# The Impact of Government Support on Social Acceptability in Waste Management Projects: A Case of Developing Countries Summera Malik<sup>\*</sup>, Wajid Shakeel Ahmed<sup>†</sup>, Malik Faisal Azeem<sup>‡</sup>, Naveen Farooq<sup>§</sup>

## Abstract

There is a high level of interdependency of different activities during a Waste Management Project (WMP) and these may be helpful or harmful if not looked after from time to time. However, the likelihood of a WMP falling prey to social non-acceptance is quite high. The study adopted government support as moderator on the relationship strength of; Environmental Upgradation, Health Improvement, and Economic Suitability of a WMP with social acceptability for Rawalpindi Waste Management Company (RWMC) as a case in Pakistan as a developing country. The impact of each type of social acceptability was seen separately through standardized coefficients in multiple linear regression. Hayes and Preacher (2010) process was used to evaluate the significant relationship between Environmental Upgradation, Health Improvement, and Economic Suitability of Waste Management (WM) with its social acceptability. The study concluded that there is positive and significant support for the government in establishing its social acceptance with the environmental upgradation, health improvement, and economic suitability of a waste management project for (RWMC).

**Keywords:** environmental upgradation, health improvement, economic suitability, social acceptability, government support.

#### 1. Introduction

The industrial civilization that has revolutionized countries all over the world led to increased economic growth in the 21st century. The rise of industrial society and population growth worldwide contribute significantly to the increase in waste volume and diversity (Akmal & Jamil, 2021), raising their management issues. Cities are the driving forces for social and economic development worldwide and generate huge volumes of municipal solid wastes, which usually exceed urban authorities' management and financing capabilities, and prevent them from effectively; collecting, processing, or disposing off the waste, especially in developing countries. It results in unsustainable solid waste management (SWM) (Ogutu, Kimata, & Kweyu, 2020). Cities with high population growth in developing countries frequently lack institutional resources and capacity to the provision of suitable SWM solutions. Solid waste problem is not properly managed in developing countries since cities and towns cannot cope with the rapid increase of the solid waste production (Tshekiso, Mmopelwa, & Chanda, 2020), that is adding up heaps of garbage more and more. The management and recycling of municipal solid waste is now a major problem in developing countries. It is evident that improper management of solid waste has substantial impacts on public health, safety emissions of greenhouse gases (Xiao, et al., 2020). The increased population, rising economy, quick development and increased standard of community life have substantially accelerated the city's rate of solid waste generation (Guerrero, Maas & Hogland, 2013). Fast urbanization in developing countries has dramatically increased solid waste production and serious social, economic, and ecological consequences. Moreover, poorly handled municipal waste produces various environmental and health problems, particularly in dumping site neighbourhood (Akmal & Jamil, 2021). With an increasing urban population, the amount of solid municipal waste is also growing. This requires municipal SWM systems to be regularly reviewed and improved (Romero et al., 2020). For urban population in both developed and developing countries, SWM

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is a crucial environmental concern. Poor SWM harms the well-being of urban people through infectious diseases and damages the ability to preserve urban environment and aesthetic attractiveness of metropolitan areas (Kubanza & Simatele, 2020).

In emerging economies, the key drivers for the production of large quantities of waste are concerns such as population expansion, new production and consumption, industrialization, increased living standards, and lifestyles. This causes negative performance concerns for waste disposal systems, quick landfilling and inadequate WM services (Tshekiso, Mmopelwa & Chanda, 2020). In developing countries, WM specialists struggle with the rise of slums, an absence of general infrastructure, an insufficient budget, corruption, inefficient education, and community distrust of government (Azevedo, Scavarda, Gusmão Caiado & Fuss, 2021). SWM is a serious issue in urban settlements due to its effect on public health and the physical environment (Tshekiso, Mmopelwa & Chanda, 2020). Besides the environmental and health implications of improper management of solid waste, it causes not only environmental degradation but also killing of animals, an unpleasant environment that adversely affects tourism industry, human injuries, and etc. (Kubanza & Simatele, 2020). Solid waste comprises of; containers waste consisting of public disposal products like plastic sheets and container, cooking waste and markets waste (Muturi, 2021). Solid waste includes; waste produced by municipalities, industrial regions, commercial centres, traditional building sites, deconstruction operations and city services. It comprises all daily products, including containers, beverages, food disposable, newspaper, electronics, battery, and dyestuffs (Tsai, Bui, Tseng, Lim & Hu, 2020). Municipal solid waste is the mixture of substances waste disposed of daily as trash, scrap, and waste by urban and rural population. Typically, municipal solid waste includes cooking waste, garden waste, paper products, plastic containers, metals, glassware, industrial wastes, inorganic matter and diverse scrap products. Approximately 2 billion tonnes of municipal solid waste are produced globally from which about 33% of municipalities remain uncollected (Nanda & Berruti, 2021) that increases it total quantity to an unmanageable bulk for most of the countries in the developing community.

