

# Investigating the Effect of Social Capital on Household's Poverty in Khyber Pakhtunkhwa, Pakistan

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**Abstract:** Poverty is one of the sustainable development goals, and mostly the developing world is suffering from high poverty rates. Pakistan being a developing country, is also facing a high poverty rate. Poverty can be gauged through objective, subjective and time-based aspects; however, objective poverty is related to income and documented in official statistics. This study is related to objective poverty and investigates the impact of social capital on Poverty in Khyber Pakhtunkhwa. This study also performs a comparative analysis of rural and urban areas of Khyber Pakhtunkhwa. Primary data has been collected through a well-structured questionnaire. The sampling size is decided on the well-known Yamane formula, and this is followed by a multi-stage stratified random sampling method. This study analyzed the data from 392 valid respondents. This study constructs social capital on seven dimensions and estimates poverty level and social capital, followed by logistic regression analysis. Gender, human capital, employment ratio, female-male ratio and size of household are control variables in the study. The logistic regression results show that social capital, employment ratio, human capital, gender of the household and size of household are significant factors of Poverty in Khyber Pakhtunkhwa. Moreover, an increase in social capital, employment ratio and human capital results in less poverty, while the household size and female-male ratio led to increasing the chances of being poor. Additionally, results indicate that social capital is more effective in rural areas, while employment ratio and human capital are more effective factors in alleviating poverty in urban areas. The findings of this study explain and signify the level of poverty occurrence in Khyber Pakhtunkhwa and also highlights factors of poverty; thus, the policy implications of the study will be helpful in addressing poverty. It is recommended that policy measures must enhance social capital along with human capital for poverty alleviation.

Keywords: Employment, Human capital, Poverty, Social capital, Logistic regression.

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## **INTRODUCTION**

Poverty, a multifaceted concept, has been defined through monetary, social, biological, and time-based aspects. Generally, poverty can be gauged through objective, subjective and time-based aspects; however, objective poverty is related to income and documented in official statistics. A person is said to be poor if he or she is not in a position to earn sufficient income to meet his or her basic needs (EDA, 2005). Poverty has also been defined as the lack of resources determining the quality and standard of life, which includes the availability of food, availability of clothes, shelter, and accessibility to safe and clean drinking water (Hoeven & Anker, 1994), as well as lack the opportunity of learning, non-engagement in expressive employment, and inability to enjoy respectful citizenship. Poverty is a condition characterized by unequal social status and unbalanced social relationships, followed by social exclusion, reduced capacity to participate, and failure in the development of consequential networks in society (Silver, 1994). Poverty is closely associated with the nature and structure of development and results from frequent fluctuations in social institutions and the system of valuation. The productive capacity of an economic system and the supervision of its resources are reflexed by culture and social institutions. So, the execution of the development process encourages social institutions, which further leads to social capital formation and thus reduces Poverty (Hayami, 2001; Nasution et al., 2014).

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Social capital is the term that induces attention to some benefits associated with social networks and tracked by information, reliance, and mutual cooperation and brings prosperity and reduces Poverty (Knack & Keefer, 1997). Coleman (1988) articulates that it is the term that consists of a set of social aspects and organizations, expectations, networks, channels of information, and a set of rules and social trust and is operative in encouraging or limiting certain behaviours. Durlauf (2002) defined social capital as the set of formal and informal institutions based on communal relationships and networks that are responsible for generating collective knowledge, communal trust and societal norms. It permits community members to take communal actions for the achievement of collective and common benefits through collaboration and cooperation.

