Perception of the Community about the Role of Local Government in Sustainable Development Goals: A Structural Equation Modeling Approach for Khyber Pakhtunkhwa, Pakistan

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Abstract

The Sustainable Development Goals (SDGs) provide a comprehensive framework for fostering sustainable development by 2030. In alignment with this global agenda, the Government of Pakistan has implemented various policies and initiatives to localize the SDGs, emphasizing grassroots-level development. This study investigates community perceptions regarding the role of local governments (LGs) in achieving the SDGs, focusing on key areas such as poverty alleviation, education, healthcare, water and sanitation, employment and decent work, and environmental sustainability. A survey was conducted across eight districts in Khyber Pakhtunkhwa, Pakistan, gathering data from 400 respondents using a five-point Likert scale. Structural Equation Modeling (SEM) techniques were employed to analyze the data and identify the primary factors influencing public perceptions of LG performance in achieving the SDGs. The research explored economic, social, environmental, and governance dimensions, examining how these factors interact to shaping community opinions. Findings reveal a positive correlation between LG initiatives and progress in poverty reduction, education, environmental sustainability, and water and sanitation services. However, the study also highlights negative community perceptions regarding LG performance in healthcare delivery and employment opportunities, particularly in providing quality healthcare services and decent work. Based on these insights, the study offers targeted policy recommendations to enhance LG effectiveness in achieving the SDGs. These include increased investment in health infrastructure, the expansion of employment programs, measures to strengthen public trust in local governance, and greater community engagement in decision-making processes.

Keywords: Sustainable Development Goals, Local Government, Structural Equation Modeling.

Introduction

The Sustainable Development Goals (SDGs) adopted by United Nations (UN) in 2015, comprise an essential global agenda. These goals are actively discussed in countries around the world at national and international levels. National policymakers and global leaders are emphasizing the

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importance of localizing the SDGs, to expedite the achievement of each target. Localizing the SDGs is the process through which the national government devolves all administrative and fiscal power to LGs and where LG takes the responsibilities and carries out the SDGs-related projects and actions. The empowerment of LGs that deliver services that include water supply, sanitation, drainage, environmental sustainability, waste management, food security, poverty reduction, and local economic development are also addressed by this concept. There are some other domains where LG can influence the accessibility and quality of services provided by the provincial government like education, health, and social welfare (Biljohn, 2020). Therefore, it is essential to localize the SDGs to advance the 2030 agenda for SDGs, as LG plays an important role in the implementation of development initiatives (Islam, 2020). Therefore, LGs play a vital role in the accomplishment of SDGs, especially in the developing countries of the world. Numerous societal actors like government agencies, LGs, and civil society must participate, to achieve the SDGs (Dube et al., 2021 & Stafford et al., 2017).

LGs have been identified as crucial actors in the achievement of SDGs, as they are closer to communities and frequently contribute to designing and implementing policies that influence the daily lives of communities. The Khyber Pakhtunkhwa, Pakistan is a province facing both multiple opportunities and problems in achieving SDGs. Khyber Pakhtunkhwa has a lot of natural resources but faces challenges like economic crisis, political instability, and degradation of the environment (Baber, 2023). However, their efficacy in carrying out their responsibilities under investigation, especially the perspective of community perceptions, which are essential for determining how well the local governance efforts are working (Khaliq, 2024 & Jones, 2019). To improve practice and enhance the development programs of the LGs it is essential to understand how local communities perceive their LG's role in achieving the SDGs. Community perceptions have a significant influence on the acceptability of policies and development projects (Abukari, 2020).

Pakistan is a growing economy in South Asia and facing many economic and political challenges. One of the most important lessons that can be learned from MDGs (2000-2015) was the lack of localization for the accomplishment of MDGs. So the SDGs may not be achieved without localization. The country is trying to perform well to achieve SDGs and seeks to shift political, administrative, and fiscal powers from higher to lower levels of government to bring governments closer to ordinary citizens for greater accountability and a better knowledge of their needs and preferences. Pakistan Parliament has approved SDGs as a national development plan, avoiding the issues associated with viewing them as a purely UN agenda. Additionally, the federal government formed the SDGs unit to work for sustainable development. In Pakistan, the role of local government toward sustainable development is just a dim spot due to social, political, and economic obstacles. Despite widespread perception, the country failed to meet the Sustainable Development Goals; LG power and practice are governed by government MNAs or MPAs (Ahmad et al, 2021). In the index ranking 2023, Pakistan ranked 128th out of 166 countries, and in 2024, the country ranked increased to 137th. In UN Sustainable Report 2024 indicates Pakistan track off performance, while there have seen modest in some areas (UN, 2024).

