ORIGINAL ARTICLE
A Study of Social and Educational Lives of Food Insecure Children in Slum Areas of Multan

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ABSTRACT
Food is necessary for all humans on our planet. Food insecurity has become a worldwide problem. The survey's goals were to learn about children's eating habits, current rate of food insecurity, and the link between food insecurity and children's academic and social lives. The survey's target demographic consisted of guardians who had at least one kid between the ages of 4 and 12 who attended school. The researcher drew a sample of 385 people from Multan's slum communities. The multi-stage cluster and purposive sampling techniques were utilized by the researcher. The information was gathered using an interview schedule. The findings revealed a strong connection, implying that food insecurity has an impact on kid's social and academic lives. The researcher advised that authorities and the government should implement measures that eradicate poverty and increase food security. It was also suggested that additional study be conducted in the area of food insecurity, putting precise and detailed information on a variety of issues such as government policies, climate and weather, catastrophes, climatic conditions, and other factors impacting food poverty into account.
Key Words: social life, educational life, Academic Performance, food insecurity, food pattern.

INTRODUCTION
Over the last few decades, food security has become a topic of discussion in academic circles. Food security encompasses more than just having adequate foodstuff in town or on shop shelves; it encompasses a variety of factors. Food security, according to Lacy and Busch (1986), has three aspects: availability, affordability, and accessibility. Availability refers to having enough food to maintain human life despite production challenges. In both the short and long term, affordability refers to a stable diet with a wide diversity of foods. Finally, food accessibility is influenced by transportation, marketing, and livelihood approaches.

Food security is an agitation in both affluent and rising countries, but the condition in underdeveloped countries is particularly dire (Bashir et al., 2013a). Due to a recent decline in the amount of individuals who are food insecure across the world, 794.6 million individuals are still hungry. 780 million of the 794.6 million people are from underdeveloped countries. The scenario is even more appalling in Asia and Africa, in which 511.7 million and 232.5 million individuals, respectively, are undernourished (FAO et al., 2015).

Many individuals in various regions of the globe consider three or indeed two meals per day to be a luxury, despite the fact that eating is a fundamental requirement. This inequity clarifies the meaning and notion of food shortages. Food insecurity is defined as individuals being not proficient to satisfy their famine whenever they desire (and eating whatever they wish for), or not understanding when their next repast would arrive. "Food security cannot be guaranteed and safeguarded if people cannot continuously purchase the basic food they are accustomed to" (Kakwani & Son, 2016).

The idea of food insecurity advanced with the passage of time from supply of food to access and distribution of food resources. Even with the existence of enough food resources at national level, variations always exist at regional level. In recent times the term food security does not only refers to global or national level but now it also refers to community, household and individual level. The most accepted, common and extensively used description of food security is "Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (Food & Agriculture Organization, 1996).

Food insecurity and Education: Food insecurity is allied with poor nutritional, physical and psychosocial well-being (Slopen, Fitzmaurice, Williams and Gilman, 2010). Cognitive and behavioral effects have also been studied in kids and adolescents that are in the learning phase and social development. After correcting for a variety of socioeconomic characteristics, researchers discovered that, when contrasted to kindergarten children from families with food security, those from food insecure homes had considerably worse test scores but were more likely to have repeated a level. Furthermore, kindergarten kids and adolescents from food-insecure families had greater externalizing behavior and conduct difficulties, including not getting along with others and being suspended from school, as their food-secure counterparts (Alaimo, Olson & Frongillo, 2001).

Global Food Insecurity: Food insecurity, or the lack of continuous exposure to healthful meals, was prevalent in the United States in 2015, harming about 16 million families. Food insecurity affects women, kids, and people of colour significantly (Roshan, afshar & Hawkins, 2015). Malnutrition has been linked to reduced production and academic performance, as well as poor nutritional health and greater prevalence of chronic conditions such as

diabetes. Someone who is food insecure frequently experiences mental health problems (Fiedler et al., 2011).