Social capital has been recognized to play a dynamic role in the enhancement of the productivity and development of a nation. It is a vital and significant source that eases access of individuals and groups in a community to physical and human capital that can contribute to the household's productivity and well-being (Imandoust, 2011). Social capital got attention as a factor of production along with conventional factors in the literature. Putman (1993) stated that communication and relationships between individuals increase productivity in a similar fashion to human and physical capital. Knack and Keefer (1997) also concluded that trust and civic collaboration led to economic success and well-being and sustainable and balanced development. Moreover, social capital is the term responsible for prosperity and poverty reduction (Narayan & Pritchett, 1999). It reduces the chances of an individual being poor and leads to economic well-being and sustainable development. The returns on investment of households in social capital are usually greater for the poor as compared to the rich ones (Grootaert & Narayana, 2004). Social capital in society could enable people to have better access to some of the constraints and thus lead to reduce inequality (Kawachi et al., 1997). International agencies like World Bank have also documented that social capital played an effective role in the development of countries, promotion of welfare and contentment of individuals, households, societies and nations in its "Social Capital Initiative" in 1996 and have accentuated that countries, in order to extract all these benefits, should invest more in social capital. A number of research studies analyzed the role of social capital in well-being and Poverty (Adi Syahid et al., 2021; Pham & Mukhopadhaya, 2022; Rani et al., 2021).

The effect of social capital on poverty received theoretical as well as empirical attention, and there are three channels being identified in related literature on how social capital may affect poverty. These channels are; useful for information sharing among groups, enforcement of collective decision making and reduction in opportunistic behaviour (Osei & Zhuang, 2020; Pham & Mukhopadhava, 2022; Zhang et al., 2017). Various empirical researchers have discussed social capital as an important factor of well-being and poverty. Rani et al. (2021), using first-hand data, carried out research to investigate the influence of social capital and education on the objective well-being of households in the milieu of a developing country, Pakistan. Likewise, Ahmad and Sadaqat (2016) assessed the impacts of social capital on well-being and Poverty in Pakistan. In a study, Israr and Khan (2010) examined the impacts of natural, physical, human, social, and financial capital on livelihood in Northern Pakistan and concluded that these factors play an important and effective role in the livelihood of households. Although social capital is being analyzed as a factor of poverty alleviation however, the researcher came to the conclusion that none of the research studies determines the effect of social capital on poverty alleviation in the context of Khyber Pakhtunkhwa. Second, the majority of the research studies are done in rural areas, whereas this study, for the first time, is going to attempt a comparative study of rural and urban areas of Khyber Pakhtunkhwa. Third, there is a high degree of variation in both rural and urban areas of Khyber Pakhtunkhwa. In Khyber Pakhtunkhwa, 21.5% of the total population lives under the poverty line, of which 16.5% live in urban areas, and 28.2% live in rural areas. Khyber Pakhtunkhwa is the second poorest province after Baluchistan (40.7%) (Iqbal, 2020). Henceforth, the main objective of this study is to investigate the effect of social capital on Poverty in Khyber Pakhtunkhwa, Pakistan. Moreover, a comparative analysis is carried out for rural and urban areas of Khyber Pakhtunkhwa.

## LITERATURE REVIEW

Reducing poverty is a global issue that is frequently associated with economic-based solutions. While economic variables are typically addressed as a solution to poverty, more recent research has begun to highlight social capital as an alternative approach to poverty alleviation. Numerous academics have identified social capital as a crucial aspect of well-being. According to Islam and Alam (2018), social capital provides a variety of good socioeconomic outcomes, including the elimination of poverty in developing nations. In Bangladesh, they explored the relationship between social capital and poverty reduction by conducting a research study. The analysis of data collected from

310 rural households led to the conclusion that social capital in the form of trust, reciprocity, social networks, and civic engagement was inversely related to poverty. In order to fulfil the millennium development goal of eliminating poverty, they urged that the government must promote social capital. In a study on the Western United States, the mutual relationships between social capital and poverty were inspected as a negative predictor of well-being by Horrison et al. (2019). They discovered that communities with greater social capital stock were less vulnerable to poverty. They also observed that poverty was the greatest barrier to the building of social capital. Their findings show that poverty reduction initiatives would be more effective if integrated with strategies promoting social capital development.

