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Quality Education and Sustainable Development Goals: A Study of SAARC Countries

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Abstract
The South Asian Association of Regional Cooperation (SAARC) recognized education as a fundamental right. Education entails the capacity to acquire knowledge such that a transformation can occur within oneself or the sharing of knowledge to bring about change in others. It is regarded as a means to achieve various aspects of development. This study explored the association between sustainable development goal 4 (SDG 4) which focuses on quality education, and achievement of other SDGs within SAARC member countries. Using the Pearson's Correlation analysis, it was concluded that the goal of quality education would contribute to the achievement of majority of the SDGs. It was recommended that the government should work with education institutions towards uplifting the education system through increased funding in the SAARC countries.

Keywords: Quality Education, Sustainable Development Goals, SDG 4, SAARC Countries

1. Introduction

Education has been recognized as one of the most potential agents that can be used not only to transform the world but also for self-enlightenment. Education provides individuals with the capability to comprehend the things in the right manner and apply this understanding in real-life scenarios (Thangeda, 2008). Education serves as a pivotal catalyst and gateway to foster economic development and alleviate poverty within any economy (Bukhari et al., 2021). There are four fundamental pillars of education which are learning to know, learning to do, learning to live together, and learning to be, which collectively enables individuals to lead sustainable lives (Delors, 1996). Quality education consists of aspects such as skill development, school infrastructure, learning resources, technology and equipment, teaching methodology, program enrolment, qualifications, performance awards, co-curricular activities, as well as perspectives of both educators and students in the institutional management and evaluation of education (Darling-Hammond, 2000; UNESCO, 2016).

Nations across the globe have been actively engaged in the improving education and to make it available for every citizen (Saini et al., 2023). This commitment was also reflected by the United Nations Sustainable Development Goals, where Goal 4 was dedicated to Quality Education. The 17 goals aspire to be universally applicable, spanning both developing and developed countries, and offer guidelines for achieving global sustainable development. These goals reveal trade-offs, interdependencies, and synergies among them, integrated into the policies of all United Nations member states (United Nations, 2015b). As aptly stated by the United Nations (2015a), the objectives and aims of the 2030 Agenda were established to strengthen efforts over the forthcoming years in domains crucial to both humanity and the planet. These goals were seamlessly interconnected and unified, harmonizing the triad of sustainable development: the economic, social, and environmental dimensions.

'Quality Education,' the focal point of Sustainable Development Goal 4 (SDG 4), has been defined by UNESCO (2016) as 'ensure inclusive and equitable quality education and promoting lifelong learning opportunities for all'. SGD 4 is dedicated to lifelong, equitable, inclusive, and quality education, addressing barriers such as poverty, funding gaps, discrimination, resource scarcity, and the cost of education (Ferguson and Roofe, 2020; Saini et al., 2022). SDG 4holds a central position in achieving other sustainable development objectives. UNESCO (2016) outlines the principles for interpreting SDG 4 in the following ways: firstly, 'Education is an essential human right and a facilitating right'; secondly, 'Education is a benefit for the public'; and thirdly, 'Equality between genders is closely connected to the universal right to education'. This study aims to establish correlations between SDG 4 and other sustainable development goals.

2. Review of Literature

Bangay (2016) explored the contribution of education in sustainable development through a case study of India. He observed that the sustainable development goals also provide evidence of the position of education in improvement towards sustainability. He highlighted the fact that education changed according to environmental and climatic changes. He inferred that education provided awareness, knowledge and skill that would help in the achievement of sustainable development goals across the nations.

Vladimirova and Le Blanc (2016) in their research conducted content analysis on 37 global reports under the flagship of United Nations to find linkage between education and other SDGs. They found that after consolidation of all the links from the respective reports, only SDG 14 was exempted. They observed weak coverage between SDG 4 of education and SDG 12 to SDG 15 while other SDGs received more attention in the reports. They indicated that the SDG 1, 2, 4, 5, 8, 9 and10 showed reversible linkage while other SDGs had one way linkage. They concluded that their model can be used to establish linkage between other goals as well.

