



SKILLS EXPECTATION-PERFORMANCE GAP: A STUDY OF  
PAKISTAN'S ACCOUNTING EDUCATION

A thesis submitted for the degree of Doctor of Philosophy

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## ABSTRACT

Higher education institutions are always directed through policy reforms to promote graduates employability by developing skills in students that contribute to human capital. This interest in employability through education system in the development of skills reflects is part of human capital theory. Considering this, underlying research investigates the expectation-performance gap in the development of generic skills for the purpose of employability offered by the accounting institutes of Pakistan. For the purpose of answering the research question, this research, adopted the theoretical framework of 'expectation-performance gap' by Bui and Porter and analysed it within the context of Pakistan. Adoption of this theoretical framework implies the evaluation of three constituent factors as research objectives; the 'expectation gap' (reflecting the differences in the expectations of accounting educators and employers), the 'constraints gap' (limiting factors to develop generic skills into the student learning process) and the 'performance gap' (reflecting the ineffectiveness of teaching activities). However, there is also a fourth objective, that is, to evaluate an outline of the 'skills acquisition framework' considering the context of Pakistan's accounting job-market.

Principally this research adopts the survey strategy of a questionnaire with closed-ended questions in order to collect the data. But for the purpose of refining the content of the questionnaire for relevance to the context of Pakistan there are also cognitive interviews. Thus, this research entails a mixed-method approach. The qualitative data from the interviews was analysed using content analysis, thematic analysis and textual analysis. Whereas the quantitative data from the questionnaires was analysed using numerous statistical techniques such as Mann-Whitney U-test, Independent sample t-test, Statistical mean and Principal Component Analysis.

The findings related to the 'expectation gap' were that there are 19 skills where the accounting educators have dissimilar expectation from employers in terms of skill base education, such skills include decision making, economics, ability to analyse and reason logically, teamwork etc. The findings related to the 'constraints gap' were that there are 6 constraining elements which are prevailing within the context of professional accounting education, such constraints include 'training organisations are not following standard procedures to develop skills in students', 'people (potential students) have misperception about accounting education', 'enrolling students have weak academic background', 'inadequate stipend offered by training organisations to trainees', 'accounting institutes are not appreciating teaching activities, and lack of training opportunities for academics'. The findings related to the 'performance gap' were that there are 24 skills where the accounting educators found to be ineffective in the development of skills in students as expected by employers for employment purpose, such skills include inter or multidisciplinary perspective, financial risk analysis, think and behave ethically, independent thinking etc. From the perspective of the 'skills acquisition framework', overall 6 skills components were identified from the perspective of Pakistan's accounting job-market, such skills components include appreciative skills, interpersonal skills, technical and functional skills, organisational and business management skills, personal skills and professional skills.

Considering the novelty of the adopted theoretical framework (expectation-performance gap by Bui and Porter, 2010) there was a related paucity of literature employing it for empirical investigation using the questionnaire based approach. Therefore, this research provides such theoretical underpinning to this framework that now enables it to be used within the questionnaire based approach. Further this research has described all the generic skills used in this study from the accounting disciplinary perspective and highlights the constraining elements that are assumed to limit the ability of professional accounting institutes. This research also provides a skill acquisition framework which could be used as a reference point for new entrants to the accounting job-market.

## DEDICATION

I would like to dedicate this doctoral research effort to my parents, my brother, my sister, my son and my beloved wife.

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## LIST OF ACRONYMS

ACCI	Australian Chamber of Commerce and Industry
AACSB	Association of Advance Collegiate Schools of Business
ACER	Australian Council for Education Research
AECC	Accounting Education Change Commission
AICPA	American Institute of Certified Public Accountants
B.Com	Bachelor in Commerce
BBA	Bachelor in Business Administration
BIHECC	Business, Industry Higher Education Collaboration Council
BIS	Department of Business, Innovation and Skills
CBI	Confederation of British Industry
CIHE	Council for Industry and Higher Education
CPA	Certified Practising Accountants
DETYA	Department for Education, Training and Youth
DfEE	Department of Education and Employment
DTI	Department of Trade and Industry
GCCA	Graduate Careers Council of Australia
GPA	Grade Point Average
HEC	Higher Education Council
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institutions
HSSE	Higher Secondary School Education

ICAA	Institute of Chartered Accountants in Australia
ICAEW	Institute of Chartered Accountants in England and Wales
ICAP	Institute of Chartered Accountants of Pakistan
ICMAP	Institute of Cost and Management Accountants of Pakistan
ICPAP	Institute of Certified Public Accountants of Pakistan
IES3	International Education Standards 3
IFAC	International Federation of Accountants
ILC	International Labour Conference
M&L	McQuaid and Lindsay
NQF	National Qualifications Framework
NZQA	New Zealand Qualification Authority
PCA	Principal Component Analysis
PET	Poly Ethylene Terephthalate
PIPFA	Pakistan Institute of Public Finance Accountants
QAA	Quality Assurance Agency
SOAE	Society of Accounting Education
UKCES	UK Commission of Employment and Skills
KMO	Kaiser-Meyer-Olkin

## CHAPTER 1: INTRODUCTION

### 1.1 Background theory and formulation of the research objective:

Various organisations, such as state departments and professional bodies, together with individual researchers, have repeatedly emphasised the need to expand generic skills acquisition in higher education institutions as a means of promoting graduate employability (see Cranmer, 2006; Quality Assurance Agency, 2007; Coopers and Lybrand, 1998; Hillage and Pollard 1998; Dearing report, 1997; Council for Industry and Higher Education, 1996; Department of Trade and Industry, 2005) and economic growth (Becker, 1975; Lees, 2002). Despite this concern on the part of these experts:

1. There is no definitive list of generic skills or even a standard categorization among the various disciplines (see McQuaid and Lindsay, 2005; Sin and Jones, 2003; Wellman, 2010; Business Industry Higher Education Collaboration Council, 2007). The accounting discipline is no exception (see Sin and Jones, 2003; Kavanagh et al., 2009; Hassall et al., 2005; International Federation of Accountants, 2008; Albrecht and Sack, 2000).
2. Generic skills acquisition is a subject-specific phenomenon (see Business Industry Higher Education Collaboration Council, 2007; Greatbatch and Lewis, 2007; Jackling and Keneley, 2009) and country-job-market-specific (see Brown, 2002; Campbell, 2010; McKinnon, 2011). For example, as Campbell (2010, p. 487) states:

*“Relevance of these generic skills and attributes to the professional careers of international students is dependent on the social and political context, culture, opportunity and individual status within the community”*

It follows that any research in this area needs to take into account the contextual limitation of the country’s job market and discipline under study.

3. There is a substantial amount of literature available on ‘generic skills’ in developed countries such as the United Kingdom, New Zealand, Australia, America, and Canada (see Jackling and Keneley, 2009; Bowers-Brown and Harvey, 2004; Confederation of British Industry, 2009; Australian Chamber of Commerce and Industry, 2002; Kavanagh and Drennan, 2007; Kavanagh et al., 2009; Milner and Hill, 2008;



Accounting Education Change Commission, 1990; Institute of Chartered Accountants in England and Wales, 2010; Hassall et al., 1999, 2001, 2003, 2005; Aquero Montano et al., 2001; De Lange et al., 2006; Albrecht and Sack, 2000; Sin and Jones, 2003; Certified Practising Accountants, 2008; Gray and Collison, 2002; Quality Assurance Agency, 2007; Bui and Porter, 2010). However, in contrast, there is a paucity of similar literature from the less developed Asian countries such as Pakistan, India, Indonesia, Thailand, Taiwan, and Philippines.

4. Accounting students and employers both consistently 'valued' generic skills acquisition for the sake of employability (see Kavanagh and Drennan, 2008; Hassall et al., 2003). However, students are consistently reported in the literature as showing incompetence from employers' expectations perspective (see Awayiga et al., 2010; Willcoxin et al., 2010). Further, the literature in chapter three will demonstrate that accounting academics are the ones who are primarily responsible for the nurturing of generic skills in students (Kavanagh et al., 2009; Hassall et al., 2005; Hancock et al., 2010). But in spite of this explicit delegation of responsibility, it is also clear that academics are failing to equip students with an adequate set of skills as expected by the accounting profession (see Lin et al., 2005; Kavanagh and Drennan, 2007; Awayiga et al., 2010; Willcoxin et al., 2010; Bui and Porter, 2010; Jackling and Watty, 2010; Kavanagh et al., 2009).
5. Accounting academics are not working in isolation. They are bound by the contextual limitations or constraints which affect their ability to develop skills in their students (see, Bui and Porter, 2010, De Lange et al., 2006; Kavanagh and Drennan, 2007; Millner and Hill, 2008).

Given points 1-5, above, there appears to be an expectation-performance gap. Specifically, that there is an *expectation* amongst employers (accounting profession) that students should be adequately prepared for the job market in terms of their personal skills-base and the *performance* of academics in fulfilling those expectations. The expectation-performance gap to be explored in this thesis centres upon the accounting education of Pakistan and gives rise to the following objective:

***What is the expectation-performance gap in the development of generic skills for the purpose of employability offered by the accounting institutes of Pakistan?***

The next subsection (Section 1.2: Research context) is about describing the significance of the underlying research context.

## 1.2 Research context:

Pakistan is unusual in that a large part of the professional accounting education is provided through professional accounting institutes rather than universities. These professional accounting institutes are quite different from the universities where most of the academic research regarding skills development has been conducted previously (see Bui and Porter, 2010; Kavanagh and Drennan, 2007, 2008; Jackling and Keneley, 2009; Kavanagh et al., 2009; Lin et al., 2005). These differences relate to funding structure, employment policy, reward systems, curriculum development, the examination system and students' intake criteria. These differences suggest a different level of expectation-performance gap from the universities. In this regard, this research is unique in exploring the expectation-performance gap from the perspective of the professional accounting institutes.

In Pakistan the ministry of education keeps emphasising the need for policy reforms in the education sector to enhance students' chance of employability. For instance, Pakistan's national education policy review team has stated:-

*“Curriculum, in particular, should have the flexibility to accommodate local requirements and opportunities so that children are able to develop appropriate and relevant skills. **Professional degrees need to be sensitive to the requirements of the market**, especially where there is space in the market to absorb new entrants. **Industry linkages, in turn, are essential to improve management in institutions, to make curricula relevant to the job market, to improve the qualifications and quality of employees, to create career and employment opportunities, and to respond to changes in technology affecting industry. Effective industry linkages would focus on employers' active involvement in improving and reforming education, instead of launching limited projects.**” (Aly, 2007, p. 49)*

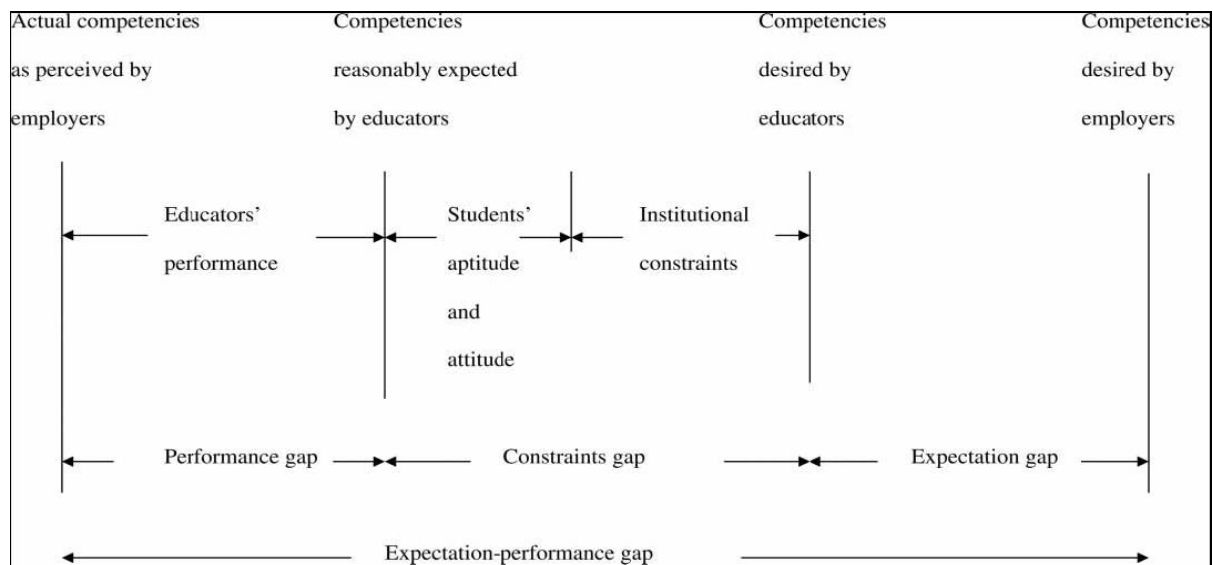
But despite of the national education policy review team advice, to date, there is a paucity of the literature from Pakistan to support such policy reforms for the accounting education system. In that sense the literature gap is a wide one, especially when it follows that any research conducted in this area needs to take account of the country's job market (see Brown, 2002; Campbell, 2010; McKinnon, 2011).

The next subsection (Section 1.3: Focal theory) illustrates the epistemological approach that has been adopted to provide the structural bases for the underlying research.

### 1.3 Focal theory:

This research adopts the theoretical framework of Bui and Porter (2010) to investigate the phenomenon of expectation-performance gap in this research. Bui and Porter's (2010) theoretical framework proposes to investigate the phenomenon of the expectation-performance gap from the perspective of three contributing factors, that is, the 'expectation gap', the 'constraints gap' and the 'performance gap' (see Figure 1). The structure of Bui and Porter's (2010) framework is illustrated below as in Figure 1:-

Figure 1: Representing the theoretical framework of the Expectation-Performance gap; source Bui and Porter (2010)



- I. Expectation gap - perceptual differences in the expectations of educators and employers regarding the skills that should be acquired by students for their accounting career development (reflecting differences in the expectations of accounting educators and employers).
- II. Constraints gap – representing the factors which are assumed to limit the ability of accounting education to develop the skills into the students' learning process such as, students' perception of accounting programmes and the profession, and their ability and aptitude, as well as Institutional constraints.
- III. Performance gap - perceptual differences in the level of skills competencies that educators can reasonably expect accounting students to acquire by the time they graduate and those employers perceive the accounting graduates should possess when they enter the profession (reflecting ineffectiveness of pedagogical activities).

The next subsection (Section 1.4: Methodological approach) illustrates the adopted methodological approach that has been used to explore the underlying research phenomenon.

#### **1.4 Methodological approach:**

All researchers approach the research site with some form of personal philosophical positioning which affects the way they see the world and, therefore, the way they choose to conduct their research, including the selection of an appropriate research method. In this regard, this research is based on Laughlin's (1995) 'alternative methodological approach' based on theory, methodology and change choice dimensions.

The Laughlin methodological approach is a tool that allows the researcher to narrow down the choice of research method on a reasoned basis but also on a basis where the researcher's philosophical prejudices are declared in advance of the research. Based on the Laughlin (1995) 'alternative methodological approach' this research adopts the methodological stance of pragmatism within Kantian/Fichtean stream of philosophical thought. Pragmatism holds that one should stop asking questions about the laws of nature and reality (Creswell, 2003). For pragmatists the research question or problem is the 'central' focus (Mackenzie and Knipe, 2006; Creswell, 2003) where the concern is 'what works' (Patton, 1990). The synthesis of abduction, inter-subjectivity and transferability in pragmatism brings opportunities to think beyond the traditional methodological stances of positivism and interpretivism (Morgan, 2007). Therefore, pragmatism is a suitable foundation for mixed-method research (Tashakkori and Teddlie, 1998; Teddlie and Tashakkori, 2003).

This research entails a mixed-method approach. This research principally adopts a survey strategy with closed-ended questions (quantitative) in order to collect the data for the investigation of the 'expectation-performance gap'. In order to refine the content of the questionnaire in regard to a Pakistani context, cognitive interviews (qualitative) are used as well.

The following steps were taken in the design of the study:

1. A preliminary draft of the questionnaire was constructed in consultation with expert opinion and prior literature.
2. Pre-testing of the preliminary drafted questionnaire was undertaken through cognitive interviews.

3. Then Pilot-testing of the pre-tested questionnaire was undertaken to check against the reliability standards.
4. Finally, a pilot-tested questionnaire was used for surveying the targeted population (employers and educators).

The next subsection (Section 1.5: Organisation of the thesis) describes the overall structure of the thesis.

## 1.5 Organisation of the thesis:

The overall organisation of the thesis by chapter is as follows:

Chapter 1: An introductory chapter to introduce thesis objective and to set that objective within a Pakistani context.

Chapter 2: In this chapter human capital theory of productivity is illustrated with an aim to provide support research objective. Further, it also legitimised the use of Bui and Porter's (2010) theoretical framework (with the help of existing education literature and social efficiency ideology in curriculum theory) to investigate the phenomenon of the expectation-performance gap in this research

Chapter 3: A review of the existing academic literature has been undertaken with the aim of illustrating the key elements within the research objective and to place an objective in the gap in that literature.

Chapter 4: In this chapter the adopted methodological approach has been explained in order to investigate the phenomenon of the expectation-performance gap within this research.

Chapter 5: This chapter involves designing the preliminary draft of the questionnaire in consultation with experts' opinion and prior literature.

Chapter 6: This chapter involves pre-testing the preliminary draft of the questionnaire in order to revise the content of it for relevance to the context of Pakistan.

Chapter 7: This chapter involves piloting the pre-tested questionnaire in order to check against reliability standards.

Chapter 8: This chapter reports and discusses the findings from the surveyed questionnaires.

Chapter 9: This chapter describes a holistic view of the thesis along with an explanation of findings, policy implications, theoretical contribution, research limitations and a recommendation for future research.

## CHAPTER 2: THEORY SUPPORTING RESEARCH OBJECTIVE

### 2.0 Introduction:

In this chapter the human capital theory of productivity is illustrated with an aim to provide the support to research objective, that is:-

*What is the expectation-performance gap in the development of generic skills for the purpose of employability offered by the accounting institutes of Pakistan?*

In this regard the following structure is applied to this chapter:-

Section 2.1, illustrates human capital theory with an explanation of its interpretation.

Section 2.2, illustrates the impact of human capital on the individual, the organisation and overall economic growth.

Section 2.3, explains how the doctrine of human capital theory provides support to underlying research objective.

Section 2.4, illustrates the phenomenon of ‘expectation-performance gap’ by reference to the education literature and the epistemological guidelines that have been used to investigate it.

### 2.1 Human capital theory:

Human capital theory predicts on the assumption that the economic prosperity and functioning of a nation depends on its human capital development (see Becker, 1975). The origin of human capital goes back to classical economics. After the manifestation of human capital as a theory, Schultz (1961) recognized human capital as being one of the factors that contribute towards economic growth (Kown, 2009).

In the literature the concept of ‘human capital’ is conceptualised in two ways. First, considering ‘human capital’ as a ‘labour force’; according to this concept the additional value could be added to the economy by using excess ‘labour force’ just like other production factors such as land, and machinery. However, the second concept assumes ‘human capital’ as an investment that people make in themselves to increase their productivity such as knowledge and skills (Rosen, 2004). Gardner and Gardner (2012) argued that ‘human capital’

should not be thought of as uni-dimensional but, in fact, it is better thought of as two dimensional, that is, mental and physical. Later, empirical studies show that the investment in mental capabilities has led to greater economic growth, more so than physical labour (Gardner and Gardner, 2012; Little, 2003). Therefore, of these two concepts of human capital (mental and physical), the mental one is more prominent than the physical (Beach, 2009). In the literature, education is widely considered as a primary source for the development of mental capabilities (Rastogi, 2002).

Under human capital theory, most of the literature theorizes education as a primary device for economic development through knowledge and skills building. Therefore, it is acceptable across most of the western countries that the conceptual foundation of one's human capital is based on 'knowledge and skills' that an individual acquires through education (Kwon, 2009). Rastogi (2002) also conceptualised human capital as 'knowledge, competency, attitude and behaviour embedded in an individual' through education. Other researchers also closely linked human capital to knowledge and skills building (see Garavan et al., 2001; Becker, 2009). Thus, in the literature the wealth of society is now thought of as a combination of human (mental) and non-human (physical) capital, where human capital is considered as an accumulation of knowledge and skills, whereas non-human capital as an accumulation of natural resources, buildings and machinery etc.

Next, section 2.2, illustrates the impact of human capital on individual, organisation and overall economic growth.

## **2.2 Impacts of human capital:**

Under human capital theory economists regard education as an economic good which is a means of providing utility on consumption and serves as an input for the production process of other goods and services. Hence, the investment in education could be seen as a reflection of productive investment under the doctrine of human capital theory. The available literature reports that investment in human capital (knowledge and skills through education) has a significant impact on individuals, organisations and the country's overall economic growth (Blundell et al., 1999). In order to discuss the impact of human capital on individuals, organisations and the overall economy this section is categorised into the following three parts:

### **2.2.1 Impact on individual level**



## 2.2.2 Impact on organisation level

## 2.2.3 Impact on national economy

Next, section 2.2.1, illustrates the impact of human capital on the individual level

### 2.2.1 Impact on individual level:

First, from the perspective of the individual level; regarding human capital, a number of researchers refer to the possibility of increased income due to higher education resulting in increased productivity (Becker, 2009; Denison, 1962; Schultz, 1961; Sidorkin, 2007). In this regard, the literature provides evidence to validate this assertion. For example, Dearden (1999) represents in Table 1 a strong association of individual's income with education. From Table 1, it can be seen that there is reported to be an increased in an individual's income (rate of return in %) with improved qualification.

Table 1: Representing private rate of return to education and formal qualifications; source Dearden (1999)

<b>Private Rates of Return to Education and Formal Qualifications</b>		
<i>Type of qualification</i>	<i>Return for men</i>	<i>Return for women</i>
<i>In school:</i>		
Basic qualifications	7.2% (3.3)	6.9% (7.3)
O levels	15.0% (3.8)	11.2% (7.7)
5+ O levels	20.8% (4.7)	25.8% (14.9)
A levels	33.6% (4.8)	37.0% (14.8)
<i>Post-school:</i>		
Lower qualification	9.0% (2.4)	6.3% (5.6)
Middle qualification	10.2% (3.0)	10.5% (8.1)
Higher qualification	19.6% (3.9)	26.4% (7.9)
Degree	18.2% (4.4)	35.4% (10.8)
Number of observations	2,597	2,363

**Notes:**

Linear matching using extensive controls including family background and early test scores *and* correcting for measurement error in the qualification variables. No correction has been made for self-selection into employment which will tend to increase returns, especially for women (see Dearden (1999)).

Standard errors in parentheses.

Qualification definitions from the National Child Development Survey are given in Table A.1.

Returns for schooling examinations and post-school qualifications are total returns for highest qualification achieved. Returns for school qualifications are relative to the base group, who left school at 16 with no qualifications. Returns for post-school qualification courses should be added to basic school qualifications.

Returns are not net of costs and are measured at age 33.

Source: Dearden (1999), who used National Child Development Survey data.

Other than that, individuals with better qualifications have better job-mobility in the market (employability). This is because organisations want to maximize their profits and, in order to do that, they are always keen to appoint educated individuals who have a good set of skills to contribute to increased productivity (Kwon, 2009; Schultz, 1961). Therefore, individuals with better qualifications are mostly given preference in the job-market.

Next, section 2.2.2, illustrates the impact of human capital on organisations.

### **2.2.2 Impact at the organisation level:**

Second, from the perspective of an organisation, Lepak and Snell (1999) closely linked the potential of human capital to a firm's competitiveness in the market. In this regard Edvinsson and Malone (1997) stated that an individuals' human capital in a firm can affect organisational human capital (such as collective competences, organisation routines, company culture and relational capital). For this reason organisations around the globe invest in education (or training) of their employees with a hope of gaining a return on their investment in the form becoming more competitive, more productive and more profitable in the future (Blundell et al., 1999). In this regard, the National Institute of Economic and Social Research, has provided evidence through research to link skill composition of a work-force of a firm to firm's productivity. They reported the findings from the perspective of continental firms that, the higher average levels of productivity of a firm was closely related to the greater level of skills and knowledge in their work-force (Blundell et al., 1999). Other than that, a study from United States also has shown that training on the job also increases workers' productivity by 16% (Bishop, 1994).

Next section 2.2.3, illustrates the impact of human capital on overall national economy.

### **2.2.3 Impact on national economy:**

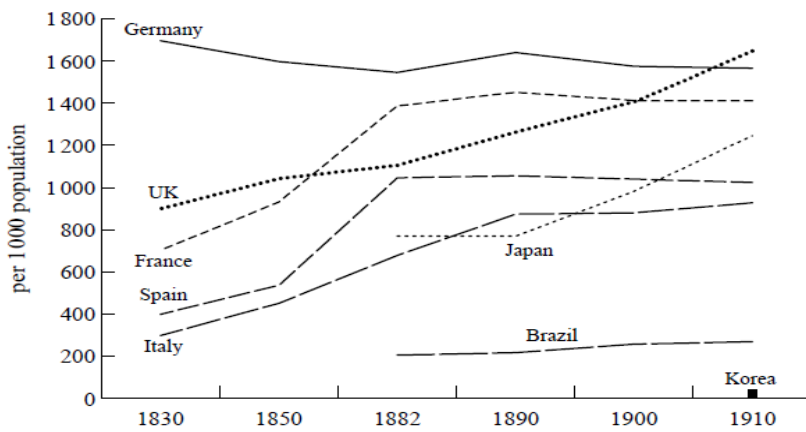
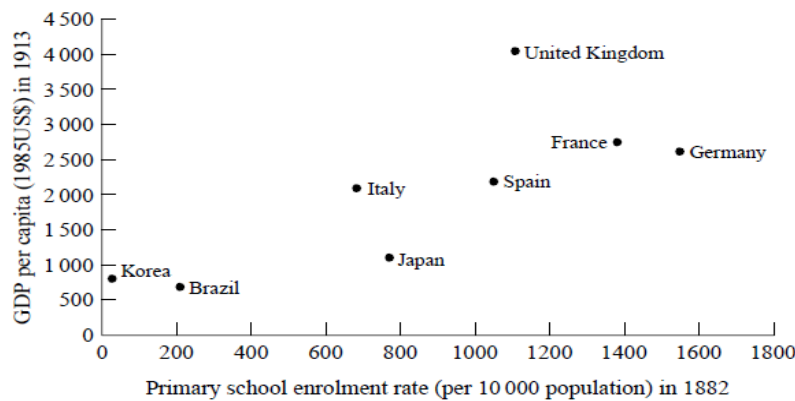
Third, from the perspective of the national economy; the benefits of investment in human capital through education and training are not only restricted to individuals and organisations but also spill over to the country's overall economy. In this regard Blundell et al. (1999) has provided evidence to support this assertion:-

*“A recent summary of the main findings of the growth accounting body of research concludes that the changing education of the labour force during the last 50 years has accounted for a significant proportion (around one-third) of overall productivity growth in the US. More recent evidence from the UK covering the period 1971–92 suggests that a one-percentage-point increase in the proportion of workers with higher qualifications raises annual output by between 0.42 and 0.63 per cent.” (Blundell et al., 1999, p. 16-17)*

Other literature provides further evidence. For example Figure 2, below shows a strong association of education enrolment and GDP growth. In Figure 2, the Pearson correlation coefficient between the two data sets reveals a strong relationship of 0.87. Also, by fitting a regression line one can deduce that a 1 per cent increase in the education enrolment rate brings a 0.35 per cent increase in GDP (Johnes and Johnes, 2004).

Figure 2: Representing the expansion of primary education measured as the enrolment rate per 10000 populations drawn from data provided by Easterlin (1981); source Johnes and Johnes (2004)

$$\ln \text{GDP per capita} = 0.35 \ln \text{Enrolment Rate} + 5.23$$



Countries	Ranking GDP per capita	Ranking Enrolment rate
UK	1	3
France	2	2
Germany	3	1
Spain	4	4
Italy	5	6
Japan	6	5
Korea	7	8
Brazil	8	7

Similarly, Dougherty and Jorgenson (1997) reported improved growth outcomes associated with educated labour in the G7 countries (Canada, France, Germany, Italy, Japan, United Kingdom, United States). See Table 2, below.

**Table 2: Representing growth of labour quality and its contribution to overall economic growth; source Dougherty and Jorgenson (1997)**

	Labour quality improvement	Contribution to growth	Growth of output per capita
Canada	0.74	0.50	2.93
France	0.73	0.49	3.04
Germany	0.41	0.28	2.91
Italy	0.19	0.12	3.74
Japan	1.16	0.79	5.39
United Kingdom	0.38	0.26	2.15
United States	0.59	0.40	2.07

Figure 2 and Table 2 above empirically provides strong evidence to validate the association of education with enhanced national productivity. Other similar studies, such as Mincer (1974), Matthews et al. (1982), Psacharopoulos (1994) also reveals similar findings. Hence, the investment in human stock in the form of education is a vital element of performance based economies (Yorke, 2006).

Next, section 2.3, explains how the theory of human capital provides support to underlying research objective.

### 2.3 Human capital theory supporting research objective:

Many governments around the world are concerned with higher education system to enhance the capability of their human stock under the doctrine of human capital theory. For example UK's HM Treasury (2000, p. 26 and 32) stated:

*“Human capital directly increases productivity by raising the productive potential of employees . . . Improving skills and human capital is important in promoting growth, both as an input to production and by aiding technological progress. This has been recognised both in endogenous growth theory and also in empirical studies comparing growth in different countries”.*

Since the early 1960's, human capital theory has been the most influential economic theory of the western world, used for framing government policies for education reforms to enhance people's employability. In this regard, Fitzsimons (1999, p. 1) stated:

*“In terms of structural reform, under Human Capital Theory the basis for nation state structural policy frameworks is the enhancement of labour flexibility through regulatory reform in the labour market, as well as **raising skill levels by additional investment in education**, training and employment schemes, and **immigration focused on attracting high-quality human capital.**”*

Employability of graduates (human stock) is an aim that governments around the world want to achieve by bringing about various reforms to their higher education systems (Yorke, 2006). In this regard, higher education institutions are considered as a mediating agent between the loosened boundaries between government and businesses (Morley, 2001). Therefore, higher education institutions are always directed through policy reforms to promote graduates' employability by developing skills in students that contribute to human capital (Knight and Yorke, 2003). This interest in employability through education systems developing skills reflects part of human capital theory (Yorke, 2006). As such, the objective of this thesis can be located in the human capital literature:

***What is the expectation-performance gap in the development of generic skills for the purpose of employability offered by the accounting institutes of Pakistan?***

Next, section 2.4, explains the epistemological guidelines that have been used to address the research objective.

## **2.4 Epistemological guideline to address research objective:**

The purpose here is to explain the appropriate epistemological guidelines (how to gain the knowledge) to initiate the research. In order to do that, the initial step is to conceptualise the notion of 'expectation-performance gap' in the research objective as drawn from the literature.

In 'education literature' there is a substantial number of publications available with respect to 'generic skills' around employability, such as Kavanagh et al. (2009), Kavanagh and Drennan (2007), Bowers-Brown and Harvey (2004) Confederation of British Industry (2009), Australian Chamber of Commerce and Industry (2002), McQuaid and Lindsay, 2005, Milner and Hill (2008), Accounting Education Change Commission (1990), Institute of Chartered Accountants in England and Wales (2010). In most of this literature employers seem to value 'generic skills' acquisition for the purpose of employability (see, Kavanagh and Drennan, 2008; Hassall et al., 2003; McQuaid and Lindsay, 2005; Kavanagh et al., 2009). Therefore, the issue of skills acquisition relevant to employers' expectation is important from the employability perspective. Further in the literature, academics are considered responsible for nurturing employers' expected skills in students (For example, Kavanagh et al., 2009; Hassall et al., 2005; Hancock et al., 2010). But in spite of this delegation of responsibility, academics

are consistently failing to equip students with an adequate set of skills as expected by employers (see Lin et al., 2005; Kavanagh and Drennan, 2007; Awayiga et al., 2010; Willcoxin et al., 2010; Jackling and Watty, 2010; Kavanagh et al., 2009; Milner and Hill, 2008; Murphy, 2001). This could be because the academics may themselves have a lack of understanding regarding skills competence in the profession that is resulting in ineffective learning outcomes (Kavanagh et al., 2009; Kavanagh and Drennan 2007; Minchington, 1999; Sadler et al., 2013; Jadama, 2014). Hence, such misunderstanding in academics' conceptions regarding skills acquisition must be remedied to improve learning outcomes. Further, the education literature indicates that academics are not working in isolation (De Lange et al., 2006; Bui and Porter, 2010). Academics are bound by the contextual limitations in which they work; such limitations hinder their abilities to develop skills in students (De Lange et al., 2006; Kavanagh and Drennan, 2007; Millner and Hill, 2008). Therefore, such constraining elements in the academics' environment must also be identified and remedied for the effective development of skills in students (see De Lange et al., 2006; Kavanagh and Drennan, 2007). Hence, capitalising upon the existing education literature (as stated above) the phenomenon of an expectation-performance gap emerges. In illustrating that phenomenon there is an expectation amongst employers that students should be adequately prepared for the job market in terms of skills-based education and that the performance of academics in fulfilling employers' expectations. This phenomenon of an 'expectation-performance gap' would appear to indicate a research exploration from employers, addressing questions about, the skills that should be acquired in accounting education and at what competence level, and how effective academics are in developing such skills in students up to the competence level desired by employers.

As we are aware of the research phenomenon (expectation-performance gap) in the given research objective, therefore now the focus shifts to establish epistemological guidelines to investigate it. In this regard, under the umbrella of education theory, theories such as 'curriculum theory' (interdisciplinary study of education experience), 'instructional theory' (methods of instructions for teaching curriculum), and 'learning theory' (how information is absorbed, processed and retained during learning) are considered. In considering the description of the aforementioned theories (as stated) and their relevance to the education context, 'curriculum theory' seemed to be the more promising one to offer appropriate epistemological support.

**Curriculum theory** is defined as “an interdisciplinary study of educational experience” (Pinar, 2004, p. 2). In general, ‘curriculum theory’ is an academic discipline dedicated to the development of curriculum design by taking into account the historical analysis of a curriculum and the future demands considering decision makers’ policy choices. In this regard, Schiro (2012) by taking a more philosophical approach to ‘**curriculum theory**’ declared four ideologies, **Scholar academic ideology** (“learning is to think and behave like a university academician”) – see lecture notes on Schiro (2012) by Frizzle (2013), **Learner-centred ideology** (“students, teacher and curriculum developer share responsibility for what is occurring but children decide what they want to learn while teacher guides them”) - see lecture notes on Schiro (2012) by Frizzle (2013), **Social reconstruction ideology** (“assumes that something can be done to keep society from destroying itself because it is unhealthy and education is a means to solve society problems”) - see lecture notes on Schiro (2012) by Frizzle (2013) and **Social efficiency ideology** (“human life consists in the performance of specific abilities. Education should prepare for life, so education should prepare for those specific abilities”) - see lecture notes on Schiro (2012) by Frizzle (2013). But in 21<sup>st</sup> century, due to the dominance of economic and political powers, it has been noticed that the education programs have been influenced more by the ideology of ‘social efficiency’ than others (Russell, 2014). This phenomenon seems more apparent in professional accounting education where teachers are now just considered as a “technicians” with a responsibility to teach ‘skills’ to students that make students more fit for employment (job-settings) in the future (Russell, 2014). The ‘social efficiency ideology’ within ‘curriculum theory’ aims to design an education curriculum intended to maximise the ‘social utility or productivity’ of an individual as a societal future (Schiro, 2012). In this regard, Lessenger and Salowe (2001, pp. 11-12) depicted the ‘social efficiency ideology’, by relating employable skills to a quality education system, cited by Schiro (2012, p. 79) as:-

*“A quality education system is an absolute essential to the economic, political, and social welfare of the United States...there is a consensus that students need employable skills for the new economy.”*

Similarly like Lessenger and Salowe (2001), Bui and Porter (2010) by advocating the ideology of ‘social efficiency’ in ‘curriculum theory’ proposed a theoretical framework titled: ‘expectation-performance gap’ that investigates the shortfall between accounting employers’ expectations regarding skills acquisition for employment purposes and academics’ pedagogical ineffectiveness in skills development. One of the major strengths of Bui and Porter’s (2010) framework is that along with investigating the above stated shortfall in skills

development it also diagnoses the reasons of any shortfall from the perspective of three contributing factors, that is, the expectation gap (reflecting differences in the expectations of accounting educators and employers), the constraints gap (representing the factors which are assumed to limit the ability of accounting education to develop skills in students) and the performance gap (reflecting ineffectiveness of pedagogical activities). That framework is selectively grounded in the literature, for example, regarding the 'expectation gap' - see earlier debate in this section with reference to Kavanagh et al., 2009; Kavanagh and Drennan 2007; Minchington, 1999, regarding 'constraints gap' - see earlier debate in this section with reference to De Lange et al., 2006; Kavanagh and Drennan, 2007; Millner and Hill, 2008, and regarding 'performance gap' - see earlier debate in this section with reference to Milner and Hill, 2008; Lin et al., 2005; Murphy, 2001. Further the hypothesised structure (see Figure 1) of Bui and Porter's (2010) proposed theoretical framework has also been empirically validated in a New Zealand University (accounting education context) through a qualitative exploratory case study. Hence, considering Bui and Porter's (2010) framework's empirical (validated in an exploratory case study) and theoretical backing within the accounting education literature (such as Kavanagh et al., 2009; Kavanagh and Drennan 2007; Minchington, 1999; Milner and Hill, 2008; Lin et al., 2005; Murphy, 2001; De Lange et al., 2006) and its conceptual alignment with the ideology of 'social efficiency' in 'curriculum theory', legitimate its use to investigate the phenomenon of 'expectation-performance gap' in this research. Further discussion regarding Bui and Porter's (2010) framework is a subject of discussion of the next chapter (see section 3.1).

## Summary

This chapter supports the underlying research objective by explaining how the interest in employability through skills development in education is located within the doctrine of 'human capital theory'. In that regard, presented a detailed description of 'human capital theory', explaining how education impacts on individual, organisation and overall economic growth. Furthermore, in order to search for the appropriate epistemological guidelines to commence this research illustrated the meaning of 'expectation-performance gap' with the help of academic literature. Then, using 'education literature' and 'social efficiency ideology' in 'curriculum theory' legitimised the use of the framework developed by Bui and Porter (2010) to investigate the underlying research objective.



In the next chapter (Literature review) a review of the existing literature is undertaken with the aim of explaining the key elements in the research objective.

## CHAPTER 3: LITERATURE REVIEW

### 3.0 Introduction:

In this chapter a critical review of the existing literature is undertaken with the aim of explaining the key elements of the research objective, that is:

*What is the expectation-performance gap in the development of generic skills for the purpose of employability offered by the accounting institutes of Pakistan?*

The underlined words, above, provide the sectional structure to this chapter, specifically:-

Section 3.1 critically illustrates the framework of the 'expectation-performance gap' as originally designed by Bui and Porter (2010).

Section 3.2 describes the constituents of the generic skills debate in detail.

Section 3.3 illustrates how the notion of employability is conceptualised in education from the students' career development perspective and explores the linkage between generic skills and employability.

Section 3.4 illustrates the higher education system of Pakistan in general and particularly the accounting education offered by the accounting institutes of Pakistan.

### 3.1 Expectation-Performance Gap by Bui and Porter (2010):

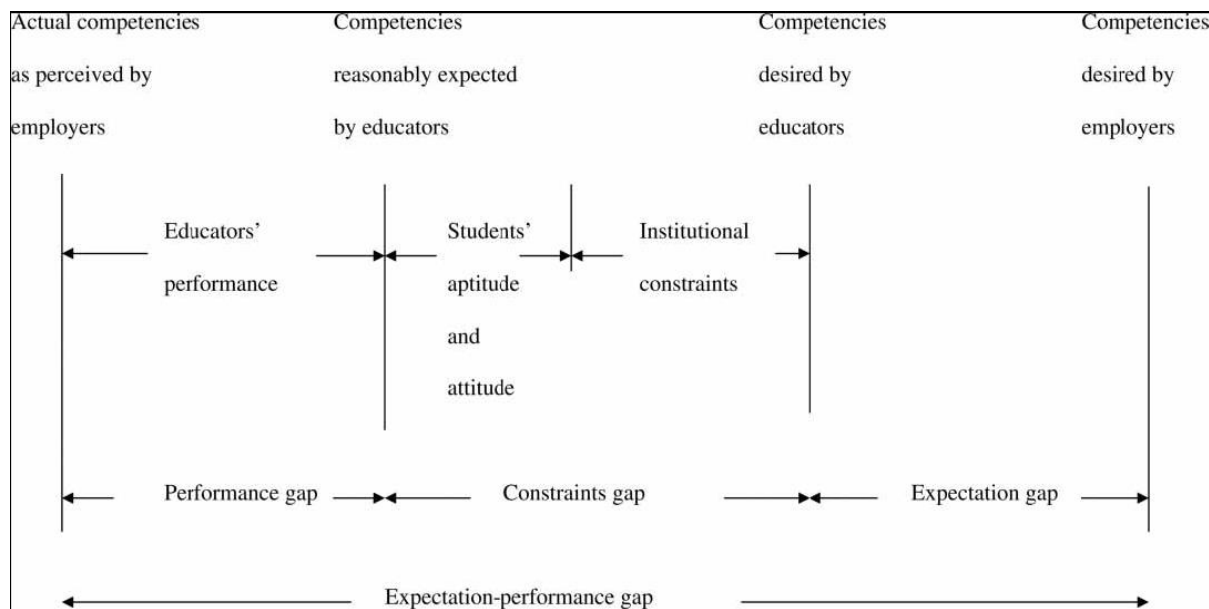
This section aims to give an overview of the existing literature relevant to the framework of the 'expectation-performance gap' by Bui and Porter (2010).