Adi Syahid et al. (2021) analyzed past literature and argued social capital was frequently measured by social involvement, social cohesiveness, network, trust and reciprocity, whereas poverty was measured by living status, poverty line, income, and welfare of household and other poverty levels based on the comparison of income and consumption. They concluded that social capital contributed significantly to poverty reduction. A study by Pham and Mukhopadhaya (2022) explored experimentally the differences over time across monetary, education, health, housing, elementary facilities and robust assets, the dimensions of poverty at the family community level in rural Vietnam. Using the Vietnam Access to Resources Household Survey (2008-2016), they found that the majority of non-monetary poverty characteristics improved with time, but monetary poverty dimensions showed the slowest rate of improvement. They investigated, both at the household and community level, the effective and significant role played by social capital in reducing poverty. The findings suggested that policymakers should recognize the substantial role social capital plays in alleviating poverty when formulating programs for poverty reduction (Pham & Mukhopadhaya, 2022).

There are some researchers who analyzed the effect of social capital on poverty in the context of Pakistan. For instance, Ahmad and Sadaqat (2016) assessed the impacts of social capital on well-being and Poverty in Pakistan. In a study, Israr and Khan (2010) examined the impacts of natural, physical, human, social, and financial capital on livelihood in Northern Pakistan and concluded that these factors play an important and effective role in the livelihood of households. Rani et al. (2021) investigated Faisalabad district data to determine social capital's effect on households' objective well-being in a developing nation like Pakistan. Except for social participation and neighborhood cohesion, their findings revealed that social capital favoured objective well-being. These findings shed light on the function of social capital in reducing poverty, improving the health of individuals, and promoting the general well-being of the population. It is suggested that social capital can contribute to societal prosperity. The government may design ways to increase social capital in order to improve the well-being of the society in question.

From the literature discussed above, social capital is being analyzed as a factor of poverty alleviation; however, the researcher came to the conclusion that none of the research studies determines the effect of social capital on poverty alleviation in the context of Khyber Pakhtunkhwa. Second, the majority of the research studies are done in rural areas, whereas this study, for the first time, is going to attempt a comparative study of rural and urban areas of Khyber Pakhtunkhwa.

## **RESEARCH METHODOLOGY**

The required information on personal, family, and other characteristics, etc., are collected from the sample respondents through a structured questionnaire in Khyber Pakhtunkhwa. Due to time and financial constraints, this study is restricted to five districts of Khyber Pakhtunkhwa, Pakistan, namely Peshawar, Kohat, Karak, Hangu, and Orakzai, with populations of 4267198, 992427, 705362, 518811, and 254303 respectively. For poverty analysis, one tehsil from each district is selected. Two union councils (one urban and one rural) are selected from each tehsil. An equal number of respondents are selected from each union council randomly. A total of 420 questionnaires were collected. But due to incompleteness and the existence of outliers, the sample size was reduced to 392 households. In order to achieve the study objectives, a survey is carried out. The sample size is selected according to the following sampling formula (Yamane, 1967).

$$n = N/\left[1 + N\left(e^2\right)\right] \tag{1}$$

where n represents the sample size, N is the total population, and e is the representation of the error margin (which could be 10%, 5%, or 1%).

After that, a multi-stage stratified random sampling method was applied (Chaudhry & Kamal, 1997).

$$n\mathbf{i} = n\left(\frac{Ni}{N}\right) \tag{2}$$

Where ni is the sample size in ith district, n is the sample size, Ni population in ith district, and N is the representation of the total population. The total population of these districts is 6738101, so according to the above Eq-i, 400 respondents are selected, out of which 63.3% respondents are from Peshawar, 14.8% from Kohat, 10.5% from Karak, 7.8% from Hangu and 3.8% out of total sample population are from Orakzai district.