Since comprehensive measuring of Canadian home food insecurity started in 2005, there have been no statistically significant reductions in the high incidence of family food insecurity in Canada (Tarasuk, Mitchell & Dacher, 2016). With the well-documented detrimental effects of food insecurity upon healthcare and well-being, such as bad nutrition, overweight and obesity, inadequate early learning, poor psychological adjustment, and unfavorable psychological health(5–8), measures to tackle this issue are critical (Vozoris &Tarasuk 2003)

Food Insecurity in Pakistan: As well as population is concerned Pakistan is the world's fifth most populated state, with the population of 224.99 million people and a growth rate of 1.89 percent. If the current population enlargement rate is sustained, Pakistan's overall population is expected to almost double 2045. Agriculture is a key industry in the country, contributing 19.8% to GDP and employing 43.3 percent of the workforce. The cattle subsector contributes 58.6% of the value added in the agricultural industry, while the crop subsector contributes 37.2 percent (GOP, 2016). Pakistan has made great attempts to achieve food self-sufficiency. Without an uncertainty, crop yields in Pakistan has expanded significantly; yet, per capita food accessibility remains at 154 kg per year, with wheat accounting for more than two-thirds of total wheat grown in the state(Ahmad & Farooq, 2010). Although all of its hard work, Pakistan still suffers from severe malnutrition. According to the 2011 National Nutritional Survey of Pakistan, minimum 58 percent of Pakistani families were undernourished, with each family spending 50.8 percent of their monthly income on food alone. Likewise, 15 percent of kids under the age of five suffered from chronic malnutrition, 44 percent were stunted, while 32 percent were underweight (NNS, 2011). In Pakistan, it is reported that approximately 41.4 million people (22%) are malnourished (FAO, 2015).

In Pakistan, food insecurity is mainly ascribed to poverty and food accessibility due to the country's status as a developing nation. Food insecurity emphasizes the lack of access to foodstuffs. When compared to metropolitan areas, rural regions have a high rate of food insecurity. Pakistan is ranked 147th out of 187 nations on the Human Development Index (HDI), placing it ahead of only Afghanistan in South Asia. Sad to say, Pakistan has failed to meet the majority of the Millennium Development Goals (MDGs) relating to child health and nutrition, particularly the weight-for-age, height-for-age, and weight-for-height goals. Although all of the challenges with access and consumption of food safety at the home level, Pakistan produces more food supplies than it consumes and is a net exporter of farming products. It has coordinated its strategies to meet the Sustainable Development Goals' food security ambitions (SDGs).

Statement of problem: Famine is a big problem in the world today since it is difficult to accomplish without food; therefore, food is the most crucial factor in human existence. People, particularly children, face numerous challenges as a result of low food availability, as they require a nutritious diet for optimum growth. Health difficulties, social issues such as altering behaviour toward deviant behavior, and academic issues are all major issues that kids with food insecurity confront.

Significance of Study: This research is significant because it addresses food insecurity that is a global concern for humans. Caused by food insecurity, a large number of people go to bed without feeding. They don't have adequate food to consume on a daily basis. This research will assist lawmakers in developing effective strategies that will aid in the resolution of food insecurity challenges. This study intended to know regarding the food pattern of kids, to find out the existing intensity of food insecurity in households and to examine the connection of food insecurity with the kid's academic and social life.

MATERIALS & METHODS

Researcher conducted this research by using survey design to recognize about the social and learning life of such children who were facing food unavailability. This quantitative research was conducted in slum areas of Multan which include Band Bosan, Lutfabad, sher shah, basti nandla and Matti Tal.

Researcher took sample size of 385 guardians of children aged 4-12 years as respondents to get information. Because of vast population the investigator followed the table of Fitz & Gibbon. According to this table, an investigator can collect data from more than 384 individuals if there is large population (Fitz & Gibbon, 1987).

Investigator used multi-stage and purposive sampling method for collecting data from guardians. A interview schedule was developed by the researcher.

This Tool has some specific sections which are as follows. In these sections of tool some scales were used.

- Demographic profile
- Prevailing level of food insecurity
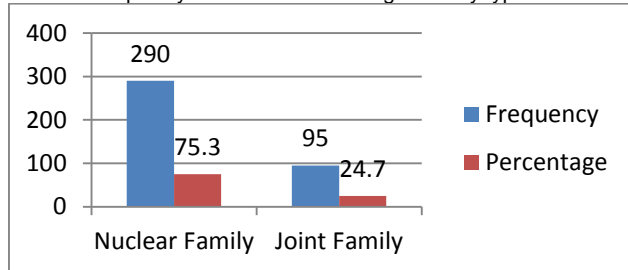- Food Pattern
- Educational life
- Social life

**Conceptual Framework**
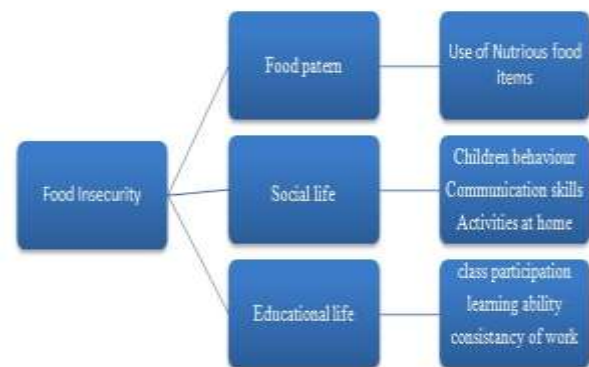
RESULTS

In this section of the article researcher discussed about analysis of the research and interpreted the results of the research according to his findings.