The SDGs (like poverty reduction, health, education, water & sanitation, and environment) that influence community life rely on the initiatives and actions of LG (Sarkar et al., 2020; Parikh et al., 2021). These SDGs have a direct link with community lives, thus, to determine the relationship between the perceived role of LG and selected SDGs empirical verification is necessary. Some studies (Lee and Park, 2022; Naraidoo et al., 2021) examined the community's perception of community Quality of Life and LG trust. Research studies are scarce on the perceived role of LG in the context of SDGs in Pakistan and no study has been traced that examined the role of LG in

SDGs in Khyber Pakhtunkhwa. This research study explores the community's perception of LG's role in achieving specific SDGs in Khyber Pakhtunkhwa, Pakistan. The community perception will be measured on a five-point Likert scale. The study will examine how the community perceives LG's contribution in the attainment of designated SDGs outlined in the LG's policies.

Literature Review

Various studies have investigated the structure and effectiveness of national and local governance systems in connection with the implementation of SDGs at national and local levels. There are a few studies that examined the performance and structure of national and local governments in various countries for SDGs. The SDGs' holistic approach that considers economic, social, and environmental factors indicates that the governance structure should function efficiently with broad initiatives and interdisciplinary challenges (Okitasari et al. 2019). In practice, international organizations and networks like the Sustainable Development Solution Network (SDSN), the Organization for Economic Cooperation and Development (OECD), the United Nations Economic and Social Commission for Asia and Pacific (UNESCAP), and the United Nations Development (UNDP), have released guidelines for the achievement of SDGs. The (SDN) 2015 offers guidelines to assist countries of the world dealing with agenda-2030. It also proposed supporting participants and stakeholders especially governments at national and local levels to figure out the global agenda. Additionally, it started a dialogue on the implementation of the SDGs and prepared national-based developmental strategies for the achievement of SDGs. The UNDP (2017) proposes guidelines that highlight the pressing needs of stakeholders' partnership, identifying competency spaces and country data and offering directions on systematic, united, and progressive methods for achieving data requirements for review processes. Many studies have been conducted about the governance system needed to achieve the SDGs. These studies also made an effort that how the different countries of the world face challenges and overcome these challenges to improve the governance system efficacy and performance. The majority of these research studies have identified issues of governance systems (Allen et al. 2018; Stafford-Smith et al. 2017) and the institutional prerequisites essential for the SDGs to be implemented at the local and national levels (Chimhowu et al. 2019). Even though the significance of practical assistance to support the establishment of the SDGs at a local level and the outcome of the research studies on governance for the SDGs, at the local level hardly exists (Morita et al. 2020). There has been limited focus on the analytical framework that can identify the role of LG in achieving SDGs in developing countries.

To investigate the relationship between LG policies and SDGs the theoretical framework is developed on the basis of relevant literature.

Theoretical Framework

The study includes six SDGs, Poverty, Health, Education, Water & Sanitation, Environment, employment, and decent work. The SDGs agenda emphasizes the greater involvement of LGs in implementing SDGs, every goal targets directly or indirectly has a link with LGs [(Kroll et al., 2019 & Moyer et al., 2019)]. Here we discuss the selected SDGs that are included in the study and that have potential links with Khyber Pakhtunkhwa LG policies. SDG 1 uses a multidimensional approach to view poverty. It proposes coordinated and multiple-level actions. LGs are in the best possible position to figure out those who are living in poverty and to provide resources and services that will help people get out of their present situation. LG in Khyber Pakhtunkhwa took the initiative to help the vulnerable and needy people of the community by providing financial