Webb et al. (2017) in their article examined the notion of live long learning and its importance to achieve the sustainable development goals. They observed that the association between education and sustainable development goals have been highlighted in various research studies especially for the developing nations. They draw attention to the inequalities which persist in respect to gender and socio-economic conditions not only at primary or secondary levels for younger generation but also at tertiary levels for the adults as well which lead to insufficiency for the achievement of goals. They suggested for the researchers and educators to divulge the significance for lifelong learning.

Boeren (2019) in his research explored the targets which fell under the quality education goals for sustainable development (SDG 4) in the categories of micro, meso and macro. He established that the micro category was linked with children and parents, the meso category was linked with school and other educational institutions and macro category was linked with legislation and their cooperation was important for improvement in quality education. He suggested to focus on factors like raising awareness among people, providing monitoring systems, quality training and partnership among stakeholders so that quality of education could be enriched.

Madani (2019) in his study examined the goal of education for all regarding education quality. He divided the data into three sub themes namely – outcomes, analysis, and evaluation of policies for a period between 1990 to 2010. He identified that the education quality was observed using range of indicators which were student teacher ratio, qualification of teachers, government spending on education, test scores and time spent by students in school. He inferred that due to different situations

in every developing country, such framework for assessment of education quality were required that were flexible.

Hussaini (2020) assessed the long-term association between higher education and economic performance of South Asian Countries. He used panel co-integration analysis for this study. He observed that there was a need for South Asian countries to spend more on higher education to increase the economic growth. He also assessed the increasing gap between south Asian countries and other Asian Countries in policy framework for higher education which further led to better economic performance. He suggested that the government policies should to be made in a manner that gave higher education the much-needed attention and overcome economic disparities.

Yadav (2020) in his research examined the concept of education for sustainable development. He also attempted to assess the actions taken by the Indian Government to remove illiteracy from the country and provide education to all. He observed that education for sustainable development help individuals attain knowledge and skills along with values that are important for sustaining the future. He inferred that to achieve education for sustainable development, it was essential to incorporate the subjects like climate change, poverty, risk management, sustainable consumption, and biodiversity into the curriculum.

Bukhari et al. (2021) in their research undertakes a comprehensive investigation into the dynamic interplay between different educational streams and their impact on poverty across selected economies within the South Asian Association for Regional Cooperation (SAARC). The scope of their study spanned from 1983 to 2016 with the focus on fully modified ordinary least square (FMOLS) approach through the lens of the Kuznets curve. Their findings illuminate the non-linear nature of the relationship between education and poverty which emphasized on the need for tailored policy interventions to maximize the positive impact of education on poverty reduction in the South Asia.

Pakkan et al. (2022) in their study assessed the impact of 16 sustainable development goals on each other in a way that would give clear insight to the universities of attaining them. They used Spearman Rank Correlation on the data retrieved from the Scopus database of the last five years. They found most goals to be significantly or moderately correlated to one another. They suggested that the stakeholders of universities should coordinate to make sustainable development goals the core of their management and further help in the achievement of these goals.

Saini et al. (2023) in their study explored the sustainable development goal for quality education and examined the various efforts made by the Indian Government to attain the milestone by the year 2030. They analysed the various indicators of SDG 4 with other sustainable development goals using correlation and exploratory data analysis from which significant associations were found. They concluded that the associations would enable the policy makers towards modification towards existing measures and strategies as well as benefit the society with the understanding of the role of sustainability in development.

3. Statement of the Problem

Quality education was seen an essential component of development, especially for developing nations, which underscored its interdependencies with other aspects of sustainable development, making a comprehensive study of such factors crucial for overall improvement. The South Asia region is characterized by its dense population and widespread poverty, allocates a mere 0.9% of its GDP towards educational investments (Bukhari et al., 2021). The literature review reveals a significant research gap in exploring the association between quality education (SDG 4) and other Sustainable Development Goals (SDGs) within the SAARC (South Asian Association for Regional Cooperation)

countries. While valuable insights have been provided by existing studies on the relationship between education and sustainable development goals, they lack a specific focus on the SAARC region, encompassing Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. Each of these countries possesses distinct socio-economic, cultural, and environmental contexts that may influence how quality education contributes to achieving other SDGs. By directing future research towards the SAARC region, policymakers and educators can benefit from targeted recommendations and insights to strengthen education's role in attaining sustainable development goals and addressing regional challenges.