The management of solid waste includes a diverse system of interrelated operations, which contributes to environmental performance of the system (Istratea, Iribarren, Martos, & Dufour, 2020). SWM includes; the waste treatment procedures with goals such as environment and health protection, economic growth, and compliance with societal and regulatory standards (Tsai, Bui, Tseng, Lim, & Hu, 2020). SWM focuses on the entire waste generating cycle: collecting, storing, transporting, separating sources, processing, handling, retrieving and disposing; such systems encourage sustainability and preserve human health and environment, when properly planned and implemented (Ogutu, Kimata & Kweyu, 2020). Management of solid waste is done for several purposes including protecting people's health and promoting environmental quality and providing a clean and healthy living environment sustainability. In developing countries, the most prevalent challenges in SWM involve: inconsistent waste collection, lower garbage collection, and unregulated informal trash disposal (Muturi, 2021) which deteriorates inner townships and cities health and hygiene condition and pose more management challenges for the local governments.

Infectious wastes dumped in unprotected open ground may disseminate various pathogens, polluting the entire environment. This may be quite damaging since these fly, rat and mosquitoes contaminate the whole environment (Thakur & Sharma, 2021). Housings close to dumping sites are more prone to a variety of risk factors, including polluted air, contaminated water, mosquitoes and flies, rodents and rats, which cause variety health and hygiene issues and should be treated seriously by authorities (Akmal & Jamil, 2021). SWM continues to show a variety of shortcomings, such as low collection, infrequent collection, unchecked waste pollution, dumping and garbage burning, uncoordinated involvement in the private sector and absence of basic infrastructures for SWM which causes major health and environmental dangers that can lead to bacterial infections, soil and surface water contamination and a high level of air pollution (Tshekiso, Mmopelwa, & Chanda, 2020). Inappropriate bin collection systems, bad road planning, lack of information concerning garbage collection schedules, insufficient infrastructure, poor road transport and number of waste-collection trucks are said to be affected by the collection, transfer and transport procedures (Guerrero, Maas, & Hogland, 2013). Developing countries lack the infrastructure necessary for depositing infected or

hazardous waste alongside municipal solid waste, including dumpsters and sealed plastic sacks (Sharma, et al., 2020). SWM reports are regularly published in developed countries by various authorities such as European Environment Agency or United States Environmental Protection Agency (EPA), while the availability of data for developing countries is far lower (Romero et al., 2020).

Countries all over the world strive to improve SWM practices of their metropolitan households. Over the course of the next 30 years, population growth, rapid urbanization and economic expansion could increase global waste by 70%, up to 3.40 billion tons per year. The most significant growth in underdeveloped countries is expected, including an increase in the percentage of waste packaging (Azevedo, Scavarda, Gusmão Caiado, & Fuss, 2021). The Economic and Social Affairs Department of the United Nations claimed that in 2018 the urban population of the world was 55%, but is forecast to continue rising up to 68% by 2050, and that over 90% of population growth in Asia and Africa has been reported (Akmal & Jamil, 2021). It is expected that municipal solid waste production will increase to 3.4 billion tonnes by 2050, according to the World Bank (Nanda & Berruti, 2021).

Outdoor dumping cause diseases, such as malaria, typhoid fever, diarrhoea, and other illnesses and hazardous emissions, air, water, and soil pollution. Waste dumps are nearly all over the place (Akmal & Jamil, 2021). In developing countries with weak WM strategies, threats to COVID-19 would be considerably larger. Solid waste is dumped in the open and at poorly managed landfills in many developing countries, where waste pickers without protective equipment scavenge for recyclable goods (Nzediegwu & Chang, 2020). The pandemic has changed the dynamics of waste production, presenting problems for policymakers and sanitation staff, and higher number of infected masks, glove and other protective equipment are generated during the outbreak. Safe management and final solid waste disposal are a critical part of an efficient emergency response (Sharma et al., 2020).