From the existing literature Bui and Porter have identified a number of reasons for accounting education not providing skills required by employers in year 2010. They broadly classified the reasons into four categories, which are:-

- a) Differences in the expectations of accounting academics and employers
- b) Students' perception of accounting programmes and the profession, and their ability and aptitude
- c) Institutional constraints
- d) The ineffectiveness of pedagogical activities

By bringing all four categories together, Bui and Porter (2010) proposed a theoretical framework to investigate the phenomenon of ‘expectation-performance gap’ in terms of evaluating three contributing factors that is the ‘expectation gap’, the ‘constraints gap’ the and ‘performance gap’ (see Figure 3).

Figure 3: Representing the theoretical framework of the Expectation-Performance gap; source Bui and Porter (2010)



- I. Expectation gap - perceptual differences in the expectations of educators and employers regarding the skills that should be acquired by students for their accounting career development (reflecting differences in the expectations of accounting educators and employers).
- II. Constraints gap – representing the factors which are assumed to limit the ability of accounting education to develop the skills into the students’ learning process such as, students’ perception of accounting programmes and the profession, and their ability and aptitude, as well as institutional constraints.
- III. Performance gap - perceptual differences in the level of skills competencies that educators can reasonably expect accounting students to acquire by the time they graduate and those employers perceive the accounting graduates should possess when they enter the profession (reflecting ineffectiveness of pedagogical activities).

Considering the novelty (newness) of this framework there appears to be a paucity of literature in relevance to findings of it. Therefore there is a need to evaluate this framework

along with its component parts (expectation gap, constraints gap and performance gap) to understand its theoretical significance.

Next, in subsection 3.1.1 the theoretical framework of the expectation-performance gap by Bui and Porter (2010) is critically evaluated along with its component parts with the help of literature to understand its significance and relevance to the body of existing knowledge.

### **3.1.1 Critical evaluation of Bui and Porter (2010) framework:**

In order to investigate the phenomenon of the ‘expectation-performance gap’, Bui and Porter (2010) suggested a theoretical framework within which the phenomenon of the expectation-performance gap could be investigated holistically. The hypothesised structure of the proposed theoretical framework has already been validated in an exploratory case study (qualitative) conducted in a New Zealand University. But this framework has one weakness: it does not provide enough theoretical underpinning in terms of its content (notably in respect of generic skills and constraining elements) to evaluate its given three component parts (expectation gap, constraints gap and performance gap) empirically. Therefore, there is an inevitable need to generate enough theoretical underpinning (in terms of generic skills and constraining elements) in order to use this framework empirically for future use.

According to Bui and Porter (2010) the framework of the ‘expectation-performance gap’ is comprised of three components:

- I. Expectation gap
- II. Constraints gap
- III. Performance gap

In order to understand the significance of Bui and Porter’s (2010) framework component parts (expectation gap, constraints gap and performance gap), this section aims to evaluate them with reference to prior studies. In this regard, subsections I, II and III critically evaluate them with reference to available literature.

#### ***I. Expectation gap:***

The first component within the theoretical framework of ‘expectation-performance gap’ (by Bui and Porter, 2010) is ‘expectation gap’ (see Figure 3). The ‘expectation gap’ refers to the perceptual differences in the expectations of educators and employers regarding the skills that should be acquired by graduates for their accounting career development (Bui and Porter,

2010). This component part of the framework (expectation gap), lets the one understand which skills should be developed in accounting students from the employers' perspective and regarding which skills accounting academics hold a dissimilar attitude to employers' expectation in terms of development in students. Thus, the findings from the component of 'expectation gap' reflects two aspects simultaneously: first, the demands of accounting employers (accounting profession) in terms of skill base education and second how well informed are accounting academics about employers' (accounting profession) expectations in terms of skill based education. In the literature it is assumed that a mismatch between academics' and employers' expectations can lead to ineffective pedagogical practices that can potentially limit the opportunities for students to secure employment (Kavanagh et al., 2009; Gati, 1998). Hence, it is important to investigate the component of the 'expectation gap' within the theoretical framework of the 'expectation-performance gap' by Bui and Porter (2010).

Prior studies that have explored the differences in employers and academics 'expectation' regarding skills development illustrate the importance of the constituent of the 'expectation gap' in the literature.

Prior studies have demonstrated that employers and educators perceive skills-acquisition differently within the accounting education process. For example, Kavanagh et al. (2009), in Australia, found that the accounting employers emphasise communication, presentation skills, team working, good interpersonal skills, fitting in with an organisation's ethos, self-management, initiative and enterprise, technological skills and planning and organising skills as the most important skills to be developed in graduates from an employability perspective. However, accounting educators viewed the development of problem-solving skills, personal development skills, strategic management, routine-accounting skills, citizenship, cultural sensitivity, work ethics and appreciative skills as the primary learning objectives in the study of accounting (Kavanagh and Drennan, 2007).

Similarly, Francis and Minchington (1999) and Lin et al. (2005) have also investigated the expectation gap of skills between accounting employers and accounting educators. For example, Francis and Minchington (1999) evaluated the expectation gap of quantitative skills in the UK and reported a mismatch between the expectations of employers and educators regarding taught skills in a management accounting syllabus. Similarly Kavanagh et al. (2009) reported there is a reasonable expectation from employers that educators will keep up-

to-date with new technical knowledge in the curriculum such as that associated with regulatory changes. This tends to leave limited time and space for many practical generic skills in an academic curriculum where priority is given to new technical accounting knowledge. And yet the employers' primary expectation may be for generic skills other than those associated with curriculum changes, for example, certain information technology skills.

## **II. Constraints gap:**

The second component within the theoretical framework of the 'expectation-performance gap' (by Bui and Porter, 2010) is 'constraints gap' (see Figure 3). The 'constraints gap' represents the factors that are limiting the ability of accounting education in the development of generic skills. This component part of the framework reveals the constraints that are limiting the ability of the academic community to perform effectively while developing skills in students. In the literature it is assumed that one of the reasons for the academics' incapability to develop skills in accounting students is the contextual limitations in which academics perform (see, Bui and Porter, 2010, De Lange et al., 2006; Kavanagh and Drennan, 2007; Millner and Hill, 2008). Therefore, in order to educate students adequately, it is important to identify such constraints from academics context, so that the required action can be undertaken in order to eradicate them. Bui and Porter (2010) suggested categorising such constraints within the component of 'constraints gap' into two broad themes; a) students' aptitude and attitude; and b) institutional constraints.

Prior studies that have explored the constraints towards skills development illustrate the importance of the constituent of the 'constraints gap' in the literature.

### *a) Students' Aptitude and attitude*

In accounting education there has been a growing concern that education institutes are not retaining the students with high aptitude in a sufficient quantity to meet the demands of the accounting education process (Wells et al., 2008). Declining institutes enrolment rates in accounting education indicate that the accounting profession is diminishing in its attractiveness to students. This aspect is well documented in the accounting literature (see Arthur Andersen et al., 1989; Felton et al., 1994; Hermanson et al., 1996; Mariott and Marriott, 2003; Wells, 2006; ICAA, 2002; Jackling and Calero, 2006). In this regard, Adams et al. (1994) conducted a longitudinal study of 238 students from an introductory accounting course in the USA. They reported that students leaving the accounting programme had on

average a higher Grade Point Average (GPA) than those who did not leave. However, in contrast, Riordan et al. (1996) reported contrary results. They conducted a longitudinal study using 4800 students in the USA, and reported that students entering the accounting programme on average had higher intellectual abilities than those who did not.

*b) Institutional constraints*

From the literature a number of factors have been identified as constraining elements within education institutions. These vary across institutions based upon their contextual limitations, such as, institution size, and financial resources, etc. (see Street et al., 1993; Manakyan and Tanner, 1994; Lindsay and Campbell, 1995; Hill, 1998; Murdoch and Guy, 2002). Considering the variability of these constraints, they are further classified into two categories, that is, internal and external constraints.

- In respect of internal constraints, the key elements that were identified are the size of a class, research activities, and unrewarded teaching excellence. For example, Murdoch and Guy (2002) investigated student performance based on class size. They found that students who had been taught in small classes appeared to show better signs of academic achievement. However, in contrast, Hill (1998) conducted research in the USA where he did not find that large class size was a constraining factor in academic achievement. On the other hand, Milner and Hill (2008) conducted research with UK academics and found that the development of generic skills was impeded by large class sizes. Other researchers, such as Hassall et al. (2005), have also identified large class size as a major constraining factor in generic skills development.

Manakyan and Tanner (1994) and Lindsay and Campbell (1995) separately studied the relationship between teaching effectiveness and research activities. Manakyan and Tanner (1994) surveyed 226 accounting educators in the USA and did not find a major difference, rather, a small, but significant, negative relationship between research activities and effective teaching practices. Similarly, Kavanagh and Drennan (2007) found from the Australian accounting academics' perspective that they were too preoccupied with research activities to keep the curriculum up-to-date in terms of skills development.

Other studies include the lack of an adequate reward system for teaching activities as another constraining factor. Today, endemic dissatisfaction exists among educators over the reward system for effective teaching practices (Seldin, 1995). This dissatisfaction exists because of the persistent undervaluing of teaching excellence and the overvaluing of research activities (discussed in the next paragraph). In this regard, Porter and Carr (1999) explicitly highlight the importance of having a proper reward system for the development of teaching excellence in accounting education in New Zealand. Similarly, Kavanagh and Drennan (2007) also found from an Australian accounting educators' perspective that having an inadequate reward system for teaching effort is a major reason for teacher ineffectiveness.

- Addressing next the external factors, those factors that are identified as constraining elements are the funding structure of educational institutes, the audit culture and the accreditation standards. For example Dominelli and Hoogvelt (1996) investigated the effects of a research-based culture, which was triggered by the changes in the UK funding structure for academic financial assistance. They reported that the shift to a research-based culture is one of the primary reasons for a decline in educators' teaching performance.

From the literature, another constraining element was an ineffective audit culture. For example, Craig and Amernic (2001) found an audit culture, which was focused on quantity and revenue, that is, one based on the number of students and the amount of fees. The implication was that teaching quality standards were compromised by this focus.

Finally, another constraining element was the nature of accreditation standards of the accounting bodies (Bui and Porter, 2010). For example, the accreditation standard criteria set by the Association to Advance Collegiate Schools of Business (AACSB) has criteria which require that 50% of the credit hours in a four-year curriculum must be outside the accredited accounting college. Further, the program must include at least 30 credit hours with a minimum of 12 hours in the area of specialisation and 18 hours in specific core areas (Duncan and Schmutte, 2006). Similarly, the 150-hour per semester learning requirement set by the American Institute of Certified Public Accountants (AICPA) broaden the accounting curriculum to the point where there is



limited space and time for accounting educators to focus on generic skills development.

### **III. Performance gap:**

The third component within the theoretical framework of the 'expectation-performance gap' (by Bui and Porter, 2010) is 'performance gap' (see Figure 3). The 'performance gap' represents the differences in the level of skills competence that educators can reasonably expect accounting graduates to acquire by the time they graduate and those employers perceive the accounting graduates should possess when they enter the profession (Bui and Porter, 2010). In the literature, different researchers have different evaluation criteria in order to measure the ineffectiveness of pedagogical activities than Bui and Porter (2010) approach, for example, see Kavanagh and Drennan (2007) and Lin et al. (2005). But irrespective of the measurement approach, investigating the component of 'performance gap' goes to the heart of the thesis objective, because, it represents the skills where educators are found incapable of developing a sufficient competence level to employers' expectations. Thus, investigating the component of 'performance gap' holds the position of pivotal importance to the focus of this research.

Next, let's illustrate the prior studies that have explored the pedagogical incompetence in order to ground the importance of the constituent of 'performance gap' in the literature.

Murphy (2001) described pedagogical practices as an act of persuasion. He illustrated pedagogical practices as a persuasion process, that is, to "convince their students of the value of knowing or understanding and to influence or alter their views of various concepts" (Murphy 2001, p. 224). Thus, educators, in assuming the responsibility for such intellectual growth and change, play a powerful role in the persuasion process. However, not all educators are supportive of the development of generic skills and their placement within the accounting curriculum (Milner and Hill, 2008). For example, Milner and Hill (2008) investigated 34 accounting educators across different UK universities (both new and old). They reported that the educators' approach to generic skills development is not uniform across all universities, for example, as Milner and Hill (2008, p. 16) reported from one of the interviewees' perspective:

*"Right. I'm, you're gonna find me massively reactionary and old-fashioned. I'm profoundly opposed to learning outcomes, goals in courses, transferable skills, massively opposed to it. It's awful"*

*“I think there are two issues there. Just to bring it back to what, I now realise, you call skills. The skills I'm interested in are reading, thinking and writing. Anything beyond those, are almost entirely incidental. As it happens, I think that there are some technical skills it make sense to teach the students. Basic book-keeping, basic arithmetic, and one or two basic cognitive techniques, but primarily I'm interested in thinking, reading and writing. Anything beyond that, I think just to call them skills somehow delimits them. They are fluffy things that don't stay in boxes”*

Similarly, Bell and Egan (2009, p. 4) reported the educators’ reluctance towards acknowledging the importance of skills-based education:

*“The reluctance of many academic staff to be involved in the delivery of generic skills units is an unspoken reality probably based on academic snobbery. The reality is that such units are often allocated to new staff or seen as a useful way of making up timetables to meet staff audit requirements”*

Lin et al. (2005) also evaluated the effectiveness of the educators’ pedagogical practices in skills development from different stakeholder perspectives (employers, educators and students). They reported a significant level of ineffectiveness in terms of pedagogical practices in generic skills-oriented services. Even the educators realised the same – see, for example, Kavanagh and Drennan (2007). Kavanagh and Drennan (2007) reported that, except for three generic skills, that is, technical bookkeeping, advances technical accounting and research skills, in all other areas, the educators’ pedagogical practices failed to deliver even to their own expectations.

In summary, with the adoption of the Bui and Porter (2010) theoretical framework, this thesis can answer the first part of the objective, that is, what is the “expectation-performance gap...”. Further the cited literature above so far clearly indicates that the development of generic skills amongst accounting graduates is constrained by the existence of the above three gaps (the expectation gap, the constraints gap and the performance gap). However, the adoption of the Bui and Porter’s (2010) framework to structure the content section 3.1 could also be viewed as a constraint in its own right. So, next, section 3.2, addresses the second underlined element within the thesis objective: “generic skills”.

### **3.2 The generic skills debate:**

This section broadens the focus of the debate in order to address “**generic skills**” in relation to the introductory objective, which is:-

**What is the expectation-performance gap in the development of generic skills...**

This section presents the principal elements of the generic skills debate, which comprise the following subsections:-

- 3.2.1 Conceptualisation of generic skills
- 3.2.2 Controversies about generic skills development
- 3.2.3 Identifying the generic skills relevant to accounting education

Section 3.2.1 establishes an understanding of alternative terminologies which are used in the conceptualisation of the term: 'generic skills'. Section 3.2.2 discusses the existing controversies about generic skills development. Section 3.2.3 identifies the different types of generic skills found in accounting education.

### 3.2.1 Conceptualisation of generic skills:

In the literature there are a number of different terminologies which represent the term 'generic skills', for example, generic-employability skills, generic attributes, competencies, soft skills and so on. In order to avoid confusion and ambiguity about the different terminologies, the term 'generic skills' is used in this research only.

There is widespread debate on what constitutes the generic skills for employability of an academic graduate. The term 'generic skills' is a subjective term that is defined in the literature as a set of transferable skills that is essential for employability and is widely used across different disciplines (Hambur et al., 2002; Greatbatch and Lewis, 2007). Transferable skills mean a set of soft skills that are widely applied across disciplines and are teachable (see Robinson, 2000); such skills include teamwork, critical thinking, problem-solving, presentation skills and communication skills. However, the literature points out that these transferable skills are best learned in relation to a disciplinary knowledge (Hambur et al., 2002; De La Harpe et al., 2000). For example, De La Harpe et al. (2000, p. 241) stated:-

*“... skill development is an important part of undergraduate education and that the teaching of skills is most effective when done by the discipline specialists within the context of the subject.”*

Similarly, Clanchy and Ballard (1995) also point out that familiarity with the disciplinary context for the development of transferable skills is an important element.

*“... while such skills cannot be learned in vacuo, indeed they must be learned in the context of a specific discipline and body of knowledge ...” (c.f. Hambur et al., 2002, p. 4)*

Furthermore, in order to augment this argument, Jones (2010) investigated five distinct disciplines (history, physics, economics, law and medicine) and found that groups from

different disciplines define skills differently, for example, critical thinking, problem-solving and communication:-

*“In physics, problem-solving is understood as the use of abstract modelling, using mathematics as the tool of analysis to solve physical problems, using either theoretical or experimental processes. In law, however, problem-solving was based upon an understanding of legal principles and conventions while in medicine, problem-solving was based upon the nexus between biomedical knowledge, the clinical relationship and diagnostic reasoning to ascertain therapeutic outcomes. In economics, problem-solving was understood as the use of economic tools and reasoning.” (Jones, 2010, p. 8)*

Thus, evaluating transferable skills in isolation from disciplinary knowledge would be ineffective. Therefore, in this research the term ‘generic skills’ is conditioned to incorporate accounting disciplinary knowledge along with transferable skills.

In the published literature a number of researchers have identified a wide range of generic skills in different disciplines and categorized them differently. For example McQuaid and Lindsay (2005), Jones and Sin (2003), Wellman (2010) and the Business, Industry and Higher Education Collaboration Council (2007) identified and categorised the skills differently in different discipline contexts. Consider Table 3 below:

**Table 3: Categorisation of generic skills in different disciplines**

<b>Irrespective of discipline context</b>	<b>Accounting Context</b>	<b>Marketing Context</b>	<b>Engineering Context</b>
<b>McQuaid and Lindsay (2005)</b>	<b>Jones and Sin (2003)</b>	<b>Wellman (2010)</b>	<b>Business Industry Higher Education Collaboration Council (2007)</b>
<p><b>Basic Transferable Skills:</b></p> <ul style="list-style-type: none"> <li>• prose,</li> <li>• document literacy, writing</li> <li>• numeracy</li> <li>• verbal presentation,</li> </ul> <p><b>Key Transferable Skills:</b></p> <ul style="list-style-type: none"> <li>• reasoning,</li> <li>• problem solving,</li> <li>• adaptability,</li> <li>• work-process management,</li> <li>• team working,</li> <li>• personal task and time management,</li> <li>• functional mobility,</li> </ul>	<p><b>Routine Skills:</b></p> <ul style="list-style-type: none"> <li>• Report writing</li> <li>• Computer literacy</li> </ul> <p><b>Analytic and design skills:</b></p> <ul style="list-style-type: none"> <li>• Identify, find, evaluate, organise and manage information and evidence</li> <li>• Initiate and conduct research</li> <li>• Analyse, reason logically, conceptualise issues</li> <li>• Solve problems and Construct arguments</li> <li>• Interpret data and reports</li> </ul>	<ul style="list-style-type: none"> <li>• Imagination/creativity</li> <li>• Adaptability/flexibility</li> <li>• Willingness to learn</li> <li>• Independent working/autonomy</li> <li>• Working in a team</li> <li>• Ability to manage others</li> <li>• Ability to work under pressure</li> <li>• Good oral communications</li> <li>• Communications in writing for varied purposes/audiences</li> <li>• Numeracy</li> <li>• Attention to detail</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to communicate effectively, with the engineering team and with the community at large</li> <li>• Ability to manage information and documentation</li> <li>• Capacity for creativity and innovation</li> <li>• Understanding of professional and ethical responsibilities, and commitment to them</li> <li>• Ability to function effectively as an</li> </ul>

<ul style="list-style-type: none"> <li>• basic information and communication technology skills,</li> <li>• basic interpersonal and communication skills,</li> <li>• emotional and aesthetic customer service skills,</li> </ul> <p><b>High Level Transferable Skills:</b></p> <ul style="list-style-type: none"> <li>• business thinking,</li> <li>• commercial awareness,</li> <li>• continuous learning,</li> <li>• vision,</li> <li>• job-specific skills,</li> <li>• enterprise skills</li> </ul>	<ul style="list-style-type: none"> <li>• Engage in ethical reasoning</li> </ul> <p><b>Appreciative skills:</b></p> <ul style="list-style-type: none"> <li>• Receive, evaluate and react to new ideas</li> <li>• Adapt and respond positively to challenges</li> <li>• Make judgements derived from one's own value framework</li> <li>• Think and act critically</li> <li>• Know what questions to ask</li> <li>• Engage in lifelong learning</li> <li>• Recognise one's own strengths and limitations</li> <li>• Appreciate ethical dimensions of situations</li> <li>• Apply disciplinary and multidisciplinary perspectives</li> <li>• Appreciate process of professional adaptation and behaviour</li> </ul> <p><b>Personal Skills:</b></p> <ul style="list-style-type: none"> <li>• Commitment to think and behave ethically</li> <li>• Flexibility in new/different situations</li> <li>• Act strategically</li> <li>• Thinking and acting independently</li> <li>• To be focused on outcomes</li> <li>• Toleration of ambiguity</li> <li>• Creative thinking</li> </ul> <p><b>Interpersonal skills:</b></p> <ul style="list-style-type: none"> <li>• Listen effectively</li> <li>• Present and discuss and defend views</li> <li>• Transfer and receive knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Time management</li> <li>• Assumption of responsibility and for making decisions</li> <li>• Planning, coordinating and organising ability.</li> </ul>	<p>individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member</p> <ul style="list-style-type: none"> <li>• Capacity for life-long learning and professional development</li> <li>• Professional attitudes.</li> </ul>
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	<ul style="list-style-type: none"> <li>• Negotiation skills (with people from different backgrounds and with different value systems)</li> <li>• Understanding group dynamics</li> <li>• Collaboration skills (with colleagues)</li> </ul>		
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However, one should note that, despite the earlier assertion as to the interchangeable nature of transferable skills, in some cases in Table 3 transferability can only be implied. Perhaps this is not a bad thing because, in subsection 3.2.2, the reader will see that the assumption of transferability between disciplines and countries is fraught with controversy.

### 3.2.2 Controversies about generic skills development:

Despite being a fertile area for academic debate, many issues remain unresolved, with continuing disagreement over ways of perceiving, defining, understanding, teaching and assessing generic skills (Jones, 2010).

The trans-disciplinary nature of generic skills acquisition is often questioned by a number of researchers on the grounds of a lack of theoretical and empirical evidence (Barrie et al., 2009; Nusche, 2008). The Department of Education Science and Training of Australia supports the promotion and testing of generic skills through a skills assessment toolkit (Australian Council for Education Research, 2001a). The skills assessment toolkit is based on an underlying assumption that generic skills are trans-disciplinary in nature, identifiable and measurable. The underlying assumption clearly isolates the generic skills from their disciplinary context and allows for their measurement, definition and assessment in all disciplines at the same level.

However, in contrast, the Australian Precision Consultancy report argued that generic skills are intrinsically complex, possessing a wide variety in the definition and the conceptualisation of them in different contexts (Business, Industry and Higher Education Collaboration Council, 2007). Thus, their argument supports defining, assessing and measuring skills separately across various industries and discipline contexts. Jones (2010) investigated five distinct education disciplines: history, physics, economics, law and medicine. Her findings explicitly confirm that groups from different disciplines define generic skills differently, such as critical thinking, problem-solving, communication, and so

on. Her study clearly demonstrated that generic skills are context specific and are shaped by the disciplinary dimensions in which they are taught. Furthermore, her argument is also supported by Barrie (2006), Greatbatch and Lewis (2007) and Jackling and Keneley, (2009) who state:-

*“Generic employability skills and attributes are context sensitive, which is to say they may vary in detail between different work contexts” (Greatbatch & Lewis, 2007, p. 7)*

*“A key argument for embedding skill development into the teaching program is that the development of such skills is more relevant when placed within the context of the discipline under study” (Jackling and Keneley, 2009, p.10)*

Further research has also demonstrated that, most of the time, attempts at identifying generic skills “have resulted in a plethora of superficially similar but often significantly different lists” (Drummond et al., 1998, p. 20) – see also Table 3. The published literature shows that different cultural values are influencing accounting values differently (Askary, 2006; Fechner and Kilgore, 1994; Gray, 1988; Perera and Mathews, 1990). This is probably why identified generic skills in accounting practices and education vary across countries. For example, in the USA, displaying a certain set of gestures such as eye contact or body postures serves to illustrate good communication skills and confidence. However, in other culturally-differentiated countries, displaying such behaviour is considered an act of aggression and rudeness (Brown, 2002). If academics, who teach a class of almost exclusively international students on their programmes, are not aware of the hidden values in relation to skills development from students’ contextual perspectives, then there is likely to be a chance of misunderstanding and conflict (McKinnon, 2011).

Campbell (2010) recently conducted an empirical investigation in an Australian university. His findings revealed that:

*“Relevance of these generic skills and attributes to the professional careers of international students is dependent on the social and political context, culture, opportunity and individual status within the community” (Campbell, 2010, p. 487)*

As such he argues that the generic skills identified in a western culture may be irrelevant for another culture. He recommended exercising some degree of caution in assuming the relevance of these skills in another context. In support of this conclusion McKinnon (2011) investigated the views of different respondents from culturally different countries Nigeria, Ghana, India, Pakistan, France, Spain, Uganda, Poland, Portugal and Russia. He also found that employers from different countries emphasised generic skills for development purpose differently, for example:

*“I felt that to quite some extent that in the UK, interpersonal skills are more important compared to Pakistan. In Pakistan they ask for more technical skills... employers need specific technical skills and they ask you the technical questions” (McKinnon, 2011, p.5)*

In summary, it has to be said that this subsection of the literature review raises some concerns in respect of stated research objective. This is because, with the exception of McKinnon (above) and a few other authors, generally, there is a dearth of literature dealing specifically with accounting generic skills within a Pakistani setting. As such, whilst this research can transfer views from a general or international setting into a Pakistani setting, care must be taken about the relevance of those views to Pakistani educators and businesses. How that ‘care’ is to be exercised is a matter for the research methods chapter and, one suspects, the limitations section of this thesis.

### 3.2.3 Identifying the generic skills relevant to accounting education:

The focus of the literature review is now narrowed from a multidisciplinary context, previously, to an accounting education context only. A number of different researchers in the accounting education field have identified a wide range of generic skills. As stated earlier, there is no single definitive list of generic skills and no standardised categorisation of such skills. Some examples of categorisation are presented in Table 4 below.

Table 4: Variability of generic skills in accounting discipline

Jones and Sin (2003)	IFAC (2008)	Hassall et al. (2005)	Albrecht and Sack (2000)
<p><b>Routine Skills:</b></p> <ul style="list-style-type: none"> <li>• Report writing</li> <li>• Computer literacy</li> </ul> <p><b>Analytic and design skills:</b></p> <ul style="list-style-type: none"> <li>• Identify, find, evaluate, organise and manage information and evidence</li> <li>• Initiate and conduct research</li> <li>• Analyse, reason logically, conceptualise issues</li> <li>• Solve problems and Construct arguments</li> <li>• Interpret data and reports</li> <li>• Engage in ethical reasoning</li> </ul>	<p><b>Intellectual skills:</b></p> <ul style="list-style-type: none"> <li>• The individual’s ability to locate, obtains, organize and understand information from human, print and electronic sources</li> <li>• The capacity for inquiry, research, logic and analytic thinking, power of reasoning, and critical analysis</li> <li>• The ability to identify and solve unstructured problems in unfamiliar settings</li> </ul> <p><b>Technical and functional skills:</b></p> <ul style="list-style-type: none"> <li>• Numeracy</li> </ul>	<p><b>communication skills:</b></p> <ul style="list-style-type: none"> <li>• present and defend the outcome of their own writing</li> <li>• present and defend the outcome of their own verbally</li> <li>• use of visual aids in presentation</li> <li>• listen effectively</li> <li>• critical reading</li> </ul> <p><b>Group working skills:</b></p> <ul style="list-style-type: none"> <li>• work with others</li> <li>• organise and delegate task</li> <li>• assume leadership positioning</li> </ul> <p><b>Problem-solving:</b></p> <ul style="list-style-type: none"> <li>• identify and solve unstructured problems</li> </ul>	<ul style="list-style-type: none"> <li>• Accounting Software</li> <li>• Appreciation of cross cultural diversity</li> <li>• Business Decision Modelling</li> <li>• Change Management</li> <li>• Company Promotion</li> <li>• Computer Literacy (I can use)</li> <li>• Computer Technology (Systems)</li> <li>• Continuous Learning</li> <li>• Creativity</li> <li>• Critical Thinking</li> <li>• Cross Cultural</li> </ul>



<p><b>Appreciative skills:</b></p> <ul style="list-style-type: none"> <li>• Receive, evaluate and react to new ideas</li> <li>• Adapt and respond positively to challenges</li> <li>• Make judgements derived from one's own value framework</li> <li>• Think and act critically</li> <li>• Know what questions to ask</li> <li>• Engage in lifelong learning</li> <li>• Recognise one's own strengths and limitations</li> <li>• Appreciate ethical dimensions of situations</li> <li>• Apply disciplinary and multidisciplinary perspectives</li> <li>• Appreciate process of professional adaptation and behaviour</li> </ul> <p><b>Personal Skills:</b></p> <ul style="list-style-type: none"> <li>• Commitment to think and behave ethically</li> <li>• Flexibility in new/different situations</li> <li>• Act strategically</li> <li>• Thinking and acting independently</li> <li>• To be focused on outcomes</li> <li>• Toleration of ambiguity</li> <li>• Creative thinking</li> </ul> <p><b>Interpersonal skills:</b></p> <ul style="list-style-type: none"> <li>• Listen effectively</li> <li>• Present and discuss and defend views</li> <li>• Transfer and receive</li> </ul>	<p>(mathematical and statistical applications) and IT proficiency</p> <ul style="list-style-type: none"> <li>• Decision modelling and risk analysis</li> <li>• Measurement and reporting</li> <li>• Compliance with legislative and regulatory requirements.</li> </ul> <p><b>Personal skills:</b></p> <ul style="list-style-type: none"> <li>• Self-management</li> <li>• Initiative, influence and self-learning</li> <li>• The ability to select and assign priorities within restricted resources and organize work to meet deadlines</li> <li>• The ability to anticipate and adapt to change</li> <li>• Considering the implications of professional values ethics and attitudes in decision making</li> <li>• Professional scepticism</li> </ul> <p><b>Interpersonal and communication skills:</b></p> <ul style="list-style-type: none"> <li>• Work with others in a consultative process, to withstand and resolve conflict</li> <li>• Work in teams</li> <li>• Interact with culturally and intellectually diverse people</li> <li>• Negotiate acceptable solutions and agreements in professional situations</li> <li>• Work effectively in a cross-cultural setting</li> <li>• Present, discuss, report and defend views effectively through formal,</li> </ul>	<ul style="list-style-type: none"> <li>• creative thinking</li> <li>• integrate multidisciplinary knowledge</li> <li>• critical analysis</li> </ul> <p><b>Pressure and time management:</b></p> <ul style="list-style-type: none"> <li>• organize the conflicting demands and unexpected requirement</li> <li>• organize the conflicting strict and coinciding deadline</li> <li>• Select and assign priorities within coincident workloads</li> </ul> <p><b>Information technology</b></p> <ul style="list-style-type: none"> <li>• use relevant software,</li> <li>• knowledge of information sources</li> </ul> <p><b>Other skills, values and knowledge:</b></p> <ul style="list-style-type: none"> <li>• commitment to life-long learning</li> <li>• ability to develop methods of effective learning</li> <li>• awareness of social and ethical responsibilities</li> <li>• knowledge of the accounting profession,</li> <li>• comprehensive and global vision of the organisation</li> </ul>	<p>Appreciation</p> <ul style="list-style-type: none"> <li>• Cross Cultural communication</li> <li>• Cultural Sensitivity</li> <li>• Customer Service Orientation</li> <li>• Decision Making</li> <li>• Entrepreneurship</li> <li>• Ethics</li> <li>• Flexibility</li> <li>• Foreign Language</li> <li>• Good Citizenship</li> <li>• Independent Thought</li> <li>• Interdisciplinarity</li> <li>• Interpersonal</li> <li>• Leadership</li> <li>• Listening</li> <li>• Logical Argument</li> <li>• Measurement (able to quantify)</li> <li>• Negotiation</li> <li>• Oral Communication</li> <li>• Problem Solving</li> <li>• Professional Attitude</li> <li>• Project Management</li> <li>• Reading for Understanding</li> <li>• Research</li> <li>• Resource Management</li> <li>• Risk Analysis</li> <li>• Risk Propensity</li> <li>• Self-Motivation</li> <li>• Self-Promotion</li> <li>• Social Justice</li> <li>• Strategic Management</li> <li>• Teamwork</li> <li>• Technical Bookkeeping</li> <li>• Tenacity</li> <li>• Values</li> <li>• Work Ethic</li> <li>• Written Communication</li> </ul>
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<p>knowledge</p> <ul style="list-style-type: none"> <li>• Negotiation skills (with people from different backgrounds and with different value systems)</li> <li>• Understanding group dynamics</li> <li>• Collaboration skills (with colleagues)</li> </ul>	<p>informal, written and spoken communication</p> <ul style="list-style-type: none"> <li>• Listen and read effectively, including a sensitivity to cultural and language differences.</li> </ul> <p><b>Organizational and business management skills:</b></p> <ul style="list-style-type: none"> <li>• Strategic planning, project management, management of people and resources, and decision making</li> <li>• The ability to organize and delegate tasks, to motivate and to develop people</li> <li>• Leadership</li> <li>• Professional judgment and discernment.</li> </ul>		
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As can be seen from Table 4 above (Jones and Sin, 2003; IFAC, 2008; Hassall et al., 2005; Albrecht and Sack, 2000) there are multiple perspectives on the skills developed as part of academic programs thought to be necessary to enhance students' employability – see also other studies such as Quality Assurance Agency (2007), Accounting Education Change Commission (1990), Confederation of British Industry (2009), Australian Chamber of Commerce and Industry (2002) and Siegel and Sorensen (1999). These multiple perspectives on generic skills development could easily be aligned with a stakeholder analysis approach – see, for example, Watty (2004). In stakeholder analysis these multiple perspectives might reflect the views of various stakeholders who claim to have an implicit or explicit legitimate authority, power or interest in voicing their viewpoint (Vroeijensteijn, 1990; Middlehurst, 1992; Carroll and Buchholtz, 1989; Savage et al., 1991; Clarkson, 1995; Freeman and Evan, 1990; Hill and Jones, 1992). Those stakeholders would comprise state agencies, professional accounting bodies, employers, senior management of educational institutes, academics and students (see Kavanagh and Drennan, 2008; Kavanagh et al., 2009; Certified Practising Accountants (2008) based on Birkett's (1993) work; De Lange et al., 2006; Morgan, 1997; Hassall et al., 2001, 2003, 2005; Montano et al., 2001; Gray and Collison, 2002; Quality Assurance Agency, 2007). However, this is not the research approach adopted in this thesis

principally because here the focus is upon two stakeholders only, namely, employers (businesses) and educators (academics). Nevertheless, the prevalence of literature using this approach is worthy of exploration in its own right.

### *Employers' Perspective*

Lloyd (2008) suggested that the UK's current skills policy is centred on the need to drive up qualification obtainment system more employer-led. Similarly Kavanagh et al. (2009) and Gati (1998) also stated that, if employers' prioritised generic skills are not developed in accounting graduates then this mismatch of skills prioritization leads to limited opportunities for graduates to secure employment in the future. Hence, for the education providers it becomes essential to prioritise generic skills as per employers' requirements to eradicate this mismatch. Thus, in this regard, a number of studies have collected views of various accounting employers around the globe to identify generic skills of a significant cadre (see Hassall et al., 1999, 2001, 2003, 2005; Montano et al., 2001; Kavanagh and Drennan, 2008; Birkett, 1993).

Hassall et al. (1999) investigated CIMA employers in the UK. They reviewed a list of 22 generic skills with respect to the level of importance they exhibit for graduates entering the workforce. Later Hassall et al. (2003) surveyed employers and students, and reported that both of the groups (employers and students) agreed over identifying the importance of generic skills from the employability perspective, but they disagreed on the priorities set over these skills. Overall the employers ranked verbal communication as the most important skill whereas the students ranked time-management as their priority in the same study. Hassall et al. (2005) also conducted a survey of management accountants (employers) in the UK and Spain. They prioritised the most valued skills from an employer's perspective (for accounting graduates) as teamwork skills, organisational skills, computing skills and communication skills (see Table 5).

Montano et al. (2001) also surveyed CIMA employers and reported communication and stress management skills as the most important skills from the employer's perspective (see Table 5). Similarly Gray and Collison (2002) also collected the view of practitioners, academics and graduates jointly and reported the need to develop students' capacity to be creative, reflective and supportive towards critical analysis.

Kavanagh and Drennan (2008) surveyed employers and students from Australian institutes using 47 identified generic skills. Their results indicated some agreement between employers and students in the perceived importance of skills (analytical/problem-solving skills, oral and written communication skills, teamwork and continuous learning), however, again it was also noted that there was a difference in terms of priorities set by both of the groups (same as Hassall et al., 2003). Later Kavanagh et al. (2009) used 36 focus group interviews from different accounting employers (manufacturing and service industries, local and state government and accounting firms including the Big 4, mid-tier and small firms in Australia) to ascertain the relative importance of certain skills as demanded by such employers (see Table 5). Based on a thorough literature review (that is, Harvey and Green, 1994; Johnson and Johnson, 1995; Gardner and Liu, 1997; AC Nielsen Research Services, 2000; Albrecht and Sack, 2000; Bennett et al., 2002; Hassall et al., 2005; Mazuki et al., 2007) and interviews feedback they reported two detailed lists of technical and not technical skills sets as per employer demand. They reported the findings that non-technical skills are more in demand by employers than technical ones and that such non-technical skills are often used as a discriminatory factor among applicants of an equal technical calibre. Therefore, employers seem to give a lower priority to technical skills rather than non-technical abilities of graduates. Further, they reported employers' dissatisfaction with the non-technical abilities of graduates entering the workforce. This is consistent with the results of other recent studies (see Awayiga et al., 2010; Willcoxson et al., 2010; Bui and Porter, 2010; Jackling and Watty, 2010).

The generic skills identified by the Certified Practising Accountants (CPA, 2008) (see Table 5) were, in fact, the detailed reflection of employer-identified skills reported by Professor William P. Birkett (1993) of University of New South Wales. He was jointly commissioned by the Australian Society of Certified Practising Accountants (ASCPA now known as CPA, Australia), the Institute of Chartered Accountants in Australia (ICAA) and the New Zealand Society of Accountants (NZSA) in 1992. He led the project that assessed the generic skills needs of the accounting profession only. He gathered the data from 100 practitioners at different career levels over 200 various incidents to comprehensively scrutinize the required generic skills in accounting profession. They are now a mandatory requirement for all associated education institutes offering accounting in the curriculum (Institute of Chartered Accountants in Australia, 2002). Later, Jones and Sin (2003) published a related book entitled "Generic Skills in Accounting - competencies for students and graduates". The identified

skills were included in Birkett's (1993) 'working documents' and incorporated into a new set of competencies recognised for professional accountants in New Zealand (1998). These working documents included illustrative examples of tasks and exercises which could be used to develop generic skills among students.

**Table 5: Generic skills identified by Employers**

<b>Hassall et al. (1999, 2003, 2005)</b>	<b>Kavanagh et al. (2009)</b>	<b>Montano et al. (2001)</b>	<b>CPA (2008)</b>
<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Group Working Skills</li> <li>• Problem Solving Skills</li> <li>• Pressure and Time Management Skills</li> <li>• Information Technology skills</li> <li>• Other Skills, Values and Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Presentation skills</li> <li>• Teamwork skills</li> <li>• Good interpersonal skills</li> <li>• Fit organisations ethos</li> <li>• Self-management skills</li> <li>• Initiative and enterprise skills</li> <li>• Technological competence</li> <li>• Planning and organising skills</li> </ul>	<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Stress management skills</li> </ul>	<ul style="list-style-type: none"> <li>• Routine skills</li> <li>• Analytic skills</li> <li>• Appreciative skills</li> <li>• Personal skills</li> <li>• Interpersonal skills</li> </ul>

### *Educators' Perspective*

Turning next to the educators, Kavanagh and Drennan (2007) sought to develop an understanding of generic skills from their perspective. They reported a considerable gap between the skills (see Table 6) that academics considered to be important for their students' future careers and those that were actually being delivered. They reported significant differences in almost all of the generic skills except technical book-keeping, advanced technical and research skills.

Tan et al. (2004) evaluated the views of educators and employers (New Zealand) for the purpose of what topics and skills should be taught in management accounting programmes. Using a survey methodology results indicated that among the set of 11 generic skills (see Table 6), educators and employers both placed high importance on thinking, problem solving, listening and quantitative skills.

