

**HEADTEACHERS' LEADERSHIP  
ORIENTATION FRAMES AND INTENTIONS  
TOWARDS IMPLEMENTING NUTRITION  
EDUCATION**

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**HEADTEACHERS' LEADERSHIP  
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by

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## DEDICATION

I want to dedicate this Ph.D. thesis to my late father, Ghulam Ahmed Qazi, whose only wish was to see his children acquire education in its real sense “the education that teaches humanity.” His words of kindness and wisdom enlightened every step of my life, be it personal or professional. He would always say, “If you have everything but no education, everything that you have is as useless as a donkey wearing a crown. Coming from a family where female education was not much appreciated at times, my father was the one who faced all the opponents with clearing my pathways to better education.

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## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENT .....</b>	<b>ii</b>
<b>TABLE OF CONTENTS.....</b>	<b>iv</b>
<b>LIST OF TABLES .....</b>	<b>x</b>
<b>LIST OF FIGURES .....</b>	<b>xii</b>
<b>LIST OF ACRONYMS.....</b>	<b>xiii</b>
<b>ABSTRAK .....</b>	<b>xiv</b>
<b>ABSTRACT .....</b>	<b>xvi</b>
<b>CHAPTER 1 INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the study .....	1
1.2 Context of the study.....	4
1.2.1 The educational landscape of the country .....	5
1.2.1(a) Federal level.....	6
1.2.1(b) Provincial level.....	6
1.2.1(c) Divisional level .....	7
1.2.1(d) District level.....	7
1.2.1(e) Cluster level .....	8
1.2.1(f) School level.....	8
1.2.2 Educational management in Pakistan.....	9
1.2.2(a) Primary education.....	10
1.2.2(b) Middle school education.....	11
1.2.2(c) The secondary level of education.....	11
1.2.3 18 <sup>th</sup> Constitutional amendment and education reforms .....	12
1.2.4 Child Nutrition in Pakistan .....	14
1.2.5 Nutrition education as a mean to overcome malnutrition.....	17
1.2.5(a) School leadership and implementation of NE.....	18

1.2.5(b) Gender and school leadership .....	20
1.2.5(c) Gender and child nutrition .....	22
1.3 Statement of the problem .....	24
1.4 Research objectives.....	29
1.5 Research questions.....	30
1.6 Operational definitions of the key terms.....	31
1.6.1 Headteacher.....	31
1.6.2 Leadership orientation frames.....	31
1.6.3 Intention.....	32
1.6.4 Nutrition education.....	32
1.6.5 Gender .....	33
1.7 Significance of the study.....	33
1.7.1 Significance for research .....	33
1.7.2 Significance for policymakers .....	34
1.7.3 Significance for practitioners.....	35
1.8 Limitations of the study .....	36
1.9 Delimitations of the study .....	37
1.10 Summary .....	38
<b>CHAPTER 2 LITERATURE REVIEW .....</b>	<b>39</b>
2.0 Introduction.....	39
2.1 Nutrition education .....	39
2.2 Need for nutrition education .....	40
2.3 Implementation of school-based nutrition education .....	42
2.4 Nutrition education in Pakistan .....	46
2.5 Challenges associated with the implementation of nutrition education ..	48
2.6 School leadership and implementation of nutrition education.....	56
2.6.1 Leadership.....	56

2.6.2	School leadership .....	58
2.6.3	Gender and leadership .....	60
2.7	Leadership orientation frames .....	64
2.7.1	Structural leaders.....	65
2.7.2	Human resource leaders.....	67
2.7.3	Political leaders .....	68
2.7.4	Symbolic leaders .....	69
2.8	School headteachers' leadership orientation frames.....	72
2.9	Previous studies on the use of leadership orientation frames.....	74
2.10	Implementation of nutrition education by school headteachers .....	82
2.11	Human behavior and intention models and theories.....	84
2.12	Previous research on headteachers' intention .....	87
2.13	The theoretical framework of the study .....	91
2.14	Conceptual framework of the study.....	92
2.14.1	Headteachers' intention of implementing nutrition education.....	92
2.14.2	Headteachers' four leadership orientation frames.....	93
2.14.2(a)	Structural frame.....	94
2.14.2(b)	Human resource frame.....	95
2.14.2(c)	Political frame .....	96
2.14.2(d)	Symbolic frame .....	96
2.14.3	Headteachers' Gender.....	98
2.15	Summary .....	99
<b>CHAPTER 3 METHODOLOGY.....</b>		<b>100</b>
3.0	Introduction.....	100
3.1	Research design .....	100
3.2	Research sample .....	103
3.2.1	Quantitative sampling.....	103



3.2.2	Qualitative sampling.....	105
3.3	Data collection.....	106
3.3.1	Quantitative data collection .....	106
3.3.1(a)	Intention questionnaire .....	107
3.3.1(b)	Developing intention questionnaire.....	108
3.3.1(b)(i)	Elicitation of the intention questionnaire..	109
3.3.1(b)(ii)	Establishing the validity and reliability ...	115
3.3.1(c)	Leadership orientation survey (LOS) .....	124
3.3.2	Reliability of LOS and intention questionnaire .....	125
3.3.2(a)	Piloting of the questionnaires.....	126
3.3.2(a)(i)	Piloting of LOS instrument.....	126
3.3.2(a)(ii)	Piloting of the intention questionnaire .....	127
3.3.3	Qualitative data collection .....	128
3.3.3(a)	Semi-structured interviews .....	128
3.3.3(b)	Interview protocols.....	129
3.3.3(b)(i)	Aligning interview and research questions	130
3.3.3(b)(ii)	Constructing inquiry-based conversation	130
3.3.3(b)(iii)	Seeking feedback on the protocols .....	131
3.3.3(c)	Piloting of the interview protocols .....	132
3.3.3(d)	The trustworthiness of the qualitative data .....	133
3.4	Data analysis procedures.....	135
3.4.1	Quantitative data analysis .....	135
3.4.2	Qualitative data analysis .....	137
3.4.2(a)	Phase 1. Familiarizing with the data.....	138
3.4.2(b)	Phase 2. Generating initial codes .....	139
3.4.2(c)	Phase 3: Searching for themes .....	139
3.4.2(d)	Phase 4: Reviewing themes.....	140

3.4.2(e)	Phase 5: Defining and naming themes.....	140
3.4.2(f)	Phase 6: producing the report.....	141
3.5	Ethical considerations .....	141
3.6	Summary .....	143
<b>CHAPTER 4 RESULTS AND ANALYSIS .....</b>		<b>144</b>
4.0	Introduction .....	144
4.1	Quantitative results .....	144
4.1.1	Response rate .....	144
4.1.2	Demographics .....	146
4.1.3	Cronbach’s alpha for LOS and intention questionnaire .....	147
4.1.4	Research question one: .....	148
4.1.4(a)	Headteachers’ leadership orientation frames .....	148
4.1.5	Research question two: .....	153
4.1.6	Research question three: .....	155
4.1.6(a)	Normality of the data .....	155
4.1.6(b)	Regression analysis .....	156
4.1.7	Research question four: .....	161
4.1.7(a)	Hayes’s PROCESS .....	161
4.2	Qualitative results .....	163
4.2.1	Research question five:.....	164
4.2.1(a)	Capacity related challenges.....	167
4.2.1(b)	Human resource-related challenges.....	169
4.2.1(c)	Infrastructure related challenges .....	170
4.2.1(d)	Challenges related to the roles and responsibilities...	172
4.2.1(e)	Policy related challenges .....	174
4.2.1(f)	Challenges related to support from authorities .....	176
4.2.1(g)	Community-related challenges.....	178