SWM is a common obligation of all stakeholders and actors and each individual is deserving for a clean and safe environment (Ogutu, Kimata & Kweyu, 2020). WM encompasses a wide range of various stakeholders with various areas of interest and they all have a part to play in shaping the city system, although frequently considered as a local authorities' duty. The operational effectiveness of the management of solid waste depends on the active involvement of the municipality and its stakeholders. In order to achieve a good functioning WMS in emerging countries, communications between different stakeholders are of great importance (Guerrero, Maas, & Hogland, 2013). Stakeholder participation should be encouraged in all stages of WM planning in order to promote public knowledge, input and support. Laws have established in the U.S. to include stakeholders in the collection, recycling and reuse of waste is a social service and a free public obligation, which is further argued that environmental services that are fully dependent on public expenditures are not sustainable. Stakeholders should contribute to the quality improvement of their SWM service (Tshekiso, Mmopelwa, & Chanda, 2020).

### 1.1 Developing Country's perspective

In Pakistan, unfortunately, none of the cities have a functioning solid waste disposal infrastructure. The failure of the SWM system has major environmental consequences, such as air and land pollution, clogged drains, and water pollution. Industrial wastes and hospital waste are also considered and treated as ordinary waste. In Pakistan, main stakeholder of SWM is municipal government but as the rate of population is increasing it's impractical to handle solid waste single handily. But now, town municipal administration (TMAs) after devolution is in authority of solid waste administration and management, now they're quite strong. At town, district and provincial level a regulatory framework is needed, and also at national level, formation of commission is the need of the hour.

To improve the public's view and attitude related to solid waste public education and awareness is needed. We can use different strategies for this purpose, e.g., Common person education workshop on waste disposal. By this way a common man can be given education regarding how they can contribute in SWM. In most of Pakistan's largest cities, municipal and local authorities are responsible for collecting waste. Approximately 60-70 percent of solid waste is collected in cities. Fleets for primary collection of waste consists of pushcart and handcarts; and open trucks, containers for arm rolling, tractor and trolley collection systems are employed for secondary waste collection. To augment other collection methods some municipalities, hire sanitary workers and street sweepers. They gather solid waste in small and bins and mounds by using brooms and dump trucks and then store it in informal and formal repositories.

The largest city in Pakistan, Karachi is the second largest in the country and utilizes only three sanitary sites, Lahore utilizes two sanitary sites. Other big cities in the country are planning to establish appropriate landfills. Disposed solid is just dumped outside the urban boundary in many areas. SWM capability and methods differ province to province. The bigger urban vicinity like Lahore has well controlled and treated solid waste in Punjab, and was subcontracted by Turkish Albayrak and OzPak firms. For other major cities of the Punjab, a similar SWM system is proposed. Asian Development Bank's (ADB) Infrastructure and Service Delivery Reform Program has contributed an amount of \$400 to Sindh for its Cities Improvement Investment Program (SCIP). It has announced tenders for an extensive variety of WM projects including the improvement of SWM services in 20 secondary cities. Local waste composes of ash, glass, textile, cardboard, food scraps, leather, paper, plastics, rubber, metals, hardwood and yard waste.

In most Pakistani cities, municipal SWM consists of a door-to-door container system in which only 60% of waste is collected and more than 90% is dumped openly. The roadway and abandoned plots in major Pakistani cities like Lahore, Islamabad and Karachi are overflowing with waste. Dumping of non-collected and illegal waste causes ecological destruction (Akmal & Jamil, 2021). The existing methods of SWM in Pakistan are extremely poor and need to be improved significantly (Azevedo, Scavarda, Gusmão Caiado & Fuss, 2021). Pakistan faces major challenges in SWM which have attracted a great deal of attention because of a rising environmental risk (Akmal & Jamil, 2021). It is vital to remember that effective municipal SWM, i.e., dumping, diversion or recycling, depends largely on a country's population and gross national income (Nanda & Berruti, 2021).

#### **1.2 Rawalpindi Waste Management Company (RWMC)**

Rawalpindi is Pakistan's biggest city. In 1959, the migration from Karachi to Islamabad reduced the number of masses seeking work and business to the town. The town stretches for around 53 square kilometres (59 sq./m). It lies 274 km (170 miles) North West of Lahore district, in northern portion of Punjab Province. Rawalpindi's climatic characteristics are wet subtropical with warm and long summers, relatively short monsoons and wet during winters. Rawalpindi has an annual precipitation of 39 inches (990 mm), primarily during the summer monsoon season. In the winter session, however, the frontal cloud band brings quite heavy precipitation. In many open locations, there were massive illegal and unauthorized disposal sites. No major WM and storage process was governed by the SWM unit, however, it was left to households, which alternatively results in the bulk of waste all over the area.