**Table 6: Generic skills identified by Educators**

<b>Kavanagh and Drennan (2007)</b>	<b>Tan et al. (2004)</b>

<ul style="list-style-type: none"> <li>• Problem Solving skills</li> <li>• Personal and Strategic Management skills</li> <li>• Routine Accounting skills</li> <li>• Citizenship skills</li> <li>• Cultural Sensitivity</li> <li>• Work Ethics</li> <li>• Personal and Appreciative skills</li> </ul>	<ul style="list-style-type: none"> <li>• Problem solving skills</li> <li>• Thinking skills</li> <li>• Listening skills</li> <li>• Quantitative skills</li> <li>• Speaking skills</li> <li>• Writing skills</li> <li>• Microcomputer skills</li> <li>• Reading skills</li> <li>• Management skills</li> <li>• Social skills</li> <li>• Marketing skills</li> </ul>
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The main findings from the above literature comprise:

1. There is no single definitive list of generic skills and no agreement over their categorization in accounting education (see Jones and Sin, 2003; Kavanagh et al., 2009; Hassall et al., 2005; International Federation of Accountants, 2008; Albrecht and Sack, 2000).
2. Considering the contextual relevance of generic skills, with respect to developed countries (Anglo) such as UK, New Zealand, Australia, America, and Canada, there is enormous amount of literature available (For example, Jackling and Keneley, 2009; Harvey and Bowers-Brown, 2004; Confederation of British Industry, 2009; Australian Chamber of Commerce and Industry, 2002; Kavanagh and Drennan, 2007; Kavanagh et al., 2009; Milner and Hill, 2008; Accounting Education Change Commission, 1990; Institute of Chartered Accountants in England and Wales, 2010; Hassall et al., 1999, 2001, 2003, 2005; Montano et al., 2001; De Lange et al., 2006; Albrecht and Sack, 2000; Jones and Sin, 2003; CPA, 2008; Gray and Collison, 2002; QAA, 2007; Bui and Porter, 2010). But, in contrast, there is paucity of literature from less-developed Asian countries such as Pakistan, India, Indonesia, Thailand, Taiwan, Philippines and Malaysia.
3. Accounting students and employers both value the importance of generic skills (see Kavanagh and Drennan, 2008; Hassall et al., 2003) but students consistently fail to show competences in this regard (see Awayiga et al., 2010; Willcoxson et al., 2010).

Point 3, above, is abundantly reported in the literature as ‘graduates incompetence in employability skills’ (see Awayiga et al., 2010; Willcoxson et al., 2010; Bui and Porter, 2010; Jackling and Watty, 2010; Kavanagh et al., 2009; Kavanagh and Drennan, 2008). The implication is that generic skills acquisition has a purpose, which is employability. In this

regard, Kavanagh et al. (2009) investigated various stakeholders to ask whose responsibility is it to assist students in acquiring generic skills. They found that education providers are the ones who should be responsible to educate skills to students, as they stated:

*“When different stakeholders were asked whose responsibility it was to nurture the acquisition of skills, the two key groups responsible were deemed to be the employers and the universities, with much almost double considering technical skills the responsibility of universities with almost a third more considering non-technical skills the responsibility of universities” (Kavanagh et al., 2009, p. 17)*

However, the viewpoint of employers is illustrated by this comment:

*“I think it is extremely important that there is some provision within the curriculum that they are taught soft skills and they are taught what’s expected of them and they need to know that they need to build relationships early on in their university life” (Hancock et al., 2009, p. 11).*

The guidelines issued by accounting bodies (see ICAEW, 2010; CPA, 2008) regarding generic skills development implicitly place the burden of responsibility on educators’ shoulders. But in spite of this explicit delegation of responsibility to educators, the accounting academics still fail to develop an adequate set of skills in their students (see De Lange et al., 2006; Kavanagh and Drennan, 2007; Milner and Hill, 2008). From a research viewpoint, this gives rise to an assessment of the contributing factors pertaining to this failure, albeit in this case, in a Pakistani context. It is at this point that one returns to the issue of ‘gaps’, as explored previously.

### **3.3 Generic skills development for the purpose of employability:**

This section addresses the third element of the introductory objective which is what is meant by the term “employability” and the link to generic skills. To repeat, the three elements so far are:

***What is the expectation-performance gap in the development of generic skills for the purpose of employability...***

This section presents the principle elements of employability debate which comprises the following subsections:-

3.3.1 What is meant by Employability?

3.3.2 Linkage of generic skills to employability

Section 3.3.1 discusses the meaning of the term 'employability'. Section 3.3.2 establishes an understanding of the linkage of term generic skills to employability.

### 3.3.1 What is meant by Employability?

In the literature the term 'employability' tends to have several meanings and is used in a variety of different ideological and disciplinary contexts. For example, Grip et al. (2004), refer to workforce mobility, training and functional flexibility; Fugate et al. (2004), refer to a multidimensional construct that is an aggregate of career identity, personal adaptability, and social and human capital; Harvey (2004) refers to the acquisition of knowledge, skills and abilities; and Hillage and Pollard (1998) refers to the capability to gain initial employment, maintain employment and obtain new employment. Therefore, the term 'employability' has a wide variety of meanings attached to it.

Initially the term 'employability' in an education context had been understood as an 'employment rate' that is, being employed within 6 months of graduating from an education institution (Higher Education Funding Council for England, 2001). The recognition of 'employability' as 'employment rate' is further encouraged because of the UK government using employment rate as an evaluation tool for measuring Higher Education Institutions (HEI's) performance in respect of the promotion of employability (Lees, 2002). So, 'employability' as 'employment rate' has been used by many researchers in their studies. However, there were some serious objections to using employment rate as an indication of employability for HEI's. For example, the measure does not consider the type of job graduates get and whether the acquired job relates to their area of study; and difficulties in getting responses from outgoing graduates (Knight and Yorke, 2003). Additionally there is no such market as a perfect market (Knight and Yorke, 2003). The index of employment rate is based on regional and economic cycles which reflect more about the labour market conditions rather than the HEI's performance (Coleman and Keep, 2001). Hence, the use of employment rate as an employability indicator of HEI's performance is, on the evidence from the above articles, correlated on a false assumption (Knight and Yorke, 2003).

Due to the above criticism, the HEI employability indicator was considered to be invalid and, as a consequence, efforts were made by the researcher to adjust the definition of employability from an educational perspective. An example of one such 'adjustment' is reflected in the following quotation:



*“Employability is the acquisition of attributes (knowledge, skills, and abilities) that make graduates more likely to be successful in their chosen occupations (whether paid employment or not)” (Harvey, 2004, p. 9)*

The above perspective on employability comprises three constituent elements: knowledge, skills and abilities. In contrast, Hillage and Pollard (1998, p. 2) defined employability instead as:

*“In simple terms, employability is about being capable of getting and keeping fulfilling work. More comprehensively, employability is the capability to move self-sufficiently within the labour market to realise potential through sustainable employment. For the individual, **employability depends** on the knowledge, skills and attitudes they possess, the way they use those assets and present them to employers and the context (e.g. personal circumstances and labour market environment) within which they seek work”.*

Of the elements identified in the above definitions of employability, ‘skills’ is one of the common elements.

### 3.3.2 Linkage of generic skills to employability:

Employability is a construct which depends on an integration of a multiple range of variables (McQuaid and Lindsay, 2005; Fugate et al., 2004), some of which are within, and others are beyond, the control of the HEI’s performance. The literature is replete with the importance of the linkage of generic skills to employability (see, for-example Quality Assurance Agency, 2007, 2009; Institute of Chartered Accountants in England and Wales, 1996, 2010; HM Treasury, 2000; Accounting Education Change Commission, 1990, Certified Practising Accountants, 2008; International Federation of Accountants, 2008; Jones and Sin, 2003; Hillage and Pollard, 1998; Cranmer, 2006; Department of Trade and Industry, 2005; Confederation of British Industry, 2009; Warn and Tranter, 2001). Consider, for example, Department of Trade and Industry (2005, pp. 19-20):

*“Skills are directly related to employment, employability and productivity. They are also indirectly related to productivity through innovation”.*

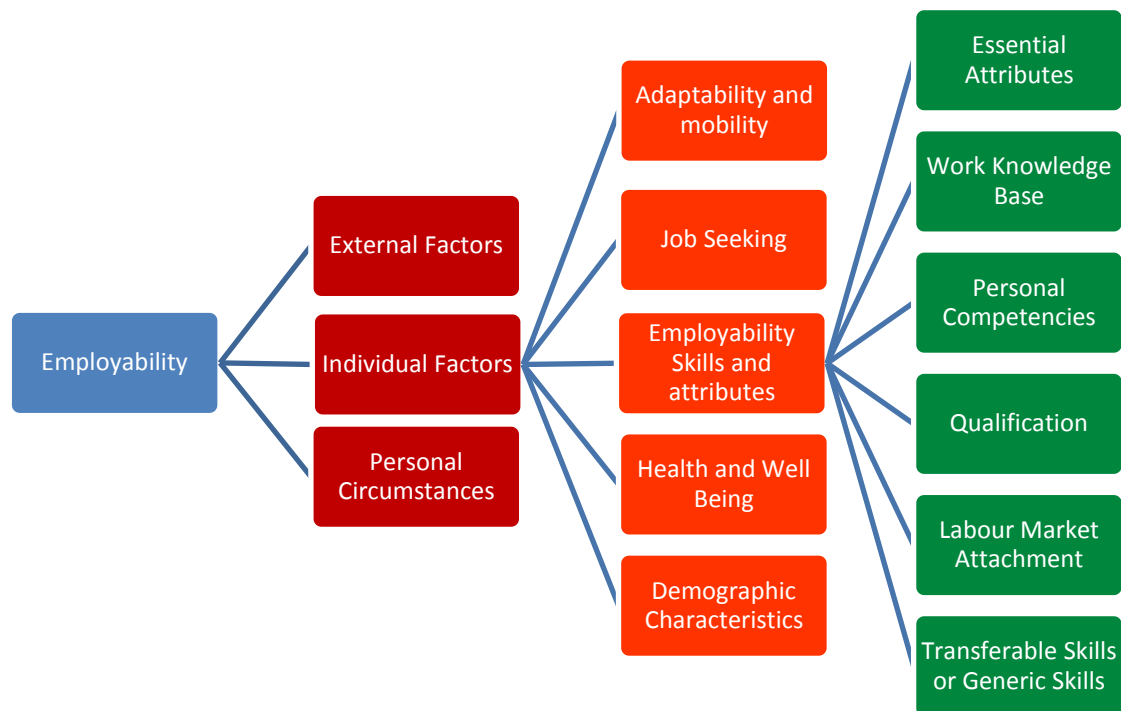
Similarly, Cranmer (2006), in her study for Higher Education Funding Council for England, recommended that the higher education institutions must utilize their funds and resources to encourage and promote graduates’ employability as a priority through the development of work-related skills. The ‘Dearing Report’ (1997) commissioned by the British government also emphasised the issue of employability in higher education through concentrating on skills development opportunities. The ‘Dearing Report’ also recognized the need to develop, implement and disseminate ways of linking generic skills in curricula required by professionals. A similar conclusion was also drawn by Cranmer (2006), Quality Assurance

Agency (2007), Coopers and Lybrand (1998), Hillage and Pollard (1998), Council for Industry and Higher Education (1996) and Department of Trade and Industry (2005).

A number of researchers have developed various employability models from a wide range of ideological and disciplinary perspectives (see, for example McGrath and Akoojee, 2009; Hillage and Pollard 1998; Harvey, 2004). Perhaps, one of the most comprehensive models is provided by McQuaid and Lindsay (2005) (M&L) because, before proposing the model, they analysed different ideological and disciplinary perspectives of employability from prior literature, such as, the Confederation of British Industry (1999), HM Treasury (1997), Canadian Labour Force Development Board (1994), Department of Higher and Further Education, Training and Employment (2002) and Hillage and Pollard, (1998).

Alternatively, one may simply consider the M&L (2005) model of employability because of the prominence given to the generic skills necessary for employability. Recently, the same model has also been considered in an Education Partnerships in Africa project titled: *“Employability in the college sector: a comparative study of England and South Africa”* funded by the UK’s Department for Business, Innovation and Skills (McGrath et al., 2010). To some extent this validates its use in this thesis too. However, the focus of the M&L (2005) study was more broadly based than this research intended use which, as stated at the beginning of this chapter, is directed towards generic skills in the accounting education domain. Nevertheless, a review the content of the M&L (2005) article in order to show how this research focuses on employability is linked to it, see Figure 4 below.

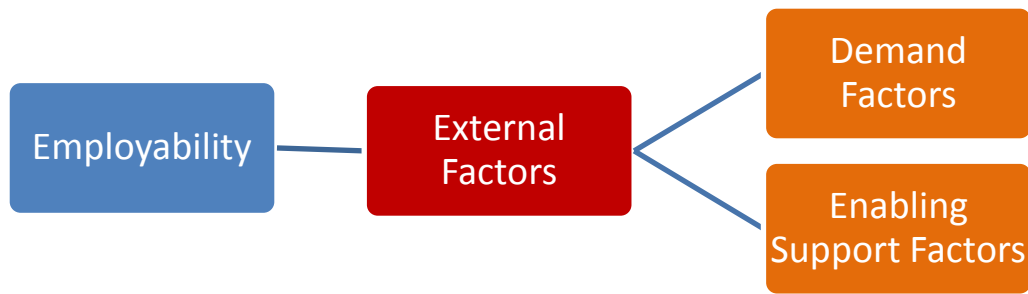
Figure 4: Representing Employability framework; adapted from McQuaid and Lindsay (2005)



According to M&L (2005) the ‘employability’ (column one left to right in Figure 4) comprises, three main features: external factors, personal circumstances, individual factors (column two left to right in Figure 4). One can see from Figure 4 that, left to right, employability (column one) is linked to individual factors (column two), which is linked to employability skills and attributes (column three), which is linked to the six far right features (column four), starting with ‘essential attributes’ and ending with ‘transferable skills or generic skills’. Whilst this thesis will address the features of Figure 4, above, the track just outlined above will form the basis of the link between employability and generic skills as presented in the thesis objective. So, in this vain, next this section will address the top and bottom boxes of column two, as revealed in Figure 5 and Figure 6 below.

External factors (Figure 5) refers to ‘demand factors’ (labour market factors, macroeconomic factors, vacancy characteristics, recruitment factors) and ‘enabling support factors’ (employment policy factors, other enabling policy factors). Like M&L (2005), other researchers (for example, Kirubahar et al., 2010; Harvey, 2003) acknowledge the significance of external factors as a mediating agent in employability. This linkage is extracted from Figure 4 and is presented separately in Figure 5, below.

Figure 5: Representing constituents of External factors and its linkage to Employability; adapted from McQuaid and Lindsay (2005)



‘Demand Factors’ (Figure 5), to repeat, includes:

- Labour market factors, for example, flexibility in labour markets such as the speed with which a labour market adapts to the changes in the economy (see Furlong and Cartmel, 2004),
- Macroeconomic factors, for example, macroeconomic stability such as the Slovenian government adopted a gradual path of economic reforms to control trade deficits and inflation. These resulted in increased foreign investment that subsequently created more job opportunities (International Labour Conference, 2005)
- Vacancy characteristics, for example remuneration, condition of work, working hours and prevalence of shift of work, opportunities for progression, part time work opportunity etc (M&L, 2005).
- Recruitment factors, for example, employers’ formal recruitment and selection procedures, employers’ search channels (method for searching for staff), discrimination (age, sex, gender etc), demanding appropriate qualifications or credentials etc. (M&L, 2005).

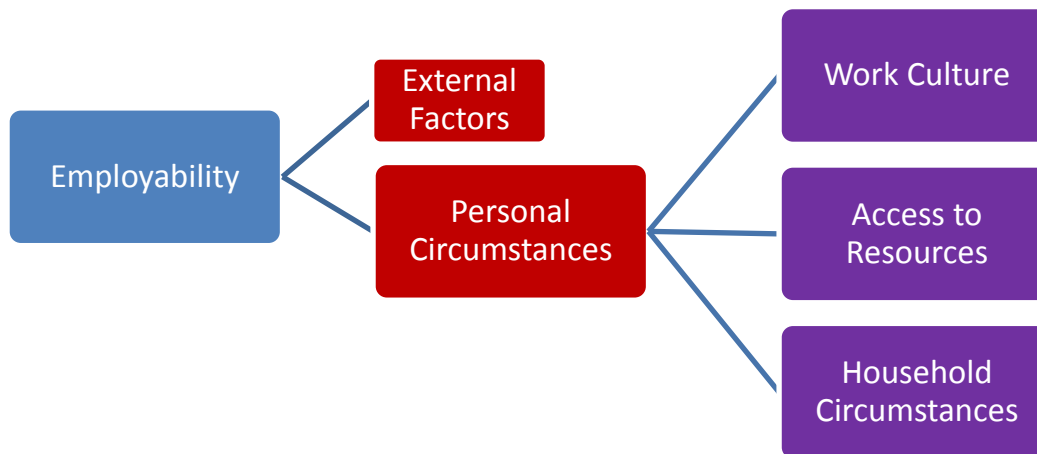
‘Enabling Support Factors’ (Figure 5), to repeat, includes:

- Employment policy factors, for example, Dmitrijeva (2009) reported a positive relationship between training and employability from which she recommended active labour market policies that promoted subsidised training programmes and other incentives.
- Other support factors, for example, Glasgow and its surroundings areas were once officially recognized as sites for job creation but whether the ‘enabling support

services' such as housing strategy, public transport policy and other available infrastructure facilitated employment was debatable (Turok, 2006; Turok and Edge, 1999; Arnott, 1998; Preston and McLafferty, 1999).

Returning again to the second column of Figure 4, next debate addresses the constituent nature of the 'Personal circumstances' box as presented in Figure 6 below. There are researchers, other than M&L (2005), who advance the link between personal circumstances and employability, such as Kirubahar et al. (2010), Mcskimming (2007) and Hillage and Pollard (1998).

Figure 6: Representing constituents of Personal circumstances and its linkage to Employability; adapted from McQuaid and Lindsay (2005)



The 'Personal Circumstances' relate to a range of socio-economic contextual factors which include:

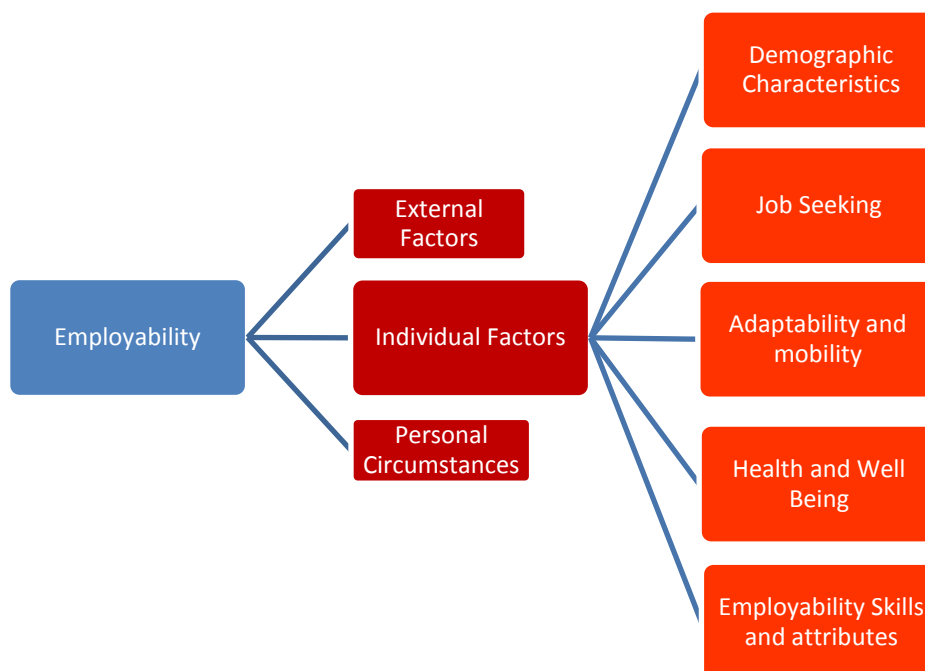
- 'Work culture', for example, existence of a culture within which work is encouraged (M&L, 2005). Work culture does not only have value for career ownership and employability, but also rewards learning (Estienne, 1997). In this regard Bourdieu, (1986) highlighted the influence of 'size', 'quality' and 'relationships' of social networks for enhancing individuals' employability.
- 'Access to resources' such as transport, financial capital, and social capital. Consider, for example, social capital: Calvo-Armengol and Jackson (2004) highlighted the influence of social networks on an individual's attitude towards work. Social-networking appears to have a significant impact on progression in the labour market (Granovetter, 1982; Levesque and White, 2001). Therefore, the scarcity of

professional contacts reduce the probability for individuals to access the means that support employability (Quinn and Seaman, 2008; Atkinson and Kintrea, 2004).

- ‘Household circumstances’ includes direct caring (notably children), other family caring responsibilities (elderly parents), and other household circumstances (ability to access appropriate housing) (M&L, 2005; McQuaid, 2006). Such factors intervene as major impediments towards an individual’s ability to seek benefit from available job opportunities (M&L, 2002).

Finally, in next, this section addresses ‘Individual Factors’ from the second column of Figure 4. As one can see from Figure 7, below (which was extracted from Figure 4) there are five constituent elements. As regards the objective of this thesis, clearly the final box labelled “employability skills and attributes” has the most relevance but all of them are explored sequentially, next.

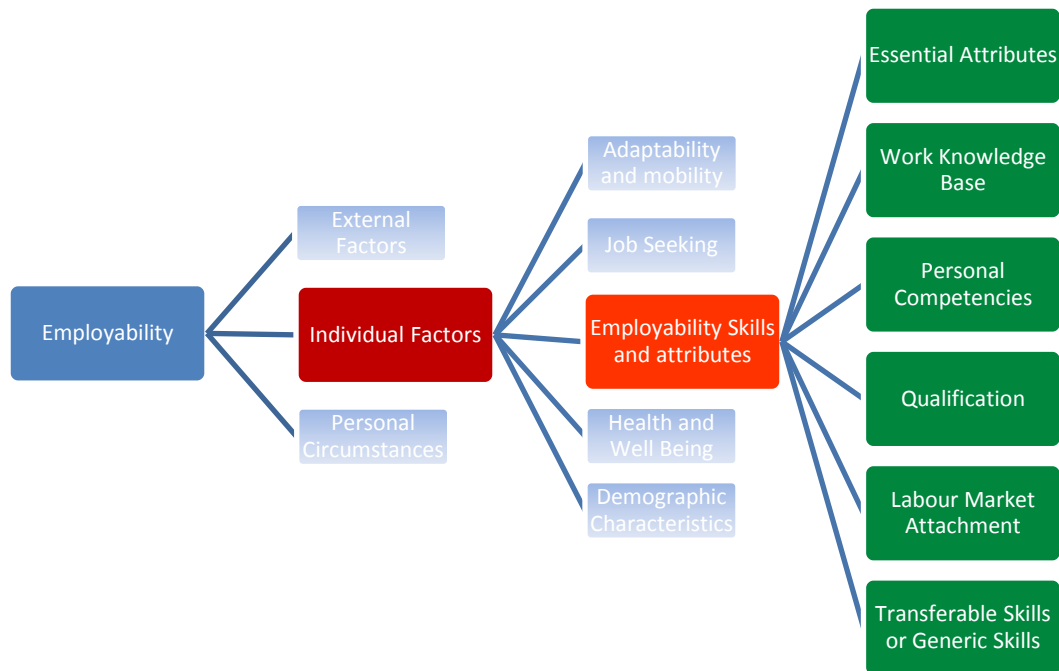
Figure 7: Representing constituents of Individual factors and its linkage to Employability; adapted from McQuaid and Lindsay (2005)



- ‘Demographic Characteristics’ refers to age and gender related issues. Rothwell et al. (2008) investigated the demographic characteristics of age and gender in relation to employability in the UK. They reported a significant difference in the employability of students belonging to different gender and age groups. See too Dmitrijeva (2009) who investigated the significance of the demographic characteristics of Latvians and Russians to unemployed training programs.

- ‘Job seeking’ refers to job seekers’ skills and the strengths and weaknesses of a job seeker’s approach to the job market (M&L, 2005; McQuaid, 2006). Urwin and Shackleton (1999) found that a lack of appropriate job seeking skills had a negative impact on employability. And, at the institutional level, Harvey (2004) found that providing opportunities to students using central support services, labour market information, interview techniques and curriculum vitae writing had a positive impact on employability.
- ‘Adaptability and mobility’ refers to the geographical and occupational flexibility of job seekers. Geographical accessibility has a significant impact on employability especially in low paid areas. This impact is because job seekers will often fail to relocate because of commuting times and the related costs (M&L, 2005). The inaccessibility of work locations can have further negative effects where individuals have personal responsibilities, such as the care of elderly parents or child care (M&L, 2005).
- ‘Health and well-being’ refers to one’s mental and physical ability to perform various jobs. In this regard the general assumption is that the individual’s having sound mental and physical health will have a positive impact on employability. The converse is also true: people with health problems are more likely to be unemployed and economically inactive (see Beck and Quinn, 2011).
- ‘Employability Skills and Attributes’ comprises ‘**Essential Attributes**’ (honesty, integrity, reliability and other basic social skills, etc.), ‘**Work Knowledge Base**’ (including work experience and occupational specific skills), ‘**Personal Competencies**’ (diligence, motivation, confidence, etc.), ‘**Labour Market Attachment**’ (current unemployment/employment duration, work history, etc.), ‘**Qualification**’, ‘**Transferable or Generic Skills**’ (Basic, Key, and High Transferable Skills) (M&L, 2005; McQuaid, 2006). These factors are repeated from Figure 4 into Figure 8, below, except that this time this section highlight the middle track from left to right in this Figure. This middle track links employability (left) to generic skills as set out in the objective at the beginning of this chapter. Six employability skills and attributes are identified in Figure 8 which is addressed sequentially, next. From this point onwards this section largely excludes the other factors of M&L (2005) model of employability.

Figure 8: Representing constituents of Employability skills and attributes and its linkage to Employability; adapted from McQuaid and Lindsay (2005)



- ‘Essential Attributes’, to repeat, includes basic social skills like honesty, integrity, basic personal presentation, reliability, willingness to work, understanding of actions and consequences, positive attitude to work, responsibility and self-discipline (see M&L, 2005; McQuaid, 2006; Poole and Zahn, 1993; Shafie and Nayan, 2010; Department of Education Victoria, Australia, 2006). These attributes were also cited by Robinson, (2000), for example, see Table 7 below:-

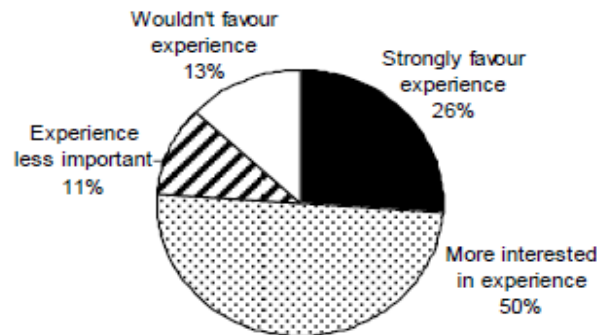
Table 7: Representing essential attributes; source Robinson (2000)

Basic Academic Skills	Higher-Order Thinking Skills	Personal Qualities	
<ul style="list-style-type: none"> <li>• Reading</li> <li>• Writing</li> <li>• Science</li> <li>• Math</li> <li>• Oral Communication</li> <li>• Listening</li> </ul>	<ul style="list-style-type: none"> <li>• Learning</li> <li>• Reasoning</li> <li>• Thinking Creatively</li> <li>• Decisions Making</li> <li>• Problem Solving</li> </ul>	<ul style="list-style-type: none"> <li>• Responsible</li> <li>• Self Confidence</li> <li>• Self Control</li> <li>• Social Skills</li> <li>• Honest</li> <li>• Have Integrity</li> <li>• Adaptable and Flexible</li> </ul>	<ul style="list-style-type: none"> <li>• Team Spirit</li> <li>• Punctual and Efficient</li> <li>• Self Directed</li> <li>• Good Work Attitude</li> <li>• Well Groomed</li> <li>• Cooperative</li> <li>• Self Motivated</li> <li>• Self Management</li> </ul>



- ‘Work Knowledge Base’ includes work experience and occupational specific skills (M&L, 2005; McQuaid, 2006). As regards work experience, a survey conducted by Beaven and Wright (2006) of 123 UK employers found that 76 per cent of the employers believed that entry level candidates should possess the relevant work experience - see Figure 9, below:-

Figure 9: Representing employer attitudes to direct vocational experience; source Beaven and Wright (2006)



Recently Archer (2010) also investigated the significance of work experience for graduate employability. She found that as regards employability of the individual, a one year work experience placement was considered to be more beneficial from the managers' perspective than an individual's qualifications. A similar statement has also been issued by KPMG group (c.f. The University of Nottingham, 2008) stating that:-

*“While achieving a good degree clearly remains important when entering the job market, our research has shown that if a candidate can demonstrate relevant work experience this is a significant consideration for many employers.”*

- ‘Personal Competences’ includes pro-activity; diligence, self-motivation, judgement, initiative, assertiveness, confidence and ability to act autonomously (M&L, 2005; McQuaid, 2006). ‘Personal competencies’, as a heading, is usually referred in the literature as ‘personal qualities’. The relevance of this heading to employability is made apparent by Robinson (2000), Knight and Yorke (2003), Yorke (2006) and Lees (2002), as well as M&L (2005). Realising the significance of personal qualities for employability, Wye et al. (2009), for example, investigated the personal competence qualities of 600 students from the perspectives of 30 Malaysian employers. He showed a high level of match between students' competence level and employers' expectations in Malaysia.

- ‘Qualification’ includes vocational or job-specific qualifications (M&L, 2005; McQuaid, 2006). Academic qualification enjoys a considerable amount of significance for employability. Job specific qualification is the technical skills required specific to perform the particular job. UK Commission of Employment and Skills (2009), Kavanagh et al. (2009), Lin et al. (2005), Tan et al. (2004), De Lange et al. (2006) and other similar articles all point to a strong linkage between technical skills acquisition and employability. For example Sir Mike Rake stated in the report titled ‘The Employability Challenge’ published by UK Commission of Employment and Skills (2009, p. 3):-

*“These employability skills are the lubricant of our increasingly complex and interconnected workplace. They are not a substitute for specific knowledge and technical skills: but they make the difference between being good at a subject and being good at doing a job.”*

Harvey et al. (1997) reported that UK employers value generic skills more than discipline specific knowledge and understanding. For example, as Brown et al. (2002, p. 19) states:

*“Academic qualifications are the first tick in the box and then we move on. Today we simply take them for granted.”*

- ‘Labour Market Attachment’ includes current unemployment, employment duration, and work history (M&L, 2005; McQuaid, 2006). An individual’s current and the most relevant job experience are often considered as among the most important criteria for employment (Manning, 2000; Brown et al., 2002). Further, individuals having long term unemployment even receive severely limited job opportunities because of outdated qualification and occupational skills (Lindsay, 2002). Hence, long term unemployment by consequential means becomes a major barrier to employability. Similarly, a low skilled employment history limits an individual’s mobility in the labour market when trying to obtain a better paid or more stable job (Robinson, 1997).
- ‘Generic or Transferable skills’ includes ‘basic transferable skills’ (prose, document literacy, writing, numeracy, verbal presentation), ‘key transferable skills’ (reasoning, problem solving, adaptability, work-process management, team working, personal task and time management, functional mobility, basic information and communication technology skills, basic interpersonal and communication skills, emotional and aesthetic customer service skills), and ‘high level transferable skills’ (business

thinking, commercial awareness, continuous learning, vision, job-specific skills, and enterprise skills) (M&L, 2005; McQuaid, 2006).

In summary, as the link between generic skills and employability is now established, therefore now this section excludes the other factors of the M&L (2005) model of employability as shown in Figure 10, below, which is extracted from Figure 4. Figure 10 establishes the chain of links between employability and generic skills as discussed previously in this section.

Figure 10: Representing Linkage of Generic skills to Employability; adapted from McQuaid and Lindsay (2005)



Employability has always been considered to be central to the strategic direction of the government's education priorities (Hillage and Pollard, 1998). For example, in the UK, to ensure employability through the creation of a skilled workforce, the Department of Education and Employment (DfEE) and the Department of Business Innovation and skills (BIS) directed a number of educational reforms through the agencies of the higher education institutions such as the Quality Assurance Agency (QAA) and the Higher Education Funding Council for England (HEFCE). The DfEE and BIS has also sponsored several studies to recognise the importance of core educational skills in order to enhance students' employability. Similarly, the Enterprise in Higher Education initiative, in year 1995 emphasised the importance of generic skills in the development of student lifelong learning in the working environment (Whiteley, 1995). Likewise, Cranmer (2006), in her study for the Higher Education Funding Council for England (HEFCE), recognised the link between skills and employability. The related Enhancement-Led Institutional Review (ELIR) explicitly acknowledges the significance of skills acquisition in the education process. Further, in order to supplement the development of generic skills, the Quality Assurance Agency, in the year 2000, issued subject benchmark statements for various disciplines. This included the accounting discipline where the following generic skills were identified: critical evaluation, analysing and drawing conclusions from structured problems, locating, extracting and analysing data, independent and self-managed learning, numeracy, information technology, communication and presentations, group work and other inter-personal skills (QAA, 2007).

Similarly, other state departments such as the Department of Trade and Industry (DTI, 2005) and Council for Industry and Higher Education (CIHE, 1996) also signified employability through skills development in higher education.

Other countries, such as New Zealand and Australia, have also given considerable importance to employability and its promotion through the development of generic skills in higher education institutions. For example, in Australia, the positioning of generic skills in higher education institutions is considered to be one of the major factors contributing to the nation's prosperity and economic progression (Higher Education Council, 1992). In Australia, educational policy development was directed towards solving skills shortages in targeted professions (see Jackling and Keneley, 2009). In Australia, since 1998, the state Department for Education, Training and Youth (DETYA) has imposed a mandatory requirement for universities to specify their graduates' generic attributes. In addition, a Graduate Skills Assessment process is managed by the Graduate Careers Council of Australia (GCCA), as commissioned by the DETYA, which measures student growth in generic skills acquisition, such as critical thinking, problem solving, interpersonal understandings and written communication (Bowers-Brown and Harvey, 2004). Similarly New Zealand has also developed a National Qualifications Framework (NQF) as managed by the state department of the New Zealand Qualification Authority (NZQA) in consultation with specialists from education and industry so as to focus on the skills necessary for employability.

### 3.4 Accounting Institutes of Pakistan:

This chapter can now complete the last part of the review that is, "accounting institutes of Pakistan", in respect of the introductory stated objective, which is:

***What is the expectation-performance gap in the development of generic skills for the purpose of employability offered by the accounting institutes of Pakistan?***

There is nothing in the literature that addresses Pakistan's accounting education. In that sense the literature gap is a wide one. The literature, such as it is, addresses instead accounting education in Pakistan generally.

In Pakistan there are two main streams of education at tertiary level, that is, private and public sector. The principal source where students obtain their education is the public sector institutions (Shah, 2009). Higher education institutions comprise colleges, universities, and

institutes which offer education in disciplines such as medicine, engineering, business administration, commerce, health studies, computer science, physics, chemistry, information technology, social sciences etc. Universities and colleges from both public and private sectors have a statutory requirement to work under the supervision of the Higher Education Commission (HEC) or the technical board of Pakistan. According to the Higher Education Commission, at the moment, there are 74 public and 59 private universities/colleges. Generally, within a university there are different departments such as business administration, commerce, and economics who are involved in teaching accounting subjects. Such departments teach accounting subjects at the undergraduate, graduate and post-graduate levels. For example a typical 'Business Administration' department offers the accounting subject at Bachelor level (BBA), Master Level (MBA, MS); A 'Commerce' department offers at Bachelor level (B.Com) and Master level (M.Com) etc. However, such departments only provide accounting education as a part of their finance, management and commerce degrees. Such degrees aim not to produce accountants for accounting jobs but rather to equip commerce graduates with the basics of accounting for general understanding. Though graduates from such education programs are eligible to qualify for low level accounting jobs, they do not come into the mainstream of accounting employment. Thus, the education programmes offered at university level in Pakistan are not suitable for this research.

In contrast there are five professional accounting bodies available in Pakistan, which are providing certified accounting education in the field of financial accounting, management accounting and public finance accounting that are, the Institute of Chartered Accountants of Pakistan (ICAP); the Institute of Cost and Management Accountants of Pakistan (ICMAP); the Society of Accounting Education (SOAE); the Institute of Certified Public Accountants of Pakistan (ICPAP) and the Pakistan Institute of Public Finance Accountants (PIPFA). These accounting bodies have authorised certain registered education institutions to conduct teaching activities under their supervision (see Appendix 11a). These accounting institutions have a very different organisational structure, which differentiate them from universities' contextual perspective in many respects, for example: tuition fees, funding structure, class size, number of professional courses, examination system, and on the job training/work placement. These accounting institutions offer a variety of professional accountancy programs that consist of modular courses and examinations and on the job training/work placement. Each module contains professional accounting bodies' specified subjects which the students have to pass in order to make progress towards accounting certification. Such

accounting institutions are spread all over the country for students' convenience. In order to gain admission to these institutions the pre-requisite qualification required by an individual is first the Higher Secondary School Certification, that is, F.Sc and second tertiary level education, that is, bachelor degree such as B.Com, B.Sc., B.A, B.B.A or an equivalent qualification approved by Higher Education Commission, Pakistan.

The majority of the literature or thematic content incorporated in section 3.1 is derived from a universities' contextual perspective. As such, given the structural differences outlined in the previous paragraph, it is possible to argue that the accounting education context of Pakistan (that is professional accounting institutions) is totally different from the previous studies. Thus, the re-evaluation of the thematic content of the 'expectation-performance gap' from the perspective of professional accounting institutions in Pakistan, in itself provides a degree of novelty to the underlying area of study. To date, there is not a single study yet to be found in Pakistan or in a similar context which throws light on the issue of generic skills development from the perspective of the expectation-performance gap in Pakistani professional accounting institutions.

## Summary

In this chapter a review of the existing academic literature is undertaken with the aim of explaining the key elements (underlined) within the underlying research objective, that is:

*What is the expectation-performance gap in the development of generic skills for the purpose of employability offered by the accounting institutes of Pakistan?*

Initially the framework of 'expectation-performance gap' by Bui and Porter (2010) is explained along with its component parts (expectation gap, constraints gap and performance gap). Using existing academic literature the significance of each component part of Bui and Porter's (2010) framework is established critically. Then, illustrated the different terminologies used as alternatives to 'generic skill' and discussed the existing controversies associated with the development of generic skills and what skills are considered important for the career development in the accounting discipline. Further the notion of employability is explained, that, how it is conceptualised in education from the students' career development perspective and explored the linkage between generic skills and employability. In the end, this chapter has illustrated the higher education system of Pakistan in general and particularly the accounting education offered by the accounting institutes of Pakistan.

The next chapter (Methodological approach) illustrates the adopted methodological approach in this research for the purpose of addressing the introductory research objective (stated above).

## CHAPTER 4: METHODOLOGICAL APPROACH

### 4.0 Introduction:

The objective of this chapter is to illustrate the adopted methodological approach for the purpose of this research. In this regard the following sectional structure is applied:

Section 4.1 presents Laughlin's (1995) methodological approach to guide the adopted methodology for the underlying research.

Section 4.2 presents the study design of the underlying research that includes formulation of the research questionnaire, pre-testing, pilot-testing and survey.

Section 4.3 illustrates the different analytical techniques that have been used to analyse the data at different stages of research design.

Section 4.4 illustrates the sample size and data collection procedure that has been used during this research

Section 4.5 illustrates the ethical considerations that are followed during commencement of the research.

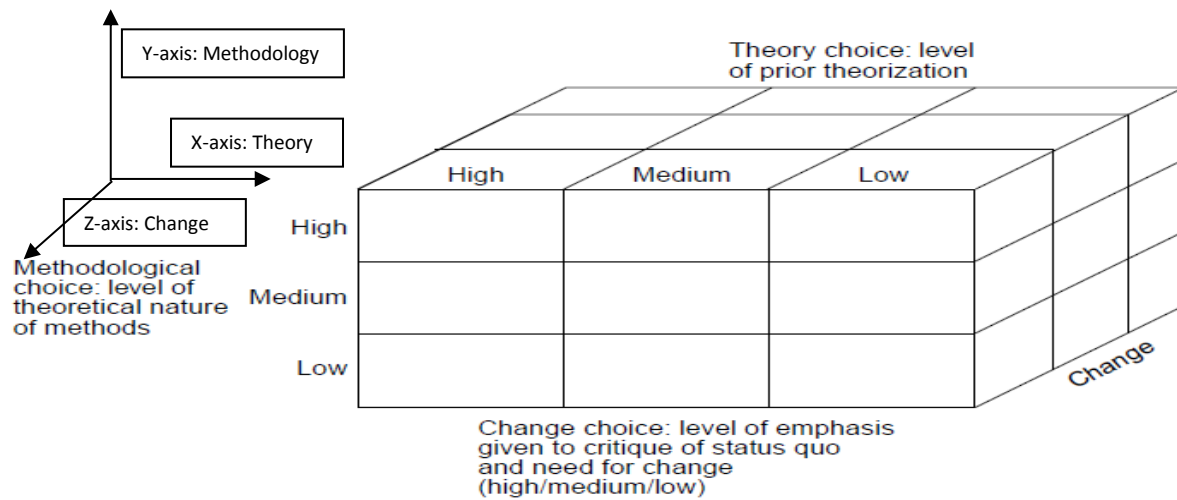
### 4.1 Laughlin's (1995) methodological framework:

All researchers approach the research problem with some form of personal philosophical positioning which affects the way they see the world and therefore the way they choose to conduct their research, including the selection of an appropriate research method. In this regard the Laughlin 'alternative methodological approach' is a tool that allows a researcher to narrow down the choice of research method on a reasoned basis (theory choice) but also on a basis where the researcher's philosophical prejudices are declared in advance.

According to Laughlin (1995) the research process comprises three broad dimensions labelled as **“theory”**, **“methodology”** and **“change”** choices as presented in Figure 11.