4.2.1(h) Political and teacher union related challenges .....	180
4.3 Summary .....	183
<b>CHAPTER 5 DISCUSSION AND CONCLUSION.....</b>	<b>184</b>
5.0 Introduction .....	184
5.1 Headteachers' leadership orientation frames .....	184
5.2 Headteachers' intentions towards implementing nutrition education ...	186
5.3 The influence of headteachers' LoF on their intentions .....	188
5.4 Headteachers' gender as a moderator .....	192
5.5 Challenges anticipated by the headteachers while implementing NE...	194
5.6 Implications of the study.....	197
5.6.1 Implications for policymakers .....	197
5.6.2 Implications for secondary school headteachers.....	200
5.7 The uniqueness of the study in the context of Pakistan .....	202
5.8 Recommendations for future research .....	206
5.9 Researcher's final reflection.....	207
5.10 Conclusion.....	208
<b>REFERENCES .....</b>	<b>210</b>
<b>APPENDICES</b>	
<b>LIST OF PUBLICATIONS</b>	

## LIST OF TABLES

	<b>Page</b>
Table 1.1 Education Administration (Pre & Post 18th amendment .....	12
Table 2.1 Summary of the studies related to challenges .....	53
Table 2.2 Leadership Orientation Frames .....	71
Table 2.3 Summary of previous studies on Leadership orientation frames ...	79
Table 2.4 Summary of previous studies-Headteachers' intentions .....	90
Table 3.1 Sample size for qualitative data. ....	106
Table 3.2 Questionnaire Development (Ajzen, 1991).....	109
Table 3.3 Questions for focused group discussion.....	111
Table 3.4 Salient behavioural beliefs about implementation of NE .....	113
Table 3.5 KMO & Barlett's Test .....	121
Table 3.6 Total Variance Explained .....	122
Table 3.7 Factors Loading for the Modified Intention Questionnaire.....	122
Table 3.8 Description of Leadership Orientation Frames .....	124
Table 3.9 Response Rate .....	126
Table 3.10 Reliability of LoS Questionnaire .....	127
Table 3.11 Reliability of Intention Questionnaire.....	127
Table 3.12 Guiding Questions for Semi-Structured Interviews .....	128
Table 3.13 Interview Protocols Checklist .....	131
Table 3.14 Summary of Interview Protocols.....	133
Table 3.15 Quantitative Data Analysis .....	136
Table 3.16 Summary Data Analysis Phases.....	138
Table 4.1 Response Rate .....	145

Table 4.2	Respondents' Demographics .....	146
Table 4.3	Cronbach's Alpha Scores of LOS and Intention Questionnaire .....	147
Table 4.4	Mean and SD of the Items from Political Frame .....	149
Table 4.5	Mean and SD for the Items of Structural Frame .....	150
Table 4.6	Mean and SD for the items of Human Resource Frame .....	150
Table 4.7	Mean and SD of the Items from Symbolic Frame.....	151
Table 4.8	Leadership orientation frames .....	152
Table 4.9	Responses on Intention seven Likert Scale .....	154
Table 4.10	Frames -Wise Mean Scores .....	154
Table 4.11	Case Procession Summary.....	155
Table 4.12	Normality of the Data .....	156
Table 4.13	Coefficients & Multicollinearity, Tolerance & VIF .....	157
Table 4.14	Correlation .....	157
Table 4.15	Model Summary .....	158
Table 4.16	Variance of Analysis.....	159
Table 4.17	Coefficients .....	160
Table 4.18	Correlation .....	161
Table 4.19	Model Summary .....	162
Table 4.20	Model Summary (Gender as a Moderator).....	163
Table 4.21	Matrix of Qualitative Analysis (Codes, Sub & Main Themes).....	164

## LIST OF FIGURES

	<b>Page</b>
Figure 1.1. Educational Administration (Provincial Level) BESP-2012-2018...9	
Figure 2.1. Theory of planned behavior (Ajzen, 1985) .....92	92
Figure 2.2. Leadership orientation frames .....97	97
Figure 2.3. Conceptual framework of the study .....99	99
Figure 3.1. Sampling procedures, Adopted from Neuman (2014) ..... 105	105
Figure 3.2. Steps involved in developing intention questionnaire ..... 109	109
Figure 3.3. Four Phases of interview protocols (Montoya, 2016)..... 129	129
Figure 3.4. Thematic map (adopted from Braun & Clark, 2006)..... 141	141
Figure 3.5. Summary-research design ..... 143	143
Figure 4.1. Summary of headteachers' frames..... 152	152
Figure 4.2. Summary of headteachers' intentions ..... 153	153
Figure 4.3. Summary of challenges ..... 182	182

## LIST OF ACRONYMS

BISP	Benazir Income Support Program
CPD	Continuous Professional Development
DEC	District Education Coordinator
DEO	District Education Officer
DIS	District Inspector of Schools
ECP	Economic Survey of Pakistan
GDP	Gross Domestic Product
HT	Headteacher
IYCF	Infant and Young Child Feeding
LHW	Lady Health Worker
MDGs	Millennium Development Goals
NE	Nutrition Education
NNS	National Nutrition Survey
PCP	Planning Commission of Pakistan
P&D	Planning & Development
PTSMC	Parent Teacher School Management Committee
SDGs	Sustainable Development Goals
SUN	Scaling Up Nutrition
UN	United Nations
UNESCO	United Nations Educational, Scientific & Cultural Organization
USI	Universal Salt Iodization
WEC	World Economic Forum
WFF	Wheat Flour Fortification

# **KERANGKA ORIENTASI KEPIMPINAN DAN HASRAT PENGETUA DALAM MELAKSANAKAN PENDIDIKAN NUTRISI**

## **ABSTRAK**

Dalam kajian ini, kerangka orientasi kepimpinan pengetua sekolah di Wilayah Baluchistan, Pakistan telah dikaji untuk melihat hasrat mereka dalam melaksanakan pendidikan nutrisi. Kajian tinjauan orientasi kepimpinan (LOS) dan soal selidik yang baharu dibangunkan tentang hasrat (berdasarkan teori tingkah laku yang dirancang) digunakan untuk untuk mengumpul data daripada 378 (152 perempuan dan 226 lelaki) pengetua sekolah menengah. Kajian ini bertujuan untuk menentukan sama ada terdapat hubungan di antara kerangka orientasi kepimpinan pengetua dan hasrat mereka dalam melaksanakan pendidikan nutrisi. Jantina pengetua sebagai aspek penting dalam pendidikan nutrisi, dilihat sebagai moderator bagi menentukan sama ada ia mempunyai kesan terhadap kerangka hubungan kepimpinan dan hasrat mereka. Pelaksanaan pendidikan nutrisi, agak baharu, diterokai dari dimensi cabaran yang dijangkakan. Penemuan ini menunjukkan bahawa pengetua di Pakistan adalah pengguna aktif kerangka politik manakala tiga kerangka lain iaitu struktur, sumber manusia dan simbolik berada jauh di bawah paras jangkaan nilai min yang sama dengan atau lebih daripada empat ( $M=4$ ). Hasil kajian, hasrat pengetua berdasarkan skala likert 7 mata dari sangat setuju ke tidak setuju didapati majoriti responden setuju (60.8%) dan sangat setuju (28.1%) dengan pernyataan melaksanakan pendidikan nutrisi. Terdapat hubungan yang signifikan di antara kerangka kepimpinan pengetua dan hasrat sebagai kerangka dan kekal sebagai peramal hasrat. Kerangka meramalkan 65.9% hasrat pengetua terhadap pelaksanaan pendidikan nutrisi. Dalam empat kerangka tersebut, politik kekal sebagai peramal yang signifikan ( $B=.826$ )