It was being seen that before the introduction Rawalpindi WMS system almost42.6% was disposed of in open dumps without any treatment, 24.1 percent was burnt and remaining of the municipal solid waste is taken to sanitary landfill. Only 18 percent of overall generated waste is taken Recycling and composition (see Figure 1). Failure in Rawalpindi of the municipal SWM systems was because of the lack of public awareness and community involvement, having no proper resources, equipment, funds and apart from that extreme weather conditions. This failure to manage solid waste has had several environmental effects such as air and soil pollution, drainage blocks and water contamination which were resulting into many infectious diseases and environmental degradation. The efficient upgrading of the WM system was necessary in the city as the increase in waste generation was becoming a serious challenge for the local government.

This resulted in the establishment of Rawalpindi Waste Management Company (RWMC) on 15<sup>th</sup> of July, 2013 under Section 42 of Companies Ordinance for efficient and effective management of waste based on modern technologies. RWMC concluded a deal in the WM business with M/s Albayrak, a mature Turkish company. This WM company's main purpose is to collect waste from doorways and colonies in Rawalpindi to keep the environment clean and free from diseases. Although the services provided by RWMC are much appreciated by the public but still a lot of improvements are required to come up to the standard of the international WM firms. From the time this company came into being, it has never been audited by any registered body. The funds allocated to RWMC are utilized in the best way possible or not, has been a major concern of the locals. Linking of such public based projects on the

bases of their social acceptance is very necessary (Swapan, 2016). From the past literature it has been observed that many of the economically efficient projects like Motorolla iridium and many others failed because of their non-social acceptance (Zheng, 2013). In the context of Pakistan, accountability of such projects is always ambiguous.



#### Figure 1: Municipal Solid Waste Composition in Rawalpindi

Recently, it has been observed that those WMP which have ignored the social acceptance have been a failure (Rahardyan et al. 2004) because of the lack of cooperation. The social non- acceptance is a great obstacle toward the success of the project. Social indicators of a WMP include; environment, health, public knowledge, social acceptance etc. (Momčilović, 2018). Therefore, all the related aspects should be taken into account to increase the future prospects of such a project (Kockelman, 2018) if to make social structure strong through accomplishing reasonable health and hygiene standards. The biggest challenges of WM are; social non-acceptability, lack of government funding for managing the waste and meeting the international standards (Mcallister, 2015; Momčilović, 2018). Social indicator of a WMP include; environment, health, economy, public knowledge, and social acceptance (Momčilović, 2018) and all need to be addressed to a needful level if to accomplish WMP. Hence, there is an immense need to link the performance of WM company in relation to social acceptability against environmental upgradation, health improvement and economic suitability.

Following research questions have been formulated anticipating of the future need to improve WM issues in developing country like Pakistan;

RQ1: How do environmental upgradation, health improvement and economic suitability impacts the social acceptability in a developing country?

RQ2: How the government support moderates relationships among social indicators and social acceptability, thus helping Waste Management Company in a developing country?

#### **1.3 Conceptual Framework**

Figure 2. Conceptual Framework related to moderating role of Government support among Environmental upgradation, Health improvements, Economic



#### **1.4 Research Hypothesis**

H1: Environmental upgradation has an impact on social acceptability for waste management company.

H2: Health improvement has an impact on social acceptability for waste management company.

H3: Economic stability has an impact on social acceptability for waste management company.

H4: Government support has an impact on relationship among environmental upgradation and social acceptability for waste management company.

H5: Government support has an impact on relationship among health improvement and social acceptability for waste management company.

H6: Government support has an impact on relationship among economic suitability and social acceptability for waste management company.

#### 2. Study method

The study was descriptive and conducted with the help of a survey questionnaire. The statistical analysis was performed with the help of Statistical Package for Social Sciences 19.0, as an appropriate tool to easily analyse the data findings (Arkkelin, 2014). Questionnaire was distributed amongst the 30 residents of Rawalpindi to check its reliability, that remained good. Later, the total 230 questionnaires were distributed, out of which 200 responses were acquired from the union councils selected through random sampling. Only valid responses were selected for the analysis. The statistical outcome is better if data entries are more in number (Arkkelin, 2014), and the study opted the same. The gathered data was entered into SPSS and MS Excel, and Cronbach's alpha was used as the internal consistency measure for reliability. All data sets were checked for reliability and validity, and only reliable data-measuring variables were chosen.