Figure 11: Representing 3D model for selection of research paradigm representing: 'theory-choice' on x-axis, 'methodology-choice' on y-axis and 'change-choice' on z-axis; source Laughlin (1995)



(a) The 'theory choice' dimension on the x-axis in Figure 11 refers to the level of prior theorising that tends to shape the researcher's view about the nature of the world and what constitutes knowledge:

*"On the "theory" dimension we can express the amalgam of concern in relation to the level of prior theorizing and prior theories that can legitimately be brought to the empirical investigation. This links to ontological assumptions about the nature of the world we are investigating and our views about its materiality as well as its generality of representation through previous theoretical endeavours." (Laughlin, 1995, p. 66)*

A 'High' level of prior theorisation (Figure 11) is an indication of an assumed material world, with a high level of generality that is already well achieved through a variety of empirical research. Another study in this regard is a little more than an incremental study that tends to test a well-developed theory.

A 'Medium' level of theory (Figure 11):

*"...recognizes that generalizations about reality are possible, even though not guaranteed to exist, yet maintains that these will always be "skeletal" requiring empirical detail to make them meaningful...to "middle range" thinkers the empirical detail is of vital importance. It complements and completes the "skeletal" theory" (Laughlin, 1995, p. 81).*

A 'Low' level of theory choice (Figure 11), at the extreme, assumes that the world is not material (being a projection of the mind) and since projections differ, generalities are impossible. Equally, learning from or relying on previous theoretical studies and insights is both inappropriate and potentially corrupting of the diversity and detail of an investigation. In this regard Laughlin (1995, pp. 66-67) states:

*"In this position the empirical detail is not mere confirmable or refutable "data" for some prior theory but becomes important in its own right. This detail becomes the theory for this*

*particular phenomena but cannot be transferred to another study for the reasons that other theories could not be used in the context of this study - both are separate and distinct and should be approached as such”*

(b) The ‘Methodology choice’ dimension on y-axis in Figure 11 refers to the way of conducting an investigation which can either rely on the implicit perceptual power of the researcher or could be defined by the theoretical approach towards the observed phenomenon:

*“The “methodology” dimension can have more or less of a theoretical definition for the “set of spectacles” that forms the nature of the methods for the empirical investigation which also has implicit implications for the role of the human agent in the process” (Laughlin, 1995, p. 67)*

A methodological choice is categorised as ‘High’ (Figure 11) when a method is adopted whereby there is high theoretical definition. In this case, the role of the researcher becomes independent of the phenomenon that is being researched. Hence, researcher subjectivity plays no part in such a research process.

At a ‘Medium’ level of methodology choice (Figure 11), the intention of the researcher is to design a methodological approach which sets the ‘skeletal’ rules for the discovery process. A ‘Medium’ level allows for diversity in the observational process. At this level there is a combination of both high and low level methodological extremes (objective and subjective) while avoiding their weaknesses. For as (Laughlin, 1995, p. 81 and p. 84) states:

*“...the intention is to design a methodology which sets “skeletal” rules for processes of discovery which still allows for variety and diversity in observational practice...In this way it is part-constrained and part-free which again is a combination of the strengths of both approaches while avoiding the weaknesses of both”*

At a ‘Low’ level of methodology choice (Figure 11), the researcher is allowed to be involved in the observation process and is permitted to preserve his/her subjectivity completely. At this level the methodological approach has no pre-defined theoretical definitions for the interpretation of the resultant outcome:

*“At the “low” end of this continuum, on the other hand, the individual observer is permitted and encouraged to be free to be involved in the observation process completely uncluttered by theoretical rules and regulations on what is to be seen and how the “seeing” should be undertaken. This is taken on board with the clear assumption that the observer is free-thinking and variable in his or her perceptual skills and rather than seeing this as a problem it is built on as a strength.” (Laughlin, 1995, p. 67)*

(c) The ‘Change choice’ dimension in Figure 11 refers to the researcher’s attitude concerning the worth of maintaining the status quo in what is being investigated. At the ‘High’ end of the

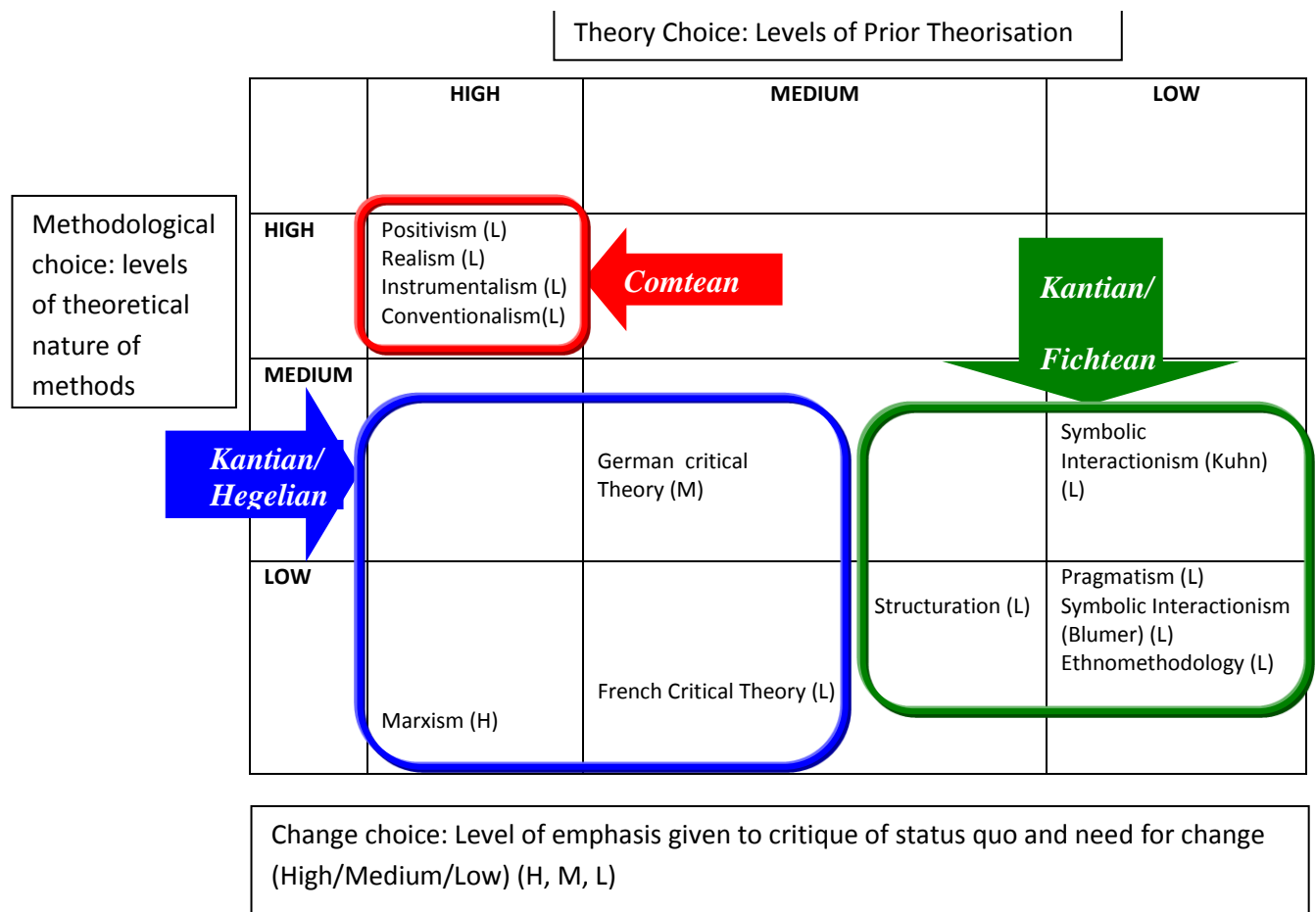
change dimension the researcher views everything as inadequate and incomplete and feels immediate need for change, though he or she is not always in a position to engender the required change. On the other extreme, at the 'Low' end of the change choice dimension, researchers see little problem in maintaining the status quo.

At the 'Middle' level of the change dimension, researchers adopt a strategic attitude to change, being open to certain aspects of current functioning but at the same time to also challenging the status quo. In support of the middle level, Laughlin (1995, p. 84) argues that in respect of the 'High' and 'Low' change dimensions:

*“Both positions are arguably untenable and very extreme. Again the “medium” position holds open the possibility that the status quo should continue while also keeping open that change is required. This more balanced perspective, which neither argues that everything is right nor that it is wrong, calls for a rather more sophisticated model of change to make this judgement. It is this change model which is central to this “medium” position on the change dimension.”*

Having summarised the dimensions of Figure 11, the next step is to use it and that depends on the researcher's philosophical position towards the research site. According to Laughlin (1995), three philosophical stances are possible. Each philosophical stance is positioned in Figure 12 which is a two dimensional version of Figure 11.

Figure 12: Representing choices of Philosophical paradigm; source Laughlin (1995)



Broadly categorised, the three philosophical perspectives presented in Figure 12 are Comtean, Kantian/Fichtean, and Kantian/Hegelian. Let us look at these philosophical perspectives in more detail in order to determine which one is appropriate to underlying research.

*The Comtean philosophical perspective:*

Accounting researchers who approach the research site from a high theory, high methodology, and low change choice dimensions tend to believe in a world possessing definable patterns which can be observed through formal, often quantitative, investigative methods. An investigation in this regard, is just an incremental study to a well-established body of knowledge which is assumed not to bring change without empirically verifiable grounds for doing so. Such an approach is tightly clustered around the Comtean school of thought (Auguste Comte 1798-1857) which follows high theory, high methodology and low change choice dimensions. The Comtean's philosophical perspective is represented by four research methods as shown in Figure 12. Perhaps 'positivism' is the most well-known and

common method in use, allowing for an absolute description of the material world that is free from observer bias.

*The Kantian/Fichtean philosophical perspective:*

A Kantian/Fichtean philosophical perspective (Immanuel Kant 1724-1803) is loosely clustered around the medium-to-low theory and medium-to-low method in Figure 12. According to Kant, all experience is mediated through human beings and will always be conditional and subjective. Thus, in contrast to positivism, it is impossible to separate the observer from what is being observed (Laughlin, 1995). Scruton (1982, p. 18) supports this assertion in the following way:

*“Objects do not depend for their existence on my knowing them; but their nature is determined by the fact that they can be perceived...They are objective, but their character is given by the point of view through which they can be known.”*

Let us look at the Kantian perspective in more detail, in particular, derivations of it through the linkage to the Johann Fichte and George Hegel school of thought is stated by Laughlin (1995, p. 72) as:-

*“...two areas of ambivalence in Kantian thought are significant. The first is related to the ontological question concerning a material existence. If all insights are mediated through experience then to what degree is reality, real, tangible and distinct from our mental images? The second relates to critique and change in the subjective interpretation of observers. Are there any conditions in which it is possible to say interpretation X by individual Y is incorrect? Neither of these questions and concerns were adequately answered in Kant’s writing leading to major differing interpretations even in his own students. Thus his two most notable students (George Hegel and Johann Fichte) came to interpret Kantian thought in totally different ways because of these ambivalences. Hegel interpreted Kant’s thinking in such a way as to give emphasis to a material world which could be understood and misunderstood. He also gave emphasis to an ideal to which we should be aiming. These emphases, together, introduced notions of critique and change into understanding and action. Fichte, on the other hand, emphasized the highly subjective side of the ambivalences in Kantian thought. Everything to Fichte was a projection of our minds thus making a material existence uncertain. This led inevitably to a lack of critique in terms of interpretation. Put simply, if everything is a projection of our minds what right has anybody to question and challenge another person’s projections?”*

Thus, a Kantian/Fichtean perspective

*“Assumes a world whose existence cannot be divorced from the observer’s perception of it, where generalisations cannot be assumed to exist and where understanding is subjective, specific and subjectively derived” (Laughlin, 2000).*

In this world there is no basis upon which to judge the superiority of one interpretation over another and, therefore, any attempt to do so can only be advanced and subjectively justified on the basis that it produces a ‘better’ view of reality.

### *The Kantian/Hegelian philosophical perspective:*

In contrast, a Kantian/Hegelian perspective is positioned between the two extremes offered by a Comtean perspective and the Kantian/Fichtean perspective. The key difference between a Kantian/Hegelian perspective and a Kantian/Fichtean perspective is that the Kantian/Hegelian perspective starts with an assumption of the existence of a material world. Any perception of the material world tends to be directed in the first instance towards the physical and visible aspects of it rather than to the non-physical and invisible. As can be seen from Figure 12, a Kantian/Hegelian view embraces high-to-medium theory, medium-to-low method. The Kantian/Hegelian perspective

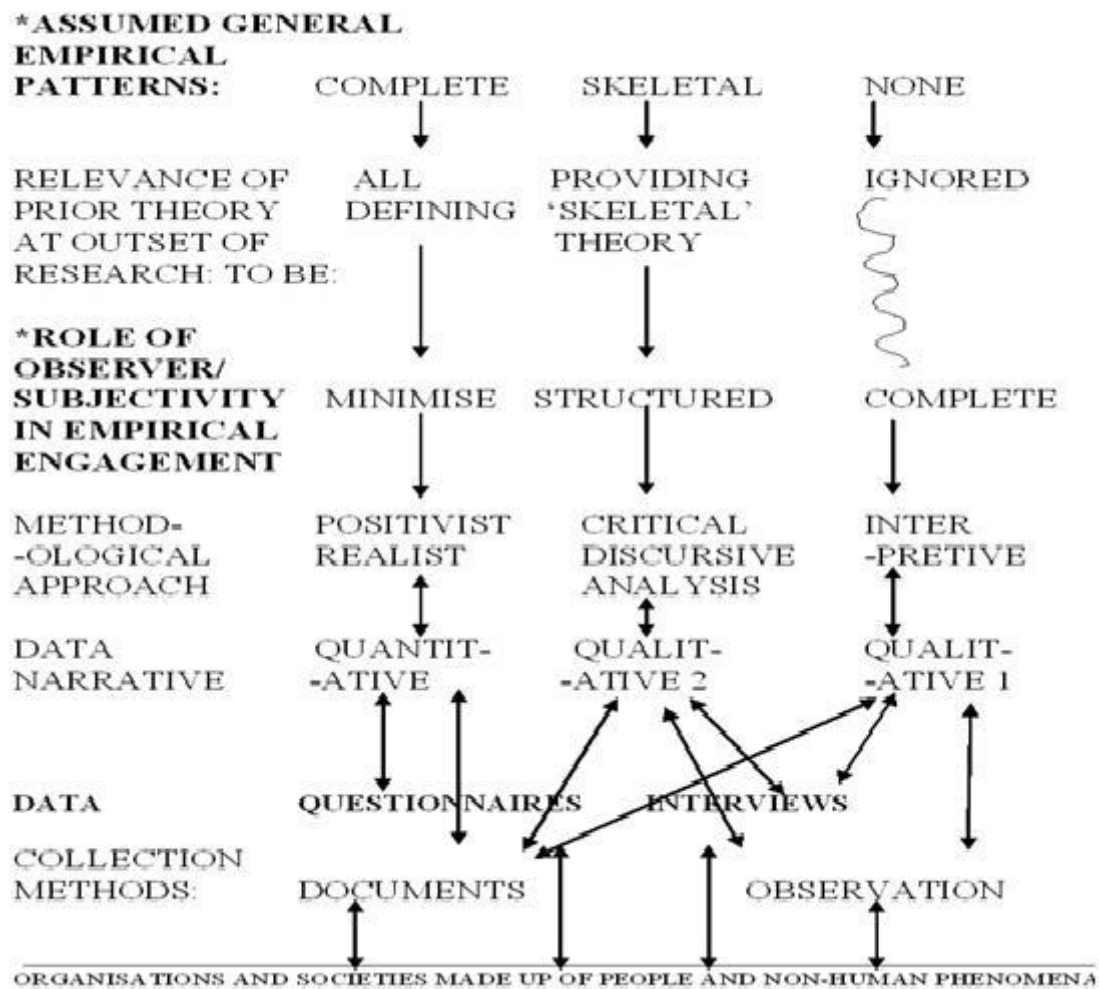
*“Assumes a material world, which exists distinct from our perceptions but is mediated and moulded, to a degree, by our interpretation, where ‘skeletal’ generalisations exist but they can never fully encapsulate reality and where understanding can be accessed through a mixture of structured and subjective processes” (Laughlin, 2000).*

Here, it is interesting to note that all the individual philosophical perspectives presented in the above ‘Comtean’ and ‘Kantian/Fichtean’ extremes emphasise low change in their respective objective and subjective stances: each maintaining their version of the status quo – see ‘(L)’ against each research method in Figure 12. Whereas, the Kantian/Hegelian perspective, embraces the whole range of change from high change (characterised by Marxism) to low change (characterised by French Critical Theory).

#### **4.1.1 Development of methodological framework:**

Figure 13, below shows the theoretical and methodological dimensions in the diagonal of Figure 12 (see Laughlin, 2004). In Figure 12 the diagonal represents the high/high position (top left) to the low/low position (bottom right) of the theoretical and methodological dimensions respectively, as one move from left to right. The content of this high/high, medium/medium, and low/low diagonal can be exposed in the related six horizontal headings from top to bottom in Figure 13. The first two horizontal headings relate to theory whereas the lower four relate to methodology. The arrows in the figure represent the primacy of ontology that links the tendency to rely on prior theory or not as the case may be (Laughlin, 2004). At the bottom of the Figure 13 is the targeted phenomenon.

Figure 13: Representing theoretical and methodological choice dimensions; source Laughlin (2004)



In respect of Figure 13, Laughlin (2004, pp. 271-272) says:

*“The upper two levels relate to the theory dimension and the next four levels depict the methodological dimension but develop their respective natures considerably. The sequencing and arrow flows in Fig 1 [read Figure 13, in this thesis instead] are intended to indicate the primacy of ontology and the links between this and the tendency to rely on prior theories. This is almost a duplicate of the original argument with its categorisation of ‘high’, ‘medium’ and ‘low’ use of prior theories yet, in this case, the descriptors are developed and amplified and the previous somewhat invisible links to underlying ontological assumptions are now made clearer. This ontological choice is seen as the foundation for all the other choices that need to be made. A decision on this guides, both directly and indirectly, the remaining choices about methodology and method.”*

Once the decision on the ontology and theoretical choice is made, then it has implications for the role of the observer. According to Laughlin (2004) if empirical patterns can be summarized in theoretical terms and concepts, then during the investigation researcher bias is minimised and with it the subjectivity associated with the investigation. The distinction between ‘minimum’ and ‘complete’ subjectivity is easy to conceptualise. ‘Minimum’ subjectivity considers the observer as being largely independent of the investigated

phenomenon and therefore observer value bias is largely avoided. Whereas, with ‘complete’ subjectivity the observer is important and will always be the part of the discovery process (Laughlin, 1995). The mid position between minimum and complete is associated with a ‘skeletal’ theoretical stance and an observer position of ‘structured’ subjectivity in respect of the research site. In Figure 13 ‘structured’ subjectivity tries to specify more precisely abstracted terms and concepts whilst not trying to squeeze out the intuitive, imaginative properties of the individual observer (Laughlin, 2004). Once the role of the researcher is decided then it has implications for the choice of methodological approach. In the case of underlying research, this study is using a skeletal outline drawn from the work of Bui and Porter (2010). However, given its recent nature, there is nothing else in the literature to directly support its use in that capacity. And, even if that were the case, there are no prior studies relating to a Pakistani context. As such, whilst Bui and Porter’s framework represents a useful starting point for the analysis in this research, the researcher’s involvement with the research site cannot reasonably be regarded as anything other than ‘complete’.

In Figure 13, minimum subjectivity tends to be associated with methodological approaches which are premised on the philosophical tradition of positivism, realism, instrumentalism and conventionalism. Where, instead, there is complete subjectivity, this tends to be associated with methodological approaches which are premised on the philosophical tradition of grounded theory, symbolic interactionism, ethnomethodology, structuration and pragmatism (see Figure 12). In this regard Laughlin (2004, pp. 274) says:

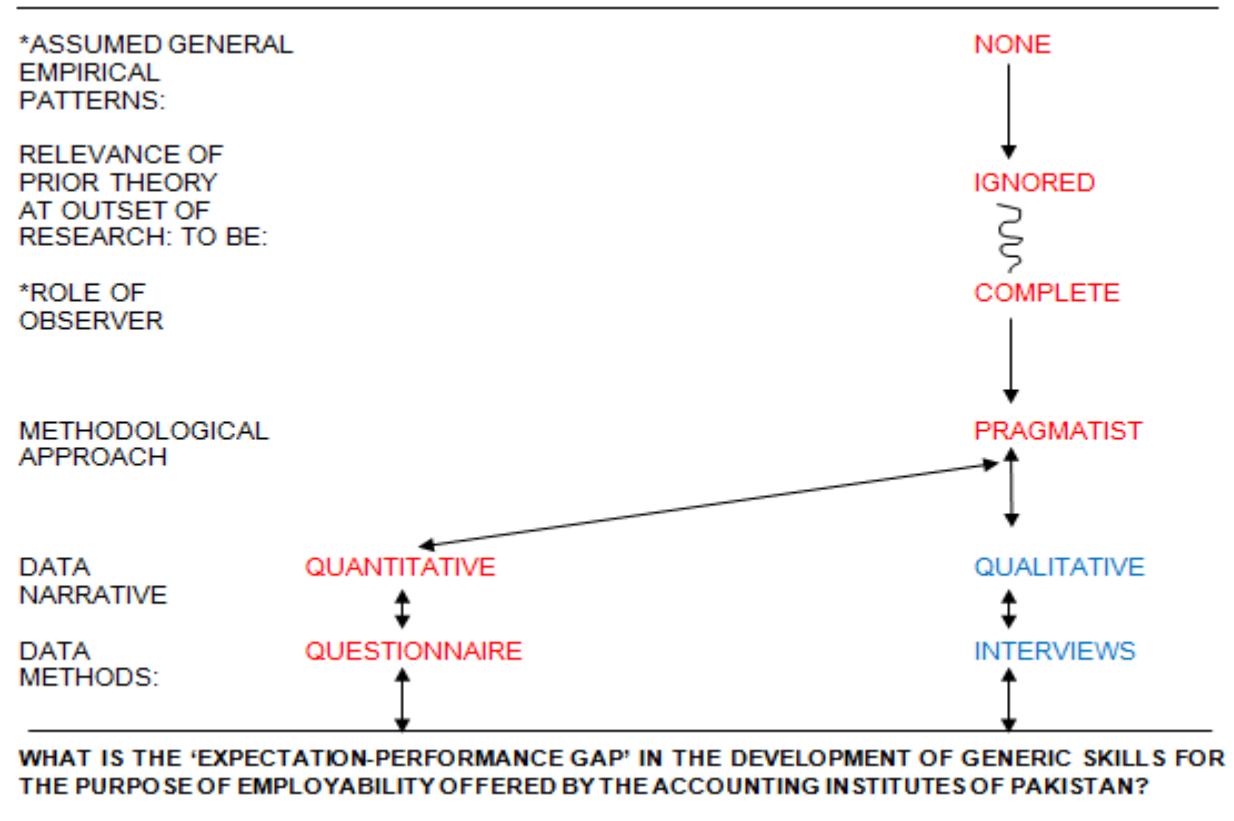
*“A minimal assumption on subjectivity leads to different forms of positivism and realism structured around the formulation of explicans, explicandums and hypothesis testing (cf. Keat and Urry, 1982). An assumption on structured subjectivity could lead to a number of alternative methodological frameworks. Yet in the spirit of trying to maintain consistency with the original framework—which positions German Critical Theory in the mid point—‘critical discursive analysis’ is highlighted. This involves a three stage process of formulation of critical theorems, enlightenment and selection of strategies (cf. Broadbent, 1998; Broadbent and Laughlin, 1997; Habermas, 1984, 1987; Laughlin, 1987). Finally, where complete subjectivity is assumed, this naturally leads to the different interpretive approaches such as symbolic interactionism (cf. Blumer, 1969), ethnomethodology (cf. Garfinkel, 1967), grounded theory (cf. Glaser and Strauss, 1967) and the discovery of meanings and theoretical codes etc.”*

Finally, the last two levels in Figure 13 involve incorporating data collection methods. Generically there are four methods which are usually employed to collect the data, that is, questionnaires, interviews, documents and observations. But here it is important to generate data in those narratives (quantitative or qualitative), which are in accordance with the philosophy of the adopted methodological approach.



Given Laughlin's comments above, in this research data collection approach is able to span across the headings in Figure 13, as indicated in Figure 14, below. Figure 14 is a refined version of Figure 13 representing the chosen Kantian/Fichtean philosophical positioning, that is, a 'Low/Low' positioning in Figure 12. That 'Low/Low' positioning in respect of the theory and methodological choices is explained next.

Figure 14: Representing underlying research approach assumptions to pragmatism following Laughlin (2004) theoretical and methodological choice dimensions; source author



*Theory dimension – 'low' level:*

At a 'Low' level of theory there is no clear replicable information available to feed into a prior theory for evaluation purpose (Laughlin, 2004). This is certainly the case with the Bui and Porter (2010) framework which is adopted and adapted herein for social construction. Their framework is supported by some empirical work but, given its recent appearance, it is reasonable to argue that there is little to rely upon in terms of pre-assumed general empirical patterns (thematic content). Thus, although Laughlin (1995) asserts no reliance on pre-assumed general empirical patterns, here in this research it is argued that, given the Pakistani setting, this work is sufficiently different from Bui and Porter's work to not be regarded as merely confirmable or refutable "data" of some prior empirical findings, but rather, an

important contribution in its own right. As such, the findings from this research's empirical investigation support a theory which cannot be transferred to another study for the reason that other findings could not be used in the context of this study because both works are separate and distinct and should be approached as such (see Laughlin, 1995).

With a 'Low' methodology, Laughlin (2004) asserts a 'complete' reliance on the observer's subjectivity. That is why Figure 14 above is showing a wavy line, rather than an arrowed line, thus depicting the divorce between the theory and methodology dimensions. In the case of this study, a 'Low' level of theory choice leads to the selection of three possible methodological approaches, that is, Symbolic Interactionism (Blumer/Kuhn) (L), Ethnomethodology (L), and Pragmatism (L) (see Figure 12), as discussed below.

*Methodology dimension – 'low' level:*

Once the role of the 'theory' is decided then this has implications for the selection of an appropriate methodological approach. Figure 12 shows the three possible approaches. A brief overview of each method is given in order to confirm or refute its 'appropriateness' for the purpose of this research.

*1) Ethnomethodology:*

Ethnomethodology is a research approach to sociological inquiry originating from the work of American sociologist Harold Garfinkel (1917-2011). Ethnomethodology represents an effort to study the methods in and through which members concertedly produce and assemble the features of everyday life in any actual, concrete, and not hypothetical or theoretically derived settings' (Douglas et al., 2012). In this regard Garfinkel (2002) provides the following 'ethnomethodology' terminological breakdown:

- a. "Ethno" refers to members of a social or cultural group,
- b. "method" refers to the things members routinely do to create and recreate various recognizable social actions or practices,
- c. "ology", means the study of, or the logic of these methods.

Thus, in simple terms, the rationale for the adoption of an ethnomethodological approach is justified on the grounds of studying the 'methods' of a human group or

group members in order to produce socially recognizable orders or actions which are routine in nature. For example, studying the methods used for listening to employees' voices in various enterprises.

One of the most confounding problems that ethnomethodologists face is the lack of formal stated theory and a methodology. However, irrespective of this limitation, ethnomethodologists are not prevented from doing ethnomethodological studies. They are allowed to generate a substantial literature of "findings" through their own subjectivity (Douglas et al., 2012). Therefore, methods adopting an ethnomethodological perspective are mostly qualitative in nature.

An ethnomethodological approach to this research is inappropriate because the underlying rationale is to evaluate the 'expectation-performance gap', rather than studying the methods employed by groups of educators or employers to produce socially recognizable actions. Therefore, this research rejects this methodological approach on this basis.

## 2) *Symbolic Interactionism (Blumer and Kuhn):*

Like ethnomethodology symbolic interactionism is also a methodological approach to sociological inquiry but originating from the work of American sociologist Herbert Blumer (1900-1987). It relates to the study of human group life and conduct focusing on the meaning of events to the subjects and the symbols they use to convey that meaning (Dowling, 2007). Both symbolic interactionism and ethnomethodology relates to the study of interpersonal social interaction and that is why they share a lot of common features (Dowling, 2007). However they have a significant difference, which is illustrated by Dennis (2011, p. 349):

*“For symbolic interactionists, the sense of interaction depends entirely on actors' interpretations and understandings (Blumer 1969: 2), while for ethnomethodologists the meaning of any interactional “move” is reflexively tied to its context: action, sense, and situation are mutually elaborative in situ (Garfinkel 1967: 3-4)”*

Symbolic interactionism is evaluated through the process of interaction in the formation of meanings between individuals (Nelson, 1998). As Blumer (1969, p. 47) put it:

*“Symbolic interactionism is a down-to-earth approach to the scientific study of human group life and human conduct. Its empirical world is the natural world of such group life and conduct. It lodges its problems in this natural world, conducts its studies in it, and derives its interpretations from such naturalistic studies. If it wishes to study religious cult*

*behavior it will go to actual religious cults and observe them carefully as they carry on their lives. If it wishes to study social movements it will trace carefully the career, the history and the life experiences of actual movements."*

Between 1937 and 1964, Manford Kuhn (1964) reported new trends in symbolic interactionism by enlisting different emerging theories with it, for example, role theory, language and culture theory, interpersonal theory, self-theory and reference group theory etc in what he called "the age of inquiry" (Plummer, 2000). By the 1970's, the term "symbolic interactionism" became re-established through a series of published books and other texts. So, Meltzer et al. (1975) introduced a division to the theories espoused by Blumer and Kuhn's schools of thought, specifically, that Blumer's school of thought can be seen as being more humanistic (subjective) oriented, whereas Kuhn's school of thought is orientated towards a positivist (objective) mindset. However, both schools of thought have been claimed to come under the same umbrella of symbolic interactionism.

Given the similarity to an ethnomethodological approach, a symbolic interactionist approach to this research is inappropriate because the underlying rationale is to evaluate the 'expectation-performance gap', rather than studying the social group life of educators and employers. Therefore, this research rejects this methodological approach on this basis.

### (3) *Pragmatism:*

Pragmatism is an American methodological approach originating from the work of William James (1842-1910), John Dewey (1859-1952), Charles Sanders Peirce (1839-1914) and Herbert Mead (1863-1931). Pragmatists believe one should stop asking questions about the laws of nature and reality (Creswell, 2003). For example as Powell (2001, p.884) argued:

*"The pragmatist epistemology stands in contrast to prevailing positivist and anti-positivist views of scientific discovery. Whereas positivism emphasizes the objective, law-like properties of a brute reality independent of observation (Donaldson, 1992; Wicks and Freeman, 1998), anti-positivism emphasizes the creative role of active, subjective participants, none of whom owns a privileged claim on truth (Burrell and Morgan, 1979; Astley, 1985; Martin, 1990). Pragmatism, on the other hand, rejects positivism, on grounds that no theory can satisfy its demands (objectivity, falsifiability, the crucial experiment, etc.); and rejects anti-positivism, because virtually any theory would satisfy them. As such, the pragmatist proposes to reorient the assessment of theories around a third criterion: the theory's capacity to solve human problems (Rorty, 1989; Stich, 1990)."*

For pragmatists the research question or problem is the ‘central’ focus (Mackenzie and Knipe, 2006; Creswell, 2003) where the central concern is ‘what works’ (Patton, 1990). According to Powell (2001, p. 884):

*“... the pragmatist proposes to reorient the assessment of theories around a third criterion: the theory’s capacity to solve human problems (Rorty, 1989; Stich, 1990). To a pragmatist, the mandate of science is not to find truth or reality, the existence of which are perpetually in dispute, but to facilitate human problem-solving. According to pragmatist philosopher John Dewey, science should overthrow ‘the notion, which has ruled philosophy since the time of the Greeks, that the office of knowledge is to uncover the antecedently real, rather than, as is the case with our practical judgments, to gain the kind of understanding which is necessary to deal with problems as they arise.’”*

Hence, any rationale for the adoption of pragmatism would link directly to the purpose of, and the nature of the research question being posed (Creswell, 2003). Thus, instead of the method being dominant, the research question or problem is viewed as the most important concern (Creswell, 2003). The data collection methods (such as interview, questionnaires, observation and documents etc), narratives (qualitative and quantitative) and the analysis (such as descriptive, factor, content, thematic and textual analysis etc) is that which is deemed to be most likely to provide a deep insight into the research problem (Creswell, 2003; Mackenzie and Knipe, 2006).

Unlike ethnomethodology and symbolic interactionism, the methodological approach of pragmatism is complimentary to the underlying research objective, for example, Strom (1996), recommends that education researchers use pragmatism to assess educators’ programs for vocational education. Similarly, Miller (1994) also advocates pragmatism as one of the most effective philosophies for underpinning the design of vocational education programs, such as ‘tech-prep’, which is intended to meet the needs of the workplace of the future. Therefore, this study considers pragmatism as the most appropriate methodological approach to address the phenomenon of ‘expectation-performance gap’ in this research.

#### **4.1.2 A review of methodological stance of pragmatism:**

The word ‘Pragma’ is derived from the Greek literature (πράγμα) which means ‘action’, from which the words ‘practice’ and ‘practical’ comes (James, 2000). In English the term ‘pragmatic’ has the connotation of searching for feasible, workable solutions to solve human problems (Fishman, 1991). Therefore, ‘pragmatism’ is described as being suitable to “relieve

and benefit the condition of man – to make us happier by enabling us to cope more successfully with the physical environment and with each other” (Rorty, 1991, p. 27). Thus the concern for a pragmatist is to find out ‘what works’ and what enables solutions to problems (Patton, 1990; Creswell, 2003).

Pragmatism is not new to the social sciences. In the literature there are many reviews of pragmatism, both as a general belief system (for example, Maxcy, 2003) and as a justification for using a mixed-method research approach (for example, Mackenzie and Knipe, 2006; Tashakkori and Teddlie, 2003; Somekh and Lewin, 2005; Creswell, 2003). In this regard, Table 8 provides a simple summary of pragmatism, as adapted from the work of Morgan (2007). In Table 8 the columns represent pragmatism in relation to the two most commonly employed research approaches: interpretivism and positivism, whereas the rows in Table 8 make comparisons in terms of the essential features of these three broad categories.

**Table 8: Assumptions of Pragmatism in relation to positivist and Interpretivist approach**

	<b>Positivist approach</b>	<b>Pragmatist approach</b>	<b>Interpretivist approach</b>
<b>Connection of theory and data</b>	Deduction	Abduction	Induction
<b>Relationship to research process</b>	Objectivity	Inter-subjectivity	Subjectivity
<b>Inference from data</b>	Generality	Transferability	Context

*Connection of theory and data:*

The ‘connection of theory and data’ is one of the prominent features of a research approach. In positivism the aim is to use deductive reasoning, where the objective of the researcher is to confirm often a well-established theory employing primary data analysis. On the other hand, the interpretive approach often draws upon inductive reasoning, where the objective is to develop a theory. This sharp distinction between the reasoning process of positivism and interpretivism places both of these approaches at opposite extremes of a research process continuum. But here, as any experienced researcher knows, in reality the research design is not so polarised (Morgan, 2007). In reality, with pragmatism the researcher will typically employ an ‘abductive’ reasoning process, which moves back and forth between an inductive and a deductive reasoning process (Morgan, 2007). This abduction process is defined as a “retroductive process (the spontaneous conjectures of instinctive reason) of finding or forming hypotheses or theories that might explain a (surprising) fact or an (unexpected)

observation” (Patokorpi, 2006, p. 73). This particular version of the reasoning process is quite familiar to the researchers, who combine qualitative and quantitative research methods in a sequential way (Ivankova et al., 2006). For example Pansiri (2005, p. 197) stated:

*“In terms of the mode of enquiry, pragmatism embraces the two extremes normally espoused by positivism/post-positivism and those supported by interpretivists. The former emphasizes quantitative methods as opposed to interpretivists’ qualitative approaches. Not surprisingly therefore pragmatism has been hailed as the foundation of mixed-method research (Tashakkori and Teddlie, 1998; Teddlie and Tashakkori, 2003)”*

This research is supported by a mixed-method approach.

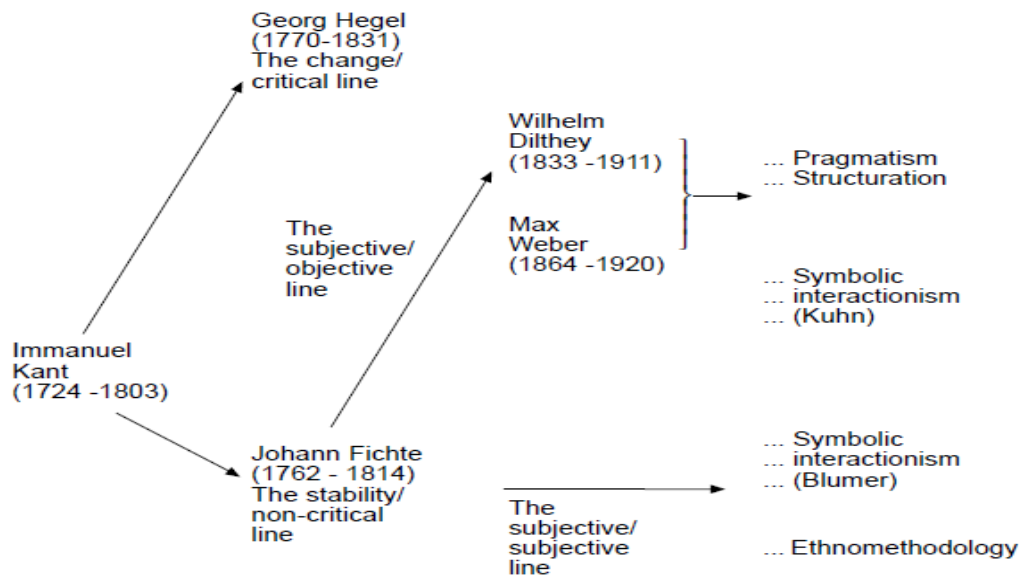
#### *Relationship to research process:*

The ‘relationship to research process’ is about the role of researcher’s value bias within a research process. For example Pansiri (2005, p. 198) stated:

*“Positivism believes that inquiry is value free while interpretivism believes that enquiry is values bound. For pragmatists, values play an important role in conducting research and interpreting results, and the researcher is advised to accept external reality and choose explanations that best produce desired outcomes”*

Pragmatists believe that there is a “real world” out there, but at the same time they also believe that all individuals have their own unique interpretation of that world (Morgan, 2007). Thus a pragmatist would decline to accept complete ‘subjectivity’ or ‘objectivity’ and adopt instead the notion of ‘inter-subjectivity’. For example, see Kantian/Fictean line in Figure 15 which has branches through Wilhelm Dilthey’s and Max Weber’s schools of thought. Both schools of thought can be seen to be key in providing an objective but also subjective dimensions (Laughlin, 1995), where pragmatism lies. Thus, inter-subjectivity captures the duality of the subjectivity/objectivity stance in which the researcher has to achieve a sufficient degree of mutual understanding of both stances before representing it as a social reality (see Morgan, 2007; Fishman, 1991). Thus, pragmatism implies that there must be a degree of shared meaning before representing it as a single social reality.

Figure 15: Representing Pragmatism linkage to inter-subjectivity that is represented by subjectivity/objectivity line; source Laughlin (1995)



#### *Inference from data:*

The 'inference from data' asserts that knowledge derived from data is either context-specific (idiographic) or universally generalisable (nomothetic). In positivism the derived knowledge is presented as a universally generalisable phenomenon irrespective of contextual limitations, whereas, in interpretivism the derived knowledge is specific to its contextual boundaries. Pragmatists, on the other hand, would argue that it is highly unlikely in either case (positivism or interpretivism) that knowledge from a research setting would be so singular as to have no implications for other settings (Morgan, 2007). Pragmatists adopt the notion of 'transferability' instead. The notion of 'transferability' is borrowed from Guba and Lincoln (1985); "who treated the question of whether the things learned in one context can be applied in another as an 'empirical' issue". For example, in this regard, Morgan (2007, p. 72) stated:

*"This advocacy of transferability thus arises from a solidly pragmatic focus on what people can do with the knowledge they produce and not on abstract arguments about the possibility or impossibility of generalizability. Instead, we always need to ask how much of our existing knowledge might be usable in a new set of circumstances, as well as what our warrant is for making any such claims."*

In pragmatism the synthesis of abduction, inter-subjectivity and transferability brings opportunities to think about, beyond the traditional methodological stances of positivism and interpretivism.



This section is now complete. The next section 4.2 (Study design) explains the study design of this research.

## 4.2 Study design:

To date, there is paucity of literature employing the theoretical framework of Bui and Porter (2010) in order to evaluate the expectation-performance gap: the central feature of the underlying research objective. This gap accounts for the positioning of this research as set out in the previous section. Other studies similar to this one have previously employed survey strategies with closed-ended questionnaires (see Table 9, for example, Kavanagh and Drennan, 2007, 2008; Jackling and Keneley, 2009; Lin et al., 2005; Hassall, 1999, 2001, 2003, 2005; Francis and Minchington, 1999; Shugahara and Coman, 2010; Abdolmohammadi and Shanteau, 2004; Wye and Lim, 2009; Sughara et al., 2010; Jones and Abraham, 2009; Kavanagh et al., 2009; Milner and Hill, 2008).