For the measurement of objective poverty, the FGT index will be used (Foster et al., 1984; Reardon & Taylor, 1996).

$$P_{\alpha} = \frac{1}{n} \sum_{i=1}^{m} \left[ \frac{z - y_i}{z} \right]^{\alpha} \tag{3}$$

Where n denotes the total sample used in the study, m denotes the total number of households living below the poverty line, yi denotes the income of the poor household, which will be organized in intensifying order, z denotes the poverty line income, which will be used as a yardstick at \$1.90 per day, and denotes a parameter for poverty aversion.

A social capital index will be constructed, for the measurement of social capital, with the help of the following table 1 (Behtoui & Neergaard, 2016; Glenn et al., 2001).

Table 1: Construction of social capital					
Dimensions	Items	Measurement			
Groups and networks	Membership in a formal & informal association	Yes (Y), No (N)			
	Capacity to get assistance in hard- ship from other than family mem- bers and relatives	Y or N			
Trust and solidarity	Majority in the community is trust- worthy	Y or N			
	Majority in the community often help each other	Y or N			
Collective action and cooperation	More than half of the community contributes time or money towards common development goals	Y or N			
	High chances that community's members cooperate to solve commu- nity problems	Y or N			
Information and communication	A frequent listener of the radio	Y or N			
	A frequent reader of the newspapers	Y or N			
	A frequently watching TV	Y or N			
	A frequent user of the social media	Y or N			
Social cohesion and inclusion	Intense feeling of togetherness within the community	Y or N			
	Feeling safe at home when alone	Y or N			

	Cont	
Dimensions	Items	Measurement
Empowerment and political action	Have control in making decisions	Y or N
	affecting daily activities	
	Voted in the last general election	Y or N
Parents-kid relationship	Do your parents assisted you in	Y or N
	homework	
	Did you discuss matters other than	Y or N
	education with your parents	

And is calculated through the following equation:

$$Y = h(X) = 1 + \left(\frac{9}{100}\right)X$$
 (4)

In the above equation, X and Y denote the sum of the score of 'Yes' and the household's social capital. To estimate the connection between various prospects of poverty, social capital and other demographic variables, binary choice regression is applied to the data. The model is;

$$P = \ln\left(\frac{P_0}{1 - P_0}\right) = \beta_0 + \beta_1 SCI + \beta_2 \text{ HHead } + \beta_3 HHS + \beta_4 HC + \beta_5 EMPR + \beta_6 FMR + \mu$$
(5)

Where P represents poverty (assigning 1 for poor and 0 for non-poor), SC represents the social capital index. Different social factors have different effects. Studies pertaining to measurements of social capital (for instance, Keefer & Knack, 2008; Knack, 2007; Narayan & Pritchett, 1999) used indirect proxies, in which the social network serves as the primary constituent. Social capital is based on socioeconomic and demographic factors, household traits and other human capitals, and economic and physical capital) are put to use in profitable pursuits to boost income; They reduce the likelihood that households will be in Poverty (Nasution et al., 2014); Grootaert & Narayan, 2004). HHead is the representation of the gender of the household head, HHS denotes the number of people in the household, HC denotes human capital, which is measured in terms of completed years of education, EMPR is the employment ratio, and FMR is the female to male ratio. In both rural and urban areas, the same regression is used to determine social capital's impact on Poverty in Khyber Pakhtunkhwa. Table 2 depicts the variables' description of the study along with the expected sign of the explanatory variables.

Table 2: Variables description					
Items	Measurement	Sign			
P (Poverty)	1 for poor and 0 non-poor				
SC (Social capital Index)	Index will be calculated with the help of formula	-			
HHead (Household Head)	1 = male and $0 = $ Otherwise	-			
HHS (Household Size)	Total number of people in the house	+			
HC (Human Capital)	Years of education	-			
EMR (Employment ratio)	Ratio of employed to labor force	-			
FMR (Female to male ratio)	Ratio of female to male	+			

#### **RESULTS AND DISCUSSION**

Figure 1 depicts the sample characteristics, and this study figured out on the basis of the sample covered that 51% population live in rural areas and 49% population live in urban areas. Out of the total sample population, 88.5% of households have a male head, of which 43.9% belong to rural, and 44.6% to urban areas and 11.5% are the female head of which 7.1% are rural and 4.3% in urban.