4. Objectives of the Study:

- To study the level of Quality Education in South Asian Association for Regional Cooperation Countries.
- To evaluate the association between Quality Education and other sustainable development goals.

5. Hypothesis of the Study

H01: There is no significant association between Quality Education and Poverty.
H02: There is no significant association between Quality Education and Food Security.
H03: There is no significant association between Quality Education and Health.
H04: There is no significant association between Quality Education and Gender Equality.
H05: There is no significant association between Quality Education and Sanitation.
H06: There is no significant association between Quality Education and Sustainable Energy.
H07: There is no significant association between Quality Education and Economic Growth.
H08: There is no significant association between Quality Education and Infrastructure.
H09: There is no significant association between Quality Education and Inequality.
H010: There is no significant association between Quality Education and Sustainable Cities.
H011: There is no significant association between Quality Education and Consumption.
H012: There is no significant association between Quality Education and Climate Change.
H013: There is no significant association between Quality Education and Life below water.
H014: There is no significant association between Quality Education and Life on land.
H015: There is no significant association between Quality Education and Peace.
H016: There is no significant association between Quality Education and Partnership.

6. Research Methodology

This research was descriptive in nature and considered the eight members of South Asian Association for regional development (SAARC) which are, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. The backdated normalized data was used and was taken from the UN sustainable development data base and sustainable development reports 2022 for the backdated five years from 2017 to 2021, along with journals, magazines, and other published data for the study. The normalization of the data was done as:

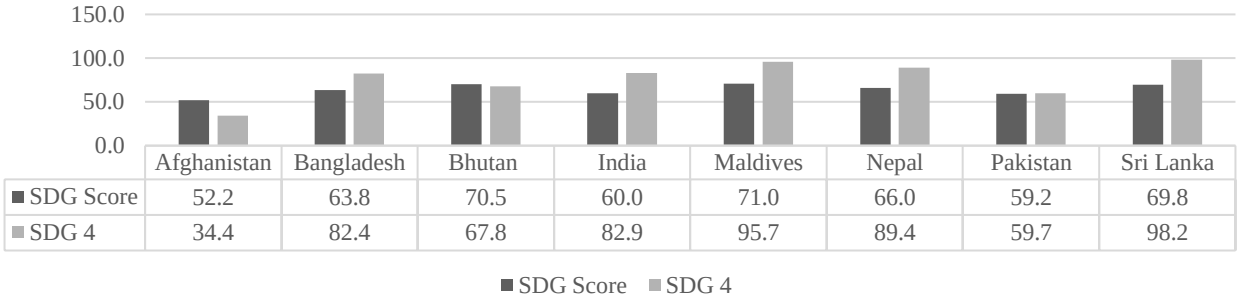
The upper and lower bounds were established and the variables were transformed linearly to a scale between 0 and 100 with the help of the following rescaling formula for the range [0; 100]:

$$x' = \frac{x - min.(x)}{max.(x) - min.(x)} \times 100$$

where, x was the raw data value; max/min denoted the upper and lower bounds; x' was the normalized value after rescaling.