**Table 9: Prior studies with their employed methodologies**

S.No	Authors Detail	Publication Forums	Research Title	Research Paradigm and Methodology
1	Z. Jun Lin, XiaoyanXiong, and Min Liu (2005)	Journal of Accounting Education	Knowledge base and skill development in accounting education: evidence from china	<b>Quantitative:</b> The self-administered survey instrument (close-ended) is adopted from Albrecht and Sack (2000)
2	M. H. Kavanagh and L. Drennan (2008)	Accounting and Finance	What skills and attributes does an accounting graduates need? Evidence from student perceptions and employer expectations	<b>Quantitative:</b> The self-administered survey instrument (close-ended) is adopted from Albrecht and Sack (2000)
3	S. Shugahara and R. Coman (2010)	Asian Journal of Finance and Accounting	Perceived importance of CPA's generic skills: Japanese Studies	<b>Quantitative:</b> The self-administered survey instrument (close-ended) is adopted from Boyatzis and Kolb (1995)
4	M. J. Abdolmohammadi, D. G. Searfoss and J. Shanteau (2004)	Behavioral Research in Accounting	An investigation of the attributes of top industry audit specialists	<b>Quantitative and Qualitative:</b> The self-administered survey instrument (partially open/close-ended)
5	T. Hassall, J. Joyce, J. L. Arquero Montano, J. A. DonosoAnes (2005)	Accounting Forum	Priorities for the Development of vocational skills in management accounting: A European perspective	<b>Quantitative:</b> The self-administered survey instrument (close-ended) adopted from previous studies Hassall et al., 1999, 2001 and 2003 studies

6	T. Hassall, J. Joyce, J. L. Arquero Montano, J. A. DonosoAnes (2003)	Innovations in Education and Teaching International	The vocational skills gap for management accountants: the stakeholders' perspectives	<b>Quantitative:</b> The self-administered survey instrument (close-ended) is adopted from previous studies Hassall et al., 1999 and 2001 studies
7	T. Hassall, J. Joyce, J. L. Arquero Montano, J. A. DonosoAnes (2001)	Accounting Education	Vocational skills in the accounting professional profile: the Chartered Institute of Management Accountants (CIMA) employers' opinion	<b>Quantitative:</b> The self-administered survey instrument (close-ended) is adopted from previous studies Hassall et al., 1999
8	M. H. Kavanagh and L. Drennan (2007)	Conference paper: Accounting and Finance Association of Australia and New Zealand	Graduates attributes and skills: are we as accounting academics delivering the goods	<b>Qualitative and Quantitative:</b> The survey instrument is adopted from Albrecht and Sack (2000)
9	C.H. Wye and Y.M. Lim (2009)	International Education Studies	Perception Differential between Employers and Undergraduates on the Importance of Employability Skills	<b>Quantitative:</b> The self-administered survey instrument (close-ended)
11	S. Sughara, K. Suzuki, and G. Boland (2010)	Asian Review of Accounting	Students' major choice in accounting and its effect on their self-efficacy towards generic skills: An Australian study	<b>Quantitative:</b> The survey instrument (close-ended) is adopted
12	G. Jones and A. Abraham (2009)	Australasian Accounting Business and Finance Journal	The Value of Incorporating Emotional Intelligence Skills in the Education of Accounting Students	<b>Quantitative:</b> The self-administered survey instrument (close-ended)
13	M. Kavanagh, P. Hancock, B. Howieson, J. Kent and I. Tempone (2009)	Conference paper: Accounting & Finance Association of Australia and New Zealand	Stakeholders perspectives of the skills and attributes for accounting graduates	<b>Qualitative:</b> interviews
14	M.M. Milner and W. Y. Hill (2008)	Accounting and Finance	Setting the skills agenda: The views of UK accounting academics	<b>Qualitative:</b> Semi-structured interviews

There are two fundamental features to note from the studies listed in Table 9. First, evaluating such research objectives typically require the data to be collected on a large scale. Second, the research strategy also typically requires comparison of the views of two different respondent groups without value bias. In the case of this study, both of these requirements are satisfied. Thus, this research adopts the survey strategy with closed-ended questions in order

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to collect the data for the evaluation of the ‘expectation-performance gap’. The survey will be broken down into its component elements, as in Bui and Porter (2010): the expectation gap, the constraints gap and the performance gap relevant to a Pakistani context.

Overall this research entails a mixed-method approach. Though, it principally adopts the survey strategy with closed-ended questions in order to collect the data for the evaluation of the ‘expectation-performance gap’, which is quantitative in nature. But, the purpose of refining the content of the questionnaire in relevance to Pakistan’s context involves cognitive interviews, that is, it is qualitative in nature.

Figure 16: Representing process flow chart for study design; source author

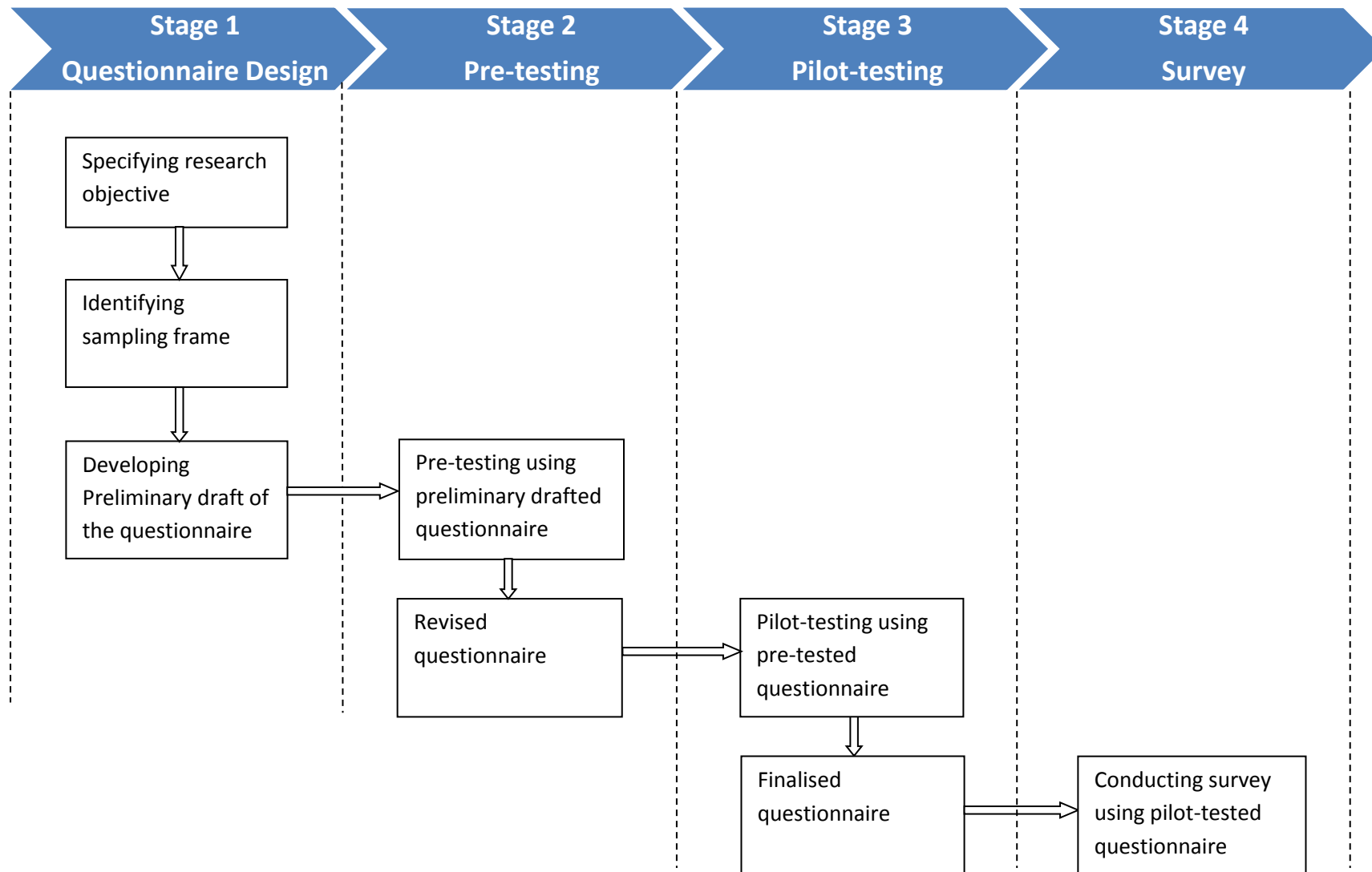


Figure 16 shows the four stage study design process flow chart developed specifically for this research::

**Stage 1 – Questionnaire design:** At this stage a preliminary draft of the questionnaire has been constructed in consultation with prior literature and experts' opinion (for detail see chapter 5).

**Stage 2 – Pre-testing:** At this stage pre-testing of the preliminary drafted questionnaire has been undertaken (for detail see chapter 6). In this regard, 6 cognitive interviews have been conducted for data collection. The data from the interviews has been analysed by using a mix of qualitative data analytical methods: content analysis, thematic analysis and textual analysis

**Stage 3 - Pilot testing:** At this stage pilot testing of the pre-tested questionnaire has been conducted in order to check against the reliability standards (test-retest reliability) (for detail see chapter 7). The collected data has been analysed by using a statistical technique of spearman correlation coefficient.

**Stage 4 - Survey:** At this stage a pilot tested questionnaire has been used for the survey (for detail see chapter 8). The data has been analysed by using a mix of quantitative data analytical methods that are, Independent Sample T-test, Mann-Whitney U-test, Statistical Mean, and Principal Component Analysis.

The next, section 4.3 (Analytical techniques used to analyse data) illustrates the different analytical techniques that have been used to analyse the data at different stages of the research design (i.e. pre-testing, pilot-testing and survey).

### **4.3 Analytical techniques used to analyse data:**

This section explains the different analytical techniques that have been used in this research to analyse the data at different stages. In this research, the data collection involves at three stages (i.e. pre-testing, pilot-testing, survey). In that regard, Table 10 presents the various analytical techniques (quantitative and qualitative) that have been used to analyse the data at the pre-testing (stage 2), the pilot testing (stage 3) and the survey (stage 4) of the research design.

**Table 10: Representing analytical techniques that have been used to analyse the data at various stages of the research design**

<b>Research design stages</b>	<b>Analytical techniques</b>
<b>Pre-testing (stage 2)</b>	Content analysis Thematic analysis Textual analysis
<b>Pilot testing (stage 3)</b>	Spearman correlation coefficient
<b>Survey (stage 4)</b>	Independent sample t-test/ Mann-Whitney U-test Statistical mean Principal component analysis

### 4.3.1 Pre-testing stage:

This section describes the analytical techniques that have been used to analyse the data collected during pre-testing stage (2).

In the pre-testing stage the aim is to refine and revise the preliminary drafted questionnaire (in stage 1) in accordance with Pakistan's accounting education context. In this regard, 6 cognitive interviews have been conducted for data collection purpose. Then the data from the interviews have been analysed by using a mix of qualitative data analytical methods that are, content analysis, thematic analysis and textual analysis. The description of each analytical method is stated below:-

#### a) **Content analysis:**

Content analysis is a method of analysing the written, verbal or visual communication messages (Cole, 1988). Generally, through content analysis categories are formulated into a few content related categories (Elo and Kyngas, 2008). The purpose of creating the categories is to provide a means of describing and understanding the phenomenon in order to create knowledge (Cavanagh, 1997). Whenever formulating categories in content analysis, the researcher has to ensure, through interpretation, that all the similar items must go into a same category (Dey, 1993). Thus, in general it is assumed that all the words and phrases within a category are alike and share the same meanings (Cavanagh, 1997).

**b) Thematic analysis:**

In the literature thematic analysis is generally illustrated as a method for identifying, analysing and reporting various themes within a data set (Braun and Clarke, 2006). A theme is described as something important and meaningful that has been captured from the collected data in relation to the research question. The important aspect or ‘keyness’ of a theme is not necessarily the frequency or repeatability of it in a data set, but rather, whether it captures something important in relation to the research question (Braun and Clarke, 2006). Therefore, in a data set, a theme might be sharing a considerable space or just appear to be sharing relatively little space in a whole data set. Thus, identifying a theme in a data set requires a great deal of judgement from the researcher’s subjective perspective.

**c) Textual analysis:**

Textual analysis is illustrated as a way for the researcher to gather information about how people or communities make sense of the world (McKee, 2003). When we perform textual analysis on a text we make an educated guess at some of the most likely interpretations of a text through general consensus. While it is true that not everybody sees the world in exactly the same way that we do, as a community living together. We overlap things enough that we can make a consensus about our perceptions enough that we are able to communicate with each other (McKee, 2003). In textual analysis when we refer to a text, it means that something is interpreted as being meaningful to our research question. It could be a book, television programme, film, magazine, T-shirt or kilt, piece of furniture or ornament (McKee, 2003).

**4.3.2 Pilot-testing stage:**

This section describes the analytical techniques that have been used to analyse the data collected during pilot-testing stage (3).

At pilot testing stage, the pre-tested questionnaire has been tested to ensure that it conforms to reliability standards. In this regard 40 questionnaires were completed, surveyed twice by the selected respondents within the targeted population. Then the data received from the pilot tested questionnaires were analysed against the reliability standard (test-retest reliability) by using the statistical technique of Spearman correlation coefficient. The description of Spearman correlation coefficient is stated below:-

#### a) Spearman correlation coefficient:

The Spearman correlation coefficient is a non-parametric statistical test that assumes the data is asymmetrically or abnormally distributed. For measuring test-retest reliability, a Spearman correlation coefficient is evaluated for the data from the same person on two different occasions (generally after 2-4 weeks) for agreement level (see Medical Research Council, 2013). The theoretical value of a Spearman correlation coefficient is from -1 to +1. A value close to +1 is interpreted as perfect agreement, whereas a value close to zero or negative is interpreted as no agreement. The values of a Spearman correlation coefficient could be interpreted with reference to Table 11, stated by Mukaka (2012) as a standard criterion for determining the agreement level.

**Table 11: Representing interpretation of Spearman's correlation coefficient.**

<b>Spearman's Correlation Coefficient</b>	<b>Level of agreement interpretation</b>
.90 to 1.00 (-.90 to -1.00)	Very high positive (negative) correlation
.70 to .90 (-.70 to -.90)	High positive (negative) correlation
.50 to .70 (-.50 to -.70)	Moderate positive (negative) correlation
.30 to .50 (-.30 to -.50)	Low positive (negative) correlation
.00 to .30 (-.00 to -.30)	Negligible correlation

### 4.3.3 Survey stage:

This section describes the analytical techniques that have been used to analyse the data collected during survey stage (4).

In the survey stage, pilot tested questionnaire has been used for surveying the target population (educators and employers). Quantitative data received from the returned questionnaires were analysed by using a mix of statistical data analytical techniques which are, Independent Sample T-test, Mann-Whitney U-test, Statistical Mean, and Principal Component Analysis. The description of each statistical analytical technique is stated below:-

#### a) Independent sample T-test/Mann Whitney U-test:

The Independent Sample T-test (parametric test) /Mann Whitney U-tests (non-parametric test) are used when we have to see whether the two groups of respondents are significantly different (Stengel et al., 2009). Both of the tests are used for the same purpose. The choice for the selection of an appropriate statistical test is straight forward. When the data follows a normal distribution then the Independent Sample T-test (parametric test) should be employed, if not then the Mann Whitney U-test (non-parametric test) is the appropriate one (Stengel et al., 2009; Nachar, 2008) (Figure 17). In



order to see whether the data holds normal/abnormal distribution generally skewness and kurtosis tests are undertaken to decide (Ma et al., 2006).

Figure 17: Representing choice for the selection of appropriate statistical test; source Stengel et al. (2009)

		<i>Data type</i>			
		<i>Binary or categorical</i>	<i>Ordinal</i>	<i>Continuous</i>	
<i>Number of groups</i>				<i>Normal distribution assumed</i>	<i>Normal distribution not assumed</i>
2	<i>Descriptive statistic significance test</i>	<i>Proportion chi-square test</i>	<i>Median Mann-Whitney U test</i>	<i>Mean value t-test*)</i>	<i>Mean value Mann-Whitney U test**)</i>
3+	<i>Descriptive statistic significance test</i>	<i>Proportion chi-square test</i>	<i>Median Kruskal-Wallis H test</i>	<i>Mean value ANOVA (F-test)</i>	<i>Mean value Kruskal-Wallis H test</i>

Table 5-1 Appropriate methods for statistical analysis of differences between groups.

\*) sometimes referred to as "Student's t-test".

\*\*\*) also known as "Wilcoxon rank sum test".

#### b) Statistical Mean:

The statistical mean is also referred to as the arithmetic mean. The arithmetic mean is probably the most commonly used statistical test. It is calculated by adding all the values of the data points and then dividing the result by the total number of data points. In practice, the statistical mean is used when the desire is to derive the central tendency of the data in question. This is because this type of calculation eliminates random errors by taking all the values into account.

#### c) Principle Component Analysis:

Principal component analysis (PCA – see Cornish, 2007) is used when the purpose is to reduce the number of observed items/variables to a smaller number of components by taking into account variances (SAS, 2013). In Principal Component Analysis extracted components accounting for the maximal amount of variance are retained while others accounting for minor variances are omitted (SAS, 2013). In order to account for major and minor variances Eigenvalues are used to indicate the amount of variance explained by each component. The components having an Eigenvalue of more than 1 only are retained. The first extracted component accounts for most of the variance explained

within the data set. The second extracted component accounts for the second largest amounts of variance and that is uncorrelated with the first extracted component, and so on.

The next section 4.4 (Sample size and data collection procedures) illustrates the sample size and data collection procedure that has been used during the conduct of this research.

#### **4.4 Sample size and data collection procedures:**

In this research data has been collected from two groups of respondents, they are:-

1. Educators: Academics who teach in educational institutes of professional accounting education.
2. Employers: Accounting practitioners from the professional organisations registered as training organisations with the accounting institutes.

In Pakistan, from the educators' perspective; there are 5 accounting bodies providing certified accounting education, that is, the Institute of Chartered Accountants of Pakistan (ICAP); the Institute of Cost and Management Accountants of Pakistan (ICMAP); the Institute of Certified Public Accountants of Pakistan (ICPAP); the Society of Accounting Education (SOAE) and the Pakistan Institute of Public Finance Accountants (PIPFA). These professional bodies have 37 registered education centres across the country to provide professional accounting education (see Appendix 11a). Unlike developed countries, unfortunately in Pakistan there is no database available providing information regarding number of academics working in accounting educational institutes (For example, in New Zealand - Wiley Directory of Accounting provides information about all available accounting academics).

From the employers' perspective, the only list of professional organisations that are associated with accounting bodies are 170 auditing firms registered as training organisations/partners (see Appendix 11b). Unfortunately, unlike educators in Pakistan there is also no database available providing information regarding the number of accounting practitioners working in these organisations.

Overall the data collection process in this research involves at three stages, that is, at Pre-testing (stage 2), Pilot testing (stage 3) and Survey (stage 4). In that regard Table 12 below

represents the number of respondents from whom the data has been collected at the pre-testing, the pilot testing and the survey stage of the research.

**Table 12: Representing number of respondents from whom that data has been collected at the various stages of the research design**

<b>Research design stages</b>	<b>No. of Educators (Academics)</b>	<b>No. of Employers (Practitioners)</b>	<b>Total No. of respondents</b>
<b>Pre-testing (stage 2)</b>	3	3	6
<b>Pilot testing (stage 3)</b>	20	20	40
<b>Survey (stage 4)</b>	201	204	405

Next, this section explains the sampling procedure and process of data collection within the pre-testing stage.

*a) Pre-testing (stage 2):*

The purpose of pre-testing was to refine and revise the content of the pre-developed questionnaire (in stage 1) in relevance to Pakistan's accounting education context. Therefore, employing personal contacts, six experts (expert sampling) were interviewed based on their experience in the field of accounting education (3 accounting educators/academics) and accounting professionals (3 accounting practitioners) (see Table 12). All of the interviews were conducted at the places suitable to the participants' convenience.

Next, this section explains the sampling procedure and process of data collection within the pilot-testing stage.

*b) Pilot testing (stage 3):*

The purpose of pilot testing was to check the pre-tested questionnaire against the reliability standard (test-retest reliability). Therefore, employing a quota sampling technique, 20 respondents from the employers' group (accounting practitioners associated with one auditing firm) and 20 from the educators' group (academics associated with one educational institute) were selected to pilot test the questionnaires (see Table 12). All of the respondents were contacted through their organisations. Once they agreed, the questionnaires were sent to all of the forty respondents to their contact addresses (mostly at their organisation addresses with few exceptions) to fill in with

advice to return them in a short time (one week). After, receiving all of the questionnaires back, the researcher waited for 14 days and then a fresh copy of the same questionnaire was sent again to fill-in.

Next, this section explains the sampling procedure and process of data collection within the survey stage.

*c) Survey (stage 4):*

At this stage the pilot tested questionnaire was used. In order to achieve a breadth of responses, preliminary considerations were given to the viability of surveying all the accounting academics and practitioners working in accounting education centres and professional organisations respectively. But pragmatically it was impossible to survey all, especially when the exact population size is not known. Therefore, in this research for the purpose of data collection at this stage, the sample size was determined by observing the requirements of the analytical techniques that were used for the analysis (that are, Independent sample t-test, Mann Whitney U-test and Principal Component Analysis). With regards to the independent sample t-test/Mann Whitney U-test, there is no specific sample size requirement (Wallace, 2013). But generally, it is considered that the greater the sample size, the better the inference that can be drawn about the targeted population. However, the Principal Component Analysis requires a large sample size, minimally a sample size of 100 subjects or subjects' equivalent to five times the observed variables/items should be analyzed, whichever is greater (see SAS, 2013). Therefore, considering the rule of five times the number of observed items (35 items – see Appendix 3b & 6b and Appendix 4b & 7b) in the questionnaire implies that a minimum of data should be collected from 175 subjects (that is, 5 x 35 generic skills) for the underlying research. Thus, the required sample size was needed to be over 175 subjects for each of the respondents' groups in this research (that is, employers and educators). Hence, 1480 questionnaires were distributed among accounting practitioners and academics (1020 to accounting practitioners and 460 to accounting academics) at the organisations where they work. Further organisation heads were also requested by telephone to circulate the questionnaires among their employees. In response, 405 questionnaires were returned (204 from accounting practitioners and 201 from accounting academics) (Table 12).

The next, section 4.5 (Ethical consideration) describes the ethical considerations that were followed during this research.

### **4.5 Ethical consideration:**

In Brunel University any research that involves human subjects, requires ethical approval to be obtained from the Brunel Business School Research Ethics Committee. Therefore, prior to commencement of this research, an ethical approval was obtained from this body.

In this study, the guidelines issued by Brunel Research Ethics Committee are strictly followed during all the phases of this research. According to directions issued by the Research Ethics Committee, during cognitive interviews, that is, stage 2 of the study design (chapter 6), a consent form was completed by all of the interviewed participants to secure their voluntary participation. Additionally, during the interview process all of the participants were fully assured of the anonymity of their responses and confidentiality of their identity. However, during pilot-testing (chapter 7) and the survey phase (chapter 8), that is, stage 3 and stage 4 of the study design (Figure 16) respectively, the participant's information sheet was attached to the respondents' questionnaire. All of the respondents were asked to respond voluntarily and given the chance to withdraw from participation if they chose to do so. Thus, the respondents' consent to participate in this research was linked to answering and returning the questionnaire. All the respondents were fully assured of the anonymity of their responses and confidentiality of their identity.

### **Summary**

The chapter has described the adopted methodological approach' that allowed the researcher to narrow down the choice of research method on a reasoned basis. Using Laughlin (1995) 'alternative methodological approach' this study has adopted the methodological stance of 'pragmatism'. With the synthesis of abduction, inter-subjectivity and transferability, the adopted methodological stance of pragmatism hailed the foundation for the mixed-method in this research. In order to collect the data, this research has principally adopted the survey strategy of a questionnaire with closed-ended questions. But for the purpose of refining the content of the questionnaire for relevance to the context of Pakistan there were also cognitive interviews involved. The quantitative data from the surveyed questionnaires were analysed using statistical techniques such as Mann-Whitney U-test, Independent sample t-test,

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Statistical mean and Principal Component Analysis, whereas the qualitative data from the interviews were analysed using content analysis, thematic analysis and textual analysis.

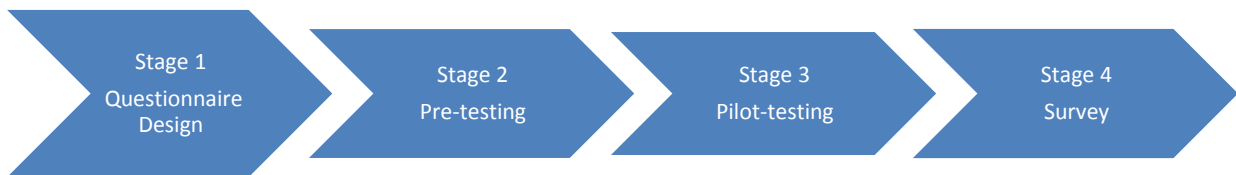
The next chapter (Stage 1 - Questionnaire design) involves designing the preliminary draft of the questionnaire, which comes at stage 1 of the study design (see Figure 16).

## CHAPTER 5: STAGE 1 – QUESTIONNAIRE DESIGN

### 5.0 Introduction:

This chapter comes at stage 1 of the study design (see Figure 18). This chapter involves designing the preliminary draft of the questionnaire in consultation with experts' opinion and prior literature.

Figure 18: Representing Questionnaire design - stage 1; repeated section from Figure 16



In order to guide the reader through this chapter, the structure of it is as follows:-

Section 5.1 reports the research objective. At this stage identifying a clear research objective helps to guide the researcher in developing a well-defined questionnaire.

Section 5.2 identifies the sampling frame. Identifying the exact respondent groups is important for developing a questionnaire relevant to the respondents' contextual perspective.

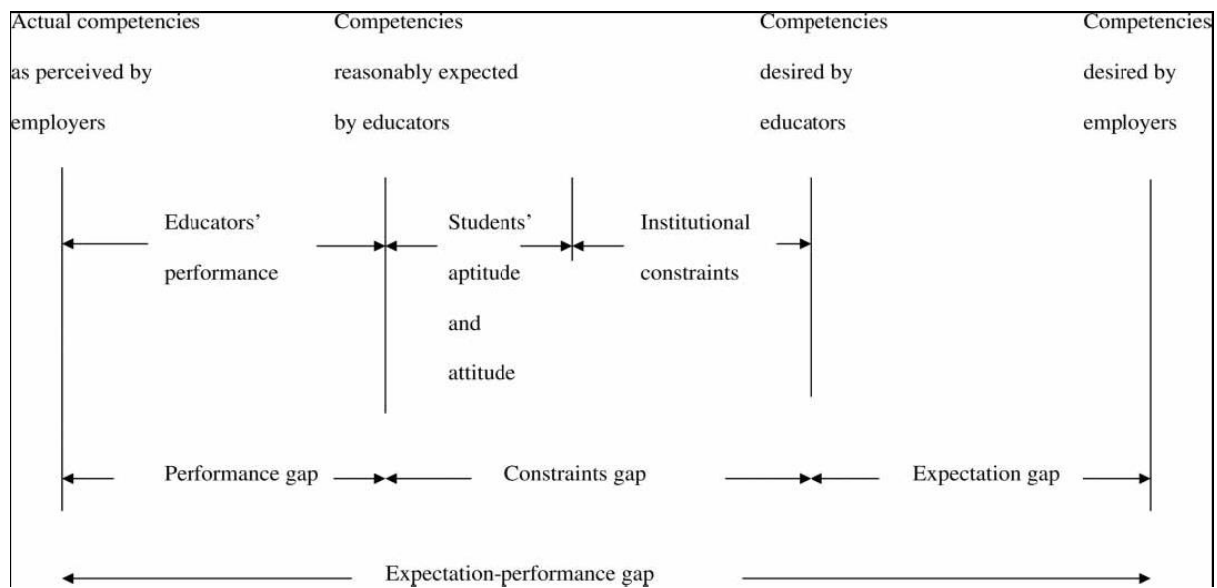
Section 5.3 reports the structure of the questionnaire. In order to develop a well-defined questionnaire it is important to have a structure which addresses the objectives of the research clearly.

### 5.1 Research objective:

In order to develop a well-defined questionnaire it is important to have a clear research objective (Burns et al., 2008; Presser et al., 2004). The objective should reveal the thought process involved in interpreting a question and arriving at an answer (Presser et al., 2004).

In this thesis the theoretical framework of 'expectation-performance gap' (Bui and Porter, 2010) is adopted to investigate the research objective (see Figure 19).

Figure 19: Representing the theoretical framework of the Expectation-Performance gap; source Bui and Porter (2010)



The adaptation of the Bui and Porter (2010) framework into a Pakistani accounting education context is structured as follows:

- I. Expectation gap - perceptual differences in the expectations of educators and employers regarding the skills that should be acquired by students for their accounting career development (reflecting differences in the expectations of accounting educators and employers).
- II. Constraints gap – representing the factors which are assumed to limit the ability of accounting education to develop skills into the students' learning process such as, students' perception of accounting programmes and the profession and their ability and aptitude, as well as institutional constraints.
- III. Performance gap - perceptual differences in the level of skills competencies that educators can reasonably expect accounting students to acquire by the time they graduate and those skills which employers perceive the accounting graduates should possess when they enter the profession (reflecting ineffectiveness of pedagogical activities).

The next section 5.2 (Sampling frame) is about identifying the respondent groups. Identifying respondent groups at this stage is important for the development of a well-defined questionnaire relevant to the respondents' contextual perspective.



## 5.2 Sampling frame:

The 'sampling frame' can be defined operationally as the target population from which the sample is drawn and to which the sample data will be analysed and generalised (Aday and Cornelius, 2006). Because of the size of the whole population and the difficulty in identifying the different respondents (Rubinfeld, 2004), pragmatically it is almost impossible to administer the questionnaire to the whole population. Therefore, the suggestion is to design the questionnaire in a way that maximizes the response rate for the sampling frame (Burns et al., 2008). In order to identify the sampling frame for this research, Figure 19 shows that there are two groups of respondents required to evaluate the expectation-performance gap, which are educators and employers.

From the educators' perspective in Pakistan there are five accounting bodies providing certified accounting education, that is, the Institute of Chartered Accountants of Pakistan (ICAP); the Institute of Cost and Management Accountants of Pakistan (ICMAP); the Institute of Certified Public Accountants of Pakistan (ICPAP); the Society of Accounting Education (SOAE) and the Pakistan Institute of Public Finance Accountants (PIPFA). These professional bodies have a number of registered educational centres across the country to provide professional accounting education. Thus for this research, from an educators' perspective, academics teaching in such education centres are included for data collection. From an employers' perspective in Pakistan the only list of organisations that are registered with accounting bodies are the auditing firms (also called training organisations/partners). Thus, the two groups of respondents required to investigate the expectation-performance gap in this research are educators' and employers' which are defined as:-

1. Educators: Academics who teach in educational institutes of professional accounting education (see appendix 11a).
2. Employers: Accounting practitioners from the professional organisations registered as training organisations with accounting institutes (see appendix 11b).

The next section 5.3 (Preliminary draft of the questionnaire) is about reporting the structure of the research questionnaire. In order to develop a well-defined questionnaire it is important to have a well-defined structure which addresses each research objective.

### 5.3 Preliminary draft of the questionnaire:

In this research the developed questionnaire is comprised of four parts in total; measuring the stated objective of this research within a Pakistani context:

#### 5.3.1 Demographic details

#### 5.3.2 Expectation gap

#### 5.3.3 Constraints gap

#### 5.3.4 Performance gap

The next section 5.3.1 (Demographic details) is about reporting the demographic details section of the questionnaire. This report comes as a subsection under the section 5.3 (Preliminary draft of the questionnaire).

#### 5.3.1 Demographic details:

The *first part* of the questionnaire includes taking the demographic details.

This section includes measuring the demographic characteristics from each member of the respondent groups (employers and educators) separately. Therefore, two sets of questionnaires were required: one measuring demographic details from educators (Appendix 1a) and another from employers (Appendix 2a). These details include sex, age, years of experience, position and qualification.

The next section 5.3.2 (Expectation gap) is about reporting the structure of the questionnaire in relevance to the expectation gap (first objective).

#### 5.3.2 Expectation gap:

The *second part* of the questionnaire addresses the constituents of the ‘expectation gap’.

The ‘expectation gap’ refers to the perceptual differences in the expectations of educators and employers regarding the skills that should be acquired by students for their accounting career development. This section includes measuring the views towards generic skills development from accounting employers and educators separately. Thus, there are two sets of questionnaires: one evaluating the ‘expectation gap’ determinant from the educators’ perspective (Appendix 3a), while the other evaluates the same from the employers’ perspective (Appendix 4a).

This section examines various types of generic skills for evaluation from both of the respondent groups' perspective. In that regard this study adopts a list of 33 generic skills listed by prior literature (Jones and Sin, 2003; Hassall et al., 1999, 2001, 2003, 2005; IFAC, 2008; AICPA, 1998; Albrecht and Sack, 2000; Kavanagh and Drennan, 2007, 2008; Kavanagh et al., 2009; Lin et al., 2005; Jackling and Keneley, 2009). These generic skills are the detailed reflection of employer-identified skills, reported by prior literature to enhance students' chance of employability. For example in the third column of Table 13, the generic skills identified by Jones and Sin (2003) are the detailed reflection of employer-identified skills, reported by Professor William P. Birkett of University of New South Wales. He was jointly commissioned by the *Australian Society of Certified Practising Accountants* (ASCPA now known as CPA, Australia), the *Institute of Chartered Accountants in Australia* (ICAA) and the *New Zealand Society of Accountants* (NZSA) in 1992. He led a project that assessed the generic skills needs of the accounting profession. He gathered the data from 100 practitioners at different career levels over 200 various incidents and comprehensively scrutinized the data to identify the required generic skills in the accounting profession. These generic skills were initially reported in Birkett's (1993) 'working documents' but later, Jones and Sin (2003) published a book titled "Generic Skills in Accounting - competencies for students and graduates" that incorporates these generic skills (Birkett, 1993) along with another new set of skills later recognised for the professional development of accountants in New Zealand in 1998. These generic skills are now considered as a mandatory requirement for all the education institutions in Australia associated with offering certified professional accounting education (CPA, 2008).

Similarly Albrecht and Sack (2000) collectively integrated the views of many stakeholders including businessmen, education leaders, educators, and public, private and government accountants and proposed a list of numbers of generic skills to be considered important from an employability perspective in accounting education (sixth column of Table 13). Later Kavanagh and Drennan (2008) adopted the same list of generic skills (Albrecht and Sack, 2000) and surveyed employers, academics and students from the Australian universities. The results indicate the perceived importance of all generic skills among accounting employers. Later Kavanagh et al. (2009) implicitly recognised the contextualised nature of the area under study using 36 focused group interviews from diverse accounting employers (manufacturing and service industries, local and state government and accounting firms including Big 4, mid-tier and small firms) in Australia to find out employers' perspectives on the skills they

demanded. Based on a thorough literature review (Harvey and Green, 1994; Johnson and Johnson, 1995; Gardner and Liu, 1997; AC Nielsen Research Services, 2000; Albrecht and Sack, 2000; Bennett et al., 2002; Hassall et al., 2005; Mazuki et al., 2007) and interviews feedback they reported two detailed lists of technical and non-technical skills demanded by employers (eighth column of Table 13).

Hassall et al. (1999) investigated CIMA employers in the UK to review a list of 22 generic skills with respect to the level of importance they exhibited for graduates entering the workforce (fifth column of Table 13). Later Hassall et al. (2001, 2003, 2005) surveyed employers (UK and Spain) and students (UK) using the same list of generic skills, and reported that both of the groups did agree about identifying the importance of stated generic skills from the employability perspective. Similarly, the International Federation of Accountants (IFAC, 2008) also issued a list of categorized generic skills (fourth column of Table 13) with the title: 'International Education Standards 3' (IES3). IES3 narrates important skills with the advice that individuals who are seeking to acquire accounting as a profession should acquire the following skills: intellectual, technical and functional, personal, interpersonal and communication, organisational and business management skills. Similarly, the American Institute of Certified Public Accountants (AICPA, 2012) developed a core competency framework based on functional, personal and broad business competencies to be taught in accounting education for the professional development of accounting students (seventh column of Table 13).

Table 13 comprises a list of 33 generic skills adopted for the purpose of questionnaire development. In order to measure the expectation gap, respondents (employers and educators) are asked to rate on a scale ranging from 1 (strongly disagree) to 5 (strongly agree) those skills which students are 'expected' to acquire for their career development from accounting education. Later, the views from both respondent groups were combined in order to evaluate the 'expectation gap' for the underlying research.

Table 13: Selected generic skills to be included in questionnaire from prior studies

	Selected skills	Jones and Sin (2003); Jackling and Keneley (2009)	IFAC (2008)	Hassall et al. (1999, 2001, 2003, 2005)	Albrecht and Sack (2000); Kavanagh and Drennan (2007, 2008); Lin et al. (2005)	AICPA (2012)	Kavanagh et al. (2009)
1	Decision modelling		<ul style="list-style-type: none"> <li>Decision modelling and risk analysis</li> </ul>		<ul style="list-style-type: none"> <li>Business Decision Modelling</li> </ul>	<ul style="list-style-type: none"> <li>Decision modelling</li> </ul>	
2	Risk analysis		<ul style="list-style-type: none"> <li>Decision modelling and risk analysis</li> </ul>		<ul style="list-style-type: none"> <li>Risk Analysis</li> <li>Risk Propensity</li> </ul>	<ul style="list-style-type: none"> <li>Risk analysis</li> </ul>	
3	Reporting	<ul style="list-style-type: none"> <li>Interpret data and reports</li> <li>Report writing</li> </ul>	<ul style="list-style-type: none"> <li>Measurement and reporting</li> </ul>		<ul style="list-style-type: none"> <li>Technical Bookkeeping</li> </ul>	<ul style="list-style-type: none"> <li>Reporting</li> </ul>	<ul style="list-style-type: none"> <li>Basic Accounting Skills</li> </ul>
4	Information technology competence	<ul style="list-style-type: none"> <li>Computer literacy</li> </ul>	<ul style="list-style-type: none"> <li>Numeracy and IT proficiency</li> </ul>	<ul style="list-style-type: none"> <li>use relevant software</li> <li>use of visual aids in presentation</li> </ul>	<ul style="list-style-type: none"> <li>Computer Technology (Systems)</li> <li>Computer Literacy (I can use)</li> </ul>	<ul style="list-style-type: none"> <li>Leverage technology</li> </ul>	<ul style="list-style-type: none"> <li>IT software skills</li> <li>Technological Competence</li> </ul>
5	Critical thinking	<ul style="list-style-type: none"> <li>Think and act critically</li> <li>Receive, evaluate and react to new ideas</li> </ul>		<ul style="list-style-type: none"> <li>critical analysis</li> <li>critical reading</li> </ul>	<ul style="list-style-type: none"> <li>Critical Thinking</li> <li>Reading for Understanding</li> </ul>	<ul style="list-style-type: none"> <li>Strategic/critical thinking</li> </ul>	
6	International, Industry and sector perspective					<ul style="list-style-type: none"> <li>Industry/sector perspective</li> <li>International/glo</li> </ul>	

						bal perspective	
7	Legal regulatory perspective		<ul style="list-style-type: none"> <li>• Compliance with legislative and regulatory requirements.</li> </ul>				
8	Marketing/clients focus				<ul style="list-style-type: none"> <li>• Customer Service Orientation</li> </ul>	<ul style="list-style-type: none"> <li>• Marketing/clients focus</li> </ul>	
9	Problem solving and decision Making	<ul style="list-style-type: none"> <li>• Solve problems and Construct arguments</li> </ul>	<ul style="list-style-type: none"> <li>• The ability to identify and solve unstructured problems in unfamiliar settings</li> </ul>	<ul style="list-style-type: none"> <li>• identify and solve unstructured problems</li> </ul>	<ul style="list-style-type: none"> <li>• Problem Solving</li> </ul>	<ul style="list-style-type: none"> <li>• Problem solving and decision making</li> </ul>	<ul style="list-style-type: none"> <li>• Problem Solving</li> </ul>
10	Leadership		<ul style="list-style-type: none"> <li>• Leadership</li> <li>• The ability to organize and delegate tasks, to motivate and to develop people</li> </ul>	<ul style="list-style-type: none"> <li>• organise and delegate task</li> <li>• assume leadership positioning</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership</li> <li>• Change Management</li> <li>• Company Promotion</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership</li> </ul>	
11	Project Management		<ul style="list-style-type: none"> <li>• Strategic planning, project management, management of people and resources, and decision making</li> </ul>	<ul style="list-style-type: none"> <li>• organize the conflicting demands and unexpected requirement</li> <li>• organize the conflicting strict and coinciding deadline</li> </ul>	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Entrepreneurship</li> <li>• Resource Management</li> </ul>	<ul style="list-style-type: none"> <li>• Project management</li> </ul>	<ul style="list-style-type: none"> <li>• Planning and Organising</li> <li>• Enterprise</li> </ul>
12	Think and behave ethically	<ul style="list-style-type: none"> <li>• Commitment to think and behave</li> </ul>	<ul style="list-style-type: none"> <li>• Considering the implications of</li> </ul>		<ul style="list-style-type: none"> <li>• Work Ethics</li> <li>• Tenacity</li> </ul>		

		ethically	professional values ethics and attitudes in decision making • Professional scepticism		• Values • Professional Attitude		
13	Flexible and be adaptable to changing environment and situation	<ul style="list-style-type: none"> <li>• Flexibility in new/different situations</li> <li>• Appreciate process of professional adaptation and behaviour</li> <li>• Adapt and respond positively to challenges</li> </ul>	<ul style="list-style-type: none"> <li>• The ability to anticipate and adapt to change</li> </ul>		<ul style="list-style-type: none"> <li>• Flexibility</li> </ul>		<ul style="list-style-type: none"> <li>• Fit organisation ethos</li> </ul>
14	Act strategically		<ul style="list-style-type: none"> <li>• The ability to select and assign priorities within restricted resources and organize work to meet deadlines</li> </ul>	<ul style="list-style-type: none"> <li>• comprehensive and global vision of the organisation</li> <li>• Select and assign priorities within coincident workloads</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic Management</li> </ul>		
15	Think and act independently	<ul style="list-style-type: none"> <li>• Make judgements derived from one's own value framework</li> <li>• Thinking and</li> </ul>	<ul style="list-style-type: none"> <li>• Professional judgment and discernment.</li> </ul>		<ul style="list-style-type: none"> <li>• Independent Thought</li> </ul>		

		acting independently					
16	Focused on outcomes	<ul style="list-style-type: none"> <li>To be focused on outcomes</li> </ul>					
17	Tolerate ambiguity	<ul style="list-style-type: none"> <li>Toleration of ambiguity</li> </ul>					
18	Think creatively	<ul style="list-style-type: none"> <li>Creative thinking</li> </ul>		<ul style="list-style-type: none"> <li>creative thinking</li> <li>ability to develop methods of effective learning</li> </ul>	<ul style="list-style-type: none"> <li>Creativity</li> </ul>		
19	Listen effectively	<ul style="list-style-type: none"> <li>Listen effectively</li> </ul>	<ul style="list-style-type: none"> <li>Listen and read effectively, including a sensitivity to cultural and language differences.</li> </ul>	<ul style="list-style-type: none"> <li>listen effectively</li> </ul>	<ul style="list-style-type: none"> <li>Listening</li> </ul>		
20	Present, discuss and defend views	<ul style="list-style-type: none"> <li>Present and discuss and defend views</li> </ul>	<ul style="list-style-type: none"> <li>Present, discuss, report and defend views effectively through formal, informal, written and spoken communication</li> </ul>	<ul style="list-style-type: none"> <li>present and defend the outcome of their own writing</li> <li>present and defend the outcome of their own verbally</li> </ul>			<ul style="list-style-type: none"> <li>Presentation skills</li> </ul>
21	Transfer and receive knowledge	<ul style="list-style-type: none"> <li>Transfer and receive knowledge</li> </ul>					
22	Negotiate with people from different backgrounds	<ul style="list-style-type: none"> <li>Negotiation skills (with people from</li> </ul>	<ul style="list-style-type: none"> <li>Negotiate acceptable solutions and</li> </ul>		<ul style="list-style-type: none"> <li>Negotiation</li> <li>Cross Cultural communication</li> </ul>		



		different backgrounds and with different value systems)	agreements in professional situations • Interact with culturally and intellectually diverse people				
23	Understand group dynamics	• Understanding group dynamics					
24	Communicate in written format				• Written Communication		
25	Communicate orally				• Oral Communication		• Communication
26	Engage in lifelong learning	• Engage in lifelong learning	• Initiative, influence and self-learning	• commitment to life-long learning	• Continuous Learning		
27	Apply inter or multidisciplinary perspectives	• Apply disciplinary and multidisciplinary perspectives		• integrate multidisciplinary knowledge	• Inter-disciplinarity		
28	Ability to collaborate with colleagues to resolve conflicts and work in team	• Collaboration skills (with colleagues)	• Work with others in a consultative process, to withstand and resolve conflict • Work in teams	• work with others	• Teamwork • Interpersonal		• Teamwork • good interpersonal skills
29	The ability to analyse and reason logically	• Analyse, reason logically, conceptualise issues	• The capacity for inquiry, research, logic and analytic		• Logical Argument		

			thinking, power of reasoning, and critical analysis				
30	Personal attributes such as identifying own strengths and weaknesses, motivation, confidence, self-promotion and self-management etc	<ul style="list-style-type: none"> <li>Recognise one's own strengths and limitations</li> </ul>	<ul style="list-style-type: none"> <li>Self-management</li> </ul>		<ul style="list-style-type: none"> <li>Self-Motivation</li> <li>Self-Promotion</li> </ul>		<ul style="list-style-type: none"> <li>Self-Management Skills</li> </ul>
31	Awareness of social and ethical responsibilities	<ul style="list-style-type: none"> <li>Appreciate ethical dimensions of situations</li> <li>Engage in ethical reasoning</li> </ul>		<ul style="list-style-type: none"> <li>awareness of social and ethical responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Ethics</li> <li>Social Justice</li> <li>Good Citizenship</li> </ul>		
32	Work effectively in diversified cultural settings		<ul style="list-style-type: none"> <li>Work effectively in a cross-cultural setting</li> </ul>		<ul style="list-style-type: none"> <li>Cross culture appreciation</li> <li>Cultural Sensitivity</li> </ul>		
33	Initiative		<ul style="list-style-type: none"> <li>Initiative, influence and self-learning</li> </ul>				<ul style="list-style-type: none"> <li>Initiative</li> </ul>

The next section (Section 5.3.3: Constraints gap) is concerned with reporting the structure of the questionnaire in relevance to the constraints gap (second objective).