Figure 1: Poverty across gender

Table 3: Poverty estimates at \$1.9 per day							
	Rural				Urban		
	Total	Male	Female	Total	Male	Female	
Poor	32.4%	26.8%	5.6%	24%	20.6%	3.3%	56.4%
Non-Poor	18.6%	17.1%	1.5%	25.0%	24.0%	1.0%	43.6%
Total	51.0%	43.9%	7.1%	49.0%	44.6%	4.3%	100.0%

The total sample population is divided into poor and non-poor. Table 3 shows that 56.4% of the total population lying lie under the poverty line. In rural areas, the poverty rate is 32.4%, out of which 26.8% are male heads, and 5.6% are female heads. Poor female-headed households may be due to the underrepresentation of households led by women due to cultural factors. Due to societal norms, many homes with female heads also pretend to have male heads. On the other hand, Figure 2 highlights that poverty in urban areas is 24%, of which 20.6% are households with a male head while 3.3% are households with a female head.



Figure 2: Poverty across areas

It is clear from the results that poverty is more in rural areas as compared to urban areas. These results are in line with that of Iqbal (2020), who estimated that poverty was more in rural areas (28.2%) as compared to urban areas (16.5%). The same nature of the socioeconomic conditions in rural areas also intensifies poverty in rural areas (Akhtar et al., 2015). As the population in rural areas lack specialized knowledge, the populace in rural areas lacks access to rewarding career options. In contrast, the population in metropolitan areas has a variety of talents, making it possible for them to choose from a variety of career options with appealing benefits (Chaudhry, 2009).

Table 4: Averages of the explanatory factors						
	SC	EMPR	FMR	HS	HC	
Overall	6.35	0.42	1.03	10.0	6.07	
Rural	6.20	0.41	0.99	11.0	5.80	
Urban	6.52	0.43	1.07	9.0	6.36	

Table 4 represents the average of the other factors in rural and urban Khyber Pakhtunkhwa. The average household size is about 10. The average household size is 11 in rural areas and 9 in urban areas. The overall aggregate average social capital is 6, while it is 6.2 and 6.51 in rural and urban areas, respectively. It means that social capital is higher in urban areas than rural areas. Human capital is averaged at 5.8 and 6.4 in rural and urban areas.

			_	-	-	
	В	S.E.	Wald	Df	Sig.	Exp(B)
SC	-0.454	0.111	16.646	1	0.000	0.635
EMPR	-3.767	0.721	27.314	1	0.000	0.023
FMR	0.221	0.220	1.013	1	0.314	1.248
HHead	-0.993	0.452	4.821	1	0.028	0.371
HHS	0.176	0.033	29.022	1	0.000	1.192
HC	-0.412	0.094	19.094	1	0.000	0.662
Constant	6.259	1.096	32.598	1	0.000	522.464

Table 5: Results estimation of household poverty in Khyber Pakhtunkhwa

Using the logistic regression, the estimation of household Poverty related factors is shown in Table 5. Results show that, with the exception of FMR, all factors are significant. The results reveal that all of the variables have the predicted signs and are compatible with the hypothesis. Poverty is adversely connected to SC, EMPR, HHead, and HC, whereas HHS and female-male ratio FMR have beneficial effects on poverty. Social capital carries a negative and significant magnitude thus, suggests that the bigger a household's social capital stocks are, the lower odds of becoming impoverished. It's clear from the Table that when SC changes, it will result in a reduction in poverty. It means that a household with a greater stock of social capital has a low probability of falling into poverty. The findings are similar to previous studies. Grootaert and Narayan (2004), Hassan and Birungi (2011), and Tenzin et al. (2013) were also of the view that social capital has negative impacts on household poverty.