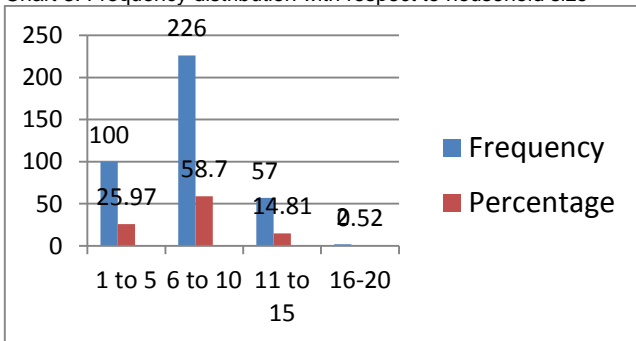Chart 1: Frequency distribution according to family type

This column chart illustrates the frequency and percentage distribution of response of the respondents. When we look at this chart we came to know that 290(75.3%) respondents were those who belonged to nuclear family while other 95(24.7%) respondents belonged to joint family.

Chart 2: Frequency distribution with respect to number of children under 12 years
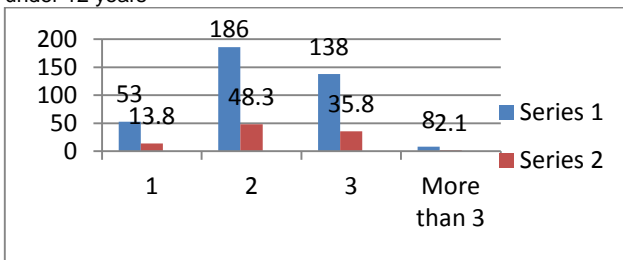

This column chart was constructed to show the number of kids whose age is below 12 years. When we look at this chart we came to know that 53(13.8%) respondents have only one kid who is under 12 years while 186 (48.3%) contributors have 2 children who were below 12 years. There were 138(35.8%) respondents who have 3 children under 12 years age and 8(2.1%) Participators were having greater than 3 children under 12 years.

Chart 3: Frequency distribution with respect to household size

This column chart describes the frequency and percentage distribution of the respondent's household size. When we look at this chart we came to know that 100(25.97%) respondents have 1-5 family members, 226(58.7%) have 6-10 family members, 57(14.81%) respondents have 11-15 family members while other 2(0.52%) were those who have 16-20 members in their family.

Chart 4: Frequency distribution with respect to employment status of household head
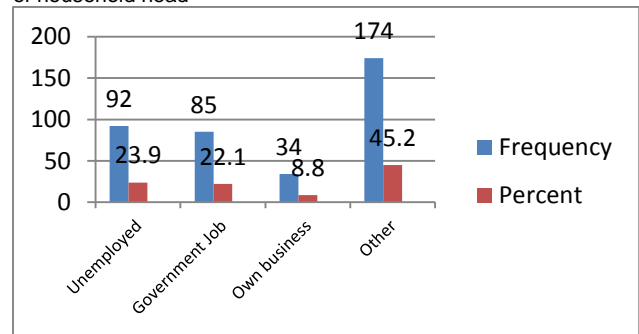
This column chart tells us about employment status of the household heads. It shows that 92(23.9%) household heads were unemployed, 85(22.1%) were those who were doing government job, 34(8.8%) have their own business and 174(45.2%) were those who were doing some other jobs like working as laborers, doing private job, teaching at private schools and some of them were those who have their own agricultural land and they were working there as farmer.