### 5.3.3 Constraints gap:

The *third part* of the questionnaire addresses the constituents of the ‘constraints gap’.

The ‘constraints gap’ represents the elements that are assumed to limit the ability of accounting education in the development of skills.

This section identifies the different constraining elements from an academic community’s perspective (Appendix 5a). In this regard, consideration is given to the prior literature. The constraining elements comprise 6 statements in total (see Table 14), covering the broadly defined themes of graduates’ aptitude and attitude and the institutional constraints specified by Bui and Porter (2010) in their framework. In order to evaluate the constraints gap, academics are asked to rate on a scale ranging from 1 (strongly disagree) to 5 (strongly agree) the constraining elements that are assumed to limit the accounting education ability to develop skills in students.

**Table 14: Selected constraining elements to be included in questionnaire from prior studies**

S. N	Constraining factors
	<b>Students aptitude and attitude</b>
1	Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?
2	Students have an inappropriate attitude for learning?
	<b>Institutional constraints</b>
3	Classes are pack with a large number of students?
4	Accounting curriculum has insufficient provision to allow for the effective development of skills?
5	As a shift to research based culture, educators are too busy with research that this impacts their teaching abilities negatively?
6	Institution does not reward high quality teaching practices?

The justification for each stated constraining element in Table 14 is to be discussed next in the sections of ‘students’ aptitude and attitude’ and ‘institutional constraints’, below.

***Students’ aptitude and attitude:***

According to Bui and Porter (2010), the first constraining factor within the component of the constraints gap is ‘students’ aptitude and attitude’. Bui and Porter (2010) asserts that student factors such as their intellectual ability and attitude towards the accounting profession and accounting education limits the educators’ ability to develop skills in students. For example Millard (2003) states that students characterise the accounting profession as dull and laborious work and accountants as mere bean counters. Such shared perceptions are alarming for the stability of a sound academic discipline and discourages students with high intelligence to come forward and opt for the accounting profession. This aspect is evident through the declining rate of students’ enrolment in the accounting discipline. So, for example, Adams et al. (1994) conducted a longitudinal study and found that students leaving accounting programs are generally those who have higher grade point average (GPA) scores than those who did not. Further, this situation affects the institutional quality audits and leads to compromises on students’ intake criteria (Bui and Porter, 2010). This, in turn, potentially leads to classes which have students with substandard academic qualifications and an inappropriate attitude towards learning. This aspect is well-evidenced through the following statements:-

*“Students enrolling in accounting classes today don’t have the basic skills needed to learn at a fast enough pace” (Kavanagh and Drennan, 2007, p. 30)*

And...

*“From comments expressed by the case study interviewees, it seems that, broadly speaking, accounting students’ attitude towards learning is not satisfactory” (Bui and Porter, 2010, p. 42)*

Considering the above discussion the following two elements were identified within the underlying constraining factors:

- 1. Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?***
- 2. Students have an inappropriate attitude for learning?***

***Institutional constraints:***

According to Bui and Porter (2010) the second constraining factor within the component of the constraints gap is ‘institutional constraints’. This component includes institutional elements that contribute to limiting the educators’ abilities to inculcate generic skills in their students. In this regard, Bui and Porter (2010) highlight the first element as ‘student-lecturer ratios’. They asserted that universities have not been able to employ lecturing staff commensurate with the number of students due to financial reasons. In this regard, Bui and Porter (2010, p. 39) argued the following, as stated by one of their interviewees:

*“Accounting is the milk cow of universities. Accounting has always been a single major that attracts the most students of all the degrees offered at this university. The need for [university] revenues leads to big [accounting] classes, which in turn hinders teaching quality.”*

This phenomenon was also noticed by Hassall et al. (2005) and Milner and Hill (2008). For example Milner and Hill (2008, p. 21) quoted from one academic he interviewed as:-

*“Our classes are double the size than they were ten years ago. Um, probably students coming in who are less motivated now towards a degree education [interview 30]”*

Murdoch and Guy (2002) investigated students’ performance based on class size. They reported that students who had been taught in small classes appeared to show better signs of academic achievement than students from large classes. Craig and Amernic (2001) found an audit culture that focused on quantity and revenue, that is, one based on the number of students in order to collect a large amount of revenue. The implication was that teaching quality standards were compromised due to that priority. Thus, the next constraining element is identified as:

***3. Classes are pack with a large number of students?***

Haigh (1994) found that accounting students expected academics to teach knowledge and skills in education which are applicable to their immediate working environment. And if an educator deviates from this goal, then students show a negative attitude towards it. This issue was reported by Bui and Porter (2010, p. 40) from one of his interviewee’s (academic) perspective as:-

*“We used to require students to take liberal papers to [final year] level as part of the BCA requirements .... However the students did not like this. They voted to get rid of this requirement. They wanted to learn only things that [they think] are directly relevant, or at least as close as possible to their major.”*

Hence, if accounting students have to be professionally credible then the accounting curriculum should have enough provisions to incorporate the knowledge of those subjects that allow for the development of generic skills in students.

The next constraining element refers to:

***4. Accounting curriculum has insufficient provision to allow for the effective development of skills?***

Dominelli and Hoogvelt (1996, p. 205) argue that

*“Letting outside bodies set the research agenda has squeezed the funding of scholarly research which underpins teaching, thereby jeopardizing the quality of teaching.”*

In the above statement Dominelli and Hoogvelt (1996) explicitly point attention towards an increasing emphasis on research activities in academia. This phenomenon was also noticed by Bui and Porter (2010, p. 41):

*“By contrast, teaching excellence attracts relatively little recognition. Two of the educator interviewees expressed concern about the differential reputational effect of excellence in teaching and research, with the possible effect of teaching becoming views by academics as a burden. Three other interviewees noted that they have a genuine interest in teaching but the combined effect of the university’s reward system and the difficulty of simultaneously satisfying all of their academics responsibilities results in their according highest priority to research.”*

Hence, considering this, the next constraining element to include in the component of institutional constraint is identified as:-

***5. As a shift to research based culture educators are too busy with research that this impacts their teaching abilities negatively?***

Finally, a constraining element to teaching practice was identified as ‘inadequate reward system’ as highlighted by Seldin (1995, p. 6):-

*“Many teachers argue that the biggest road block to improved teaching is the reward system that pits teaching against research. Many institutions give lip service to the importance of teaching but then turn around and reward scholarly research and publication.”*

Later Porter and Carr (1999), Kavanagh and Drennan (2007) and Bui and Porter (2010) also highlighted this issue in their studies and signified the importance having a proper rewards system to enhance the teaching excellence. In this regard, Bui and Porter (2010) stated many educators have genuine interest in teaching but due to a rewards system linked to research, it

inhibits them from achieving excellence in teaching practices. As Bui and Porter (2010, p. 41) state:

*“The university’s promotion and tenure policy also operates to hinder improvements in accounting education in the case study programme. As four of the educator interviewees observed, although academics have research, teaching and administration responsibilities, research productivity is the key factor in promotion and tenure decisions – and its supremacy has been heightened in recent years as a result of the introduction of performance based funding (PBRF) by the NZ Government. By contrast, teaching excellence attracts relatively little recognition.”*

As such the final constraining element is:

#### **6. Institutions do not reward high quality teaching practices?**

The next section 5.3.4 (Performance gap) is about reporting the structure of the questionnaire relevance to performance gap. This discussion comes as a subsection under the section 5.3 (Preliminary draft of the questionnaire).

### **5.3.4 Performance gap:**

The *fourth part* of the questionnaire addresses the constituents of the ‘performance gap’.

The ‘performance gap’ refers to the perceptual differences in the level of skills that educators can reasonably expect accounting students to acquire by the time they graduate and those skills which employers perceive the accounting graduates should possess when they enter the profession. This section includes measuring the views separately from accounting employers and educators. Thus, as before, there are two sets of questionnaires: one evaluating the performance indicator from the educators’ perspective (Appendix 6a), while the other from the employers’ perspective (Appendix 7a).

Like the composition of the ‘expectation gap’ this section refers to various generic skills as viewed from the educators’ and employers’ perspectives. As such, this section includes the same list of 33 generic skills (see Table 13) which were earlier adopted for the evaluation of the ‘expectation gap’. In order to measure the performance gap the respondent groups (educators and employers) are asked to rate on a scale ranging from 1 (no competence) to 5 (high competence), the expected ‘level of skill competence’ to be developed in a student from the above stated two perspectives. Later, the views of both groups are combined in order to evaluate the ‘performance gap’.

## Summary

This chapter comes at stage 1 of the study design (Figure 20) which involves designing a 'preliminary draft of the questionnaire'. In consideration to the adopted theoretical framework (expectation-performance gap by Bui and Porter, 2010) there was a need recognised to develop two sets of questionnaires to collect the data from the two different types of respondent groups (employers and educators). In order to include the content within the questionnaires prior literature has been reviewed. In that regard, Table 13 and Table 14 shows the list of generic skills and constraining elements, respectively, that has been included within the preliminary drafted questionnaires. The preliminary drafted questionnaires for respective respondent groups (educators and employers) are comprised of the following appendices:-

- a) Educators' group questionnaire: demographic details (Appendix 1a), expectation gap and performance gap (Appendix 3a & 6a), and constraints gap (Appendix 5a).
- b) Employers' group questionnaire: demographic details (Appendix 2a), and expectation gap and performance gap (Appendix 4a & 7a).

The next chapter (Stage 2- Pre-testing) moves to the second stage of the study design. Pre-testing is the process through which the content of a preliminary drafted questionnaire would be revised in order to accommodate the contextual relevance.

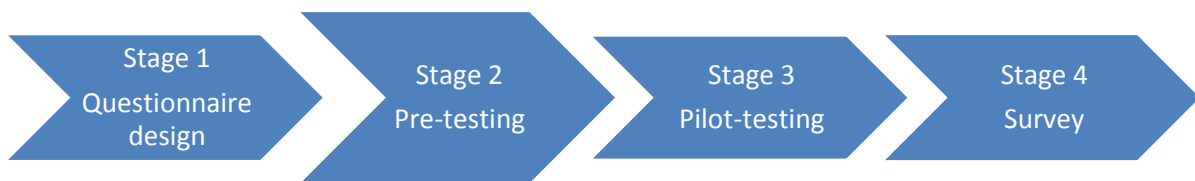


## CHAPTER 6: STAGE 2 - PRE-TESTING

### 6.0 Introduction:

This chapter comes at stage 2 of the study design (see Figure 20). This chapter involves pre-testing the preliminary drafted questionnaires in order to revise the content of it relevant to the respondents’ contextual perspective.

Figure 20: Representing Pre-testing - stage 2; repeated section from Figure 16



The objective of this study is to answer the question "What is the expectation-performance gap in the development of generic skills for the purpose of employability offered by the accounting institutes of Pakistan?" The investigation of the expectation-performance gap follows Bui and Porter’s (2010) tripartite structure as presented in Figure 21 and explained below in respect of a 'Pakistan' context.

Figure 21: Representing the theoretical framework of the Expectation-Performance gap; source Bui and Porter (2010)

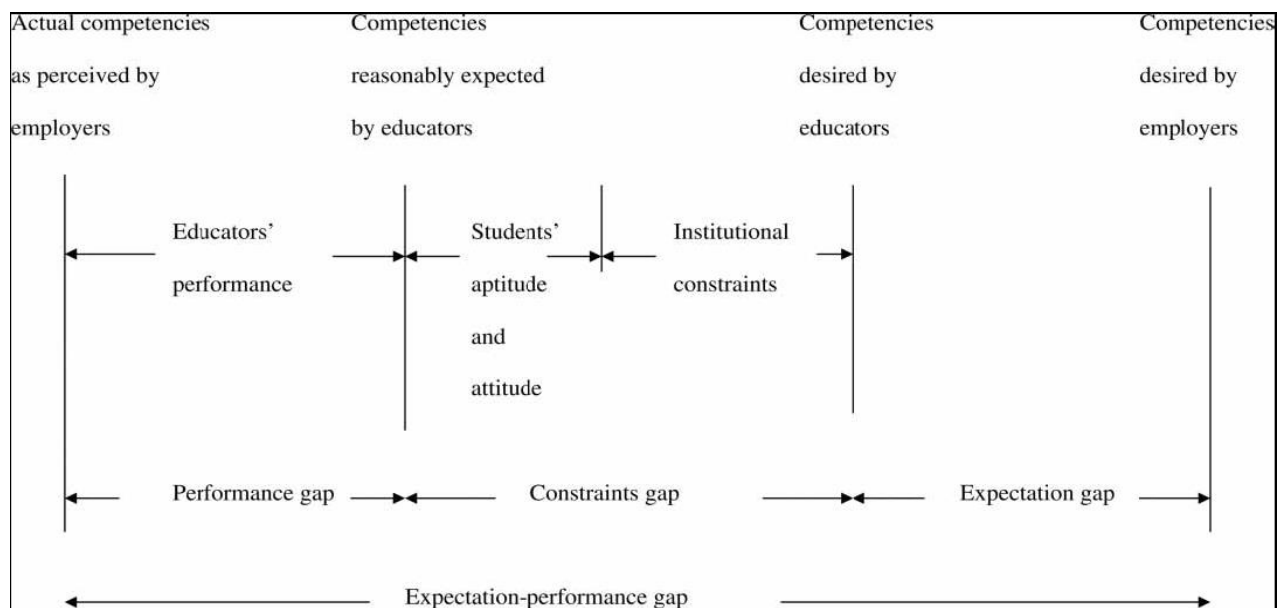


Figure 21 shows that the expectation-performance gap comprises:

- I. Expectation gap - perceptual differences in the expectations of educators and employers regarding the skills that should be acquired by students for their accounting career development (reflecting differences in the expectations of accounting educators and employers).
- II. Constraints gap – representing the factors which are assumed to limit the ability of accounting education to develop skills into the student learning process, such as students’ perception of accounting programmes and the profession, and their ability and aptitude, as well as institutional constraints.
- III. Performance gap - perceptual differences in the level of skills competencies that educators can reasonably expect accounting students to acquire by the time they graduate and those skills which employers perceive the accounting graduates should possess when they enter the profession (reflecting ineffectiveness of pedagogical activities).

In order to investigate the 'expectation gap' and the 'performance gap' the views of accounting employers and educators group were obtained separately and were later combined. As such, there were two sets of questionnaires: one set evaluating the 'expectation gap' and 'performance gap' determinants from the educators' group perspective (see Appendix 3a & 6a) while the other set evaluated the same determinants from the employers' group perspective (see Appendix 4a & 7a). The theoretical content of both sets of questionnaires remains same, that is, 33 generic skills derived from the previous literature (Table 13).

The 'constraints gap' however is evaluated from the educators' group perspective only (see Appendix 5a). This is because the 'constraints gap' represents those elements which are assumed to limit the ability of accounting education to the skills development process in students. As such they have no relevance to employers. Therefore, for the constraints gap, there is only one part of the questionnaire (see Appendix 5a), which is to be completed by the educators group only. The 'constraints gap' comprises 6 constraining elements derived from the previous literature (Table 14).

Pre-testing is the process through which the content of a questionnaire is reviewed and revised in order to accommodate the respondent's viewpoint (Burns et al., 2008). In order to do that, the researcher normally conducts cognitive interviews (Presser et al., 2004). Generally, in pre-testing, participants from the respondent groups are given a copy of a questionnaire to fill in and then they are requested to discuss and criticize the different

aspects of it (Frery, 2003). However, in the case of this research the purpose of pre-testing the questionnaires is twofold, that is...

**Purpose 1:** First, observing those generic skills and constraining factors that might exist in Pakistan's context but were not included in the questionnaire during the development phase.

**Purpose 2:** Secondly, clarifying the respondents' comprehension of the meaning attributed to the word (content comprehension) of the questionnaire.

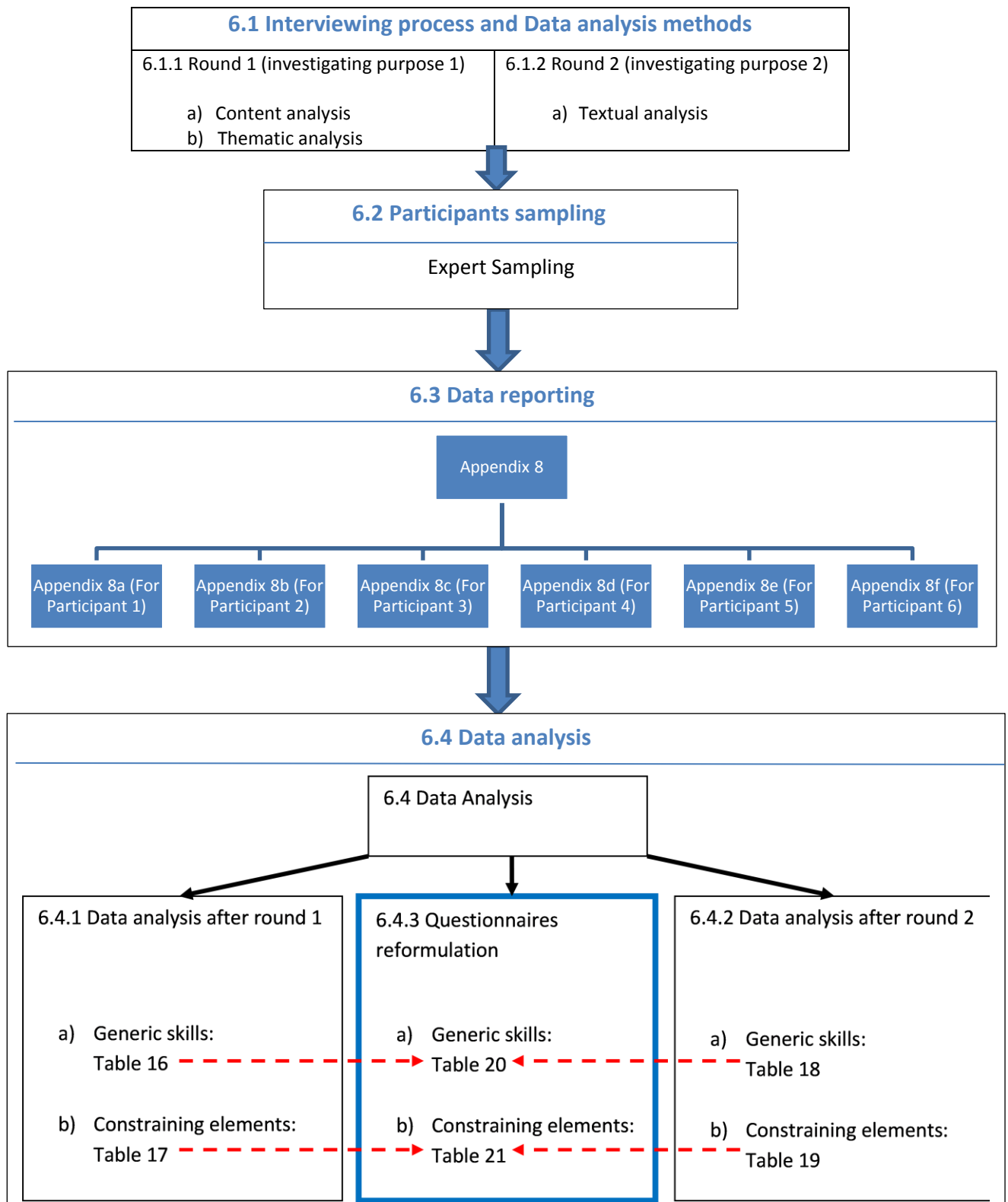
Some degree of surety was required that the content within the questionnaire, and the meaning of the words used therein, were properly understood by the potential respondents (employers and educators). In order to do that, cognitive interviews were undertaken during this pre-testing phase with selected individuals of the following two groups in Pakistani society:

1. Educators: Academics who teach in the educational institutes of professional accounting education (see appendix 11a).
2. Employers: Accounting practitioners from professional organisations registered as training organisations with accounting institutes (see appendix 11b).

A flowchart of the whole pre-testing process is shown in Figure 22. The structure of this process is as follows:

- The process flowchart starts with the heading of 'Interviewing process and data analysis methods' (section 6.1). Under this heading the interview process along with the data analysis methods are illustrated in order to achieve the above stated twofold pre-testing purposes, that is, purpose 1 and purpose 2.
- The second heading within the process flowchart is 'Participants sampling' (section 6.2). This heading describes the selected participants' credentials and explains why such participants have been contacted for the purpose of an interview.
- The third heading within process flowchart is 'Data reporting' (section 6.3). This heading explains how the data from the interviews have been reported for analysis using a structural data display approach in this thesis.
- Lastly, the final heading in Figure 22 is 'Data analysis' (section 6.4). Under this heading the data is analysed using qualitative data analysis techniques.

Figure 22: Representing the Pre-testing process flowchart; source author



The interviewing process and the methods that are used to analyse the interview data are explained next in section 6.1.

## 6.1 Interviewing process and data analysis methods:

The ‘interviewing process and data analysis methods’ is the first heading within the pre-testing process flowchart (Figure 22). Under this heading the interview process along with the data analysis methods are explained in order to achieve the stated twofold pre-testing purposes, that is, purpose 1 and purpose 2.

To date, there is nothing in the literature to illustrate the job-market requirement of Pakistan in respect of generic skills from the accounting educators’ and employers’ perspective, nor the constraining elements which prevail in the accounting education system of Pakistan. This follows that it would be inappropriate to carry out this research without validating the content of the questionnaires in a Pakistani context. In order to do that, the interview process along with data analysis method are explained in order to achieve the twofold pre-testing purposes, that is ....

**Purpose 1:** First, observing those generic skills and constraining elements that might exist in Pakistan's context but was not included in the questionnaires during the development phase.

**Purpose 2:** Secondly, clarifying the respondents’ comprehension of the meaning attributed to the words (content comprehension) of the questionnaires.

Figure 23: Representing interview process; repeated section from Figure 22

<b>6.1 Interviewing process and Data analysis methods</b>	
6.1.1 Round 1 (investigating purpose 1)	6.1.2 Round 2 (investigating purpose 2)
<ul style="list-style-type: none"> <li>a) Content analysis</li> <li>b) Thematic analysis</li> </ul>	<ul style="list-style-type: none"> <li>a) Textual analysis</li> </ul>

In pre-testing interviews, generally, participants are given a copy of a questionnaire to fill-in and then requested to discuss and criticise different aspects of it (Frery, 2003). However, there is a change made to the conventional process of interviewing here. Specifically, an additional round of questions and answers was conducted at the beginning (round 1) before commencing the questionnaire fill-in round (round 2). If this had not been done, the

participants may have failed to identify any new skills and constraining elements specific to Pakistan's context (Figure 23).

The process of conducting interviews in round 1 and round 2 is explained as follows:-

### 6.1.1 Round 1 (investigating purpose 1):

In round 1, a question-answer session occurs with the interviewer with a view to ascertaining those generic skills and constraining elements that might exist in Pakistan's accounting education system but which were not included in the questionnaire during the development process.

In order to investigate purpose one, during this round, two questions were asked of the interviewed participants:

Q1: What generic skills do you think accounting students should acquire for the career development of their accounting profession? (See Appendix 8, row 3)

Q2: What constraining factors do you think are limiting your ability to towards generic skills development in your students? (See Appendix 8, row 3)

The questions asked in round 1 are of a 'general' explorative nature. At this stage they do not refer to the generic skills (in Appendix 3a & 6a and Appendix 4a & 7a) and constraining elements (in Appendix 5a) listed in the questionnaire. The overall data collected in round 1 of the interview process has been analysed by using content analysis and thematic analysis:

Data collected in response to question 1 of round 1 are qualitatively analysed using '*content analysis*'. This is because the aim of the question 1 ("What generic skills do you think accounting students should acquire for the career development of their accounting profession?") is to explore the generic skills which are specifically relevant to the context of Pakistan's accounting education.

Data collected in response to question 2 of round 1 were qualitatively analysed using '*thematic analysis*'. This is because the aim of question 2 ("What constraining factors do you think are limiting your ability towards generic skills development in your students?") is to explore the constraining elements which are specifically relevant to the context of Pakistan's accounting education.

### 6.1.2 Round 2 (investigating purpose 2):

After round 1, in order to address **purpose two**, that is, clarifying the respondents' comprehension of the meaning attributed to the words (comprehension) of the questionnaire, a copy of a questionnaire was given to the participants for them to fill in. Only a single question has been asked of the participants:

Q1: What comes to your mind when you read out the following content? (See Appendix 8, row 7)

The question asked in round 2 is specific to 33 generic skills and 6 constraining elements given within the questionnaire. The overall data collected in round 2 of the interview process was analysed by using textual analysis:

The data collected in response to question 1 of round 2 was qualitatively analysed using textual analysis. This is because the question's aim is to clarifying the respondents' comprehension of the meaning attributed to the words (comprehension) used within the questionnaire.

Next, see section 6.2 (Participants sampling) as regards to the credentials of persons who were selected for the purpose of interviews.

## 6.2 Participants Sampling:

The 'participants sampling' is the second heading within the pre-testing process flowchart (Figure 24). This heading describes the selected participants' credentials and explains why such participants have been contacted for interview purposes.

Figure 24: Representing participants sampling procedure; repeated section from Figure 22

<b>6.2 Participants sampling</b>
Expert sampling

All the interviewed participants were selected through the expert sampling method. Expert sampling is described as:-

*“Expert sampling is a type of purposive sampling technique that is used when your research needs to glean knowledge from individuals that have particular expertise. This expertise may be required during the exploratory phase of qualitative research, highlighting potential new*

*areas of interest or opening doors to other participants.....Expert sampling is particularly useful where there is a lack of empirical evidence in an area and high levels of uncertainty, as well as situations where it may take a long period of time before the findings from research can be uncovered.”(Purposive sampling, 2013)*

The purpose here is to connect (or selectively not connect, as the case may be) what is essentially a generic questionnaire to a Pakistani accounting discipline context. Thus, employing personal contacts, six experts (knowledgeable participants) were interviewed based on their experience in the field of education (3 accounting academics) and accounting professionals (3 accounting practitioners).

All of the interviews were conducted at the places suitable to the participants’ convenience and they belonged to one of the following two groups in Pakistan:

1. Educators: Academics who teach in educational institutes of professional accounting education.
2. Employers: Accounting practitioners from professional organisations registered as training partners with accounting institutes.

Educators group participants’ profiles:

- a) Participant 1 (for transcripts see Appendix 8a): was selected because he is involved in teaching activities, coordinating different accounting courses at one of the accounting institutes in Pakistan and he has managed in-house exams for at least 2 years. Additionally he has more than 4 years of practitioners’ experience in different professional organisations in Pakistan.
- b) Participant 2 (for transcripts see Appendix 8b): was selected because his name was referred to the researcher by the principal of one of the accounting institutes in Pakistan. He has been involved in teaching and managing administrative functions for more than 5 years. Additionally, he has more than 3 years of practitioners’ experience.
- c) Participant 3 (for transcripts see Appendix 8c): was selected because he is principal of one of the leading institutes of accounting education in Pakistan. He is involved in teaching and managing administrative activities of the institute and he has more than 4 years of practitioners’ experience.

Employers’ group participants’ profiles:

- a) Participant 4 (for transcripts see Appendix 8d): was selected because he has run an auditing firm for more than 5 years. His firm is involved in audits of limited



companies and training accounting students. Additionally, he is involved in teaching activities in a reputable accounting institute in Pakistan.

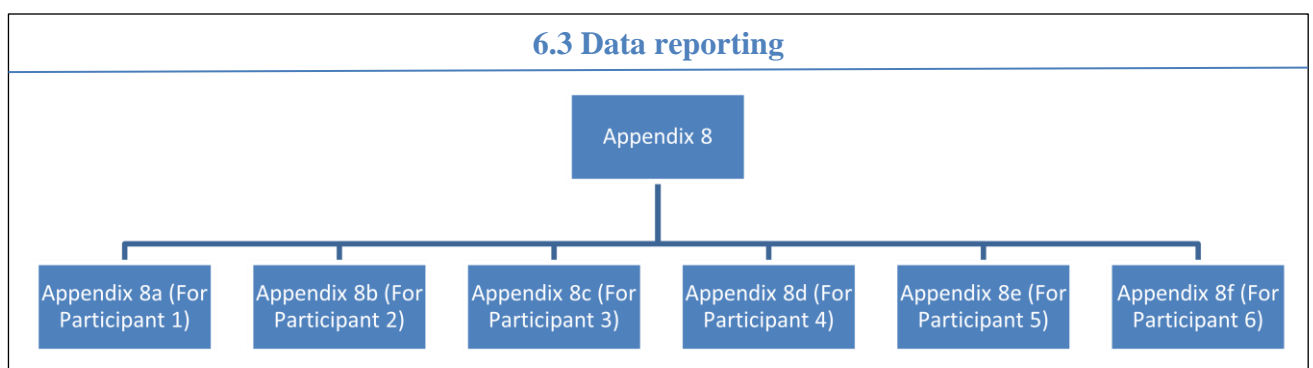
- b) Participant 5 (for transcripts see Appendix 8e): was selected because he is associated with an auditing firm and has served as a chief financial officer in a reputable educational group for more than 6 years. He is involved in managing the financial, auditing and taxation activities of the whole group.
- c) Participant 6 (for transcripts see Appendix 8f): was selected because he is associated with an auditing firm and has served as a chief internal auditor of a PET bottle manufacturing firm for more than 2 years. Additionally, he is also involved in teaching activities at one of the accounting institutes in Pakistan.

Next, see section 6.3 (Data reporting) that illustrates how the data from the interviews was reported for the analysis using a structural data display approach.

### 6.3 Data reporting:

The third heading within the pre-testing process flowchart is 'Data reporting' (Figure 25). This heading explains how the interview data from the participants was reported in this thesis using a structural data display approach (see Appendix 8).

Figure 25: Representing data reporting; repeated section from Figure 22



All the interviews with the selected individuals were recorded electronically and written transcripts were transcribed from it. Later, the data collected in round 1 and round 2 of the interview phase is presented structurally in appendix 8 through employing the 'structural data display' technique (see Miles and Huberman, 1994). The 'structural data display' technique is an analytical approach designed specifically to make qualitative data tractable to theoretical analysis (Lillis, 1999). Structural data displays allow one to view the full data set arranged in

a systematic order to then analyze the investigated phenomenon (Lillis, 1999). Further, it allows one to compare the remarks from the different respondents simultaneously.

The structure of Appendix 8 is as follows (from top to bottom):

- a. The 1st row contains the information about the participant profile, interview location and date. The information presented in this row will let the reader to assimilate why such respondents have been contacted, when and where.

For the presentation of data collected in **round 1 (for investigating purpose 1)**, see Appendix 8:

- b. The 3rd row contains the questions asked in order to investigate purpose one. Two questions were asked: one which was pertinent to the investigation of generic skills (Q1) and the other which was pertinent to the investigation of constraining elements (Q2).
- c. The 4th row contains the interviewee responses (transcripts) to the questions that have been asked in the 3rd row. In this row, participants' responses have been grouped, under the headings of 'skills that should be acquired (response from Q1)' and 'constraints that prevails (response from Q2)'. Later on, the transcripts from this section allow the researcher to determine the skills and constraining elements relevant to Pakistan's accounting education context.

For the presentation of data collected in **round 2 (for investigating purpose 2)**, see Appendix 8:

- d. The 6th row shows the component of the questionnaire under scrutiny, specifically, the content comprehension (meaning attributed to the content of the questionnaire).
- e. The 7th row shows the question asked in order to investigate the content comprehension (meaning attributed to the content of the questionnaire) of the questionnaire, that is, the generic skills and constraining elements. In this regard, the participants' responses relevant to 'generic skills' are shown from rows 8 to 40 and those relevant to the 'constraining elements' are shown from rows 42 to 47. Later on the transcripts from this section allow the researcher to define each skill and constraining element in a way intended to illicit a common understanding from all of the participants.

This study takes the structure (Appendix 8) explained above and apply it to actual interviews. All interviews are presented structurally in Appendix 8. For example, see Appendix 8a for participant 1 data of round 1 and round 2, Appendix 8b for participant 2 of round 1 and round 2 and so on. Recorded data sheets from the interviewed participants in the educators' and employers' groups appear in Appendix 8 of this thesis. See, Appendix 8a (participant 1), Appendix 8b (participant 2) and Appendix 8c (participant 3) for the educators' group participants and Appendix 8d (participant 4), Appendix 8e (participant 5) and Appendix 8f (participant 6) for employers' group participants (see Figure 25).

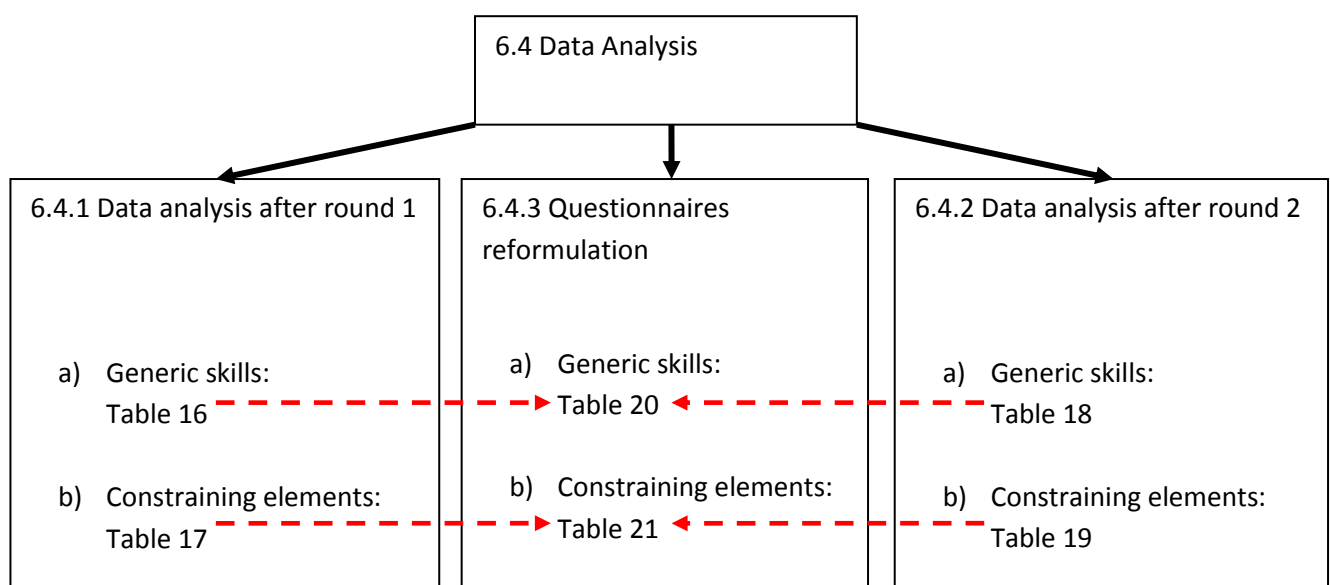
Overall, the interview process was highly interactive. In order to differentiate the conversation of the interviewer from the participants, font case changes have been chosen as a differentiating indicator. From Appendix 8a to 8f, transcripts recorded in uppercase fonts (capital letters) present the interviewer's questions and probes, whereas transcripts in lowercase (small letters) present the participants' remarks.

The next section 6.4 (Data analysis) illustrates how the recorded data was analysed using qualitative data analysis techniques.

## 6.4 Data analysis:

After data recording, the next step involves data analysis. In order to guide the reader through the analysis process, Figure 26 is extracted and repeated from Figure 22, below:-

Figure 26: Representing Data analysis; repeated section from Figure 22



The structure of the data analysis is divided into the following three sub-headings (Figure 26), that is...

#### 6.4.1 Data analysis after round 1

#### 6.4.2 Data analysis after round 2

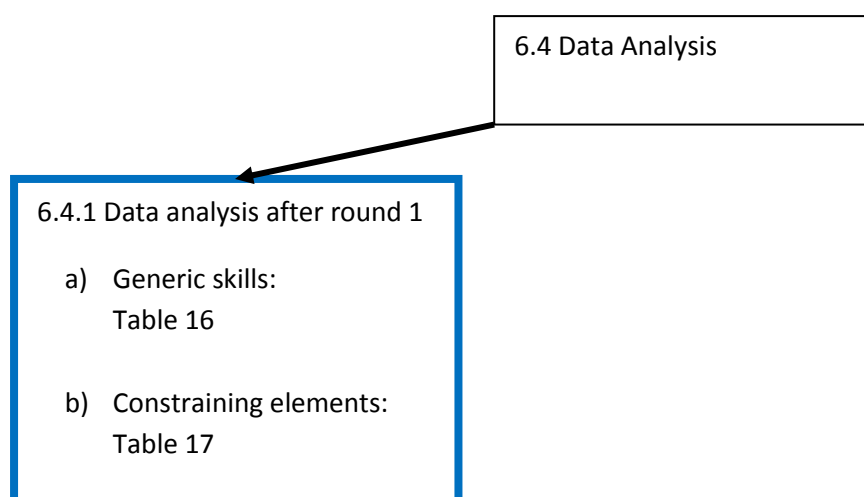
#### 6.4.3 Questionnaires reformulation

The scheme of the analysis is; in section 6.4.1 data collected in round 1 will be analysed and findings from it will be summarised in Table 16 and Table 17. Then in section 6.4.2 the data collected in round 2 will be analysed and findings from this section will be summarised in Table 18 and Table 19. Later in section 6.4.3 (Questionnaires reformulation) the summarised information in given Table 16 and Table 17 from section 6.4.1 (Data analysis after round 1); and Table 18 and Table 19 from section 6.4.2 (Data analysis after round 2), is collated so as to reformulate the questionnaires accordingly in Table 20 and Table 21.