7. Evaluation of Quality Education in SAARC Countries

Figure 1: SDG overall score and SDG 4 for SAARC countries



	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
SDG Score	52.2	63.8	70.5	60.0	71.0	66.0	59.2	69.8
SDG 4	34.4	82.4	67.8	82.9	95.7	89.4	59.7	98.2

Source: Authors' Construction

The data presented in the figure 1 provide valuable insights into the progress of SAARC countries in achieving sustainable development goals, particularly concerning quality education. Afghanistan's SDG score of 52.2 suggested that the country was making progress toward sustainable development, but there were still considerable challenges to address. The low SDG 4 score of 34.4 indicated that there was work to be done to ensure that all Afghan citizens had access to quality education, which was crucial for their individual well-being and the country's overall sustainable development. The data for Bangladesh revealed a relatively positive picture with an SDG score of 63.8 and an SDG 4 score of 82.4, which were notably high. These scores signified that Bangladesh had made substantial strides in improving access to education, curriculum quality, and educational outcomes. Bhutan's SDG score of 70.5 reflected progressive efforts towards sustainability, and the SDG 4 score of 67.8 for Bhutan indicated some dedication towards providing education to its citizens. The SDG score of 60.0 for India highlighted that there was a lot of room for improvement. However, the high SDG 4 score of 82.9 underscored its commitment to providing quality education to its vast population. The Maldives' impressive SDG score of 71.0 reflected noteworthy achievements across various dimensions of sustainable development, along with standing out as an extraordinary example of a country with an unwavering dedication to ensuring top-quality education for its citizens, with an SDG 4 score of 95.7. Nepal's overall SDG score of 66.0 indicated progress across various development dimensions, especially highlighting the pivotal role of education in driving holistic advancement within the country, with an SDG 4 score of 89.4. The data for Pakistan showed a need for further progress in both overall sustainable development and the specific area of quality education, with overall SDG and SDG 4 scores being 59.2 and 59.7, respectively. Sri Lanka's advancing SDG score of 69.8 and remarkable SDG 4 score of 98.2 reflected Sri Lanka's substantial advancements in ensuring widespread access to education, enhancing the quality of education provided, and realizing favourable results towards sustainable development goals. The SAARC countries demonstrate diverse trajectories in their pursuit of sustainable development, with varying degrees of emphasis on quality education.

8. Pearson's Correlation between Quality Education and Sustainable Development Goals

The analysis used for the study was Pearson's Correlation Analysis to find association between SDG 4 and other SDGs, for which IBM SPSS software was used to conduct the same. The correlation coefficient between two variables x and y can be denoted as r or r_{xy}, and computed as:

$$r_{xy} = \frac{\text{cov}(x, y)}{\sqrt{\text{var}(x)} \cdot \sqrt{\text{var}(y)}}$$

where cov (x, y) was the covariance of x and y, var(x) was the sample variance of x, and var(y) is the sample variance of y.

Table 2: Pearson Correlation Analysis

Association between Goals	Pearson Correlation (r)	Sig. (2-tailed) (p)
SDG4 X SDG1	-0.067	0.683
SDG4 X SDG2	0.206	0.203
SDG4 X SDG3	.829**	0.000
SDG4 X SDG5	.572**	0.000
SDG4 X SDG6	.458**	0.003
SDG4 X SDG7	.469**	0.002
SDG4 X SDG8	.808**	0.000
SDG4 X SDG9	.740**	0.000
SDG4 X SDG10	-0.280	0.081
SDG4 X SDG11	.575**	0.000
SDG4 X SDG12	-.428**	0.006
SDG4 X SDG13	-0.288	0.072
SDG4 X SDG14	.352*	0.026
SDG4 X SDG15	-0.039	0.809
SDG4 X SDG16	.366*	0.020
SDG4 X SDG17	0.306	0.055

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' Calculation

The Pearson's correlation of the association between SDG 4 and other sustainable development goals for which 16 hypotheses were created showed thatthe correlation coefficient (r) which fell under the range which was greater than equal to 0.05 showed strong correlation, the range of r between 0.3 to 0.5 showed moderate correlation and the r value which fell in the range which was less than equal to 0.3 showed weak correlation. The inference for the analysis was discussed as follows:

i. Quality Education andPoverty

The Pearson correlation coefficient for SDG 4 and Poverty (SDG 1), r was -0.067 and that it is not statistically significant (p= 0.683). The scatter plot between SDG 4 and SDG 1 (figure 2) also showed weak negative correlation. Hence, the null hypothesis 1 (H_{01}) was accepted and we could say that there was no significant association between SDG 4 and SDG 1.