hasrat pengetua untuk melaksanakan pendidikan nutrisi di sekolah masing-masing dalam tempoh tiga tahun. Namun, jantina sebagai moderator, tidak mempunyai keupayaan serta kesan interaksi yang kurang ( $R^2=.0669$ ) berbanding dengan hubungan langsung kerangka dan hasrat ( $R^2=.659$ ). Model interaksi jantina hanya menjelaskan 6% kesannya berbanding dengan kerangka dan kesan hasrat sebanyak 65.9%. Maka, peranan jantina sebagai moderator didapati tidak penting. Hasil dapatan kualitatif berkaitan cabaran yang dihadapi pengetua dalam melaksanakan pendidikan nutrisi termasuk penggubalan dan pelaksanaan dasar secara ad-hoc kerana kerap berlaku perubahan dasar. Staf tidak mencukupi dan tidak terlatih bersama serta juga isu peranan dan tanggungjawab. Dapatan juga menunjukkan masyarakat tidak menyokong terhadap pelaksanaan pendidikan nutrisi. Selain itu, campur tangan dari kesatuan guru dan parti politik juga dihadapi oleh pengetua dan merupakan cabaran yang besar. Namun, kajian ini berpotensi untuk memberi kesan kepada perkembangan profesional di Pakistan dan juga tempat lain yang mempunyai konteks yang sama. Selain itu, kajian ini mengenal pasti orientasi kepimpinan yang biasa diamalkan oleh majoriti pengetua dan keberkesanan kerangka mereka gunakan untuk melaksanakan pendidikan nutrisi. Di samping itu, maklumat daripada kajian ini boleh menjadi sangat bernilai kepada pengetua sebagai refleksi terhadap kepimpinan mereka sendiri. Soal selidik hasrat yang dibangunkan dan digunakan dalam kajian ini dapat digunakan dengan berkesan dalam kajian pada masa hadapan dalam atau sebelum sesuatu pembaharuan pendidikan dilaksanakan.

# **HEADTEACHERS' LEADERSHIP ORIENTATION FRAMES AND INTENTIONS TOWARDS IMPLEMENTING NUTRITION EDUCATION**

## **ABSTRACT**

In this study, the leadership orientations frames of secondary school headteachers in Baluchistan province of Pakistan, were examined in relation to their intentions towards implementing nutrition education. Leadership orientation survey (LOS) and newly developed intention questionnaire (based on the theory of planned behavior) were used to collect data from 378 (152 females and 226 males) secondary school headteachers. The study sought to determine if there existed a relationship between headteachers' leadership orientation frames and their intentions towards implementing nutrition education. Gender of headteachers, as an important aspect, in relation to nutrition education, was looked into as a moderator to see whether it had any effect on the relationship of headteachers' leadership frames and their intentions. The implementation of nutrition education, being a new initiative, for headteachers, was also explored from the dimension of anticipated challenges they might face while implementing nutrition education. The findings portray headteachers, in Pakistan, as active users of political frame, while the rest of the three frames (structural, human resources and symbolic) are well below the expected count of mean score equal to or greater than four ( $M=4$ ). The results of headteachers' intentions, on seven Likert scale (from strongly agree to strongly disagree) remained positive as majority of them were found to agree (60.8%) and strongly agree (28.1%) with the statements of implementing nutrition education. There was a significant relationship found between headteachers' leadership frames and intentions as frames remained a significant predictor of their intentions. The frames predicted 65.9% of their intentions towards

implementing nutrition education. Amongst the four frames political remained a significant predictor ( $B=.826$ ) of headteachers' intentions towards implementing nutrition education in their respective schools within next three years. Gender as a moderator, however, had insignificant capability with having less interaction effect ( $R^2=.0669$ ) as compare to direct relationship of frames and intentions ( $R^2=.659$ ). The interaction model of gender explained only 6% of the effect as compared to frames and intention effect of 65.9%. So, the role of gender, as a moderator, was found insignificant in this regard. The qualitative results, in relation to challenges the headteachers anticipated while implementing nutrition education, included the formulation and implementation of policies on ad-hoc basis with having frequent changes in the policies. Insufficient and nontrained staff along with issues of roles and responsibilities were also amongst the key challenges for headteachers. The results also revealed community being non supportive towards the implementation of nutrition education. In addition, the interference from teachers' union and political parties was also anticipated as huge challenges, by the headteachers, while implementing nutrition education. This research, nevertheless, has the potential to impact professional growth in Pakistan and elsewhere, with similar contexts. The study identifies a common leadership orientation frame used by a majority of headteachers and the effectiveness of their frames towards implementing nutrition education. Additionally, this information could be self-reflecting guide of headteachers own leadership orientations. The intention questionnaire developed and used in this study could be effectively used in future studies exploring the implementors' intentions prior to implementing any educational reforms.

# **CHAPTER 1**

## **INTRODUCTION**

Chapter one of the study begins by presenting the background and context of the study. The chapter then proceeds to highlight the problem statement along with research objectives and research questions. Afterward, the chapter spots light on the significance, limitations, and delimitations of the study. In the later part, it illustrates the key terms used in this study and concludes with presenting the summary.

### **1.1 Background of the study**

Under the 18<sup>th</sup> constitutional amendment, the recent changes in the governance structures in Pakistan, have delegated certain powers and programs from the central to the provincial governments. Nutrition, in the context of power delegation, is at the core of government reform agenda. In addition, Pakistan was also a signatory to UN's Millennium Development Goals (MDGs) and now Sustainable Development Goals (SDGs), where nutrition has gained considerable recognition as one of the central components of SDGs. The SDGs aim at transforming the world, by 2030, via achieving 165 targets leading to 17 goals, and improved nutrition (SDG-2) is at the heart of SDGs. The main target of the SDG-2 is to end hunger through ensuring access by all people, especially the poor and people in susceptible conditions, including infants, to safe, nutritious and sufficient food (WF (Dury, 2017; WFP, 2019). SDG-2, as Das, Sharma, and Babu (2018) state, also aims to end all forms of malnutrition by 2025 and follow the globally set targets on stunting (height for age) and wasting (weight for height) in under five years children. It also encompasses meeting the nutritional needs of adolescent girls, pregnant and lactating women, and older persons (WFP, 2019).