### 6.4.1 Data analysis after round 1:

The first sub-heading in section 6.4 is 'Data analysis after round 1' (Figure 27 as selectively extracted from Figure 26, first column from the left).

Figure 27: Representing data analysis after round 1; repeated section from Figure 26



Data collected in **round 1** of the interview has a particular purpose: to observe those generic skills and constraining elements that might exist in Pakistan's accounting education

environment but are not yet the part of the existing developmental questionnaire (that is purpose 1). In order to investigate this, during round 1, two questions were asked from the interviewed participants (see row 3 of Appendix 8), that is

Q1: What generic skills do you think accounting students should acquire for the career development of their accounting profession?

Q2: What constraining factors do you think are limiting your ability towards generic skills development in your students?

In this regard outcomes related to generic skills and constraining elements are presented separately in subsequent sections (see also Figure 27 again), that is,

a) Generic skills

b) Constraining elements.

a. “Generic skills” is about question 1 of round 1 that is, investigating the generic skills for students’ acquisition within accounting education. This debate comes under section 6.4.1 (Data analysis after round 1, left column in Figure 27).

### **a) Generic skills:**

In response to question 1, the interviewed participants identified a number of skills that were considered important for their career development in the accounting profession in Pakistan. Participant responses (transcripts) were recorded in the respective participant data sheet under the headings of 'skills that should be acquired' (see 4th row in Appendices 8a-8f).

Employing content analysis, Table 15 presents those generic skills which are identified during the interview process from both of the participants groups (educators and employers). In Table 15 the parenthesis in front of each generic skill reflects the exact words spoken by the respective participants. The serial number to each generic skill is pointing to the location of that particular skill within the transcript that is recorded (see the 4th row in Appendix 8).

For example, in Table 15, participant 1 of the educators group (first column from left) identified the skill (serial number 1) related to 'Financial accounting' saying the words: 'financial reporting' and 'book keeping' (reflected in parenthesis). In order to trace the words of the participant 1 (that is, financial reporting, book keeping) in the transcripts, one can see

them as the serial number 1 in 4th row of Appendix 8a under the heading of the 'skills that should be acquired', where the transcript of participant 1 has been recorded.

During this round of the interview phase participants have used multiple terminologies to describe "generic skills". If one were to take these terminologies individually as skills, then they would number in the hundreds. For example, as regards skills linked to Financial accounting:

Participant 1 identified 'financial reporting and book keeping',  
Participant 2 identified 'recording transactions and providing accounts',  
Participant 4 identified 'accounting issues', and  
Participant 6 identified 'financial reporting standards'.

Similarly skills related to business law:

Participant 2 identified 'legal regulations and legal based',  
Participant 4 identified 'UK's law and Pakistani law',  
Participant 5 identified 'mercantile law' and  
Participant 6 identified 'companies' law and corporate statutory filling'.

As such, the skills grouping or categorization only exists within the eye of the person who is identifying them. It follows that there is researcher bias in whether one takes them individually or defines them collectively. Thus by combining together the associated terminologies used by the participants in the interviews, 21 generic skills were identified through the data set. Table 16 represents those 21 generic skills that were derived from the data collected in response to question 1. From amongst these 21 generic skills a few of them do not yet form part of the existing questionnaire – since remedied - see Figure 30.

Table 15: Terminologies related to generic skills which are identified during the interview process

<b>Table 10: Terminologies related to Generic skills which are identified during the interview process</b>					
<b>Educators group</b>			<b>Employers group</b>		
<b>Participant 1 (appendix 8a)</b>	<b>Participant 2 (appendix 8b)</b>	<b>Participant 3 (appendix 8c)</b>	<b>Participant 4 (appendix 8d)</b>	<b>Participant 5 (appendix 8e)</b>	<b>Participant 6 (appendix 8f)</b>
1. Financial accounting (financial reporting, book keeping) 2. English language (business English, functional English) 3. Communication skill (communication skills, writing skill) 4. Leadership (leadership skills) 5. Presentation skills (presentation skills)	1. Business law (legal regulations, legal based) 2. Professional independent judgement (professional obligation, professional judgement obligation) 3. Accounting code of ethics (ethical, ethical obligations) 4. Financial risk analysis (financial analysis) 5. Financial accounting (recording transactions, providing accounts) 6. Economics background (economics background, economics knowledge) 7. Statistical techniques (quantitative	1. Confidence (confidence) 2. Communication such as speaking and writing ability (communication skills, communication, Speak, writing a letter) 3. Presentation skills (Presentation skills) 4. Leadership (leadership skills, take work from humans) 5. Creative thinking (Creative thinking) 6. Strategic management (Strategies)	1. Auditing (audit) 2. Taxation (tax laws, taxation, sales tax) 3. Business law (UK's law, Pakistani law) 4. Financial accounting (accounting, accounting issues) 5. Inter or multi-disciplinary perspective (inter disciplinary perspective, multitasking) 6. Problem solving skill (Problem solving skill)	1. Presentation skills (Presentation skills, present things in the class) 2. Confidence (Confidence, speak with shivering voices) 3. Decision making (Decision making skill, have to make prompt decision) 4. Leadership (Leadership, job stress, motivational theory) 5. Business law (mercantile law) 6. Taxation (income tax law)	1. Auditing (Auditing, Audit, auditing standards) 2. Financial accounting (Financial accounting, knows accounting, financial reporting standards) 3. Taxation (tax, taxation, tax laws and provisions) 4. Cost and management accounting (cost management accounting, advance management accounting, cost accounting) 5. Business law (laws, companies law, corporation statutory filling) 6. Information technology competence (IT information system, information system)

	<p>methods) 8.Leadership (Leadership)</p>				<p>audit and control, information system) 7.Financial risk analysis (financial management, strategic financial management, investment appraisal, portfolios management, forex management, international finance) 8.Strategic management (strategic management) 9.Communication (communication, communication skills) 10. Presentation skills (presentation skills, presentation) 11. English language (Business language skills) 12. Decision making (Decision making skills, decision making) 13. Leadership (leadership, leadership theory, styles, types, everything, motivation theory, leadership skills)</p>
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Table 16: Enlisting 21 generic skills that were derived by combining the associated terminologies from the participants data

<b><u>1) Financial accounting</u></b>		<b><u>2) English language</u></b>		<b><u>3) Communication such as speaking and writing</u></b>		<b><u>4) Information technology competence</u></b>	
Participant 1	Financial reporting, book keeping	Participant 1	Business English functional English	Participant 1	Writing skills, communication skills	Participant 1	-----
Participant 2	Providing accounts, recording transactions	Participant 2	-----	Participant 2	-----	Participant 2	-----
Participant 3	-----	Participant 3	-----	Participant 3	writing a letter, speak, communication, communication skill	Participant 3	-----
Participant 4	Accounting, accounting issues	Participant 4	-----	Participant 4	-----	Participant 4	-----
Participant 5	-----	Participant 5	-----	Participant 5	-----	Participant 5	-----
Participant 6	Financial accounting, knows accounting, financial reporting standards	Participant 6	business language skill	Participant 6	Communication skills	Participant 6	IT information system, information system audit and control, information system
<b><u>5) Leadership</u></b>		<b><u>6) Presentation</u></b>		<b><u>7) Business law</u></b>		<b><u>8) Professional independent judgement</u></b>	
Participant 1	Leadership skills	Participant 1	Presentation skills	Participant 1	-----	Participant 1	-----
Participant 2	Leadership	Participant 2	-----	Participant 2	legal regulations, legal based	Participant 2	professional obligation, professional judgement obligation
Participant 3	Leadership skills, take work from humans	Participant 3	Presentation skills	Participant 3	-----	Participant 3	-----

Participant 4	Leadership, job stress, motivational theory	Participant 4	-----	Participant 4	UK's law, Pakistani law	Participant 4	-----
Participant 5	-----	Participant 5	Presentation skills, present things	Participant 5	mercantile law	Participant 5	-----
Participant 6	Theory, styles, types, everything, motivation theory, leadership skills	Participant 6	presentation skills, presentation	Participant 6	laws, companies law, corporation statutory filling	Participant 6	-----
<b><u>9) Accounting code of ethics</u></b>		<b><u>10) Financial risk analysis</u></b>		<b><u>11) Economics</u></b>		<b><u>12) Statistics</u></b>	
Participant 1	-----	Participant 1	-----	Participant 1	-----	Participant 1	-----
Participant 2	ethical, ethical obligations	Participant 2	financial analysis	Participant 2	economics background, economics knowledge	Participant 2	quantitative methods
Participant 3	-----	Participant 3	-----	Participant 3	-----	Participant 3	-----
Participant 4	-----	Participant 4	-----	Participant 4	-----	Participant 4	-----
Participant 5	-----	Participant 5	-----	Participant 5	-----	Participant 5	-----
Participant 6	-----	Participant 6	financial management, strategic financial management, investment appraisal, portfolios management, forex management, international finance	Participant 6	-----	Participant 6	-----
<b><u>13) Confidence</u></b>		<b><u>14) Creative thinking</u></b>		<b><u>15) Strategic management</u></b>		<b><u>16) Auditing</u></b>	
Participant 1	-----	Participant 1	-----	Participant 1	-----	Participant 1	-----
Participant 2	-----	Participant 2	-----	Participant 2	-----	Participant 2	-----
Participant 3	Confidence	Participant 3	Creative thinking	Participant 3	Strategies	Participant 3	-----
Participant 4	-----	Participant 4	-----	Participant 4	-----	Participant 4	Audit
Participant 5	Confidence, speak with shivering	Participant 5	-----	Participant 5	-----	Participant 5	-----

Participant 6	voices -----	Participant 6	-----	Participant 6	strategic management	Participant 6	Auditing, Audit, auditing standards
<b><u>17) Taxation</u></b>		<b><u>18) Inter or multi- disciplinary perspective</u></b>		<b><u>19) Problem solving</u></b>		<b><u>20) Decision making</u></b>	
Participant 1	-----	Participant 1	-----	Participant 1	-----	Participant 1	-----
Participant 2	-----	Participant 2	-----	Participant 2	-----	Participant 2	-----
Participant 3	-----	Participant 3	-----	Participant 3	-----	Participant 3	-----
Participant 4	tax laws, taxation, sales tax	Participant 4	Inter disciplinary perspective, multitasking	Participant 4	Problem solving skill	Participant 4	
Participant 5	income tax law	Participant 5	-----	Participant 5	-----	Participant 5	Decision making skill, have to make prompt decision
Participant 6	tax, taxation, tax laws and provisions	Participant 6	-----	Participant 6	-----	Participant 6	Decision making skills, decision making
<b><u>21) Cost and management accounting</u></b>							
Participant 1	-----						
Participant 2	-----						
Participant 3	-----						
Participant 4	-----						
Participant 5	-----						
Participant 6	cost management accounting, advance management accounting, cost accounting						

The findings from question 1 of round 1 are presented in Table 16 of this section. Table 16 represents a summary of the 21 generic skills that were derived from the interviewed transcripts in respect of recorded skills.

The next part of this subsection is about “constraining elements”, that is, question 2 of round 1, specifically, investigating the prevailing constraints in the accounting education system of Pakistan. This discussion comes under the section of ‘constraining elements’ in section 6.4.1 (Data analysis after round 1, left column in Figure 27).

### **b) Constraining elements:**

In response to question 2, interviewed participants from the educators group identified seven constraining elements in the accounting education of Pakistan. Question 2 is irrelevant for the employers group. This is because the constraining elements represent those factors that limit the ability of the academic community only and not the employers. Participant responses (transcripts) were recorded in the respective participant data sheet under the headings of 'constraints that prevails' (see 4th row of appendices 8a-8c). Employing a thematic analysis, the following is the discussion on the seven constraining elements (numbered 1 to 7):

#### 1) Students non-serious attitude:

From the educators’ perspective the first constraining element towards a skills development process is identified as 'students’ non-serious attitude for learning education'. In this regard participant 2 stated that most of the accounting students have an attitude problem, specifically, when they come to class they come with sleepy or tired eyes and they take education as an extra burden on themselves. They are unaware of the importance of education. And in that regard, one of the major contributions is from their traditional home environment. Specifically, they are not guided by their parents on how to take responsibility for their education. They consider learning as a secondary thing. And because of this, teachers have to waste most of their time in disciplinary activities to maintain the decorum of the class and to make everyone attentive, rather than emphasising learning activities. In this regard one participant’s comments are pertinent:

*"...students do have the attitude problem, they play with iphone, there mood is inappropriate in the class room. Just for instance at that day I have asked a one [students] in the classroom, he was rubbing his eyes so I told him what's the problem? Are you ok? [Student replied] sir I am fine I am ok. Then I asked why are you sitting like that? So he replied, sir, I was awake till 3 o'clock. Then I asked why you were awake till 3 o'clock? He [student] replied sir I was watching a movie. Then I said it's fine that is not a bad thing but you have*

*to be responsible for the things that you have to do tomorrow. [12]" [Participant 2 - appendix 8b]*

Thus the following constraining statement is derived to represent the recorded constraint:

Students do not have a serious attitude for learning?

2) Lack of interest in the accounting discipline:

From the educators' perspective the second constraining element towards skills development process is identified as 'students' lack of interest in accounting discipline'. In this regard participant 1 stated that accounting education in Pakistan is considered as a last option. Most of the students have intentions to take admission in engineering or medical colleges. But when they fail to qualify for admission they enrol in accounting institutes. He stated:-

*"...unfortunately here accounting is considered as a last option. Students when get drop from the entry test exams of engineering or medical colleges or they don't qualify to get admissions in universities then they come towards accounting institutes [9]" [Participant 1 - appendix 8a]*

Speculatively, most of the students in the accounting institutes are those who are studying accounting because they are not being selected in their desired disciplines. Seemingly, as they do not have an interest in accounting, they are less inclined to take the responsibility to continue with it:

*"... I think there is a need to work on students' aptitude [7]" [Participant 1 - appendix 8a]*

*"... If they [students] don't come to have interest in it then they will move to other courses or leave. For us we want students to come here who have really interest in it [10]" [Participant 1 - appendix 8a]*

Speculatively, this could be one of the reasons for the high drop-out ratio in accounting education in Pakistan. Thus the following constraining statement is determined:

Students have a lack of interest in the accounting discipline?

3) Misperception of accounting education:

Another constraining element in the skills development process is 'students' misperception about accounting education'. In this regard participant 1 stated that there is a misperception among most of the students, that is, to be an accountant one has to be very competent in mathematics. Consider, for example, the following comments:

*"As for related to accounting there is a misconception, misperception about accounting discipline. People [students] think that to be accountant you have to be very competent in mathematical skills. This differentiation is needed to be clear about accounting and mathematics [6]" [Participant 1 - appendix 8a]*

*"Students have no idea what is accounting. They have not studied [8]" [Participant 1 - appendix 8a]*

One can therefore speculate that some intelligent, non-mathematically gifted students might be reluctant to obtain admission to accounting education. And perhaps as a consequence, the job of accounting academics becomes more difficult if the pool of students is of a lower academic standard. Arguably, one may determine the following constraint:

People (potential students) have misperception about accounting education as being highly mathematical in nature?

#### 4) Inadequate training opportunities for academics:

From an accounting educators' perspective the fourth constraining element towards the skills development process is identified as 'inadequate training opportunities for accounting academics'. In this regard one of the participants stated that the teaching methodologies used are quite old fashioned. For example:

*"...our teaching methodologies should have some change. Because the problem of a generation gap is started here. Teachers are quite old and students are new [11]" [Participant 2 - appendix 8b]*

and

*"But I think teaching methodologies should be more modern as well because we also have to give some gap to children. You can't treat people like the way we used to treat them in old times. Then we used to criticise in old times as well that teachers were quite strict on us. But nowadays it's a bit difficult to do like that [13]" [Participant 2 - appendix 8b]*

Thus the following constraining statement is recorded as a constraint:

Accounting institutes are not offering adequate training opportunities to their academic staff?

#### 5) Training organisations are not following standard procedures:

The fifth constraining element on the skills development process is identified as 'training organisations are not following standard procedures to develop skills in trainees'. In Pakistan all the registered training organisations are required by the accounting bodies to follow particular directions (skills development matrix) while developing skills in accounting students. These directions explicitly state the percentage of time to be spent in each area of

skills development during training (job contract/job placement/articleship), for example, 15% of time in the audit section, 10% of time in statutory filing, 5% of time in book-keeping etc. Unfortunately, compliance by the training organisations is rare in that most of the students remain untrained in most of the valuable skills in which they are supposed to learn during training. For example:

*"Another problem is from the perspective of training organisations. Over here good training organisations quantity is much lower. So for them it is a little hard to take more intake of students. So rest of the students either wait in the pipeline or they have to go here and there. So they can't learn what is expected of them like leadership and analytical skills which you are talking about. One has goes to government or some small private institution for-example XY& Co. There he will come to learn ledger entries and book keeping [14] ...So there is no standard criteria for measuring skills level to students in articleship. We have to believe on training organisation. That is why when students from average or below average firms goes to employment then these things they have to face in the interviews [15]" [Participant 2 - appendix 8b]*

Thus the following constraining statement is derived to represent the recorded constraint as:-

Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?

#### 6) Difficult to find competent teaching staff:

The sixth constraining element in the skills development process is identified as 'accounting institutes having difficulty in finding competent teaching staff'. In this regard one of the participants stated that most of the accounting institutes have small organisational setups where they lack of opportunities for academics to grow professionally. As such, academics tend not to see their professional career in accounting institutes. Therefore, they prefer to teach in universities due to their long professional organisational hierarchy (that is, lecturer, assistant professor, associate professor, professor), where they can find promotional opportunities. Due to this reason, quite often, the accounting institutes arguably have difficulty in finding competent staff for teaching. By extension the students' skill development process also suffers. In this regard participant 3 stated:

*"...we are not been able to retain good teaching staff members. Most of the individuals who work here as teachers prefer to be as part timers rather than full time basis [9]... Because here our academic setup is institutional, we don't have big organisational hierarchy here. Therefore he [teacher] can't see his career in it [10]" [Participant 3 - appendix 8c]*

Thus the following constraining statement is determined:

For teaching in accounting institutes it is difficult to find competent academic staff?

### 7) Inadequate stipend during articleship:

The seventh constraining element in the skills development process is identified as 'inadequate stipend offered by training organisations'. During training (job contract/job placement/articleship), professional organisations tend to offer a very low stipend of Rs.8000/pm to trainees. Since this training period is three and a half years long, during this period it becomes very difficult for the trainees to survive on this stipend. It is simply not good enough to meet their travelling expenses and food expenses on a monthly basis. As a consequence, most of the students leave their accountancy programs in the middle of their training and join some professional organisations to support their families as partly qualified accountants. In this regard participant 3 stated:

*"Another problem is financial incentives. If you don't give good enough incentives then their [students] performance gets effected. The problem accounting students do face when they go to training organisation firms is that they have set stipend. Looking at the inflation factor in our country, the amount of money which they are getting they can't fulfil their daily expenses, even not their travelling which is very much big constraint [11] ... So I think it is a very big constraint I mean Rs. 8000 is nothing nowadays [12]" [Participant 3 - appendix 8c]*

Thus the following constraining statement is derived to represent the recorded constraint:

During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations?

The findings from questions 2 of round 1 are summarised in Table 17 of this section. Table 17 presents the seven constraining elements that were derived from the interview transcripts.

**Table 17: Enlisting 7 constraining elements that were derived from the participants data**

	<b>Identified constraining elements</b>	<b>Derived constraining statements</b>
1	Students non-serious attitude	Students do not have a serious attitude for learning?
2	Lack of interest in accounting discipline	Students have a lack of interest in the accounting discipline?
3	Misperception of accounting education	People (potential students) have misperception about accounting education as being highly mathematical in nature?
4	Inadequate training opportunities for academics	Accounting institutes are not offering adequate training opportunities to their academic staff?
5	Training organisation are not following standard procedures	Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?



6	Difficult to find competent teaching staff	For teaching in accounting institutes it is difficult to find competent academic staff?
7	Inadequate stipend during articleship	During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations?

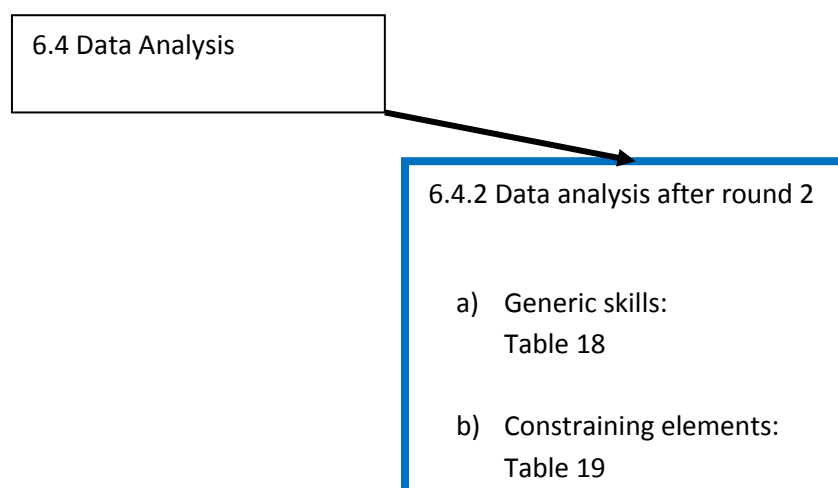
In summary the accumulated findings from this round are presented in Table 16 (findings related to generic skills) and Table 17 (findings related to constraining elements).

Next, this study address round 2 of the interview, that is, section 6.4.2 (Data analysis after round 2, right column in Figure 26). This round has the particular purpose to refine the existing content of the questionnaire from a respondents' comprehension perspective. Later, the findings from this round 2 (section 6.4.2) will be combined with the findings of round 1 (section 6.4.1) to reformulate the existing questionnaires in section 6.4.3.

### 6.4.2 Data analysis after round 2:

The second sub-heading in section 6.4 is 'Data analysis after round 2' (See Figure 28 as selectively extracted from Figure 26, third column from the left).

Figure 28: Representing data analysis after round 2; repeated section from Figure 22



The data collected in **round 2** of the interview phase has the particular purpose of clarifying the respondents' comprehension of the meaning attributed to the words and rectifying the content where ambiguity exists among participants. In the literature review chapter it was

established that respondents from the different disciplines define skills differently (in section 3.2.2). For example, Jones's (2010) research demonstrates that generic skills are highly context-dependent and are shaped by the disciplinary context in which they are taught. Therefore, keeping this in mind, the purpose of this section is to define each skill by adding a description intended to ensure that a common understanding (interpretation) prevails amongst the respondents to the survey. In order to achieve this purpose, during this round, a copy of preliminary drafted questionnaires was given to each participant for them to fill in.

The pre-testing of the following appendices of the educators' and employers' group questionnaires is conducted:-

Educators' group questionnaire: demographic details (Appendix 1a), expectation gap and performance gap (Appendix 3a & 6a), and constraints gap (Appendix 5a).

Employers' group questionnaire: demographic details (Appendix 2a), and expectation gap and performance gap (Appendix 4a & 7a).

While completing the questionnaire, there was a question asked of each participant of the interview (stated in row 7 of Appendix 8), specifically:

Q1: What comes to your mind when you read out the following content?

Further some probing questions were also asked from the participants that were pertinent and they are presented within the recorded transcripts in capital letters.

Employing textual analysis, a number of amendments emerge for the wording of the questionnaires content. In this regard outcomes related to generic skills and constraining elements content are presented separately in subsequent sections (see also Figure 28 again), that is,

a) Generic skills

b) Constraining elements

It follows that the next discussion is about evaluating and rectifying the comprehension of the words attributed to the content of the generic skills within the questionnaire. This discussion comes under the subsequent section of 'generic skills' in section 6.4.2 (Data analysis after round 2, right column in Figure 26).

### a) Generic skills:

This section concerns the evaluation of 33 generic skills from both the educators' and the employers' groups perspectives (see 'Appendix 3a & 6a' and 'Appendix 4a & 7a' respectively). These skills were already part of the existing list of generic skills in the questionnaire for both of the respondent groups. Thus, any changes made as a result of textual analysis in this section will be applicable for both of the respondents groups.

The following are the findings with respect to generic skills content of the questionnaire:-

1) Decision modelling (For participants' responses see 8th row of Appendices 8a-8f):

The first generic skill is decision modelling. Earlier in the literature, this term was introduced as generic skills by AICPA (2012), Kavanagh and Drennan (2007, 2008), Albrecht and Sack (2000), Lin et al. (2005) and IFAC (2008) (see Table 13).

During the interview sessions, the 'decision modelling' was discerned as a term which was similar to 'decision making' skill from a participant's comprehension perspective. In this regard, some notable remarks from the participants in the interviews are underlined:

*"...Decision modelling to me is how you come to make some decision. So basically it is the structuration of the situation coming across through which you take decision. [14]" [Participant 1 - appendix 8a]*

*"...decision modelling is decision making. The ability to take decision while analysing the situation. [19]" [Participant 2 - appendix 8b]*

*"When I read decision modelling, what comes to my mind is the pattern of decision making, the way we make decisions. [10]" [Participant 4 - appendix 8d]*

*"Ok, decision modelling I conceptualise it as the way you come to a decision. [10]" [Participant 5 - appendix 8e]*

*"Decision modelling is decision making. Whenever you have two or more choices you should have the ability to analyse each choice... [17]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Decision making: having the ability to conceptually structuralize the situation and select one amongst available options.

2) Risk analysis (For participants responses see 9th row of Appendices 8a-8f):

The second generic skill is risk analysis. Earlier in the literature, this term was introduced as generic skills by AICPA (2012), Kavanagh and Drennan (2007, 2008), Albrecht and Sack (2000), Lin et al. (2005) and IFAC (2008) (Table 13).

During the interview sessions, 'risk analysis' was a term found strictly related to financial risk analysis from a participants' comprehension perspective. In this regard notable remarks from the participants in the interviews are underlined:

*"...While I was filling in my mind it was project appraisal like NPV, IRR etc. [15]" [Participant 1 - appendix 8a]*

*"As I said, related to financial statement analysis like ratio analysis, and project appraisal. If you want to clarify it more, according to my perspective you should mention it as financial risk analysis .... [20]" [Participant 2 - appendix 8b]*

*"Financial risk analysis. LIKE? Like ratio analysis, sensitivity analysis, project appraisal techniques.[17]" [Participant 3 - appendix 8c]*

*"...NPV, sensitively analysis, ratio analysis.[11]" [Participant 5 - appendix 8e]*

*"...in which we study investment appraisal, portfolios management techniques... [18]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Financial risk analysis: having the ability to assess the factors that may jeopardize the project such as knowing cost benefit analysis, ratio analysis, portfolio management, NPV, IRR, sensitivity analysis etc.

### 3) Reporting (For participants' responses see 10th row of Appendices 8a-8f):

The third generic skill is 'reporting'. Earlier in the literature, this term was introduced as a generic skill by the AICPA (2012) and IFAC (2008) (Table 13).

During the interview sessions, 'reporting' was a term found to be strictly related to 'financial accounting', such as recording financial transactions and the preparation of the financial statements. In this regard, some notable remarks from the participants in the interviews are underlined:

*"... financial reporting like how you mention assets liabilities current investments. [17]" [Participant 1 - appendix 8a]*

*"...In my mind was financial reporting like producing like how to make balance sheet, cash flow statements. [22]" [Participant 2 - appendix 8b]*

"... I perceived it as financial reporting, you know making balance sheet, income statement. [19]" [Participant 3 - appendix 8c]

"...It means financial statements reporting and other reporting to financial aspects. [13]" [Participant 4 - appendix 8d]

"...It means financial reporting to me, balance sheet, income statement, profit and loss accounts. [13]" [Participant 5 - appendix 8e]

"...Business report writing skills means like making profit and loss statement, preparation of balance sheet account. [20]" [Participant 6 - appendix 8f]

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Financial accounting: concerned with the study of reporting the financial transactions and the preparation of financial statements.

4) Information technology competence (For participants responses see 11th row of appendices 8a-8f):

In the literature 'information technology competence' as skill was introduced with multiple terminologies such as 'technological competence' (Kavanagh et al., 2009), 'computer technology' and 'computer literacy' (Jones and Sin, 2003; Jackling and Keneley, 2009; Albrecht and Sack, 2000; Kavanagh and Drennan, 2007, 2008; Lin et al., 2005), and IT proficiency (IFAC, 2008) (Table 13).

During the interview sessions, the interviewed participants conceptualised the term 'information technology competence' as having computer software skills, such as knowing accounting software applications (Peachtree and User Business System) and MS-Office that aid routine activities. All of the participants in the interviews rejected the notion of including computing hardware skills in it. They stated that all of the organisations have separate departments for handling hardware associated problems. In this regard notable remarks from the participants in the interviews are underlined:-

"...that means to me as computer software handling. [19]" [Participant 1 - appendix 8a]

"... every company has its own software to work, on which they give trainings to accountants when they go there. [24]" [Participant 2 - appendix 8b]

"Information technology competence, of course. SIR WHAT HAVE YOU PERCEIVED BY IT. Peachtree, excel, MS office. [21]" [Participant 3 - appendix 8c]

*"Information technology competence means to know about computer softwares, in which you do accounting... Yes, for-example peach tree, UBS, SAP, Excel such kind of. You will also need to know text softwares, where you can draft letters. FOREXAMPLE? Like Microsoft office and Wordpad. [15]" [Participant 4 - appendix 8d]*

*"They [students] must have this skill, they must know how to make accounts in peach tree. [15]" [Participant 5 - appendix 8e]*

*"Knowledge of basic software is necessary. [22]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Information technology competence: having the ability to use computer softwares such as knowing MS Office, Peachtree, UBS etc.

#### 5) Critical thinking (For participants responses see 12th row of Appendices 8a-8f):

In the literature, 'critical thinking' as a generic skill has been introduced by a number of authors, such as Kavanagh et al. (2009), Jones and Sin (2003), Jackling and Keneley (2009), Hassall et al. (1999, 2001, 2003, 2005), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During interview sessions, the interviewed participants conceptualised the term 'critical thinking' as having a sight to see things beyond its apparent meaning and not accepting anything until proven. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"...critical thinking is having sight to see things beyond its apparent meaning. [25]" [Participant 2 - appendix 8b]*

*"So it is being critical on something, not accepting it in first, until you examine the situation. [22]" [Participant 3 - appendix 8c]*

*"So this [critical thinking] should be there, even it has been advised to us that in your profession you have to show scepticism. Means whenever something is told to you, you do not take it true unless you completely satisfied with it. So the questioning in mind is always necessary for us. [16]" [Participant 4 - appendix 8d]*

*"Critical thinking is basically the process of questioning and disbelieving what you see. [16]" [Participant 5 - appendix 8e]*

*"An accountant always needs to see things with scepticism. [23]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Critical thinking: having a sight to see things beyond its apparent meaning and not accepting anything until proven with logical reasoning or through some evidence.

6) International, industry and sector perspective (For participants responses see 13th row of Appendices 8a-8f):

In the literature, ‘international, industry and sector perspective’ as a skill was introduced by the AICPA (2012) (Table 13).

During the interview sessions, the interviewed participants conceptualised the term ‘international, industry and sector perspective’ as knowing international financial reporting standards and current developments in the accounting profession. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"It is international global perspective on accounting profession, knowledge of accounting profession like IFR standards, what are the current developments in accounting profession, what are the specific industry requirement for accounting profession ...[26]" [Participant 2 - appendix 8b]*

*"It means, to know about accounting discipline, standards and the recent developments in accounting profession across the globe not just in Pakistan.[23]" [Participant 3 - appendix 8c]*

*"Yes of course, that is already there in [ACCOUNTING BODY NAME] syllabus, we do have international financial reporting standards. [17]" [Participant 5 - appendix 8e]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

International global perspective: Knowledge and understanding of international financial reporting standards and of current developments in the accounting profession.

7) A legal regulatory perspective (For participants responses see 14th row of Appendices 8a-8f):

In the literature, a ‘legal regulatory perspective’ as a skill was introduced by IFAC (2008) (Table 13).

During the interview sessions, the interviewed participants conceptualised the term ‘legal regulatory perspective’ as knowing corporate law, taxation and auditing

standards. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"...it means compliance with legal regulatory authorities like SECP [security exchange commission of Pakistan] and FBR [Federal Board of Revenue].[12]" [Participant 1 - appendix 8a]*

*"Taxation, compliance with SECP standards these are the things that are in my mind. [27]" [Participant 2 - appendix 8b]*

*"Legal regulatory perspective of course, this is important. In fact this is the job of accountants. If an accountant does know what are the FBR [Federal Board of Revenue] requirements then how he comes to manage accounting books for taxation. [24]" [Participant 3 - appendix 8c]*

*"An accountant today in himself is a very big tax expert and a legal advisor. [18]" [Participant 4 - appendix 8d]*

*"Legal regulatory perspective, yes this is important one and employer also see this. For an accountant this is very elementary stuff to know the legal requirements of different authorities. If you don't know auditing then you come to be an auditor. Let's assume you are a tax consultant and someone comes to you, bringing his tax problem, now how you will going to advise him when you, yourself don't know the legal requirement of taxation. [18]" [Participant 5 - appendix 8e]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

A legal regulatory perspective: knowledge of the legal structure of the state such as corporate law, taxation and auditing standards.

8) A marketing/client focus (For participants responses see 15th row of Appendices 8a-8f):

In the literature 'marketing/clients focus' as skill was introduced with various terminologies such as customer service orientation (Albrecht and Sack 2000; Kavanagh and Drennan, 2007, 2008; Lin et al., 2005), and marketing/clients focus (IFAC, 2008) (Table 13).

During the interview sessions, the interviewed participants conceptualised the term 'Marketing/clients focus' as knowing marketing tactics in order to deal with clients. In this regard participants have given mixed responses. A few of them stated that it was not a necessary skill but that it added additional value, however, others regarded it as an essential skill. Notable remarks from the participants in the interviews are underlined:-



*"...accountants normally does not need such skills. May be someone need it in some role but what I have seen in working environment they have no public dealing therefore I don't agree with it. [23]" [Participant 1 - appendix 8a]*

*"Yes, marketing tactics should be there especially in consultancy business, you need this skill. People often get offended if you don't treat them good after all business is all that it matters in consultancy. [25]" [Participant 3 - appendix 8c]*

*"Marketing/clients focus that is important, but not that much. Because an accountant job is inward looking, he has no public dealing. [19]" [Participant 4 - appendix 8d]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Marketing/clients focus: customer care orientation such as knowing marketing tactics in order to deal with clients.

#### 9) Problem Solving and Decision Making (For participants responses see 16th row of Appendices 8a-8f):

In the literature, 'problem solving and decision making' as a generic skill was introduced by a number of authors, such as Kavanagh et al. (2009), Jones and Sin (2003), Jackling and Keneley (2009), IFAC (2008); Hassall et al. (1999, 2001, 2003, 2005), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions, the interviewed participants conceptualised the term 'problem solving' and 'decision making' as two different things. They stated 'problem solving' is an ability to come up with a practical and feasible solution to a problem, whereas, 'decision making' is already explained earlier. They suggested separating the 'decision making' term from the 'problem solving' term and related 'decision making' to 'decision modelling' (also explained earlier). In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Most of the time you come across situation where you don't have immediate solutions to it but you have to move on, you can't stop there. So at that moment you need a skill to make immediate solution to it and move on. [24]" [Participant 1 - appendix 8a]*

*"...produce self-created solutions to it. [29]" [Participant 2 - appendix 8b]*

*"According to my perspective problem solving is the ability to understand issue and produce most effective solution to it in a given time limit and situation. It should not be like that a solution which is workable but not feasible. .... See in decision making you just decide, you have nothing to do physically. Whereas in problem solving you should have practical skills involve it. [26]" [Participant 3 - appendix 8c]*

*"Problem solving and decision making, yes, indeed it is important. See decision making should not be here with problem solving. It [decision making] was there before as well, see 1 decision modelling you should use decision making with it. [20]" [Participant 4 - appendix 8d]*

*"Problem solving is the skill that develops over a passage of time. This enables the one to find solutions to new problems. [20]" [Participant 5 - appendix 8e]*

*"Problem solving and decision making. I guess I've already told you about decision making. Whereas problem solving that is important as well... Decision making is when you have to select one among multiple choices. However, problem solving is something different... Problem solving means coming up with a feasible solution to a problem. [27]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Problem solving: coming up with a practical and feasible solution to a problem.

#### 10) Leadership (For participants responses see 17th row of Appendices 8a-8f):

In the literature, 'leadership' as a generic skill was introduced by a number of authors, such as Hassall et al. (1999, 2001, 2003, 2005), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008), Lin et al. (2005), AICPA (2012) and IFAC (2008) (see Table 13).

During the interview sessions, the interviewed participants conceptualised the term 'leadership' as assigning tasks to staff, giving them directions, keeping them motivated and ensuring that they are answerable. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Giving directions to your staff is always important. [25]" [Participant 1 - appendix 8a]*

*"See accountants are normally hired as managers and at that post it is common to have the team of 3 to 8 members depends on the organisation size. Now a manager suppose to guide his team, assign task, keep them motivated and make them answerable. [30]" [Participant 2 - appendix 8b]*

*"Accountants work are at managers level and they need this skill to guide their subordinates. [27]" [Participant 3 - appendix 8c]*

*"As I told you 15% of the accountants who run their own consultancy firms if they don't have leadership skills then they can't even run their own offices, so this is important. And this should be there in other accountants as well because tomorrow they will have their own team and they have to guide them, lead them. [21]" [Participant 4 - appendix 8d]*

*"This is an important skill because most of the people after passing CA start works in supervisory positions. They need to know how to handle their staff in this position. You know*

*our culture, they have to get strict sometimes but they should not be like that of military style. Their purpose is to get the work done. [28]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Leadership: having the ability to manage a group of people such as assigning tasks, giving directions, keeping staff motivated and make them answerable.

11) Project Management (For participants responses see 18th row of appendices 8a-8f):

In the literature, 'project management' as a generic skill was introduced by a number of authors, such as Kavanagh et al. (2009), IFAC (2008), Hassall et al. (1999, 2001, 2003, 2005), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008), Lin et al. (2005) and AICPA (2012) (Table 13).

During the interview sessions, the participants conceptualised the term 'project management' as the establishment of a new project. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Project Management, yes this should be there as well. But I don't think our students get much of it... It is about managing projects like doing things start till end e.g. introducing new accounting software within the organisation now for that you have to arrange training programs on it. [28]" [Participant 3 - appendix 8c]*

*"Project management. If you are talking about new CA's so I don't think so this is very much relevant. Employers don't expect to hire a fresh CA for the establishment of complete new projects. [22]" [Participant 5 - appendix 8e]*

*"Project management, of course. I'm appointed here [current employer] subject to a new project establishment. [29]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Project management: having the ability to establish and run new projects.

12) Think and behave ethically (For participants responses see 19<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'think and behave ethically' as a generic skill was introduced by a number of authors, such as Kavanagh et al. (2009), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008), and Lin et al. (2005) (see Table 13).

During the interview sessions, the participants conceptualised the term 'think and behave ethically' as accountants' behavior should be according to accounting code of ethics. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"See in our profession ethical approved behaviour is very important. [27]" [Participant 1 - appendix 8a]*

*"Think and behave ethically, very important. Compliance with accounting code of ethics is very important. Even this is the part of our code of ethics. [32]" [Participant 2 - appendix 8b]*

*"Professionally approved ethical behaviour is the requirement of accounting profession. We have code of ethics on it. [29]" [Participant 3 - appendix 8c]*

*"It means compliance with accounting code of ethics, it's simple. [23]" [Participant 4 - appendix 8d]*

*"Think and behave ethically, indeed this one is very important. [ACCOUNTING BODY NAME] has very strict code of ethics that everyone has to follow. [30]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Think and behave ethically: professional behavior of accountants must be according to accounting code of ethics.

13) Flexible and be adaptable to changing environment and situation (For participants responses see 20<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'flexible and be adaptable to changing environment and situation' as generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), IFAC (2008), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During interview sessions, the participants conceptualised the term 'flexible and be adaptable to changing environment and situation' in the context of official routine activities. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Flexible and adaptable to changing environment and situation. The one should be like that. Organisations do have changes time to time and individuals have to adjust themselves with that. [30]" [Participant 3 - appendix 8c]*

*"Flexible and be adaptable to changing environment and situation, this what I have just told you. In offices you have to work with different people so an individual must be flexible enough to adjust with peoples changing attitude. [24]" [Participant 5 - appendix 8e]*

*"Flexible and adaptable to changing environment and situation. Flexibility is very important in every aspect of life. Even in marital life one has to show flexibility. Same is the case here, see my case, I told you I've worked in Fergusons which is the part of Pricewatercoopers. Now I work in a local industry of Peshawar, not even in Karachi. I don't know whether you can imagine the difference or not but I have to compromise on many things. People attitude is different, even the work environment is not the same. But I have to adjust myself here. [31]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Flexibility and adaptability: be flexible and adaptable to changing environment in official routine activities.