The employment ratio is negatively and significantly affecting poverty. The more the household members are employed, the lower the possibility of the household being poor. Generally, in our society, the male members of the household are considered the breadwinners, while the female members are responsible for household management tasks like cleaning the house, cooking, and caring for the kids. Females are considered dependent (Khan et al., 2016). Even if they are participating in economic activity, their productivity and wages are too much lower to keep them dependent. So, the variable of the female-to-male ratio is included. If male members are fewer than female members, the number of dependents increases and the probability of being poor increases. Our results show that the female-to-male ratio, FMR, is positively related to poverty. It means that households with a higher female-to-male ratio are more exposed to poverty. Likewise, the household size also carries a negative and statistically significant coefficient; henceforth, based on this finding, it would appear that if all other variables remained constant, individuals of larger households would likely be poorer than those of smaller ones. Family size is significant because, realistically speaking, as families become larger, the load on their collective pool of resources increases, and there are fewer and fewer resources available to support their well-being. Poverty is more likely to affect large families. A number of empirical studies concluded the same results as our study's results that household size increases the chances for the household to be poor (Datt & Jolliffe, 1999; Grootaert, 1999; Hassan & Birungi, 2011; Lanjouw & Ravallion, 1995; Nasution et al., 2014; Tenzin et al., 2013). It was discovered that the human capital variable, which is assessed in terms of completing years of education, had a detrimental and significant impact on poverty. Poverty is less likely to affect households head who are highly educated individuals. Access to new knowledge and information processing capabilities is increased by human capital, which also offers better and more interesting job chances. In the long run, improving human capital raises household income and eliminates poverty.

Table 6 depicts the results of the rural model. The results show that, except for HHead, all the variables have substantial effects and have projected signs. The results show that social capital, employment ratio, and human capital are significantly and adversely related to poverty. The increase and enhancement of these will result in low poverty. A household with high social capital, a higher employment ratio, and more human capital are less likely to fall into poverty.

				•	•	
	В	S.E.	Wald	Df	Sig.	Exp(B)
SC	-0.474	0.151	9.826	1	0.002	0.622
EMPR	-3.414	0.965	12.523	1	0.000	0.033
FMR	0.685	0.368	3.468	1	0.063	1.984
HHead	-0.765	0.618	1.531	1	0.216	0.465
HHS	0.143	0.042	11.716	1	0.001	1.154
HC	-0.355	0.119	8.920	1	0.003	0.701
Constant	5.606	1.410	15.818	1	0.000	272.062

Table 6: Results estimation of household poverty in rural areas

Any attempt to increase social capital, employment ratio, and human capital will lead to greater alleviation of poverty. These results are similar to those of Rustiadi and Nasution (2017). However, the coefficient estimates of the household size and female-to-male ratio have negative signs. This result, like for overall results for Khyber Pakhtunkhwa, indicates that household size aggravates the problem of poverty in rural areas as well.

Table 7: Results estimation of household poverty in urban areas							
	В	S.E.	Wald	df	Sig.	Exp(B)	
SC	424	.176	5.793	1	.016	.655	
EMPR	-4.462	1.131	15.560	1	.000	.012	
FMR	-0.095	.304	.098	1	.755	.909	
HHead	-1.141	.709	2.589	1	.108	.320	
HHS	0.227	.056	16.488	1	.000	1.255	
HC	-0.506	.162	9.733	1	.002	.603	
Constant	6.950	1.872	13.780	1	.000	1042.795	

The results presented in Table 7 reveal that except HHead and FMR, all other variables are significant. The results depicted in Table 3 suggest that social capital, employment ratio, and human capital are negatively affected by poverty. The accumulation of social capital will alleviate poverty by 35%; an increase in employment by one more person will result in a reduction of poverty by 428.6%; and an increase in human capital by the attainment of one extra year of schooling will reduce poverty by 54%. While the size of the household positively and favourably affects poverty. The addition of one member in the house will enhance the probability of the household falling into poverty by 23%. All these results are in line with the previous studies (Adepoju & Oni, 2012; Khan et al., 2016).