assistance, educational scholarships, and free technical education and skill training (Ali, 2023).SDG 3 (Good Health), LGs play a significant role in promoting and improving public health services. In Khyber Pakhtunkhwa, they are managing healthcare services which include primary healthcare facilities such as hospitals and the Basic Health Unit (BHU). Ensuring basic health services are accessible to all citizens of the community. LGs are also involved in public health initiatives like vaccination campaigns and disease control. Besides this, local authorities are responsible for the maintenance of health infrastructure such as hospitals and emergency services. SDG 4 (Quality Education), in many countries primary education is the direct responsibility of LGs. They play a crucial role in ensuring access to high-quality education and establishing legislation and initiatives that satisfy the educational requirements of their communities. The Khyber Pakhtunkhwa LG makes sure that the schools are well equipped and provide training to teachers to deliver quality education. They ensure that all children of the community, especially those from marginalized groups, have equal access to quality education. They are responsible for the development, safety, and maintenance of school facilities. They provide essential resources like technology, textbooks, and library books. The LGs are in a good position to recognize and deal with challenges related to school attendance in their respective regions. They monitor assessing the education system in their locality. They monitor school performance, collect data, and take important and correct initiatives for the performance of educational institutions (Khan et al., 2024). SDG 6 (water & sanitation), water & sanitation are closely connected to LGs, as Khyber Pakhtunkhwa LGs play an important role the implementing, planning, and managing sanitation services and water supply in their region. They also supervise the design and construction of sewerage systems, water treatment plants, and sanitation infrastructure and manage water management to protect the environment. Clean drinking water supply directly is linked to the district public health department, where sanitation services are provided by the Tehsil Municipal Administration (TMA). Strong political determination plays a vital role in implementing appropriate policies and ensuring that water and sanitation are given high priority in the LG agenda. Effective leadership influences the achievement of long-term water management plans and sustainable development (Javed et al., 2020). SDG 8 (Employment & Decent work), The LGs may generate Jobs and collaborative growth through resource mobilization local economic development policies. Khyber Pakhtunkhwa, LGs, start infrastructure projects like hospitals, schools, and roads which create jobs, especially in the period of economic downturn. Small and Medium Enterprises (SMEs) could generate employment opportunities, especially in developing countries. LGs may facilitate SMEs through access to infrastructure and financial support. They provide vocational training programs that produce skillful full labor to emerging markets like the Kamyab Jawan Program. These training and technical education are provided in colleges, community-based training centers, or with the collaboration of NGOs. These training programs help the community to secure stable and well-paying jobs. They may promote a safe and secure working environment in local factories through labor laws and protect their rights. LG can integrate entrepreneurs and small-scale industries into their local economic development policies while taking into account local requirements, resources, and markets (Raja, 2020). SDG 15 (Environment), LG can play a vital role in influencing public behavior and fostering environmental sustainability, especially in basic services such as solid waste management, sanitation, and water. By properly delivering these services and involving the community they can significantly affect community behavior and contribute to preserving the environment. Khyber Pakhtunkhwa LG can implement policies to protect the environment's sustainability like controlling industrial pollution,

banning plastic bags, regular community clean-up events, water treatment, and tree plantation (Islam, 2020).

The LGs' efforts influence the socioeconomic conditions of the community and determine their living condition (Hansen 2015; Suk 2012; Abdullah and Kalianan 2008). Where the LGs allocate their funds and personnel have a direct impact on the community's living conditions. This implies that it comes to life satisfaction LG's role needs to be taken as satisfaction with LGs to SDGs achievement. However, previous research studies on local governmental issues are relatively limited. Therefore, satisfaction with LG was included in the present study to analyze the community satisfaction level regarding the role of LG in achieving SDGs. In contrast, communities rate LGs based on political and administrative factors (Cho and Lee 2021; Kang 2018). The political aspect offers the emotional trust of the community and the administrative component refers to the satisfaction with public service delivery provided by the LGs. Therefore, the present research study will consider the administrative aspect when measuring satisfaction with LG in the context of SDG accomplishment. Previous studies have demonstrated that LGs have a direct impact on the accomplishment of SDGs. In addition, it is used as a dependent variable that is influenced by the community's perception of the quality of services offered and accessibility of the LGs (Ko, 2018). Based on the above literature and theoretical framework the study will examine the following hypothesis.

Hypotheses

The following proposed Hypothesis will be analyzed through SEM.

H1: Poverty reduction has a positive significant impact on satisfaction with LG

H2: Quality Education has a positive significant impact on satisfaction with LG

H3: Healthcare services have a positive impact on satisfaction with LG

H4: Environment sustainability has a positive significant impact on satisfaction with LG

H5: Employment & Decent Work has a positive significant impact on satisfaction with LG

H6: Water & Sanitation services have a positive significant impact on satisfaction with LG.

Methodology

The study will analyze the perceived role of LG in the achievement of SDGs in Khyber Pakhtunkhwa. The study at hand relies on primary data collected from the target area through a comprehensive questionnaire. The questionnaires were developed with the assistance of experts and reviewed several research studies of a similar nature having closed-ended questions. The data was collected from the community members. Community perception will be measured on a five-point Likert scale to determine how they rate the services of their LGs. The study survey includes 18 and above-age members, educated and non-educated, in-service, and retired members. The Khyber Pakhtunkhwa province is located in the northern area of the country. The province is divided into seven divisions and 34 districts. Peshawar is the largest and provincial capital city of the province. According to the 2023 census report the total population of the province is 40,856,097. The data was collected from the Pakistan Bureau of Statistics (Govt. of Pakistan, 2023).