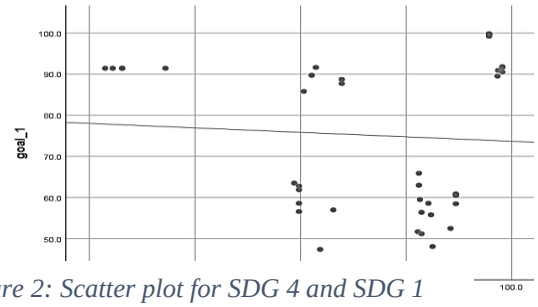


Figure 2: Scatter plot for SDG 4 and SDG 1

Source: Authors' Construction

ii. Quality Education andFood Security

The Pearson correlation coefficient for SDG 4 and Food Security (SDG 2), r was 0.206 and that it was not statistically significant (p= 0.203). The scatter plot

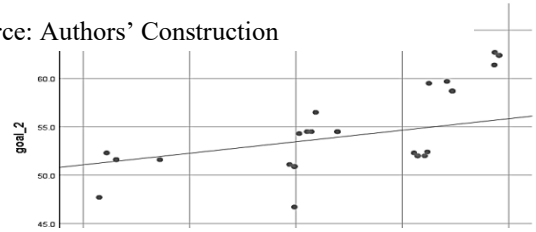


Figure 3: Scatter plot for SDG 4 and SDG 2

Source: Authors' Construction

between SDG 4 and SDG 2 (figure 3) also showed weak positive correlation. Hence, the null hypothesis 2 (H_{02}) was accepted and we could say that there was no significant association between SDG 4 and SDG 2.

iii. Quality Education andHealth

The Pearson correlation coefficient for SDG 4 and Health (SDG 3), r is 0.829 and that it was statistically significant (p= 0.000, which was less than 0.01). The scatter plot between SDG 4 and SDG 3 (figure 4) also showed strong positive correlation. Hence, the null hypothesis 3 (H_{03}) was rejected and we could say that there was a significant association between SDG 4 and SDG 3.

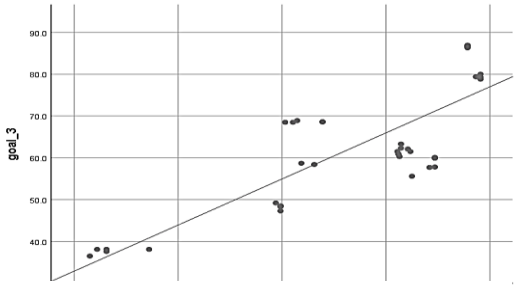


Figure 4: Scatter plot for SDG 4 and SDG 3

Source: Authors' Construction

iv. Quality Education andGender Equality

The Pearson correlation coefficient for SDG 4 and Gender Equality (SDG 5), r was 0.572 and that it was statistically significant (p= 0.000, which was less than 0.01). The scatter plot between SDG 4 and SDG 5 (figure 5) also showed moderate positive correlation. Hence, the null hypothesis 4 (H_{04}) was rejected and we could say that there was a significant association between SDG 4 and SDG 5.

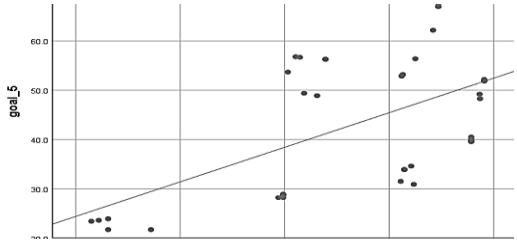


Figure 5: Scatter plot for SDG 4 and SDG 5

Source: Authors' Construction

v. Quality Education andSanitation

The Pearson correlation coefficient for SDG 4 and Sanitation (SDG 6), r is 0.458 and that it was statistically significant (p= 0.003, which was less than 0.01). The scatter plot between SDG 4 and SDG 6 (figure 6) also showed moderate positive correlation. Hence, the null hypothesis 5 (H_{05}) was rejected and we could say that there was a significant association between SDG 4 and SDG 6.