Pakistan joined the Scaling Up Nutrition (SUN) movement in the year 2013 to improve nutrition status in the country in line with the global commitments in this regard (Shaheen & Khan, 2015). Joining the SUN movement, according to Shaheen and Khan (2015), was to respond to the alarming situation of malnutrition in the country that the National Nutrition Survey (NNS) 2011 has highlighted. The survey has found 43.7% of under five-year age children stunted and underweight. It also informs about wasting, stunting and micronutrient malnutrition being prevalent in Pakistan.

Planning Commission of Pakistan (PCP) serves as an apex institute to overlook the SUN moment in the country. Regulating almost all programs and proposals related to federal and provincial governments has been in the portfolio of PCP. SUN program is further extended to the Ministry of Planning Development & Reform at federal and provincial secretariats under the direct supervision of Planning and Development (P&D) departments. The respective provincial departments have already developed their inter-sectoral strategies realizing that nutrition is no more a health issue only. Instead, all sectors are directly or indirectly responsible for enhancing the current status of nutrition, with the P&D department playing a crucial role in providing a platform to coordinate for all sectors.

Nutrition is believed to be the most beneficial investment in terms of decreased morbidity and mortality in women and children. Also, the same has been considered for paying high returns and dividends through enhanced economic productivity (World Bank, 2018). Prosperity investments and social sector development, including education, health, and nutrition, are central to decreasing malnutrition. Health promotion and prevention from diseases is highly associated with having nutrition knowledge and maintaining optimal dietary behaviors (Bauer, Briss, Goodman, &

Bowman, 2014; Mozaffarian, 2016). More importantly, child nutrition is found to be closely associated with their academic performance. Research (e.g., Florence, Asbridge, & Veugelers, 2008) informs that children with insufficient nutrition intake remain short of achieving desirable academic landmarks.

Nutrition education thus remains at the core of addressing child nutrition through bringing about change in their attitude and behavior towards healthy food choices. Students' learning, through their educational experiences (Lai-Yeung, 2010), is fundamental to developing their healthy eating habits. The government of Pakistan, in this regard, has planned to implement school nutrition education as part of its sectoral education plan. The same calls for devising research studies to provide insights to enable schools towards the implementation of nutrition education (Gonzi, 2014) in schools.

It is important to note that the schools, district administrators, policymakers, and others realize that headteacher leadership, like Louis, Leithwood, Wahlstrom, and Anderson (2010) state, is linked with students learning outcomes, dropout rates, student evaluation, and preparation for better careers. Within the school's context, school headteachers are the main stakeholders while implementing major reform agendas (Fullan, 2001) such as nutrition education. That to say, they are the gatekeepers of change. It is explicit that a headteacher role is not only to implement a given set of rules or manage certain physical recourses. They must also take the lead to develop a vision that is achievable via improved teaching and learning and establish an environment conducive to achieving academic success (Wallace Foundation, 2013). There is a need for skillful implementation of reforms to improve student awareness and academic achievement at the school level (Alvoid & Black, 2014). Headteachers' role in schools in Pakistan is found equally imperative. The majority of the studies

(Faisal et al., 2012; Khan, 2013; Niazi, 2012) have found school headteachers as key implementors of educational innovation and change. Their role has been continuously studied by researchers regarding the implementation of educational reforms and overall school improvement. Their role in the implementation of nutrition education remains central and needs to be investigated. The headteachers' role in this regard has been found phenomenal (Dycus, 2007). Research (e.g., Qian, Newman, Yuen, Du & Shell, 2019) suggests that before implementing any interventions, such as nutrition education, school headteachers' roles need to be taken into consideration.

## **1.2 Context of the study**

This study was conducted in the Baluchistan province of Pakistan. The Islamic Republic of Pakistan, as a South Asian country, situates on the intersection of West, Central, and East Asia. The main religion of the people of Pakistan is Islam, with 95 percent of the population being Muslims (Shah & Amjad, 2011). It has a total population of 193.2 million (World Bank, 2016) with occupying 7960895 square kilometers of land. It has its borders with Afghanistan on West, India in the east, China North-East, and the Islamic Republic of Iran on the southwest. On the southwest, there is also located the Arabian ocean. Pakistan consists of four provinces including, Baluchistan, Khyber Pakhtunkhwa, Punjab, and Sindh with Quetta, Peshawar, Lahore, and Karachi, as their provincial capitals. The city of Islamabad is the federal capital.

Punjab remains the largest province of the country in relation to population size. Khyber Pakhtunkhwa stands second, Sindh third, while Baluchistan fourth in terms of population. Although Baluchistan stands at the bottom of the country population wise, it is the largest province to cover one-third of its land. Baluchistan

covers the territory of 347,190 square kilometers from a total area of 796,089,5 kilometers of the country.

Urdu is the national language with other local and provincial languages that have a commanding presence. According to Heritage Online (2010), major ethnolinguistic groups are Punjabis (44.15%), Pushtoons (15.42%), Sindhis (14.1%), Seraikis (10.53), Muhajirs-Urdu speaking (7.57%), Baluchis (3.57%) and Others (4.66%) (cited in Shah & Amjad 2011).

### **1.2.1 The educational landscape of the country**

At initial stages in 1947, Pakistan inherited an administrative setup characterized as over-centralized and authoritarian (Nazir, 2010) the British had introduced to suit their vested interests. The history of the education system of Pakistan has witnessed several phases (Saghir, 2005; UNESCO, 2007). The education administration in Pakistan was originally built on a bureaucratic “top-down” model. Before the 18th constitutional amendment, a centralized policy was in place with controlling schools in the public sector. Education policies and plans were formulated by the Federal Ministry of Education (ME), while provincial governments were responsible for implementing those policies. The provincial governments did not have to take initiatives to improve the educational landscape in their respective provinces.

There has revision taken place after the 18<sup>th</sup> amendment in the constitution of Pakistan (Jogezai, 2019). As Jegezai (2019) states, the distribution of powers between the federal and provincial governments have taken place at the upfront. The revised framework of power devolution has reframed the nature of educational governance since the amendment has delegated several subjects to the jurisdiction of provinces. These subjects included planning, policy, curriculum, centres of excellence, the



standard of education, Islamic education, the centre of excellence, and higher education. This section presents the administration of education at different levels in the country.

### **1.2.1(a) Federal level**

Ministry of Federal Education and Professional Training exists at the national level. The federal minister for education serves as head of the ministry with the administrative assistance of the federal secretary of education. Education was a national subject, and the Federal Ministry for Education was created, before the 18<sup>th</sup> connotational reform, in compliance with the country's constitution. The federal government was involved in formulating educational policies, curriculum, while the provincial government held the responsibility of its launching and implementation. The federal ministry of education also dealt with the distribution of loans, donations, and the grant in aid received from different countries and donor agencies. The principal responsibility of the ministry, after the 18th amendment, lies in developing policies, plans, and programs to ensure that education in Pakistan is affordable and available. It also offers a wide range of technological, vocational, and business skills and training needed to meet national and international labor market requirements. It works along with other government ministries and organizations to sponsor students, and distribute scholarships.