Sampling Technique and Sample Size of the Study

Due to financial and time constrained, it is not easy to examine the whole population thus, a sampling technique will be adopted. The study used different sampling techniques for the finalization of sample size, which included random sampling; purposive sampling, and multi-stage

stratified sampling techniques. The selection of a suitable sample size is critical for drawing reliable conclusions from the study. The literature about sample sizes indicates different methods for selecting suitable sample sizes, such as sample-to-item ratio, variable-to-item ratio, and statistical formulas such as (Yamane, 1967). An emblematic sample size of 200 observations is used in studies that use the Structural Equation Model (SEM) as the main estimation technique (Kline 2010). This study follows the following sample formula (Yamane, 1967).

$$n = \frac{N}{[1 + N(e^2)]} ---------------------------------- (I)$$

Where n is the sample size, N is the population size and e is the tolerance error (margin error) for the 95% confidence interval. Selecting sample size from the whole population of the area was selected through eqi-I. After that, a multistage stratified sampling technique was applied (Chaudhry & Kamal, 1997)

$$ni = n\left(\frac{DP}{TP}\right) --------------------------------(II)$$

Where ni is the ith District sample size, n is the sample size selected from total population, DP is the total population of ith district and TP is the total population of the province. Sample size for each ith district was selected through eqi-II.
After the randomization, a multistage random sampling technique was used to finalize the community sample for the analysis. In the first stage randomly three divisions were selected: Peshawar, Kohat, and Bannu. In the second stage within each selected division districts are chosen for the high population. Based on the high population criteria three districts including Peshawar, Charsadda, and Nowshera are selected from the Peshawar Division. Kohat, Karak, and Hangu districts are selected from the Kohat division. Similarly, Bannu and Laki Marwat are selected from the Bannu division. In the final stage, a proportionate sampling technique was applied to select the community sample from each district. Sample size from each district was selected through eqi-II, where 400 respondents from the community were selected to analyze the community's perception of the role of LG. In each tehsil, two union councils, one from the urban called the neighborhood council and one from the rural called village council was selected. Randomly equal numbers of respondents were selected from each union council.

Measurement of the Variables

The data for these variables was collected from community members based on their age, education, and profession. Five-point Likert scales were used. The seven variables were assessed through the expression “strongly agree” (1) and “strongly disagree” (5). All of the items were derived from previous research studies. For poverty five items (PV1, PV2.PV3, PV4, and PV5) were adopted form Ogundele et al. (2012) and Noor (2021); Six items for health (HT1, HT2, HT3, HT4, HT5, HT6) were adopted from Krzych (2018); six items for education (EDU1, EDU2, EDU3, EDU4, EDU5, EDU6) the scales developed by Abdullahi (2021) and Ogundele et al. (2012) were adapted in the present study. For water & sanitation eight items (WS1, WS2, WS3, WS4, WS5, WS6, WS7, WS8) were adopted form Sifullah et al. (2024); five items for employment and decent work (EDW1, EDW2, EWD3, EDW4, EDW5) were adopted from Ferraro et al. (2018); eight items for the environment (EV1, EV2, EV3, EV4, EV5, EV6, EV7, EV8) and satisfaction with local government seven items (SLG1, SLG2, SLG3, SLG4, SLG5, SLG6, SLG7) were adopted were adopted from Lee (2022). The table 1 below shows the description of constructs.