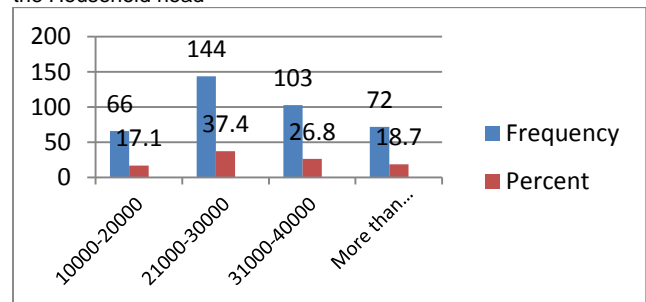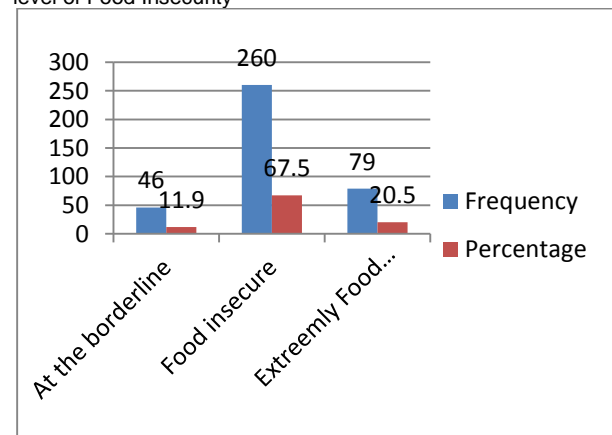Chart 5: Frequency distribution with respect to monthly Income of the Household head

Chart 6: Frequency and percentage distribution with respect to level of Food Insecurity

This table tells us about the monthly income of household heads. It shows that 66(17.1%) household heads earn 10000-20000 rupees per month, 144(37.4%) heads of house have monthly income of 21000-30000, and 103 (26.8%) heads of house earn 31000-40000 per month

and 72 (18.7%) household heads were those who earn more than 40000 per month.

As well as this chart is concerned, it is representing the prevailing intensity of food insecurity in the slum areas of Multan, Pakistan. When we look at this chart we came to know that only 46(11.9%) of the respondents were those who were at borderline which means they were neither extremely secure nor insecure. They were those who belonged to average person which means they were from middle class. Rarely, it happens that these types of people have to consider money before cooking or buying any food item and rarely or never get help or borrow food from their relatives and friends. They rarely or never faced such situation that they need more food but they didn't have sufficient money, most often they feed their children balanced diet and they never skip meal for the whole day. The chart shows that majority 260(67.5%) respondents were those who belonged to food insecure category which means sometimes such people faced the situation that they have not sufficient food due to lack of money, they have to considered amount of money before buying any food item and they preferred less expensive food items due to less money. Sometimes they have to borrow food or money from their friends and relatives. Sometimes they have to reduce number of meals or skip meals for whole day because of insufficient money. They can't provide balanced diet to their kids because they haven't enough money. This chart demonstrated that 79(20.5%) respondents belonged to extremely food insecure category. Such people have to always consider money before buying food items, mostly it happened that they haven't enough money to buy food and they always buy cheap foods and always get help from their relatives and friends. Most of the time they have to skip their whole without eating anything or they have to reduce number of meals and they didn't provide balanced diet to their children.
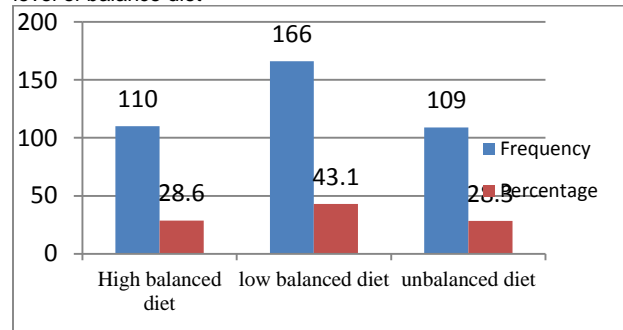
Chart 7: Frequency and percentage distribution with respect to level of social activeness
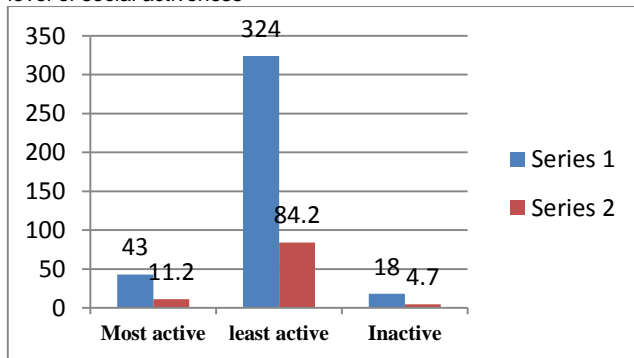
As well as this chart is concerned, it shows the level of socially activeness of the children. It shows that 43(11.2%) of the respondents belonged to most active category. It means only 43 children falls in the category which were very active, they are very talkative and always play with other children. These children work with their parents and help them. Such children went to shop by foot and actively participate in entertaining activities. When we look at next category we came to know that 324(84.2%)