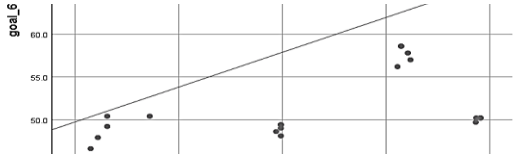


Figure 6: Scatter plot for SDG 4 and SDG 6

Source: Authors' Construction

vi. Quality Education andSustainable Energy

The Pearson correlation coefficient for SDG 4 and Sustainable Energy (SDG 7), r was 0.469 and that it was statistically significant (p= 0.002, which was less than 0.01). The scatter plot between SDG 4 and SDG 7 (figure 7) also showed moderate positive correlation. Hence, the null hypothesis 6 (H_{06}) was rejected and we could say that there was a significant association between SDG 4 and SDG 7.

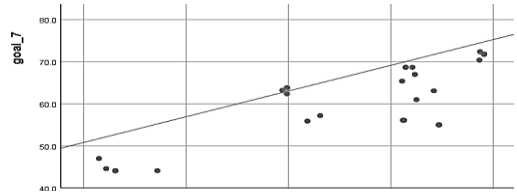


Figure 7: Scatter plot for SDG 4 and SDG 7

Source: Authors' Construction

vii. Quality Education andEconomic Growth

The Pearson correlation coefficient for SDG 4 and Economic Growth (SDG 8), r was 0.808 and that it was statistically significant (p= 0.000, which was less than 0.01). The scatter plot between SDG 4 and SDG 8 (figure 8) also showed strong positive correlation. Hence, the null

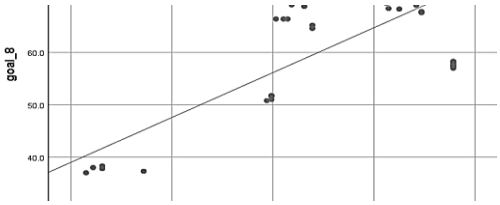


Figure 8: Scatter plot for SDG 4 and SDG 8

Source: Authors' Construction

hypothesis 7 (H_{07}) was rejected and we could say that there was a significant association between SDG 4 and SDG 8.

viii. Quality Education andInfrastructure

The Pearson correlation coefficient for SDG 4 and Infrastructure (SDG 9), r was 0.740 and that it was statistically significant (p= 0.000, which was less than 0.01). The scatter plot between SDG 4 and SDG 9 (figure 9) also showed strong positive correlation. Hence, the null hypothesis 8 (H_{08}) was rejected and we could say that there was a significant association between SDG 4 and SDG 9.

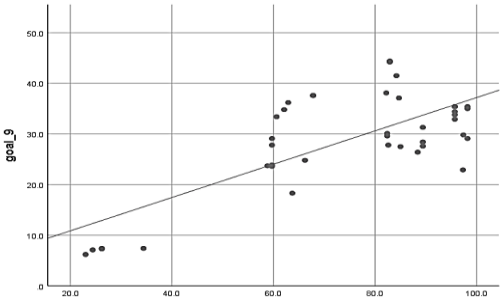


Figure 9: Scatter plot for SDG 4 and SDG 9

Source: Authors' Construction

ix. Quality Education andInequality in Countries

The Pearson correlation coefficient for SDG 4 and Inequality in countries (SDG 10), r was -0.280 and that it was not statistically significant (p= 0.081). The scatter plot between SDG 4 and SDG 10 (figure 10) also showed weak negative correlation. Hence, the null hypothesis 9 (H_{09}) was accepted and we could say that there was no significant association between SDG 4 and SDG 10.