Table 1: Description of Constructs

Constructs	Abbreviation	Items	Abb.
Poverty Reduction	PR	LG effectively addresses poverty	PR1
		LG offered accessible services (health, Edu) to Poor Communities	PR2
		LG's community programs reduce poverty levels.	PR3
		Low-income residents are aware of LG's poverty programs	PR4
		LG provides effective channels for community feedback on poverty	PR5
		Non-profit organizations addressing poverty in your area	PR6
Health	HT	LG provides quality health care services to the community	HT1
		LG Healthcare services are accessible to all poor communities	HT2
		LG has effective emergency health response systems	HT3
		LG providesPreventive health services programs	HT4
		LG allocates resources to health services	HT5
		LG properlymaintained hospitals infrastructure	HT6
		LG effectively collaborates with other healthcare providers to improve services	HT7
Education	EDU	LG offers quality education in public schools.	EDU1
		Education offered by the LG is accessible to poor community	EDU2
		LG actively engages the community in educational decisions	EDU3
		LG ensures school infrastructure is well-maintained and safe	EDU4
		LG effectively manages education funds	EDU5
		LG effectively tackles education system challenges	EDU6
Water & Sanitation	WS	The LG provides clean and safe drinking water for the community	WS1
		LG's drinking water is affordable for all residents	WS2
		LG maintains and upgrades the infrastructure for clean drinking water	WS3
		LG efficiently manages water distribution	WS4
		LG responds quickly to water quality or supply issues	WS5
		LG Engages withother agencies to ensure clean drinking water	WS7
Employment & Decent work	EDW	The LG creates job opportunities for communities	EDW1
		The LG supports job creation and local economic development in our community	EDW2
		The LG provides skill development and training programs aligned with market needs	EDW3
		The LG enforces fair labor practices and ensures safe working conditions for all employees in the community	EDW4
		Effective measures are in place to ensure worker receive wages	EDW5
Environment	EV	LG offers effective waste management services programs	EV1
		LG effectively controls pollution in the community	EV2
		LG protecting green spaces and wildlife	EV3
		LG is taking action to mitigate climate change impacts	EV4
		LG offers programs to raise public awareness on environment	EV5
		LG regularly reports on environmental issues	EV6
		LG's programs effectively address local environmental issues	EV7
		I am satisfied with the LG environmental policies and initiatives	EV8
Satisfaction With LG	SLG	The LG effectively promotes the SDGs in our community	SLG1
		The LG plays a key role in advancing sustainability in our community	SLG2
		LG's efforts have had a visible impact on advancing the SDGs	SLG3
		The LG's actively involves the community in SDG-related initiatives	SLG4
		I believe the LG is committed to achieving the SDGs	SLG5
		I believe LG officials prioritize community needs	SLG6
		LG effectively resolves public grievances	SLG7
		I'm pleased with LG's contribution to SDG achievement	

Measurement Model

The empirical result will be obtained through SEM. The study will confirm the questionnaire content validity by the reliability and Cronbach alpha coefficient for each scale, all of which will be determined with the reliability benchmark set by Hair et al. (2021), with a coefficient value of 0.70 or higher than in every case. The current study will investigate the measurement model which also looks the internal consistency, discriminant validity, and convergent validity. The two most significant steps in the measurement model are reliability and validity testing. Reliability assessment looks at the tool's consistency and stability over time across various items. The primary objective of these tests is to determine whether they produce consistent and reliable results. The instruments that do not have reliability generate inconsistent and inaccurate results. These inaccurate results are unsuitable for meaningful conclusions. On the other hand validity testing describes the instruments' intended attributes: validity testing examines the extent to which the instruments measure accurately its intended characteristics. Validity testing will determine whether it produces valid results. Lack of validity demonstrates that the tools do not measure their designated attribute leading to results that will be either irrelevant or insignificant. So, evaluating measurement model reliability and validity tests is important to ensure accurate and consistent results.

Discriminate validity measured the construct and confirmed that the construct being measured are distinct from one another. In the SEM the discriminant validity is examined using the Fornell-Larcker criteria. The diagonal components indicate the square root of the AVE for each construct, whereas the off diagonals demonstrate the correlation between the various constructs. Comparing the diagonal with the off diagonal can be found whether each construct has discriminant validity, or the discriminant validity may be determined by comparing the square roots of AVE with the correlations. Once the measurement model constructs is found reliable and valid. The study proceeds to assess the structural model results. Finally model explanatory and predictive power will be examined.

Results and Discussions

Demographic Information

The following table 2 provides the profile of respondents, whose interviews and information collected for the analysis.

Table 2: Respondent information

Age	Number (%)	Qualification	
18-25	120	Illiterates	15
26-36	110	Primary education	21
37-48	90	Secondary education	27
49-50	70	Secondary and vocational education	37
50-65	10	University graduates	110
Total	**400**	In services government servants	120
		Retired government servants	70
		Total	**400**

Sample Distribution and Respondent Demographics by District

The sample size distributions across the districts are shown in table 3. The sample size is divided into rural and urban regions. Out of the total sample, 44% were selected from rural areas and 56%

