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