### **1.2.1(b) Provincial level**

In each of the four provinces, there exists the ministry of education. The ministry is headed by the education minister and assisted by the education secretary. The provincial secretary of education has several deputies, assistants, and

undersecretaries. The provincial education department manages policy formulation in its portfolio and oversees the province's education administration. The Provincial secretariat performs the functions of policymaking and looking after other educational subjects devolved through the 18th constitutional amendment.

At the provincial level, there also exists a provincial directorate headed by the director of education (Schools). Director education reports to secretary education and is the administrative head of the directorate of education. Deputy directors, including deputy director monitoring and evaluation (M&E), finance and administration report to the director of education. The provincial directorate has the responsibility of implementing plans and policies. They are also responsible for managing and providing educational resources, including textbooks, to the schools in the province.

#### **1.2.1(c) Divisional level**

Divisional Director of Education is the administrative head at the divisional level. The divisional director reports to the director of education (Schools). They are responsible for looking after the administrative affairs and observing the implementation of policies and plans at the divisional level. They oversee all district education officers (DEOs). The divisional director's office acts as a focal point for communication and coordination between districts and the Directorate of Education.

#### **1.2.1(d) District level**

District Officer (DEO) is the administrative head at the district level. S/he exercises the powers of educational manager at the district level with having the responsibility of smooth implementation of the policies and plans. Other district education officials assist DEO. These include deputy district education officer

(DDEO), assistant district officer education (ADOE), and learning area coordinators (LCs). District officer education is also the chairman of the district education authority. The body with having the representation from the other line departments, district administration (deputy commissioner), and the community.

#### **1.2.1(e) Cluster level**

After the 18th constitutional amendment and in line with the top-down approach of educational management, the education department government of Baluchistan has established and opted for a cluster-based approach. The secondary schools have been deemed to be the hub of all surrounding primary and middle schools. The secondary schools' headteacher has been made responsible for conducting a needs assessment of the neighboring schools and managing learning and other necessary material like furniture accordingly. The headteachers of the secondary schools have been provided the annual budget of their schools and the neighboring ones. The headteachers, as cluster heads, are also responsible for monitoring the neighboring schools from the management and academic perspective.

#### **1.2.1(f) School level**

Secondary school, as discussed earlier, consists of pre-primary, primary, middle, and secondary sections. Headteachers are responsible for managing the school as a whole, including all the sections. Power devolution in the province of Balochistan, after the 18<sup>th</sup> constitutional amendment, has profound impacts on school-level management as the devolution has further empowered headteachers as compared to the past. The headteachers after power devolution have been assigned the role of monitoring the performance of teachers, managing parent-teacher school management

committees (PTSMC), overseeing continuous professional development of teachers (CPD) taking initiatives on their own through developing and implementing school improvement plans. So, the school level management relies more on school headteachers rather than district education office, and the role of headteachers remains eminent in this regard.

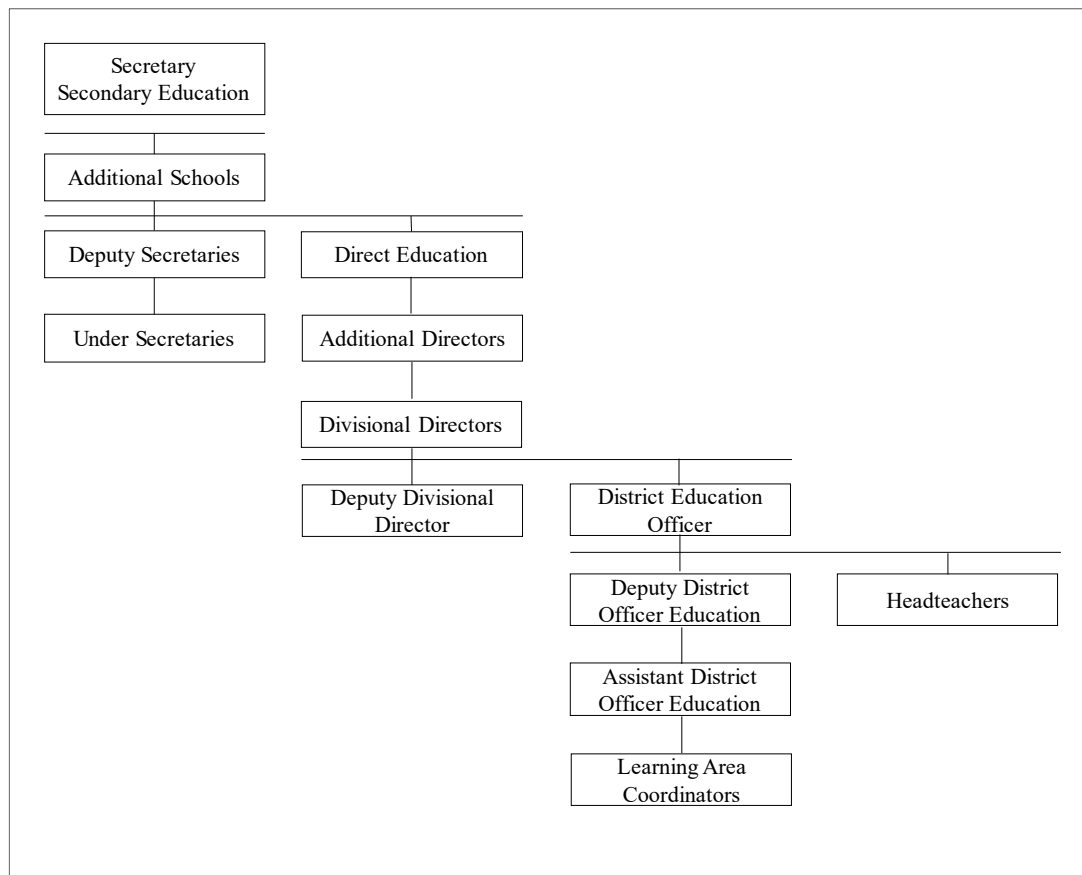


Figure 1.1. Educational Administration (Provincial Level) BESP-2012-2018

### 1.2.2 Educational management in Pakistan

In Pakistan, there are several education systems through which education is delivered. The public-school system is the largest that encompasses the majority of school students, like in many other developing countries. Along with the public school, there is a vast number of private school systems fulfilling the educational inadequacy. These schools are run both by private entrepreneurs and non-profitmaking, often

community-based, trusts. The schools facilitate a vast population living in urban areas. Besides the significant contribution made by this sector, the government is still unable to cope with the massive challenge in terms of providing necessary resources to the schools. Moreover, almost all schools, either public or private, are run by the headteachers with low managerial expertise (Memon & Bana, 2005).

Headteachers are promoted on the basis of seniority; that to say the number of years they have been serving as teachers rather than their abilities and experiences that enable them to manage the school. Nevertheless, the time has come, and the policymakers have realized the need and importance of the professional development of headteachers. In recent years, policies have been developed and proposed at the provincial level in order to recruit headteachers with relevant experiences in public sector schools.