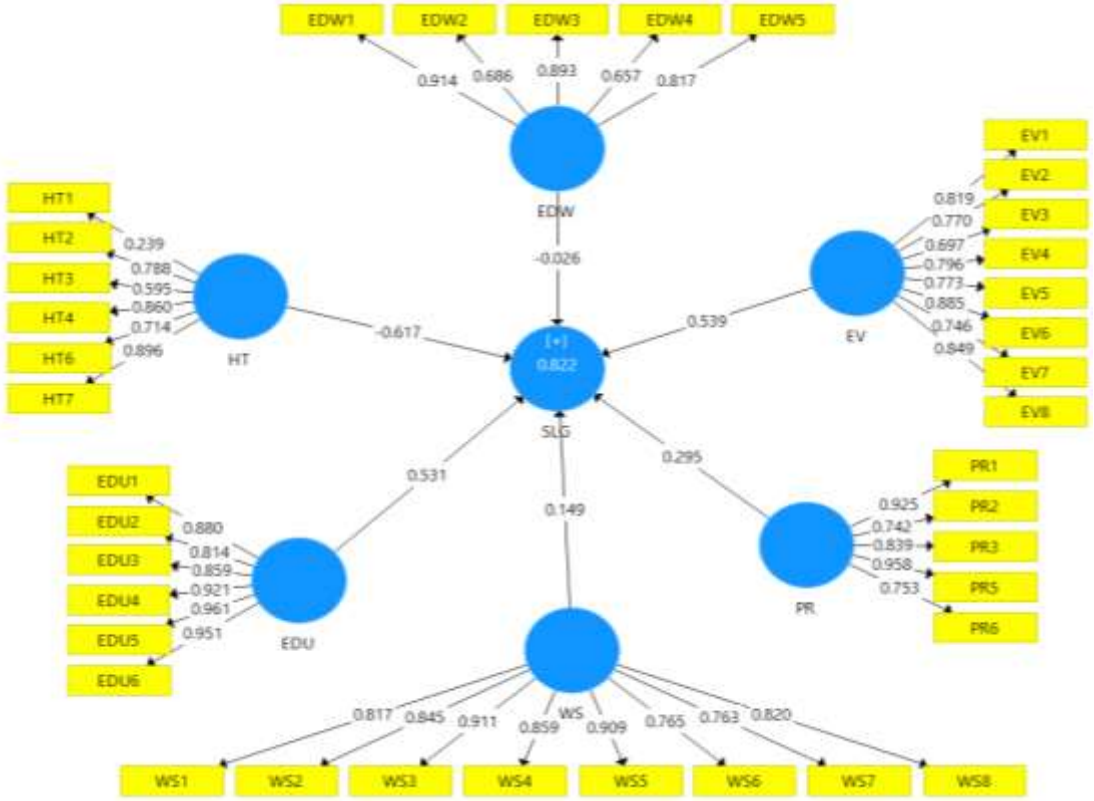
were selected from urban areas. 44% rural respondents and 56% urban respondents from Peshawar, 64% rural respondents and 36% urban respondents from Charsadda, 48% rural respondents and 54% rural respondents from Nowshera, 27% rural respondents and 73% urban respondents from Kohat, 31% rural respondents and 69% urban respondents from Hangu, 60% rural respondents and 40% urban respondents from Karak, 29% rural respondents and 71% urban respondents from Bannu and 35% rural respondents and 5% urban respondents from Lakki Marwat were selected.

Table 3: Sample Distribution and Respondent Demographics by District

District	Sample Size	Rural Respondents	Urban Respondents	Rural Percentage	Urban Percentage
Peshawar	143	63	80	44.00%	56.00%
Charsadda	55	35	20	64.00%	36.00%
Nowshera	52	24	28	48.00%	54.00%
Kohat	37	10	27	27.00%	73.00%
Hangu	16	05	11	31.00%	69.00
Karak	25	15	10	60.00%	40.00
Bannu	41	12	29	29.00%	71.00%
Laki Marwat	31	11	20	35.00%	65.00%
Total	**400**	**176**	**225**	**44%**	**56%**

Model Estimation

Figure 1: Measurement Model



The study used the Partial Least Square Structural Equation Modeling (PLS-SEM) to assess the hypothesis. In order to verify the validity and reliability of the data, the study first validated the measurement model (Fig-1). The study examined the measurement model results and after the confirmation of measurement model results, structural model results were tested.

Finding of Measurement Model

The study examined construct reliability by evaluating both Cronbach's alpha and composite reliability. Furthermore, convergent validity was examined by evaluating factor loading and Average Variance Extracted (AVE). The measurement model was confirmed by using the Fornell-Larcker criterionand Heterotrait-Monotrait (HTMT) ratioas discriminatory validity, which is demonstrated in Table 4 and Table 5 respectively. The study examined internal consistency reliability. The Cronbach's alpha values were checked and found they were above the threshold value, of 0.70. The study also examined composite reliability and confirmed it is also greater than the threshold value of 0.70. Table6indicates the values, which are more than the threshold value, of 0.70. Discriminant Validity measurement confirms that each latent construct in the model is distinct from each other. The table 4 demonstrates the discriminant validity using the Fornell-Larcker Criterion. The construct Education (EDU) diagonal value of 0.90 is higher than the off-diagonal values such as EDW (0.62), EV (0.80), HT (0.89), PR (0.80), SLG (0.75) and WS (0.82). All of the constructs follow this Pattern. Similarly, the square roots of the AVE (diagonal values) of all constructs are higher than the correlation (off-diagonal values). The diagonal values of EDW (0.80), EV (0.79), HT (0.79), PR (0.85), SLG (0.83), and WS (0.84) are all higher than the off-diagonal values mentioned in Table 4. These numbers confirm that each has discriminant validity. This demonstrates that the construct is distinct from one another in capturing unique variance.