The variables with a value of  $\alpha > 0.70$  were maintained. SPSS was used to check the data for outliers and normality. Descriptive statistics were checked and covariance analysis was carried. Now the effect of independent variable on dependent one by one was checked by applying multiple linear regression analysis as the most popular technique of forecasting one variable with the effect of other variables is regression analysis. (Leech, 2002). Hayes Model of Moderated regression was used to investigate the effects of government moderation on the link between the independent variable and dependent overruns.

#### 3. Results and statistical analysis

The goal of this study is to investigate the link between environmental upgradation and improved health, economic suitability with social acceptability along with the moderation offered by the support of the government. In this the direct relationship between environmental upgradation, health improvement, economic suitability and social acceptability of Rawalpindi waste management Company was analysed using simple linear regression using SPSS and formulating the equations mentioned in the previous section. The moderator role of financial attributes of the contractor are being analysed using Hayes Model of Regression using Process V 3.3 in SPSS.

#### **3.1. Descriptive Statistics**

Table1 shows the descriptive statistics of independent, independent and moderating variables.

# Table 1. Descriptive Statistics

			Statis	stics			
		Environmental	Health	Economic	Social	Government	
		Upgradation	Improvement	Suitability	Acceptability	Support	
N	Valid	200	200	200	200	200	
IN	Missing	0	0	0	0	0	
Mean		3.3350	3.2313	3.1063	3.1600	1.8000	
Media	an	3.7000	3.4000	3.1300	3.1800	1.7800	
Mode	•	3.70	3.90	3.13	3.18	1.53	
Std. D	Deviation	.92794	.71635	.73481	.65708	.70904	
Varia	nce	.861	.513	.540	.432	.503	

# 3.2. Multiple Linear Regression

Multiple linear regression was conducted to test our hypothesis  $H_1$ ,  $H_2$ ,  $H_3$ . In order to check that either environmental upgradation, health improvement, economic suitability has impact on social acceptability or not. Table 3 shows the model summary analysis whereas the table 4 represents the multiple variable regression analysis with significance effect.

#### Table 3. Model summary

Model R		R Square	Adjuste	d R Square	Std. Error of the Estimate				
1	.825ª	.680		.675	.37435				
a. Predic	ctors: (Const	tant), economic	suitability, er	tability, environmental upgradation, health improvement					
			С	orrelations					
Environmer	ntal	Health		Economic	Social	Government			
Upgradation		Improvement		Suitability	Acceptability	Support			
Environmer Upgradation		1							
TT 1/1 T			1						
Health Imp	rovement -	.503**							
г. : с	• •, • •••,		.514**	1					
Economic Suitability		.411**							
Social Acce	ptability	.627**	.753**	.584**	1				
Government Support		.617**	.674**	.598**	.735**	1			

## **Table 4. Multiple Regression**

C	oefficients			
Unstandardized Coefficients		Standardized Coefficients	t	Sig.
В	Std. Error	Beta	_	
.414	.139		2.975	.003
.205	.034	.289	6.052	.000
.460	.047	.501	9.874	.000
.186	.043	.208	4.328	.000
	Unstandardize B .414 .205 .460	B         Std. Error           .414         .139           .205         .034           .460         .047	Unstandardized CoefficientsStandardized CoefficientsBStd. ErrorBeta.414.139.205.205.034.289.460.047.501	Unstandardized CoefficientsStandardized CoefficientstBStd. ErrorBeta.414.1392.975.205.034.289.460.047.501

Dependent Variable: Social Acceptability

A multiple regression was calculated to predict social acceptability based on environmental upgradation, health improvement, and economic suitability. A significant regression equation was found

[F(3,196) = 139.08, p<0.05] with an adjusted R<sup>2</sup> of .675 which shows that 67.5% change in dependent variable is predicted by independent variable. Respondents predicted by following equation;

SC = 0.205 \* Env. Upgrade + 0.460 \* Hlth. Imp. + 0.186 \* Eco. Suit. + 0.414 (1)

All independent variable, environmental upgradation, health improvement, economic suitability were significant predictors of social acceptability. Hence, showing that independent impacts dependent variable, thus proving our hypothesis  $H_1$ ,  $H_2$ ,  $H_3$ .