In Pakistan, as discussed above, there exist different levels/tiers and types of education. Most of the education system comprises of the public sector being governed by the government while different bodies, boards, and individuals manage private sector schools and Deni Madaris (religious education entities). The school education system, from pre-primary to secondary education, consists of pre-primary, primary, middle, and secondary education (Saeed & Khan, 2014). Each of these levels is discussed in this section.

### **1.2.2(a) Primary education**

The primary level of schools caters to the students of age five and above. The primary level of schools consists of the class nursery to five and takes five years to complete the cycle of this level. National language (Urdu) and regional languages

remain the medium of instruction at these schools. However, in private primary schools, English is used as the instructional language.

### **1.2.2(b) Middle school education**

The Middle or elementary level of education comprises of grade VI to VII with the duration of a year for each grade. This level is for the age group of 11-13 years. Students' promotion from one grade to another is based on an annual school-based examination system. However, recently in the province of Balochistan, Balochistan Examination and Assessment Commission (BEAC) conducts the final exams of grade VIII. Both public and private sector schools must make their grade VIII students appear in BEAC exams. Elementary schools in Pakistan, though consist of grade VI to VIII, actually inculcate students of one to eight.

### **1.2.2(c) The secondary level of education**

Secondary education consisting of grade IX and X and takes two years to complete. The enrolment age for the secondary level is 13 and above. Likewise, in primary and elementary schools, Urdu is the instructional language in secondary schools. However, in private schools, including few public sector schools in the main cities, the medium of instruction is English. Almost every secondary school also has middle and primary sections. In addition to public sector schools, there exist private secondary schools, managed by individuals and organizations. Other institutions like cadet colleges are registered and run by Pakistan Armed Forces.

### 1.2.3 18<sup>th</sup> Constitutional amendment and education reforms

The 18<sup>th</sup> constitutional amendment has led to radical changes in the administration and legislative system of the country. The most prominent is the provision of access to free quality education by all children age five to 16. The second is the devolution of powers through the elimination of concurrent list which as an implication has devolved the subjects of the curriculum, syllabus, planning, policy, center of excellence and standards of education to the provincial governments. In line with the constitutional amendment, specific policy reforms have been designed to empower provinces to make their plans for quality education in public schools. Nevertheless, it is too early to determine the chances of it being successful unless and until these policies and plans are properly implemented. Table 1.1. presents the comparative analysis of pre and post 18<sup>th</sup> amendment educational administration in the country.

Table 1.1

*Education Administration (Pre & Post 18<sup>th</sup> Constitutional amendment)*

Before the 18 <sup>th</sup> amendment	Post 18 <sup>th</sup> amendment
It is based on a “top-down” bureaucratic model	Bottom-up and top-down management model
Policies and plans developed and reviewed at the federal level	The development of policies and plans takes place at the provincial level through consultation of all provincial-level stakeholders. E.g., Provincial education policy formulated and the Balochistan education sector plan (BESP) developed. Local education group formed at the provincial level (with participation from all stakeholders, including parents, government line departments, non-educational organizational partners) to review policies and plans. Thematic group for each area formed consisting of experts of that particular area to review the relevant policy guidelines and recommend amendments.

Table1.1 Continued

*Education Administration (Pre & Post 18<sup>th</sup> Constitutional amendment*

Before the 18 <sup>th</sup> amendment	Post 18 <sup>th</sup> amendment
Curriculum developed and reviewed by the federal government and implemented by provincial/area governments.	Curriculum developed, reviewed, and implemented by provincial / area governments. Capacity development plans developed for the Bureau of curriculum (BoC) provincial institute for teacher education, PITE, and board of intermediate and secondary (BISE) so they are enabled to implement and assess the implementation of the curriculum.
Pre-primary considered as early childhood education.	Provincial early childhood education policy has been framed and early childhood section added to all the existing primary, middle and secondary schools. Post of ECE teacher and Aya created at all schools across the province. (Ayas are the female personnel who will be responsible for caring and feeding of the kids). Provision of free meal provision at ECE legislated through the provincial assembly and embedded into the free education act.
Headteachers being mere receivers of policy decisions rather than challenging the status quo.	Headteachers participate in the formulation of policies. Headteachers of all school secondary schools declared as cluster head. Budget provided to their own and cluster schools. Headteachers of the cluster schools assigned the responsibility to monitor the progress of their own and cluster schools.
School-level needs identified by the central / area governments.	Schools are empowered to identify needs and devise plans as per their school needs. (Parents school management committee -PTSMC has been constituted and annual school development grants provided. So, they utilize the same as per their school needs.
National Education Assessment Cell (NEAC) solely responsible for collecting data from provincial education assessment cells (PEAC) and issue annual education census.	The education management information cell established, with detailed demographics of the schools, teachers, and students available. Provincial education assessment cell transformed into Balochistan Education Assessment Commission (BEAC). BEAC has been constitutionalized as a separate body with its chief executive officer. BEAC has also been assigned the task of conducting the standardized exam of grade 5 and 8. The same exams were taken by respective district education management at their level.



Table 1.1 Continued

*Education Administration (Pre & Post 18<sup>th</sup> Constitutional amendment)*

Before the 18 <sup>th</sup> amendment	Post 18 <sup>th</sup> amendment
Teacher training in particular in-service teacher training programs was solely conducted by the provincial institute of teacher education (PITE).	The concept of continuous professional development has been introduced at the school and cluster level.
Teachers recruited as per vacant position in each school.	The rationalization of teachers made on the strength and size of the school (school level and students' enrollment).
Schools' follow-up was solely conducted by district education officers and learning area coordinators.	A monitoring cell at each district has been established with recruiting M&E professional and field monitors. The latest android tab has been provided to field monitor for real-time school monitor. In the process, the monitoring data is clouded in real-time.

Source BESP 2010-2018

#### 1.2.4 Child Nutrition in Pakistan

Despite being a matter of grave concern for Pakistan, malnutrition has not been taken seriously. Nutrition as an issue has always been regarded as the responsibility of departments other than education. These, for example, are health or food-related divisions, including departments of health, food, and agriculture (TRF, 2018). Based on such an assumption evidently as The State of the World's Children 2011 and Economic Survey of Pakistan (ESP) 2010-11 state, an amount exceeding billions of rupees were spent on the development of these sectors through different programs.

Despite all spending, as informed by ESP, 2010-11, the health and nutrition proportion was negligible relative to the rest of the world. It is clear that nutrition, despite the government's priority, has not earned due attention. Results of Pakistan's geographic mapping (2012) reveal that malnutrition is extensive in the country among

children of less than five years of age. The situation, as the report says, is more adverse in Sindh province with a higher number of malnourished children. The other two provinces, including Baluchistan and Khyber Pakhtunkhwa, are also faced with food security. Moreover, Baluchistan, according to the survey, is found as the most food insecure province.

In an expert view, children require a higher amount of nutrients for growth and development; otherwise, children will suffer from mental and physical abnormalities throughout the rest of their life (Nag, 1994). The effects may also be felt on their intellectual gain if their balanced nutrition is not addressed. Child nutrition statistics in Pakistan seems alarming. The results of the National Nutrition Survey (NNS) 2010-11 highlight that children in Pakistan suffer from a significant amount of malnutrition. The magnitude of malnutrition, as the survey reports, is quite high at both the macro and micronutrient deficiencies level. The survey reports 30.3% of underage five children as underweight, 40.9% stunted, and 16.8% as wasted. Moreover, there are 62.1% of children of the age bracket of below five years, are anemic. Amongst these children, there is a high proportion of vitamin and mineral deficiencies. It has been reported that 56% of children are vitamin 36.5% zinc, 36.7% iodine, and 41.1% vitamin-D deficient (NNS 2011).