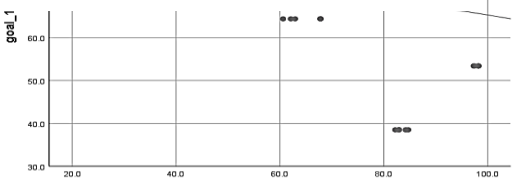


Figure 10: Scatter plot for SDG 4 and SDG 10

Source: Authors' Construction

x. Quality Education andSustainable Cities

The Pearson correlation coefficient for SDG 4 and Sustainable Cities (SDG 11), r was 0.575 and that it was statistically significant (p= 0.000, which was less than 0.05). The scatter plot between SDG 4 and SDG 11 (figure 11) also showed moderate positive correlation. Hence, the null hypothesis 10 (H_{010}) was rejected and we could say that there was a significant association between SDG 4 and SDG 11.

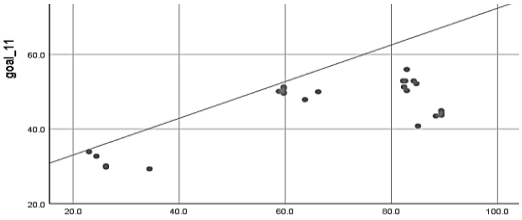


Figure 11: Scatter plot for SDG 4 and SDG 11

Source: Authors' Construction

xi. Quality Education andConsumption

The Pearson correlation coefficient for SDG 4 and Consumption (SDG 12), r is -0.428 and that it was statistically significant (p= 0.006, which was less than 0.01). The scatter plot between SDG 4 and SDG 12 (figure 12) also showed moderate negative correlation. Hence, the null hypothesis 11 (H_{011}) was rejected and we could say that there was a significant association between SDG 4 and SDG 11.

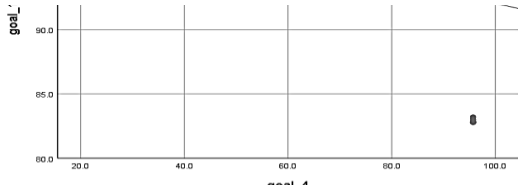


Figure 12: Scatter plot for SDG 4 and SDG 12

Source: Authors' Construction

xii. Quality Education andClimate Change

The Pearson correlation coefficient for SDG 4 and Climate Change (SDG 13), r was -0.288 and that it was not statistically significant (p= 0.072). The scatter plot between SDG 4 and SDG 13 (figure 13) also showed weak negative correlation. Hence, the null hypothesis 12 (H_{012}) was accepted and we could say that there was no significant association between SDG 4 and SDG 13.

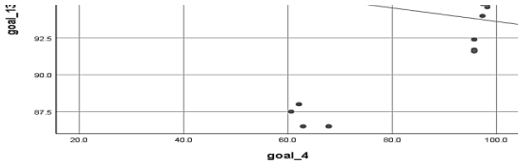


Figure 13: Scatter plot for SDG 4 and SDG 13

Source: Authors' Construction

xiii. Quality Education andLife below water

The Pearson correlation coefficient for SDG 4 and Life below water (SDG 14), r was 0.352 and that it was statistically significant (p= 0.026, which was less than 0.05). The scatter plot between SDG 4 and SDG 14 (figure 14) also showed moderate positive correlation. Hence, the null hypothesis 13 (H_{013}) was rejected and we could say that there was a significant association between SDG 4 and SDG 14.

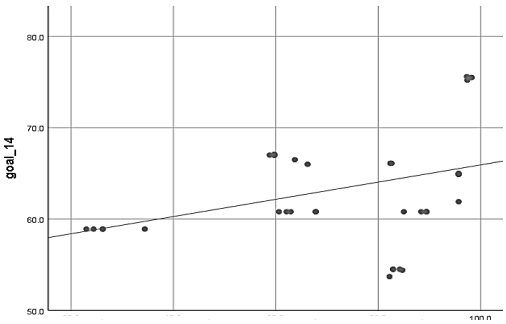


Figure 14: Scatter plot for SDG 4 and SDG 14

Source: Authors' Construction

xiv. Quality Education andLife on land

The Pearson correlation coefficient for SDG 4 and Life on land (SDG) 15, r was -0.039 and that it was not statistically significant (p= 0.809). The scatter plot between SDG 4 and SDG 15 (figure 15) also shows weak negative correlation. Hence, the null hypothesis 14 (H_{014}) was accepted and we could say that there was no significant association between SDG 4 and SDG 15.