# **3.2. Andrew Hayes Model for Moderation**

Andrew Hayes model for moderation was conducted to test our hypothesis H4, H5, H6. It was used to check whether government support moderates the relation between independent and dependent or not. Table 5 shows Andrew Hayes model for moderation analysis.

# a. Relation between Environmental Upgradation and Social Acceptability with Moderating Effect of Government Support

Table 5 shows that the effect of government support on the relation between environmental upgradation and social acceptability.

R	R-sq.	MSE	F	df1	df <sub>2</sub>	р
.7849	.6160	.1683	104.8224	3.0000	196.0000	.0000
	Coeff.	se	t	р	LLCI	ULCI
Constant	4.3126	.3128	13.7889	.0000	3.6958	4.9294
EU	0837	.0855	9784	.3291	2524	.0850
GS	9149	.1179	-7.7598	.0000	-1.1474	6824
Int_1	.1381	.0371	3.7185	.0003	.0649	.2114

#### **Table 5. Andrew Hayes Model for Moderation Summary**

Interaction effect is visible here as 0 of interaction effect doesn't lie between LLCI and ULCI, therefore the impact of moderator is significant. Hypothesis H4 is proven which states that government support impacts the relation between dependent and independent variable.

b. Relation between Health Improvement and Social Acceptability with Moderating Effect of Government Support

Table 6 shows that the effect of government support on the relation between health improvement and social acceptability.

R	R-sq.	MSE	F	df <sub>1</sub>	df <sub>2</sub>	р
.8199	.6722	.1437	133.9983	3.0000	196.0000	.0000
	Coeff	se	t	р	LLCI	ULCI
Constant	3.2707	.4125	7.9281	.0000	2.4571	4.0843
HI	.1803	.1162	1.5508	.1226	0490	.4095
GS	6907	.1358	-5.0851	.0000	9586	4228
Int_1	.1005	.0415	2.4213	.0164	.0186	.1823

**Table 6. Andrew Hayes Model for Moderation Summary** 

The interaction effect 0 doesn't lie between LLCI and ULCI, hence proving hypothesis H<sub>5</sub> which states that government support impacts the relation between dependent and independent variable. *c. Relation between Economic Suitability and Social Acceptability with moderating effect of Government support* 

Table 7 shows that the effect of government support on the relation between economic suitability and social acceptability. Table 7 shows that 0 of interaction effect doesn't lie between LLCI and ULCI, thus the impact of moderator is significant. Hence hypothesis H6 is proven that government support impacts the relation between dependent and independent variable.

 Table 7. Andrew Hayes Model for Moderation Summary

R	R-sq.	MSE	F	df <sub>1</sub>	df <sub>2</sub>	р
.7802	.6088	.1715	101.6694		3.0000	196.0000
.0000						

	Coeff.	se	t	р	LLCI	ULCI
Constant	4.7802	.3714	12.8720	.0000	4.0478	5.5125
ES	2160	.1109	-1.9472	.0529	4347	.0028
GS	-1.0752	.1335	-8.0558	.0000	-1.3385	8120
Int_1	.1867	.0443	4.2150	.0000	.0994	.2741

# 6. Conclusion

This research is part of the research undertaken to address the problem of the limitation and contribution of the research. This part provides researcher to look forward toward the whole journey of the research. The research was to examine the relation between environmental upgradation with social acceptability of WM company in a reflection to WM. It was seen that the relationship between them is significant. It was checked through multiple regression with other variables too. The result showed that environmental upgradation had a positive impact on social acceptability with the factor  $\beta$  of .205 which means that one unit change in environmental upgradation causes a change of .205 in social acceptability.

Secondly, the research was to examine the relation between health improvements with social acceptability of WM company in reflection to WM theory. It has been seen that the relationship between them is also significant. It was checked through multiple regression with other variables too. The result showed that health improvement had a positive impact on social acceptability with the factor  $\beta$  of .460 which means that one unit change in environmental upgradation is causing a change of .460 in social acceptability.

Thirdly, the research was to examine the relation between economic suitability with social acceptability of WM company in reflection to WM Theory. It reflected significant relationship between them. It was checked during multiple regression analysis. The result showed that economic suitability had a positive impact on social acceptability with the factor  $\beta$  of .186 which means, one unit change in environmental upgradation causes a change of .186 in social acceptability.

Fourthly, the study was to examine the moderating effect of government support over the abovementioned relations. Moderating effect is also found significant on all the relations and it was seen that government support has the positive effect on all the relations. Therefore, it can be concluded that all the relations were found significant along with all the hypothesis.

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