Table 4: Discriminant Validity (Fornell-Larcker criterion)

Fornell-Larcker criterion							
	EDU	**EDW**	**EV**	**HT**	**PR**	**SLG**	**WS**
EDU	0.90						
EDW	0.62	0.80					
EV	0.80	0.79	0.79				
HT	0.89	0.65	0.74	0.79			
PR	0.80	0.58	0.72	0.72	0.85		
SLG	0.75	0.62	0.76	0.59	0.77	0.83	
WS	0.82	0.72	0.76	0.77	0.77	0.78	0.84

To verify the model's effectiveness the study investigated the Heterotrait-Monotrait (HTMT) ratio in below table 5. HTMT is another method to evaluate the construct's discriminant validity. The greatest threshold value of the present study is 0.89; most of the constructs' values are below the threshold value of 0.90 advised by (Hair et al., 2021). As a result, the discriminant validity was validated.

Table 5: HTMT results; Heterotrait-Monotrait ratio (HTMT)

	EDU	EDW	EV	HT	PR	SLG	WS
EDU							
EDW	0.65						
EV	0.85	0.86					
HT	0.90	0.69	0.83				
PR	0.85	0.63	0.90	0.82			
SLG	0.77	0.65	0.81	0.64	0.80		
WS	0.87	0.77	0.82	0.87	0.83	0.83	

EDU (Education), EDW (Employment & Decent Work), EV(Environment), HT(Health), PR (Poverty Reduction), WS (Water & Sanitation) and SLG (Satisfaction with Local Government) all have Cronbach's alpha values greater than 0.70 showing excellent reliability. Cronbach's alpha value for EDU is 0.95, for EDW is 0.86, for EV is 0.91, HT is 0.79, for PR is 0.90, for SLG is 0.93 and for WS is 0.94. Like Cronbach's alpha alternative measure of internal consistency reliability is measured the "rho_A". The values of "rho_A" are also greater than the threshold value of 0.70 indicating acceptable reliability. Composite reliability is also checked, which is another measure of internal consistency. The value of composite reliability is greater than the threshold value of 0.70, which confirms the internal consistency reliability of each variable. The convergent validity is measured through Average Variance Extracted (AVE) in table 6. The AVE shows how much variance in the observed variables is explained by the latent construct. A value greater than 0.50 is considered an acceptable value. All the values of AVE in table 6 are greater than 0.50. EDU, EDW, EV, PR, WS, and SLG have AVE values greater than 0.50 and demonstrate significant convergent validity. HT has the lowest AVE value of 0.51 but it is still adequate, and it indicates that it convergent validity might be improved.

Table 6: Construct Validity and Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	(AVE)
EDU	0.95	0.96	0.96	0.81
EDW	0.86	0.91	0.90	0.64
EV0	0.91	0.92	0.93	0.63
HT	0.79	0.91	0.85	0.51
PR	0.90	0.93	0.93	0.72
SLG	0.93	0.94	0.94	0.70
WS	0.94	0.94	0.95	0.70

Findings of Structural Model

The study measures the structural model. In the structural model path coefficients are investigated through OLS regression. OLS regression of each endogenous construct on its related predictive constructs is employed to compute the path coefficient in the structural model. The study examined the relevance and significance of the structural model linkages (Path Coefficient). The results of the Path Coefficient are presented in table 7. Using bootstrapping techniques, the direct effect between exogenous and endogenous variables was examined. The result indicated that out of six endogenous variables four have a positive significant relationship with endogenous variables, but