children were least active which means they are less talkative, sometime they got angry, sometimes they get lost in thought and sometime they tell a lie. Children who fall in that category sometimes feel lethargic; they could not go to shop by foot. Such children don't help their parents and sometimes they play with other children. Next one is inactive category; this chart shows that 18(4.7%) children fall in that category. It means children who falls in that category are those who are too much shy, always get angry easily, lost in thoughts and very emotional. Such children never play with other children and never participated entertaining activities. They look like hopeless and full of sorrows. Children falls in that category are those who didn't go to shop by their selves, did not help their parents in their work and always feel lethargic.

Chart 8: Frequency and percentage distribution with respect to level of balance diet

This column chart shows the frequency and percentage division of the level of balanced diet of respondents. It shows that 110(28.6%) respondents eat high balanced diet which means mostly they eat proper diet like meat, rice, fish and green leafy vegetables regularly. People falls in such category are those who bring peanuts, chocolates and seasonal fruits for their children. Such nourishing foods and fruits are very fruitful for their children and after eating such nourishing things mental condition and physical growth of the children get improved and they became able to improve their social and educational life in positive way. As well as 2nd category is concerned results shows that most 166(43.1%) of the respondents were eating low balanced diet. People falls in that category were those who didn't eat proper food. Due to lack of money they didn't have ability to buy nourishing food. On weekly basis they can sometime eat meat, rice, fish and green leafy vegetables. Sometimes parents bring seasonal fruits chocolates and peanuts but not regularly. They did not have capability to buy fully nourishing food always due to lack of money. Last category mentioned in this chart is the unbalanced diet, 109(28.3%) respondents' falls in this category. People of this category are those who were very poor and even they didn't have ability to buy normal or low balanced food. People of this category didn't have ability to buy meat, rice or fish. Children of such category didn't eat chocolate, peanuts and seasonal fruits. Milk was the only item which was available for the people of all these categories.

Educational life: This table is the descriptive statistics of educational life of children in slum areas of Multan.

Percentage and frequency allocation of the respondents is given below.

Statement	Yes
Do your children active in class?	161 (41.8%)
Do your children participate in class activities?	188 (48.8)
Is your child active learner?	180 (46.8%)
Do your children take part in games at school?	221 (57.4%)
Is your child having the consistency of work?	151 (39.2%)
Do your kids share school activities at home?	284 (73.8%)
Are kids able to pay concentration without endorsing him/her?	104 (27%)
Are your kids able to remember material from preceding day's lesson?	178 (46.2%)

Interpretation: This table depicts that 224(58.2%) of the kids were inactive in class and other 161(41.8%) children were active in class. When we talk about participation of children in class activities we came to know that 197(51.2%) children were those who did not participate in class activities they were shy while other 188(48.8%) children were those who often participate in class activities. If we talk about learning ability we came to know that 205(53.2%) children were not active learner they were dull students and other 180(46.8%) children were active learner. Some co co-curricular activities are conducted in the school, results of the study shows that 164(42.6%) children did not participate in co-curricular activities at school while other 221(57.4%) children took part in co-curricular activities at school. Majority 234(60.8%) of children were those who have no consistency of work while other 151(39.2%) children were consistent with their school work. If we talk about sharing of school activities with their family members at home, results depicts that 101(26.2%) children did not share school activities with their family member while other 284(73.8%) children share activities of school at home with their family members. Majority 281(73%) children did not pay attention to their home work without promoting them and other 104(27%) children were able to pay attention to their work without promoting. As well as learning of lesson is concerned, results of our research shows that majority 207(53.8%) children were those were not able to learn material from their previous lesson while other 178(46.2%) children were able to learn their previous day's lesson.

Hypothesis testing

H 1: There is a connection between food insecurity and educational life of kids

Model Summary

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688[a]	.474	.472	1.911

ANOVA [a]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1259.382	1	1259.382	344.822	.000[b]
Residual	1398.816	383	3.652		
Total	2658.197	384			

Coefficients [a]

Model	Un standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	23.401	.473		49.427	.000
Food insecurity	-.313	.017	-.688	-18.569	.000

The link between academic life and food shortages was investigated using a simple linear regression test. The relationship between food shortages and kid's educational lives is statistically meaningful, with r (383) =.68, p.000. The value of R is.688, indicating that independent and dependent variables have a strong connection. The R square for this model was.474, meaning that 47.4 percent of the variation in kid's educational lives could be predicted by their food insecurity level. According to the finding of the survey, there is a relatively substantial link between food shortage and children's academic performance (Cohen, 1988). Figures shows that if level of food insecurity will increase then educational condition of kids will be low, they will not be able to focus on their studies and if level of food insecurity will decrease educational condition of children will be better and they can be able to focus on their studies.