Despite various public and private initiatives taken to eradicate malnutrition, there is not much progress evident in the NNS (2018-19). A recent survey (NNS, 2018-19) shows an increase in the number of wasting children from 16.8% to 17.7% from the last seven years. The occurrence of low weight for height among young children keeps increasing over a period of time, that to say, from 8.6% in 1997 to 15.1% in 2011 and 17.7% in 2018. These figures are the highest in the history of Pakistan. Worse than that, the occurrence of wasting among children across the four provinces apart

from Islamabad Capital Territory (ICT) and Gilgit Baltistan (GB) surpasses the emergency verge (15%) (NNS, 2018-19).

The current state of stunting is not much better than that of wasting. According to the nutrition survey (2019), in every ten children (below five years of age), four are reported as stunt. The survey informs about a .7% decrease in stunt children from 2011 to 2018. In Pakistan, as reported by (UNICEF, 2018), there exist 12 million children living with a low height for age. Such a situation has been considered drastic to human capital needed for the sustainable socio-economic development of the country. The prevalence of stunting varies from province to province. The higher proportion of stunt children in Sindh, Baluchistan, Khyber Pakhtunkhwa-NMD (Newly Merged District), and GB is quite high (NNS, 2018-19). Being at 40.2%, the prevalence of stunting in the country remains drastic.

In relation of underweight children, UNICEF (2018) highlights that one in three children (28.9%) in Pakistan is underweight, while overweight persists at the level of 9.5%. The report also informs about overweight doubled over the period of the last seven years. The increase is recorded in the range of 5% to 9.5%. In addition to wasting and stunting, Pakistan also suffers from higher neonatal mortality leading to 57% of the total under-five mortality rates (Soofi at al., 2017). They inform that 420,000 children die from infectious diseases each year. According to Soofi al. (2017), 50% of deaths are preventable via introducing relevant health and nutrition-related interventions.

Child malnutrition has been found associated with causing many vitamin and mineral deficiencies in children and leading to chronic diseases and cognitive disabilities (Eastman & Zimmermann, 2018). Iodine deficiency alone, according to Eastman and Zimmermann (2018), potentially influence intelligent quotient (IQ) via

occurring a loss of 13.5 points. According to the statistics, the presence of iodine deficiency alone causes 3% GDP loss, which according to Bleichorodt and Born, 1994), weights higher than the resources needed to process iodized salt to tackle iodine deficiency disorders.

Likewise, highlighted in a recent report (WHO, 2018), the deficiency of other micronutrients, including vitamins and minerals, is highly prevalent in Pakistan with significant consequences for the health of children and adults. In health hazard conditions, the country, as Eastman and Zimmenrmann (2018) states, confronts with child growth and cognitive performance. These deficiencies contribute to the increasing number of malnourished children every year, which leads to decreased productivity, increased absentees, lower physical and mental potential, and decreased earnings. However, preventing all deficiencies could be possible by the government taking measures and showing a real political will and commitment to invest in planning and implementing appropriate nutrition strategies.

Keeping in view the ‘1000 days approach’ government of Pakistan designed to conduct a country level nutrition mapping in the year 2012 to identify prevailing nutrition initiatives and interventions in terms of their efficiency and feasibility. The results of the study revealed that many initiatives had been taken by the government, UN agencies, and other organizations to enhance nutrition status in the country. Yet, it is suggested that increased investment should be made in nutrition and health to achieve nutrition objectives.

### **1.2.5 Nutrition education as a mean to overcome malnutrition**

Towards achieving the purpose of reducing malnutrition, policymakers must recognize that education is the most effective means to improve wellbeing while

ensuring sustainability. It is heartening that SDGs aims to reinforce global efforts towards pursuing education, training, and increasing awareness towards achieving the targets of nutrition (World Economic Forum, 2018). An effective education system is perceived to broaden access to opportunities and improve health conditions while providing the knowledge and skills required for a healthy living. According to UNICEF (2000) “Quality education includes: Learners who are healthy, well-nourished and ready to participate and learn, and supported in learning by their families and communities” (P.4). Quality education leads to produce a significant change in people’s attitudes and behaviors that could lead to enhanced nutrition. Achieving the target of improved nutrition through education may be time taking, but the results are lifelong (Delors, 2013 Shools are the learning labs that can nurture a new generation to backing the change to an affluent and sustainable tomorrow.

#### **1.2.5(a) School leadership and implementation of nutrition education**

Headteachers' role has been associated with a significant influence on the implementation of school-level interventions (Stringer & Hourani, 2016). School leadership's role was highly emphasized in school efficiency research in times of the increased accountability movement of the beginning of the 1980s and 1990s. School headteachers, as the only ones overseeing the overall school activities, have been perceived phenomenal withholding powers to coordinating school operations and moving it forward. Besides, the day to days tasks already managed by the principals, they are always awaited by new reform agendas to be implemented in school. It is because schools are the most resourceful and accessible venues to impart an idea or innovation, such as nutrition education. In a continuously changing environment, school headteachers, as argued by Fullan (2009), are confronted with changing roles.

To move along with the continuum of change, school headteachers need to be instrumental for schools' effective transition into an organization sufficiently responsive to any reform initiatives such as nutrition education (McDonnell et al., 2006).

The implementation of nutrition education at schools has been highly emphasized upon from a leadership perspective (Dycus, 2007; Lai-Yeung, 2011), and their leadership capabilities are considered fundamental in this regard (US policy brief, 2016). According to Lai-Yeung (2011) and Roberts, Pobocik, Deek, Besgrove, and Prostime (2009), before implementing nutrition education, headteachers' involvement is pivotal to inform better the formulation of school policies such as that of nutrition education. Similarly, McDonnell et al. (2006) consider school leadership with an essential role in the execution of school-level nutrition education programs. A US policy brief (2016) on the implementation of nutrition education in US schools focuses on developing all stakeholders and headteachers in particular if the aim is to successfully implement the nutrition education policy.

Headteachers' perceptions (Lai-Yeung, 2011) and their behaviors notify the extent of their support towards implementing nutrition education. Researchers have also identified the perceived leadership support as one of the vital influential factors while implementing change (Wu & Parker, 2017). Leader support has an essential effect on individuals in organizations, such as teachers in the school setting. Research highlights that individuals' responses to innovation are subjected to their level of perceiving leaders' support in the adoption of the innovation (Lai-Yeung, 2011; Wu & Parker, 2017). Namasivayam, Conklin, Carolyn, and Lambert (2007), in this regard, found that a significant influence of the program head was fundamental in the successful implementation of school nutrition programs.