the two variables indicate a negative relationship. The regression coefficient (β) indicates the direction and strength of the nexus between endogenous and exogenous (SLG in this case). To check all the hypotheses of the study the regression coefficient (β) was examined and identified positive significance relationship between EDU and SLG (β= 0.53, t= 9.79, p = 0.00), EV and SLG (β= 0.54, t= 9.00, p = 0.00), PR and SLG (β= 0.29, t= 5.36, p = 0.00) and WS and SLG (β= 0.15, t= 2.64, p = 0.01). So, these variables EDU, EV, PR, and WS have a positive significant relationship with SLG, because the t- t-value is less than 1.96 and the p-value is below 0.05. The positive relationship indicates that LGs contribute to poverty reduction, environmental sustainability, and water and sanitation. The LGs' initiatives to improve living standards and reduce poverty in marginalized communities lead to a higher level of satisfaction with governance (Pandeya, 2024). The perception of the community about the role of LGs in education significantly affects satisfaction with LGs. When they invest in education infrastructure and prioritize education, the community perceives these efforts positively and these efforts build trust and lead to greater satisfaction with LGs (Khan, 2007). Similarly, the positive relationship between environment, water, and sanitation indicates that LG efforts in sustainable environments like waste management, quality sanitation, and clean drinking water provision reflect effective LG policies in the eyes of communities (Adorsu-Djentuh 2018; Abeysuriya, et al., 2019) The variable EDW indicates a negative insignificant relationship with SLG (β= -0.03, t= 0.81, p = 0.00). EDW and SLG have a negative significant relationship, where β value (-0.03) indicates a negative weak relationship, the t statistic value (9.84) is greater than threshold 1.96 and the p-value (0.00) is below 0.05. HT and SLG have a negative insignificant relationship (β= -0.62, t= 0.81, p = 0.43). According to Health System governance theory, the LGs play a significant role in implementing high-quality healthcare services. The negative and insignificant relationship may demonstrate issues like insufficient medical infrastructure, and lack of financial resources at a local level (Lewis, 2006). The negative relationship between LGs and employment; is the community expectation for employment and decent work may be inadequately fulfilled by LGs in this case (Ayoade (2016); Uzochukwu et al., 2015; Baba, 2013). The variable EDW indicates a negative insignificant relationship with SLG (β= -0.03, t= 0.81, p = 0.00). EDW and SLG have a negative significant relationship, where β value (-0.03) indicates a negative weak relationship, the t statistic value (9.84) is greater than threshold 1.96, and the p-value (0.00) is below 0.05. HT and SLG have a negative insignificant relationship (β= -0.62, t= 0.81, p = 0.43). A higher R^2 value indicates a better fit of the model. It means that the greater part of the variance in the dependent variable is explained by the independent variables. The R^2 value of 0.82 confirms that the model of the study is a better fit. The value 0.82 indicates that 82% of the variation in the dependent variables (SLG) can be explained by the independent variables.

Table 7: Path Coefficient

	β Value	T Statistics	P Values	R Square
EDU -> SLG	0.53	9.79	0.00	0.82
EDW -> SLG	-0.03	9.84	0.00	
EV -> SLG	0.54	9.00	0.00	
HT -> SLG	-0.62	0.81	0.43	
PR -> SLG	0.29	5.36	0.00	
WS -> SLG	0.15	2.64	0.01	

Conclusion

The study explores the important role of LG, how effective local governance is crucial for the accomplishment of SDGs and considers LG in Khyber Pakhtunkhwa as an important platform for the implementation of SDGs at the local level. This study was conducted in the province of Khyber Pakhtunkhwa, Pakistan, and data was collected from 400 community members in the selected area. The results of the study demonstrate that poverty reduction, education, water & sanitation, and the environment have a positive significant impact on LG. The results indicate that the community gives high value to the LG services in the areas of education, poverty reduction, and environmental sustainability. The results align with the previous studies which suggest that LG representatives bring positive changes when they are empowered (Cheema et al., 2024; Mahmood et al., 2023). But it gives a negative response to the healthcare services; however, LG may need more attention on improving healthcare services to achieve (SDG 3) and increase public satisfaction. This result is like some previous studies that proposed improvement in the healthcare sector is required to provide quality health services to the community (Rehman et al., 2024; Cheema et al., 2024; Ali et al., 2023). The positive relationship identified that when LGs address the needs and demands of the public, they feel satisfaction and support their LG. LG gives attention to those SDGs that directly impact on the community like poverty, health, education water & sanitation, and the environment. These SDGs are not only important but also play a crucial role in shaping the perception of local governance. The study explores that the health services in Khyber Pakhtunkhwa are not positively perceived, so healthcare services need high-level improvement.

Policy Recommendations

The federal government must acknowledge the role of LGs, so both federal and provincial governments should rely on LGs not on MNAs and MPAs because LGs are the ultimate solutions for the achievement of SDGs. Community perceptions in areas like poverty reduction, education, water & sanitation, and environment are positive and show their positive satisfaction level with LG. The negative perception of the community regarding health, employment, and decent work the LG improves the local health system. The gap between community expectations and community perception will be minimized by investing in local healthcare infrastructure including mobile healthcare services for rural areas and establishment of primary health care centers. To provide job opportunities LG needs to offer technical and vocational education and development of the local economy. The LG must be empowered to a greater extent to contribute to the global agenda and more especially for the betterment of their communities.

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