The results in Tables 6 and 7 show that the impacts of social capital on poverty reduction, compared to urban areas, are greater in rural areas. An increase in social capital will result in the reduction of poverty by 47.4% in rural areas and by 42.4% in urban areas. The increase in employment ratio by 1% resulted in the reduction of poverty by 3.414% in rural areas and by 4.462% in urban areas. Completing one extra year of education alleviates poverty by 35.5% in rural Khyber Pakhtunkhwa and 50.6% in urban Khyber Pakhtunkhwa. These results show that social capital is more effective in rural areas as compared to urban areas, while other variables like employment ratio and human capital are more effective in poverty alleviation in urban areas. This may be because of the availability of greater recreational facilities, job opportunities, and quality education in urban areas.

### CONCLUSION

Poverty is a multidimensional topic that has been described from several aspects. Typically, income is used to determine poverty status. A person is considered to be poor if his or her income is insufficient to cover basic requirements. Poverty is the absence of resources that influence the quality of life, including the availability of food, clothing, housing, and clean drinking water, as well as the chance to learn, participate in a meaningful job, and enjoy respectable citizenship. Poverty reduction in the area is the most significant problem facing emerging nations. As a developing nation, Pakistan has adopted several measures to address poverty, including PPAF, the foundation of Bait ul Mal, and the Benazir income support program, among others. However, Poverty in Pakistan remains severe. It is a situation defined by uneven social status and imbalanced social interactions, followed by social isolation, a diminished ability to engage, and a failure to build social networks with significant consequences. Poverty is

directly linked to the kind and pattern of development, which may be achieved by modifying social institutions and values. Thus, the execution of the development process promotes social institutions, which ultimately leads to the production of social capital and a reduction in poverty. It has been shown that social capital is a possible source of economic development and poverty reduction. This research investigated the connections between social capital and poverty reduction. The primary purpose of this study is to investigate the relationship between social capital and Poverty in Khyber Pakhtunkhwa, Pakistan. It was shown that social capital, along with other elements, contributes significantly to the reduction of poverty. It has been shown that poverty is more prevalent in rural regions than in metropolitan ones. With the building of more social capital, poverty was shown to be decreased to a larger degree in both urban and rural regions, although it was more successful in rural areas. Families with more working members were less likely to be impoverished. Human capital was also proven to have detrimental consequences on poverty. Human capital-poor households are close to the poverty line. The households with a bigger number of people and more women were more vulnerable to poverty. The emphasis of poverty reduction projects in rural and urban Khyber Pakhtunkhwa should be on human resource development (access to financial capital, health, and education) and on infrastructure development. The engagement of families in social groups has been demonstrated to have a favourable effect on households' access to social capital.

# POLICY IMPLICATIONS

This study determined that social capital is a vital indicator of Poverty in Khyber Pakhtunkhwa and is more effective in rural areas; thus, well-planned and measured initiatives on social capital investment in rural and urban regions must be addressed. This research demonstrates that government and private sector participation in providing excellent education promotes the growth of social capital, which in turn can raise income and decrease poverty. It has also been argued that the government should prioritize job possibilities, particularly in rural areas. Although the government at the provincial level has a population department, awareness about family planning, health and education require more attention and better engagement of local influencer peoples to address family planning, health and educational problems. Henceforth, such policy measures can address and alleviate Poverty in Khyber Pakhtunkhwa.

# **RESEARCH LIMITATION AND FUTURE RESEARCH**

This study is restricted to five districts of Khyber Pakhtunkhwa due to financial and time limitations, so future research studies may try to cover all divisional headquarters of Khyber Pakhtunkhwa. Likewise, future research studies should also cover multidimensional poverty in Khyber Pakhtunkhwa, such as subjective and time-based poverty.

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