Nutrition education, associated with the change in one's behavior towards food selection, informs about a leader's behavior in this regard (May & Supovitz, 2011). According to May and Supovitz (2011), their behavior has been discovered as critical for the successful implementation of educational plans. So, nutrition education, aiming to change eating behavior, despite being possible is not easy to manage. Qian, Newman, Yuen, Du, and Shell (2019) informs that school headteachers need to address factors like knowledge, attitudes, self-efficacy, norms, behavioral control, and skills. Only then, according to them, they will be able to make the programs effective. The implementation of nutrition education as closely a behavior related phenomenon calls for considering leadership behavior and intentions.

#### **1.2.5(b) Gender and school leadership**

Gender has always been a point of dispute globally. The world society finds it hard to break through the metallic chains of patriarchy, particularly when it comes to sharing the so-called "power" or authority that has been the heritage of a class of human beings known as "men" (Cudworth, 1998). Power comes with acquiring a particular authoritative position that categorizes human beings as one being superior to the other. Gender disparities are evident in every field of life (Madhani, 2007), ranging from politics, business, health, and education to our day to day activities (Hamid & Ahmed, 2011).

We have a long distance to travel in order to minimize the deep-rooted discrimination, where women are far less likely to hold positions that involve decision making even at the domestic level. Though the terms such as gender equality, equity, women empowerment, or gender leadership have been the core of developmental initiatives and research (Gibson, 1995) for decades. However, there still appears to be

a division of who is a better leader. The comparison game goes on, leaving a question mark on either men or women are more effective as leaders.

Gender imbalance continues to be a dilemma in male-dominated societies where female leaders are in the minority only because of the stereotyped perceptions and expectations linked with leadership. Women are faced with tremendous obstacles towards becoming leaders solely based on their gender roles that have been assigned by 'so and so' (Eagly & Carli, 2007). In Pakistan, as Rarieya (2007) finds, women are faced with unexamined conceptions and practices that marginalize or exclude them from educational leadership in the country. It is because, in schools, where most of the teachers are women, leadership positions are observably occupied by the men. Rarieya (2007) also informs about women with less inclination towards leadership roles when perceived to their defined and stereotyped role as a housekeeper and the work associated with leadership practices. Such as leadership being demanding in terms of times and efforts, leaves leadership less ideal for women to pursue.

Even in developed countries, where the situation apparently may look better, there prevail certain implicit behaviors that promote gender stereotypes (Trevino, Gomez-Mejia, Balkin, & Mixon, 2015). For example, in France, pre-schools are called 'Maternells' (school education in France, 2010), which explicitly refers to maternal. Moreover, research (e.g., Sak, Sahin & Sahin, 2012), has also found that female teachers are more suitable for pre-primary schools. It models the stereotype that it is 'a women's job' to take care of children. Following the same lines, the government of Balochistan has recently introduced "single gender primary schools." In these schools, only female primary and pre-primary teachers will be posted as they are perceived to be better caretakers. On the contrary, having more men as principals tends to designate that men are more likely to become leaders or managers than women. These



comparisons have strong connotations that help develop children's brains accordingly within the very educational environment. Children with such aspirations and expectations grow up with several misconceptions, such as women being less capable, or men cannot be loving and caring. It also illustrates the negative image of a leader as only autocratic and dictatorial.

On a positive note, cultures and traditions have their pros and cons that mold our thoughts accordingly. Changes that we might not be ready to accept otherwise; can be entertained by looking at them from a cultural point of view. Such as in many of the developing countries, it is part of customs that boys and girls will have separate educational institutes (Chimombo, 2005). That to say, in Pakistan, almost all the public institutes at all levels, be a primary school or secondary, college or university; there is separate setup for male and female students. A similar arrangement is followed at the level of management. Such categorization leaves enough space for women to step on leadership positions; however, they may experience it differently because of specific gender roles. Rarieya (2007) rightly suggests that women in a leadership role in Pakistan demand awareness of the circumstances within which they attempt to flourish as leaders. The leadership is to become inclusive; understanding what holds women back are paramount to overcoming these obstacles and improving their access to and participation in leadership.

#### **1.2.5(c) Gender and child nutrition**

Research (e.g., Fadare, Amare, Mavrotas, Akerele & Ogunniyi, 2019) identifies that mothers have a crucial role in child nutrition. It all begins with mothers' breastfeeding practices. Also, mothers' role related to their children, and family feeding becomes crucial. Similarly, in the later stage of child life, according to Fadare

et al. (2019), it is the mother's knowledge of health and nutrition, which may help children overcome their nutritional deficiencies. A recent study in the context of Pakistan (Salim, Kalsoom & Humayun, 2016) also found a close relationship between mothers' nutrition knowledge and the nutrition status of children. Knowledge of child nutrition had led mothers to opt for healthy food choices for their children.

In addition, social stereotypes related to roles and responsibilities, of male and female, do have a role associated with child nutrition (Oakley, 2016). Such functions and duties are focused on a set of different tasks allocated to men and women on gender bases. Delphy (1993) states, "It is the social division of labor, and associated hierarchical relations, which lead to physiological sex being used to differentiate those who are assigned to be dominant from those who will be the part of the subordinate gender/class" (p.1). Similarly, in Pakistan, gender is highly associated with differences in roles and responsibilities between men and women (Ali et al., 2011; Haroon, 2018; Raza, 2010). To be a man or a woman is associated with social rank, a cultural role, having no universal standard of measurement. Individuals follow gender roles through the already defined assumptions enshrined in their community. According to Oakley (2016), gender is a social construction, and the gender division of labor is purely "cultural rather than natural" Delphy (1993). However, these responsibilities may vary to some extent, as family expectations, societal values, and beliefs about gender may differ (Blackstone, 2003).

No matter how developed or educated a society is, women's primary job sticks to a homemaker. That includes every major and minor task that takes place within the boundaries named as 'home.' It is what Myrdal and Klein (1956) found long ago that as a result of such an uneven division of task, what falls in women's side is almost exclusively to unpaid household labor. These responsibilities begin with taking care

of every member of the family (elderly or children, or the young or adult men) and cleaning, washing, cooking, and serving food. The factors that determine their nutritional and health-related role, according to Akanayake, Weerahewa, and Ariyawardana (2000), are access to and distribution, and preparation of food within the household, and taking care of children. In addition to already set roles and responsibilities assigned to females, eating behaviors, as research (e.g., McLeod, Campbell & Hesketh, 2011) informs, are affected by some other factors such as female working position, and knowledge level. Also, as Haroon (2018) found that women in Pakistan need to be empowered to make food choices for their children. His study found a significant correlation between child nutrition intake and mothers' empowerment.

Considering females, as strongly associated with child nutrition, their role as school headteachers, as empowered individuals (Haroon, 2018), apparently remains pivotal. It will be exciting and worth exploring if headteachers' gender contributes to their intentions of implementing nutrition education. This study finds it vital to look at secondary school headteachers from a gender lens in a context such as Pakistan, where gender is so embedded in day to day life. This study thus aims at determining if there are any effects of gender on the relationship between headteachers' leadership orientation frames and their intentions towards implementing nutrition education.

### **1.3 Statement of the problem**

The aspect of child development from the perspective of their balanced diet and nutrients gains popularity amongst the researchers and academia. School nutrition programs are primarily based on the relationship between child health conditions and their learning outcomes (Florence et al., 2008). It is also in realization with the effect