H 2: There is a connection between food insecurity and social life of kids

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.373[a]	.139	.137	3.378

ANOVA [a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	705.419	1	705.419	61.814	.000[b]
	Residual	4370.800	383	11.412		
	Total	5076.218	384			

Coefficients [a]

	Un standardized Coefficients		Standardized Coefficients		
(Constant)	B	Std. Error	Beta	t	Sig.
Food insecurity	31.748	.837		37.936	.000
	-.234	.030	-.373	-7.862	.000

Interpretation: A bi-variate regression was used to see how good food insecurity influences children's degree of social life. Food insecurity and kid's social lives have a statistically significant relationship, with r (383) =.37, p.000. The value of R is.37, indicating that there is a connection between the dependent and independent variables. The results of this test show that there can be a link between food insecurity and kid's activity levels. As per the findings, it was expected that as food insecurity increases, kid's levels of activity would drop, but as food insecurity decreases, kid's social lives will improve, and they will be highly active.

H 3: Food insecurity is linked with amount of kidsless than 12 years and monthly earnings of the family head

Model Summary

Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	.664[a]	.441	.438	4.345

ANOVA [b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5678.289	2	2839.145	150.387	.000[a]
	Residual	7211.726	382	18.879		
	Total	12890.016	384			

Coefficients ᵃ

Model	Un standardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	32.622	.923		35.345	.000
Monthly Income of the Household head	-3.687	.225	-.626	-16.363	.000
Number of children under 12 years	1.772	.310	.219	5.717	.000

Interpretation: The researchers used multivariate regression to see how effectively the family head's monthly salary and the amount of kids under the age of 12 indicate food insecurity. The test's findings reveal a significant link between malnutrition, the amount of kids under the age of 12, and the family head's monthly salary. The relationship between malnutrition and the amount of kids less than the age of 12 and the family head's monthly payment is statistically meaningful, with r (382) =.664, p.000. The value of R is.664, indicating that there is a connection between the independent and dependent variables. The R square for this analysis was.441, accounting for 44.1 percent of the variation in kid's malnutrition. This is a connection that is relatively strong (Cohen, 1988). The test's findings show that when the amount of kids less than the age of twelve years as well as the family head's monthly payment rise or fall, the level of food insecurity among youngsters rises or falls.

CONCLUSION

Currents research was conducted to recognize the social and educational status of the food insecure children. In this research investigator took 385 guardians of the children to get information about their food intake pattern, prevailing level of food insecurity, social and educational life of children. As well as food pattern is concerned findings of study tells us that a large number of respondents were those who were not able to eat high balanced diet. Poverty and specially COVID-19 have very bad impacts on the diet of the people as during data collection these areas were facing lockdown and they have no opportunities to earn wealth to buy fully nourishing food for their households. Due to this dangerous situation of COVID-19 people could not provide balanced diet to their children.

If we look at the prevailing level of food insecurity of the people of slum areas of Multan, we came to know that a huge amount of respondents falls in the food insecure category, due to their poor economic condition many times it happened that they have to keep in mind the money before buying any food item, most of the time they have to get help from their friend or relatives for their survival and they could not provide their children proper food which is necessary for their growth.

As relationship among food insecurity, social life and educational life is concerned, survey data tells us that a large number of children were not active, many of the children were depressed due to their poor conditions even they did not preferred to play with other children at home and they were very shy and disappointed due to their financial conditions because due to this condition proper food was not available for them as compare to other children. Due to their food insecure situation they were not able to pay attention their studies and they did not participate in the curricular and co-curricular activities. Even such children did not pay attention to their home and class work. Researcher applied Simple linear regression test to identify the relationship among social and academic situation of children and food insecurity. Result of the test tells us that food insecurity influenced the educational and social situation of the children.

Suggestions: By keeping in mind the results of the current research, the researcher suggested that further researches should focus on the psychological condition of the food insecure children. Further researches should be done to compare the situation of food insecurity in rural and urban areas and government should take some serious steps to reduce the food insecurity rates in these areas.

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