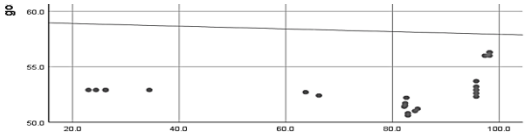


Figure 15: Scatter plot for SDG 4 and SDG 15

Source: Authors' Construction

xv. Quality Education andPeace

The Pearson correlation coefficient for SDG 4 and Peace (SDG 16), r was 0.366 and that it was statistically significant (p= 0.020, which was less than 0.05). The scatter plot between SDG 4 and SDG 16 (figure 16) also showed moderate positive correlation. Hence, the null hypothesis 15 (H_{015}) was rejected and we could say that there was a significant association between SDG 4 and SDG 16.

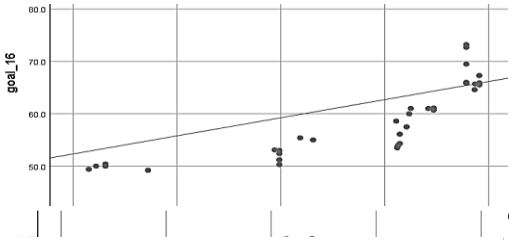


Figure 16: Scatter plot for SDG 4 and SDG 16

Source: Authors' Construction

xvi. Quality Education andPartnership

The Pearson correlation coefficient for SDG 4 and Partnership (SDG 17), r was 0.306 and that it was not statistically significant (p= 0.055). The scatter plot between SDG 4 and SDG 17 (figure 17) also showed weak positive correlation. Hence, the null hypothesis 16 (H_{016}) was accepted and we could say that there was no significant association between SDG 4 and SDG 17.

Figure 17: Scatter plot for SDG 4 and SDG 17

Source: Authors' Construction

9. Conclusion and Recommendations

The study focuses on the interconnectedness between SDG 4 and various other goals, allowing for a more comprehensive understanding of their relationships in respect of SAARC countries. While some nations, such as Sri Lanka and the Maldives, stand out as exemplary models with exceptionally high SDG 4 scores, others, like Afghanistan and Pakistan, face significant challenges in ensuring access to quality education for all also indicating the complex interplay between sustainable development and education within the SAARC region. The results of correlation revealed that SDG 4 exhibited significant associations with 10 SDGs, namelygood health gender equality, sanitation, sustainable

energy, economic growth, infrastructure, sustainable cities, responsible consumption, life below water andpeace.

Notably, a strong positive correlation was observed between quality education and goals related to good health, economic growth, infrastructure. This implies that an improvement in quality education would have a substantial impact on advancing these goals concurrently. Furthermore, moderate positive correlations were found between quality education and goals related to gender equality, clean water and sanitation, affordable and clean energy, sustainable cities and communities, and life below water. This suggests that an enhancement in quality education would contribute to progress in these goals, although at a relatively slower pace. Interestingly, the only negative correlation was identified between quality education and the SDGof responsible consumption and production. This indicates that improvements in quality education may require additional attention and coordinated efforts to address the challenges associated with responsible consumption and production practices.

Based on these findings, it can be concluded that quality education plays a crucial role in the achievement of multiple sustainable development goals simultaneously. Consequently, it is recommended that governments of SAARC countries allocate increased funding to the education sector and collaborate closely with educational institutions to enhance current policies. These steps will facilitate the attainment of the sustainable development goals by 2030. As SAARC countries continue to collaborate and learn from each other's experiences, the pursuit of sustainable development, supported by equitable access to quality education, remains a shared aspiration. The story of SAARC nations is one of resilience, innovation, and commitment, echoing the global call for a better, more sustainable future for all. Moreover, given the insights gained from the interactions between SDGs, future studies can explore similar associations in relation to other goals, both in developing and developed countries. This research can contribute to a more comprehensive understanding of the progress towards sustainable development objectives and inform policymakers and stakeholders in formulating effective strategies and policies.

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