14) Act strategically (For participants responses see 21<sup>st</sup> row of appendices 8a-8f):

In the literature, 'act strategically' as a generic skill was introduced by a number of authors, such as Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions, the participants conceptualised the term 'act strategically' as knowing strategic management skills such as knowing about Porter's 5 forces or cost differentiation strategy etc. Some of the participants did not understand its initial meaning and asked for an explanation. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Act strategically I guess you are asking strategic management skills. [29]" [Participant 1 - appendix 8a]*

*"Well when I read it strategic management came to my mind where we have price differentiation and porter's 5 forces like that. [34]" [Participant 2 - appendix 8b]*

*"Act strategically. There is even a module on it in our syllabus. Strategic management skills are important. Accountants suppose to know all such stuff. [31]" [Participant 3 - appendix 8c]*

*"..I perceive the meaning of it as strategic management like market penetration strategies, product development strategy, low cost strategies, like that. [25]" [Participant 4 - appendix 8d]*

*"Act strategically, Yes of course, this should be there. Students need to have the understanding of different strategic skills and employer often ask about it. [25]" [Participant 5 - appendix 8e]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Strategic management: concerned with the study of understanding organisation strategic requirements such as knowing porter's 5 forces, SWOT analysis, price differentiation strategies, product development, market penetration etc.

15) Think and act independently (For participants responses see 22<sup>nd</sup> row of Appendices 8a-8f):

In the literature, 'think and act independently' as a generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), IFAC (2008), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions, the participants conceptualised the term 'think and act independently' as having independent professional judgment. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Ok yes of course professional independent judgement is very important as I said before it is the legal requirement. Auditors must have to have independent judgement and students should know about it. [35]" [Participant 2 - appendix 8b]*

*"Think and act independently, this is our requirement legally. Whenever a report come to us for audit we must have to have independent and critical review on that. And must give our views on it without any biased opinion. [26]" [Participant 4 - appendix 8d]*

*"Think and act independently, that is very important. I just told you an accountant has to work in team but it does not mean that he should not compromise on his professional independent Judgement. He has to give his views on company's performance without any biasness. [26]" [Participant 5 - appendix 8e]*

*"We must have to give fair and unbiased opinion on our own professional judgment. [33]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Independent thinking: having independent professional judgment.

16) Focused on outcomes (For participants responses see 23<sup>rd</sup> row of Appendices 8a-8f):

In the literature, 'focused on outcomes' as a generic skill was introduced by authors, such as Jones and Sin (2003) and Jackling and Keneley (2009) (Table 13).

During interview sessions, the participants conceptualised the term 'focused on outcomes' as having an outcome oriented nature of an individual. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"It is situational because sometimes you have to focus on some financial outcomes but you may also come in a situation where you have to see other aspects as well like legal or ethical one. SIR YOU MEAN LIKE SUBJECTIVE OUTCOME. Yes exactly, that's what I mean like that, it is not always necessary to focus on objective outcomes sometimes also have to focus on subjective things and achievements as well. [36]" [Participant 2 - appendix 8b]*

*"Of course, it means like not doing something which has no particular objective. Whatever we do in official environment that has some reason to it. And that reasons lead us to work in offices. So if a task is assigned to you then you have to know, there is a deadline to it and you have to achieve that task within giving timeframe... [33]" [Participant 3 - appendix 8c]*

*"I am talking about financial outcomes, like financial target. [27]" [Participant 5 - appendix 8e]*

*"Things needs to be outcome oriented and anyways the job of accountants are very hectic. I agree with this point they should have focus on outcomes rather than routine activities. [34]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Focused on outcomes: ability to focus on objective and subjective outcomes such as meeting financial targets and deadlines.

17) Tolerate ambiguity (For participants responses see 24<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'tolerate ambiguity' as a generic skill was introduced by couple of authors, such as Jones and Sin (2003) and Jackling and Keneley (2009) (Table 13).

During interview sessions, participant 2 initially conceptualised 'tolerate ambiguity' as tolerating the ambiguity in financial statements. Participant 4 conceptualised the term as not exactly knowing one's job role. However, the remaining four participants conceptualised the term as ambiguities in official routine activities. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Well what I comprehended is work environment ambiguity like having issues in daily working environment with boss and colleagues may be with clients. [32]" [Participant 1 - appendix 8a]*

*"Tolerate ambiguity, you mean ambiguity in official environment? YES SIR I DO MEAN BY THAT. Yes, of course this is very important. In offices you often do have such bosses who always like bossing around. Even colleagues are such annoying that they are difficult to tolerate. [34]" [Participant 3 - appendix 8c]*

*"In my mind it is in the daily routine activities within office e.g. fan is not working, no electricity, tolerating personal jokes in the offices, boss is not in the right mood. So all these things comes in it.[28]" [Participant 5 - appendix 8e]*

*"See work environment often becomes very annoying especially when you have the deadlines. [35]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Tolerate ambiguity: having the ability to ignore annoying routine activities in official environment.

18) Think creativity (For participants responses see 25<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'think creatively' as a generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), Hassall et al. (1999, 2001, 2003, 2005), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions, participants conceptualised the term 'think creativity' as coming up with new and more effective solutions to old problems. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Creative thinking is always important from growth perspective. Changing old techniques to new ones, no one will personally come and tell you. It is you, who has this personal responsibility to make yourself useful within the work environment. Whether whatever means you use they should be effective. [38]" [Participant 2 - appendix 8b]*

*"... creative thinking is about coming up with new ideas and solutions to old problems. It is about coming up with new and effective solutions like designing new formulas and accounting sheets. [35]" [Participant 3 - appendix 8c]*

*"Creative thinking is a very simple term, it means doing things in new and more effective way. [29]" [Participant 4 - appendix 8d]*

*"...the one who comes up with the great ideas, having better solutions will get promoted. [36]" [Participant 6 - appendix 8f]*



From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Think creatively: coming up with new and more effective solutions to old problems.

19) Listen effectively (For participants responses see 26<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'listen effectively' as a generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), IFAC (2008), Hassall et al. (1999, 2001, 2003, 2005), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions, the participants conceptualised the term 'listen effectively' as listening attentively and comprehending what others are saying. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Listening skills are always important to understand what others want. [34]" [Participant 1 - appendix 8a]*

*"You must be known this fact that whatever we know today there is a major contribution of listening in it. If someone is telling you about his situation and you are not mentally present there so you will going to miss all the major stuff that you may never get it again. [30]" [Participant 4 - appendix 8d]*

*"Whatever others are saying you should take it serious and understand the instructions, not like that when you go out then you think of what did he say. When you are dealing with someone you should have full attention, understanding what he wants. [30]" [Participant 5 - appendix 8e]*

*"Without this skill how could you expect one to follow proper instructions. Even this skill is important at college level, in order to learn things. You must need to under what your teachers are saying and follow what exactly they are required. Must have to be attentive all the time. [37]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Listen effectively: listen attentively and understanding what others are saying.

20) Present, discuss and defend views (For participants responses see 27<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'present discuss and defend views' as a generic skill was introduced by number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009),

IFAC (2008), Hassall et al. (1999, 2001, 2003, 2005), and Kavanagh et al. (2009) (Table 13).

During interview sessions, the participants conceptualised the term as having good presentation skills and could not perceive otherwise. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"I guess you mean presentation skill. [37]" [Participant 3 - appendix 8c]*

*"Presentation skill that is important, but I disagree with you on defending views. Yes negotiation ability should be there but it doesn't mean if you are wrong, still you show stubbornness. One should have the flexibility. But as you stated presentation skills are important and one should know how to present his point of view to others. [31]" [Participant 4 - appendix 8d]*

*"Presentation, discuss and defend views, explain this to me? SIR IT MEANS PRESENTATION SKILLS. Ok, of course, that is important one. Trend is changed a lot, one should have that skill now. In board meetings you have to present quite often. Power point is the software which we normally use for this purpose. Discussing and defending views are not always the case. [31]" [Participant 5 - appendix 8e]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Presentation skill: appropriately present your point of view in official meetings.

21) Transfer and receive knowledge (For participants responses see 28<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'transfer and receive knowledge' as a generic skill was introduced by some authors, such as Jones and Sin (2003) and Jackling and Keneley (2009) (Table 13).

During interview sessions, the participants conceptualised the term 'transfer and receive knowledge' as having good communication skills. When it was asked of the participants to elaborate communication skills they replied by stating: one's ability to communicate in writing and orally. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"It sounds communication skill to me Yes of course it is important, in fact it is very important...This could be any form, form like written communication this could be letters, memos and orally such as telephonic conversation, face to face meetings. [41]" [Participant 2 - appendix 8b]*

*"Transfer and receive knowledge, of course important... This is quite clear basically it states about communication skills.. [38]" [Participant 3 - appendix 8c]*

*"Transfer and receive knowledge, yes of course. The one who can't understand or make others understand his point of view I guess he is not suitable for any job, not just accounting... Its communication skills, properly conveying your message to others. It's simple. [32]" [Participant 4 - appendix 8d]*

*"Transfer and receive knowledge, of course that must be there in students and employers do consider this. In fact, without communication no one can keep himself in official environment [32]" [Participant 5 - appendix 8e]*

*"Transfer and receive knowledge, of course. Almost all the skills you have mentioned here are important... Transfer and receiving knowledge sounds to me as communication skill. [39]" [Participant 6 - appendix 8f]*

The oral and written communications are already the part of the list of generic skills and included in the questionnaire. Therefore, this term does not need to be duplicated here.

22) Negotiate with people from different cultural background (For participants responses see 29<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'negotiate with people from different cultural background' as a generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), IFAC (2008), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions, the participants conceptualised the term 'negotiate with people from different cultural backgrounds' as having the ability to convince clients. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Though negotiation has some additional traits to it like defending your point of view and convincing others to come aside you. [42]" [Participant 2 - appendix 8b]*

*"This means making others understand what you are saying and convince them to a point where you and the other person come to an agreement state. [39]" [Participant 3 - appendix 8c]*

*"See it means communication in a way that other understands you, and think of those things which you want to make him understand. Because normally when you talk with someone he has his own state of mind, I mean he has his own perception on that issue. [33]" [Participant 4 - appendix 8d]*

*"Negotiation skills is a technique, normally we see this skill in salesmanship. I mean it is the way they [salesman] convince you to sale his things on you. This is about give and take but in a way that once objective must be achieved.[33]" [Participant 5 - appendix 8e]*

*"Negotiation skills to me is making other understand what you are saying. Let others know what's your limitation are and trying to accommodate others at maximum in that. [40]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Negotiation skill: making others understand what you are saying and convincing them to a point where both parties arrive at agreement.

23) Understand group dynamics (For participants responses see 30<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'understand group dynamics' as a generic skill was introduced by some authors, such as Jones and Sin (2003), and Jackling and Keneley (2009) (Table 13).

During the interview sessions the participants conceptualised the term 'understand group dynamics' as having the ability to understand others' attitudes, emotions, patience and work potential while working in groups. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Well it is related to interpersonal skills. My personal understanding to it is knowing each other's emotions, patience level, and potential. This thing is very important when you work in team because these are the things that helps to negotiate and make things done. [43]" [Participant 2 - appendix 8b]*

*"It's quite simple I mean it means understanding others attitude, when you work in a group. This really helps a lot. You should know who will be the individuals that will come towards you when you will have an opinion and who will be against. [40]" [Participant 3 - appendix 8c]*

*"It is about understanding each other. See in meetings you have to understand each other's attitude... [34]" [Participant 4 - appendix 8d]*

*"Group dynamics means when you have to work in a team you have to understand others temperament, others potential to work, attitude. You must know who is what capable of. [34]" [Participant 5 - appendix 8e]*

*"One need to understand the in between chemistry of people. [41]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Understanding group dynamics: while working in group understanding others work potential, attitude, emotions, and patience level.

24) Communicate in written format (For participants responses see 31<sup>st</sup> row of Appendices 8a-8f):

In the literature, ‘communicate in written format’ as a generic skill was introduced by a number of authors, such as Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions the participants found the term ‘communicate in written format’ simple to conceptualise as having the ability to draft letters and inter office memos. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"...communicate in written format ok that is writing skills. [39]" [Participant 1 - appendix 8a]*

*"Writing skills are always necessary. [44]" [Participant 2 - appendix 8b]*

*"If a professional accountant doesn't know how to draft a letter then he should be ashamed of himself. In offices it is the general requirement to write inter-office memos. This is the way you inform each other about the progress of the work. [41]" [Participant 3 - appendix 8c]*

*"Communicate in written format, of course. Writing skills is the matter of utmost importance. One should be capable of drafting letters, office memos. [42]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Communicate in written format: having the ability to draft inter office memos and letters.

25) Communicate orally (For participants responses see 32<sup>nd</sup> row of Appendices 8a-8f):

In the literature, ‘communicate orally’ as a generic skill was introduced by a number of authors, such as Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions, the participants conceptualised the term 'communicate orally' as having the ability to speak with proper tone to one's boss and subordinates. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Speaking is something through which you influence others. There is a famous saying 'think before you speak' so there is a message in it that use your tongue with carefulness. You should know how to talk with your boss, what would be your attitude with subordinates, how you should talk with taxation authorities. [36]" [Participant 4 - appendix 8d]*

*"I told you before without having communication skill you stands nowhere in official environment. An accountant who works at managerial level, he has responsibilities on his shoulders, now without this speaking skill how could he manage his daily operations. You can imagine yourself in that position this would be a complete disaster. [36]" [Participant 5 - appendix 8e]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Communicate orally: having the ability to speak fluently, using appropriate tone to address your boss and subordinates.

26) Engage in lifelong learning (For participants responses see 33<sup>rd</sup> row of Appendices 8a-8f):

In the literature, 'engage in lifelong learning' as a generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), IFAC (2008), Hassall et al. (1999, 2001, 2003, 2005), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions, the participants conceptualised the term 'engage in lifelong learning' as continuing to have professional development programs. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Change is the pet of life, if you will not improve yourself you will be outdated, you will have no place in this competitive world. I told you often we have to look for solutions to new accounting treatments. Other than this we also have 40 hours yearly requirement to participate in learning activities like seminars, conferences or online learning activities [46]" [Participant 2 - appendix 8b]*

*" Engage in lifelong learning, this is continuing professional development ...[37]" [Participant 4 - appendix 8d]*

*"... that it means professionally developing yourself.[37]" [Participant 5 - appendix 8e]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Engage in lifelong learning: attending professional development programs for self-learning.

27) Apply interdisciplinary or multidisciplinary perspective (For participants' responses see 34<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'apply interdisciplinary or multidisciplinary perspective' as a generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions the participants conceptualised the term 'apply interdisciplinary or multidisciplinary perspective' as considering other disciplinary perspectives while doing accounting. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Well its easy mean conceptualising financial planning with strategic management or let's say combining taxation issues with accounting treatments. [42]" [Participant 1 - appendix 8a]*

*"Like making a marketing strategic plan for the next five years while also considering financial figures from the financial statements as well. [47]" [Participant 2 - appendix 8b]*

*"See in practical world there is no such thing in isolation. If you are doing accounting for sales transaction then you should have knowledge for GST [general sales tax] otherwise how would you know what is the required GST deduction for so and so product... [44]" [Participant 3 - appendix 8c]*

*"An accountant must know all relevant knowledge to accounting. He should have knowledge of financial reporting standards, taxation, corporate lawas we have talked before. [38]" [Participant 4 - appendix 8d]*

*"It should not be like that you know accounting but you don't know tax laws or you know accounting but you don't know corporate law. In professional life people expect you to know all such things. [38]" [Participant 5 - appendix 8e]*

*"Practically things are not like the books, they are quite interconnected with each other. [45]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Inter or multidisciplinary perspective: while doing accounting considering others disciplinary perspective such as strategic management, corporate law and taxation etc.

28) Ability to collaborate with colleagues to resolve conflicts and work in a team (For participants responses see 35<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'ability to collaborate with colleagues to resolve conflicts and work in a team' as a generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), IFAC (2008), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008), Kavanagh et al. (2009) and Lin et al. (2005) (Table 13).

During the interview sessions the participants have found the term 'ability to collaborate with colleagues to resolve conflicts and work in a team' simple to understand as team working skills. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"This is required, often in official environment you have to deal with it. You should have stated it as team working skill it is more concise and includes everything in it. [48]"*  
[Participant 2 - appendix 8b]

*"Like Collaborating with your colleagues, how to talk with each other, how to commend each other, how to divide the work in between, such kind of stuff. So these are things. [45]"*  
[Participant 3 - appendix 8c]

*"Indeed it is important. Obviously we have to work as team, no one on his own can do the complete audit of a firm. We have to rely on each other. We must have the environment of trust in between so that we can understand each other and divide different responsibilities. [39]"* [Participant 4 - appendix 8d]

*"Ability to collaborate with colleagues to resolve conflicts and work in team, this is obviously important. In official environment, I told you before, we have to work as a one family. [39]"* [Participant 5 - appendix 8e]

*"You have to understand them, their environment, their limitation, you have to give them alternatives, ask their opinions. So you need to collaborate, you have to work with them. [46]"* [Participant 6 - appendix 8f]

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Teamwork: having the ability to collaborate with colleagues to resolve conflicts while working in group

29) The ability to analyse and reason logically (For participants responses see 36<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'the ability to analyse and reason logically' as a generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), IFAC (2008), Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).



During the interview sessions the participants conceptualised the term 'ability to analyse and reason logically' as supporting one's argument with some theoretical analysis or through subjective or objective reasoning processes. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Analytical or logical reasoning are both important in accounting profession. See no one expects a person who is at CFO [Chief financial officer] position and to talk stupid in board meetings. He [CFO] is a very important person to an organisation. Only he knows whether company can meet its upcoming marketing or strategic plan financially. So he needs to have very strong analytical skills to properly forecast financial figures.[46]" [Participant 3 - appendix 8c]*

*"Often during meetings we talk to each other and discuss different matters on agenda, there logical reason is required. There is no question of right or wrong in the meetings. We have to see things according to law and fair practices and for that we need logics not just talks. [40]" [Participant 4 - appendix 8d]*

*"What come to my mind is when you do argument on some issue you must have some theoretical background to it. Now this background could be objective or subjective or both. SIR WHAT DO YOU MEAN BY OBJECTIVE AND SUBJECTIVE HERE. See objective means like having mathematical, statistical analysis and by subjective I meant by some subjective analysis like TOWS analysis, PESTAL analysis. So these are the things that support your arguments... [40]" [Participant 5 - appendix 8e]*

*"See logical reasoning is only possible when you have some sort of analysis supporting your argument or some reference. When one is suggesting something and you are negating saying it's not possible then you should have a reason for it, why it's not possible, what are the analytical reasons behind it. [47]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

The ability to analyse and reason logically: supporting your arguments with theoretical analysis or objective or subjective reasoning process.

31) Awareness of social and ethical responsibilities (For participants responses see 38<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'awareness of social and ethical responsibilities' as a generic skill was introduced by a number of authors, such as Jones and Sin (2003), Jackling and Keneley (2009), Hassall et al. (1999, 2001, 2003, 2005) Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008) and Lin et al. (2005) (Table 13).

During the interview sessions the participants found the term 'awareness of social and ethical responsibilities' to be the same as the term 'think and behave ethically'

conceptualised it as following accounting codes of ethical behavior. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Awareness of social and ethical responsibilities, it was there before as well. See 14 think and behave ethically. A person can only think and behave ethically if only he has awareness of social and ethical responsibilities. So according to me it's a repetition... [51]"* [Participant 2 - appendix 8b]

*"Awareness of social and ethical responsibilities, important. This is again related to code of ethics. [48]"* [Participant 3 - appendix 8c]

*"Awareness of social and ethical responsibilities, very important. That is why the accountants are here. I guess it was before as well... Yes this also means almost the same. [42]."* [Participant 4 - appendix 8d]

*"Awareness of social and ethical responsibilities, obviously, that I've already told you before. We have accounting code of ethics and it is mandatory for all of us. We have to follow it strictly. [42]"* [Participant 5 - appendix 8e]

The term 'awareness of social and ethical responsibilities' was already conceptualised by the participants in the interviews and included in the questionnaire. Therefore, this term does not need to be duplicated here.

32) Work effectively in diversified cultural settings (For participants responses see 39<sup>th</sup> row of Appendices 8a-8f):

In the literature, 'work effectively in diversified cultural settings' as a generic skill was introduced by a number of authors, such as Albrecht and Sack (2000), Kavanagh and Drennan (2007, 2008), IFAC (2008), and Lin et al. (2005) (Table 13).

During the interview sessions, the participants conceptualised the term 'work effectively in diversified cultural settings' as understanding cultural norms and values while working in multinational organisations. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"If someone is going in multinational then he should have that skill. He needs to understand others culture, values, tradition. [43]"* [Participant 4 - appendix 8d]

*"I told you before, one should have to be ready for any sort of change. Especially who are thinking to work in Unilever, Procter & Gamble, Johnsons & Johnsons, such kind of multinationals. They need to understand organisational culture, need to be flexible enough to absorb cultural change and settle their self there. So of course this one is important, People must know how to work with foreign community. [50]"* [Participant 6 - appendix 8f]

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Work effectively in diversified cultural settings: understanding cultural norms and values to work in diversified culture or multinational firms.

33) Initiative (For participants responses see 40<sup>th</sup> row of Appendices 8a-8f):

In the literature, ‘initiative’ as a generic skill was introduced by IFAC (2008) and Kavanagh et al. (2009) (Table 13).

During the interview sessions the participants conceptualised the term 'initiative' as taking on work responsibilities on one's own whilst also considering working environment dynamics'. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Self-initiative like doing something on your own what you feel is necessary. Not waiting for someone to come and tell you. If you are obvious about something and it is important then do it. [48]" [Participant 1 - appendix 8a]*

*"Initiative, see it's a personal trait Sometimes taking self- initiative is not good. It involves personal situational judgement as well as confidence. So with that an individual decides considering official dynamics that whether it is required or not. But in general it is important and an individual should have that. [53]" [Participant 2 - appendix 8b]*

*"Having the ability to take self-initiative makes you favourite in the work environment. Initially, maybe no one expects you to do things on your own. But after sometime this becomes expected of you to do things on your own. A person must have to be self-responsible for the things which he do. [44]" [Participant 4 - appendix 8d]*

*"Initiative is what management is looking for. They wants to have individuals on top level positions who work on their own. They should not have a need to tell them. They should consider things important by themselves and solve different upraising issues. [51]" [Participant 6 - appendix 8f]*

From these comments one may subjectively construct the following statement for use in the construction of the questionnaires, specifically...

Self-initiative: taking the work responsibility on your own while considering work environment dynamics

In summary, Table 18 shows the changes that were required to be made to the generic skills content of the questionnaire as a result of the analysis of the data collected in round 2. As the generic skills are common to both of the respondent group (educators and employers), therefore, the changes are attributable to both sets of the questionnaires applying to educators and employers respondent groups' (that is, 'Appendix 3a & 6a' and 'Appendix 4a & 7a').

**Table 18: List of changes that were required to be made within generic skills content of the preliminary drafted questionnaires**

<b>Generic skills S. No</b>	<b>Existing list of Generic skills</b>	<b>Changes required to made</b>
1	Decision modelling	Decision making: having the ability to conceptually structuralize the situation and select one amongst available options.
2	Risk analysis	Financial risk analysis: having the ability to assess the factors that may jeopardize the project such as knowing cost benefit analysis, ratio analysis, portfolio management, NPV, IRR, sensitivity analysis etc.
3	Reporting	Financial accounting: concerned with the study of reporting the financial transactions and the preparation of financial statements.
4	Information technology competence	Information technology competence: having the ability to use computer softwares such as knowing MS Office, Peachtree, UBS etc.
5	Critical thinking	Critical thinking: having a sight to see things beyond its apparent meaning and not accepting anything until proven with logical reasoning or through some evidence.
6	International, industry and sector perspective	International global perspective: Knowledge and understanding of international financial reporting standards and of current developments in the accounting profession.
7	Legal regulatory perspective	A legal regulatory perspective: knowledge of the legal structure of the state such as corporate law, taxation and auditing standards.
8	Marketing/Clients Focus	Marketing/clients focus: customer care orientation such as knowing marketing tactics in order to deal with clients.
9	Problem Solving and Decision Making	Problem solving: coming up with a practical and feasible solution to a problem.
10	Leadership	Leadership: having the ability to manage a group of people such as assigning tasks, giving directions, keeping staff motivated and make them answerable.
11	Project Management	Project management: having the ability to establish and run new projects.
12	Think and behave ethically	Think and behave ethically: professional behavior of accountants must be according to accounting code of ethics.
13	Flexible and be adaptable to changing environment and situation	Flexibility and adaptability: be flexible and adaptable to changing environment in official routine activities.
14	Act strategically	Strategic management: concerned with the study of understanding organisation strategic requirements such as knowing porter's 5 forces, SWOT analysis, price differentiation strategies, product development, market penetration etc.
15	Think and act independently	Independent thinking: having independent professional judgment.
16	Focused on outcomes	Focused on outcomes: ability to focus on objective and subjective outcomes such as meeting financial targets and deadlines.
17	Tolerate ambiguity	Tolerate ambiguity: having the ability to ignore annoying routine activities in official environment.

18	Think creativity	Think creatively: coming up with new and more effective solutions to old problems.
19	Listen effectively	Listen effectively: listen attentively and understanding what others are saying.
20	Present, discuss and defend views	Presentation skill: appropriately present your point of view in official meetings.
21	Transfer and receive knowledge	Need to remove from the questionnaires
22	Negotiate with people from different cultural background	Negotiation skill: making others understand what you are saying and convincing them to a point where both parties arrive at agreement.
23	Understand group dynamics	Understanding group dynamics: while working in group understanding others work potential, attitude, emotions, and patience level.
24	Communicate in written format	Communicate in written format: having the ability to draft inter office memos and letters.
25	Communicate orally	Communicate orally: having the ability to speak fluently, using appropriate tone to address your boss and subordinates.
26	Engage in lifelong learning	Engage in lifelong learning: attending professional development programs for self-learning.
27	Apply inter or multidisciplinary perspective	Inter or multidisciplinary perspective: while doing accounting considering others disciplinary perspective such as strategic management, corporate law and taxation etc.
28	Ability to collaborate with colleagues to resolve conflicts and work in team	Teamwork: having the ability to collaborate with colleagues to resolve conflicts while working in group.
29	The ability to analyse and reason logically	The ability to analyse and reason logically: supporting your arguments with theoretical analysis or objective or subjective reasoning process.
30	Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management	Personal attributes: having confidence, identifying owns strengths and weaknesses, motivation level, self-promotion and self-management etc.
31	Awareness of social and ethical responsibilities	Need to remove from the questionnaires
32	Work effectively in diversified cultural settings	Work effectively in diversified cultural settings: understanding cultural norms and values to work in diversified culture or multinational firms.
33	Initiative	Self-initiative: taking the work responsibility on your own while considering work environment dynamics.

The next section (Constraining elements) is about rectifying the comprehension of the words attributed to the content of the constraining elements within the questionnaire. This discussion comes under the subsequent section of ‘constraining elements’ in section 6.4.2 (Data analysis after round 2, right column in Figure 28).

## b) Constraining elements:

The constraining elements represent the constraints that are limiting the ability of the academic community to develop skills in student. The views recorded in this section are only from the educators' group perspective. This section includes evaluating 6 statements representing the constraining elements from the academics' group comprehension perspective. These 6 statements are already the part of the existing list of constraining elements in the questionnaire of the educators' group (Appendix 5a). Thus, any changes made to the results of textual analysis in this section would be applicable to the educators' group questionnaire set only.

The following are the findings with respect to the content comprehension of the constraining elements of the questionnaire:-

1) Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace (For participants responses see 42<sup>nd</sup> row of Appendices 8a-8c):

The first constraining statement 'students have inadequate academic skills' is derived from the work of Kavanagh and Drennan (2007) (see Table 14).

All of the interviewed participants have found the statement simple and conceptualised the meaning of it in a similar manner as academic quality of enrolling students. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"This statement is asking about what is the level of students, quality of students is more appropriate word. How they see things their intelligence level, how quick and sharp they are mentally. [49]" [Participant 1 - appendix 8a]*

*"...in a class you have a mix of students. Some will be very good; some will be below the quality standards. It is impossible to get always good students in a class. But overall I think they are not very bad, academically they are good enough. [54]" [Participant 2 - appendix 8b]*

*"There is no doubt about it, this problem is here, we have faced it. We have very weak schooling system. Most of the students who come to us they even don't know how to talk, confidence level is totally zero. They don't even know basic English. We have to work a lot on them to bring them to our standards. [51]" [Participant 3 - appendix 8c]*

As the meaning of statement is already clear and common to all of the participants, as such there is no need to modify the existing statement.

2) Students have an inappropriate attitude for learning (For participants responses see 43rd row of Appendices 8a-8c):

The constraining statement ‘students have an inappropriate attitude for learning’ is derived from the work of Bui and Porter (2010) (Table 14).

All of the interviewed participants have found the statement simple and conceptualised the meaning of it in a similar manner as lack of interest towards education. In this regard, some notable remarks from the participants in the interviews are underlined:-

*“Students have inappropriate attitude for learning, strongly relevant. This is very important you see as I have talked before they are not serious in it. They think it [accounting] has no importance. We need to work on their attitude. [50]” [Participant 1 - appendix 8a]*

*“Students have inappropriate attitude for learning? No I don’t think so. Most of the students here are for learning. They have good attitude and are very well behaved. [55]” [Participant 2 - appendix 8b]*

*“I told you before, we normally have the drop-outs from engineering and medical college entry tests. So basically this is not the field which they have ever thought for. As they don’t have any other choice so they come to us. I don’t know, may be their parents force them or some other reasons. [52]” [Participant 3 - appendix 8c]*

As the meaning of statement is already clear and common to all of the participants, as such there is no need to modify the existing statement.

3) Classes are pack with a large number of students (For participants responses see 44<sup>th</sup> row of Appendices 8a-8c):

The constraining statement ‘classes are pack with a large number of students’ is derived from the work of Bui and Porter (2010), Milner and Hill (2008), Hassall et al. (2005) (see Table 14).

All of the interviewed participants found the statement to be simple and conceptualised the meaning of it in a similar manner as number of students in a class room. In this regard, some notable remarks from the participants in the interviews are underlined:-

*“Ok so then it is not right, hardly we have 25 to 30 students in a class which are not much. [51]” [Participant 1 - appendix 8a]*

*“Not exactly, it depends sometimes we have too many students registered in a course. In such case then we have larger classes. But most of the time we also have fewer students in our classes. [56]” [Participant 2 - appendix 8b]*

*“I will disagree with you on this point. Normally people don’t like to come in this field. They have misperception about it like this is the field only good for people who have mathematical skills. So normally students strength in our classes is very low. [53]” [Participant 3 - appendix 8c]*

As the meaning of the statement is already clear and common to all of the participants, as such there is no need to modify the existing statement.

4) Accounting curriculum has insufficient provision to allow for the effective development of skills (For participants responses see 45<sup>th</sup> row of Appendices 8a-8c):

The constraining statement ‘accounting curriculum has insufficient provision to allow for the effective development of skills’ is derived from the work of Bui and Porter (2010) (Table 14).

All of the interviewed participants found the statement simple and conceptualised the meaning of it in a similar manner as curriculum design. In this regard, some notable remarks from the participants in the interviews are underlined:-

*“We do have a good curriculum so I disagree with it. [ACCOUNTING BODY NAME] program is a lot better than university programs. [52]” [Participant 1 - appendix 8a]*

*“I will mark it 3 because I personally believe the curriculum is well designed but still have some gaps for the improvement. [57]” [Participant 2 - appendix 8b]*

*“[ACCOUNTING BODY NAME] program has all what it needs to have in a good accountant. Even there is articleship requirement within this program. So I don’t think this point is true. [54]” [Participant 3 - appendix 8c]*

As the meaning of statement is already clear and common to all of the participants, as such there is no need to modify the existing statement.

5) As a shift to research based culture educators are too busy with research such that this impacts their teaching abilities negatively (For participants responses see 46<sup>th</sup> row of Appendices 8a-8c):

The constraining statement ‘as a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively’ is derived from the work of Dominelli and Hoogvelt (1996) (Table 14).

All of the interviewed participants found the statement to be simple and conceptualised the meaning of it in a similar manner as being involved in academic research activities. In this regard, some notable remarks from the participants in the interviews are underlined:-

*“As a shift to research based culture, educators are too busy with research that left them to affect their teaching abilities negatively, no I disagree with it. We don’t have academics research like you have. Sometimes new standards come only then we request teachers to do a*



*little research on it. But it is not like you what you are doing so I disagree. [53]" [Participant 1 - appendix 8a]*

*"No I do not agree on this. If someone is involved in research then he would be in his personal capacity, not enforced by the institution. [58]" [Participant 2 - appendix 8b]*

*"Not exactly, as I told you we don't have any need for such things. Syllabus design is not our job, we need only people who can teach, so why we pay for such activities. Even teachers don't want either to do academic research. Normally they [teachers] all are engage at some level in consultancy or with professional firms, so they even don't have the time for this. [55]" [Participant 3 - appendix 8c]*

As the meaning of statement is already clear and common to all of the participants, as such there is no need to modify the existing statement.

6) Institution does not reward high quality teaching (For participants responses see 47<sup>th</sup> row of Appendices 8a-8c):

The constraining statement 'institution does not reward high quality teaching' is derived from the work of Seldin (1995), Porter and Carr (1999), Kavanagh and Drennan (2007) and Bui and Porter (2010) (Table 14).

All of the interviewed participants found the statement simple to understand but conceptualised the meaning of it differently. In this regard participants 1 and 3 conceptualised the statement as pay rate per lecture for teachers, whereas participant 2 as benefit for doing extra teaching effort. In this regard, some notable remarks from the participants in the interviews are underlined:-

*"Institution does not reward high quality teaching. It depends so I give it 3. Like I can't say, for someone having 6-digit figure is not enough while for others 50k is more than enough.[54]" [Participant 1 - appendix 8a]*

*"Yes some what I do agree on this point. Institutions have a fixed rate for lecture. Even they have no reviewing system during the classes so I agree with you on this point. Most of the teachers they don't do extra efforts to make students learn. And there is a reason for it because they know in market certified chartered accountants are short for teaching. [59]" [Participant 2 - appendix 8b]*

*"Intuitions does not reward high quality teaching, I will not agree with this statement .... I personally believe we pay a very handsome amount to our teachers. Getting Rs. 1000 per hour is not a bad amount. [56]" [Participant 3 - appendix 8c]*

The following statement is a hybrid of the two types of participants' views. Therefore, this suggests modifying the statement to make the meaning less ambiguous:-

Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?

Table 19 presents a summary of the changes that are required to be made in the constraining elements content of the questionnaire as a result of data analysis collected in round 2. To repeat, as the content of the constraining elements is only specific to the educators, any changes arising from the content of this section would only be attributable to educators' group questionnaire set (that is, Appendix 5a).

**Table 19: List of changes that were required to be made within constraining elements content of the preliminary drafted questionnaires**

<b>Constraints S. No</b>	<b>Constraining elements</b>	<b>Results derived from round 2</b>
1	Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	No change
2	Students have an inappropriate attitude for learning?	No change
3	Classes are pack with a large number of students?	No change
4	Accounting curriculum has insufficient provision to allow for the effective development of skills?	No change
5	As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	No change
6	Institution does not reward high quality teaching?	Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?

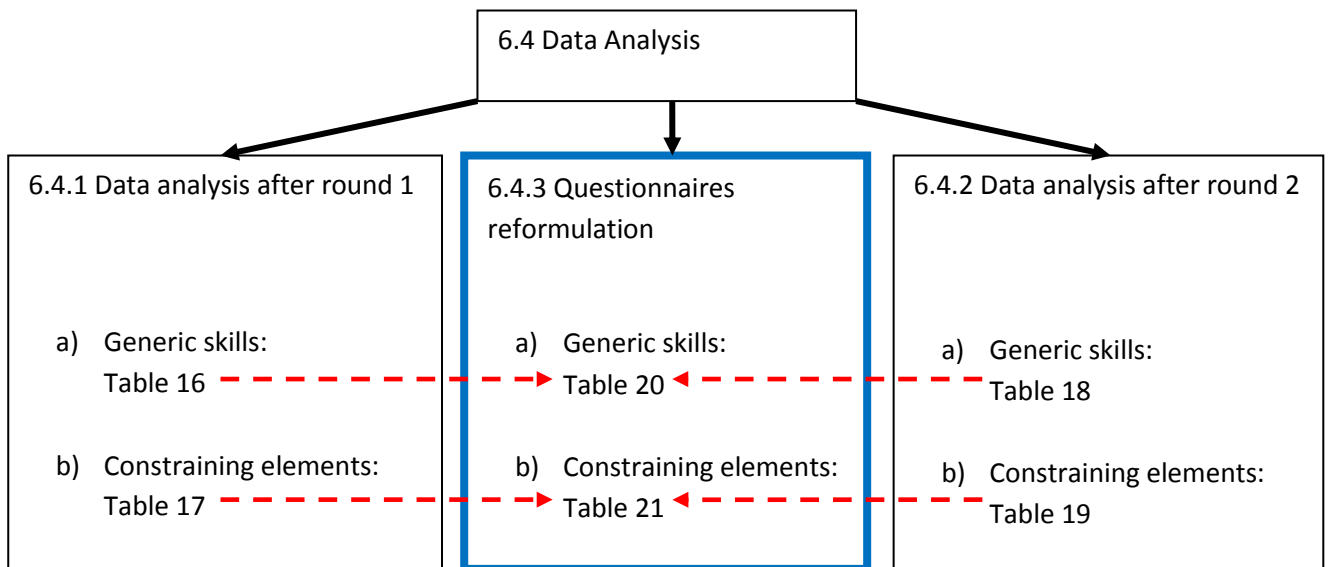
The round 2 (section 6.4.2) is now complete. The accumulated findings from this round are presented in Table 18 (findings related to generic skills) and Table 19 (findings related to constraining elements).

Next, section 6.4.3, addresses the reformulation of the questionnaires (second column from the left in Figure 26). The objective is to reformulate the questionnaires for educators and employers group with respect to findings from round 1 and round 2, previously, so as to incorporate the views of participants from a Pakistani accounting education context.

### **6.4.3 Questionnaires reformulation:**

The third sub-heading in section 6.4 is 'questionnaires reformulation' (see middle column Figure 29 is selectively extracted from Figure 26).

Figure 29: Representing questionnaires reformulation; repeated section from Figure 25



In section 6.4.2 (Data analysis after round 2, third column from the left in Figure 29), a number of important amendments emerge to improve comprehension of the generic skills and the constraining elements content of the questionnaires. However, these amendments are not the only ones that are required to be made. In section 6.4.1 (Data analysis after round 1, first column from the left in Figure 29), there are some newly identified skills and constraining elements from a Pakistani context that are also required to be included in the questionnaires. This is only possible when the findings from round 1 (Section 6.4.1) are taken into account collectively with the findings of round 2 (Section 6.4.2). This amalgamation occurs under the heading of ‘generic skills’ and ‘constraining elements’ in section 6.4.3 (Questionnaires reformulation, middle column in Figure 29).

#### **a) Generic skills:**

The changes made in this section are applicable to the questionnaires for both of the respondent groups (employers and educators) (that is, ‘Appendix 3a & 6a’ and ‘Appendix 4a & 7a’ respectively).

During round 1 of the interview phase, from the Pakistan context, a number of generic skills were found to be important for accounting career development. Amongst them, a few are not yet part of the existing questionnaires. As the context of this research is Pakistan, they needed to be included in the questionnaires. In total, the participants identified 21 generic skills in round 1 (Table 16). Among them, 17 were already part of the existing list of generic skills in

the questionnaires. However, 4 skills (English language, statistics, cost and management accounting, economics background) have yet to be included. These newly identified generic skills were explained through informal discussions with the accounting educators and employers (Figure 30).

**Figure 30: Definitions of newly identified generic skills**

English language: having the ability to read, write, listen and speak in English.
Statistics: study of the collection, organization, analysis, interpretation, and presentation of data such as knowing how to conduct regression analysis, correlation, chi-square, t-test, and hypothesis testing etc.
Cost and management accounting: study of the accounting information to managers within organizations, to provide them with the basis to make informed business decisions such as knowing budgeting techniques, costing, accounting for labour, and accounting for overheads etc.
Economics background: analysing the production, distribution and consumption of goods and services such as knowing how to measure GDP, GNP, demand and supply curve, equilibrium, and price elasticity etc.

Additionally, two generic skills (transfer and receive knowledge, awareness of social and ethical responsibilities) have a similar conceptualization to other skills within the questionnaires. Therefore, they were excluded from the list of generic skills so as to avoid duplication. In this regard, see Table 20 for a summary of the changes that are made in the generic skills content of the questionnaires for both of the respondent groups. The changes made in this section are already discussed in detail under section 6.4.1 (Data analysis after round 1) and under the heading of 'content comprehension' in section 6.4.2 (Data analysis after round 2). Therefore Table 20 summarises the changes without discussing them again.

The structure of Table 20 is as follows:-

- The first column from the left represents the serial number for each generic skill in the questionnaire that was used during pre-testing phase (see 'Appendix 3a & 6a' and 'Appendix 4a & 7a').
- The 2nd column from the left represents the generic skills in the questionnaire that were used to investigate content comprehension during the pre-testing phase round 2 (see 'Appendix 3a & 6a' and 'Appendix 4a & 7a').

- The 3rd column from the left represents the modification in generic skills terminologies (that are represented in 2nd column from the left) along with their definitions due to the result of analysis in round 2 (Table 18).
- The 4th column from the left represents the generic skills that have been identified due to the result of the analysis from round 1 (see Table 16). In this column, round 1 identified skills, were aligned with the skills having similar conceptualization in round 2. The parenthesis in front of each skill represents the serial number of that skill in Table 16.
- Last, the 5th column from the left represents the final list of generic skills to be included in the questionnaires.

In summary, the final list includes 35 generic skills which has now replaced the old list of generic skills in the questionnaires for both of the respondent groups. For changes see ‘Appendix 3b & 6b’ for the educators’ group and ‘Appendix 4b & 7b’ for the employers’ group questionnaire.

Table 20: Final list of generic skills that is to be included within the questionnaires

Generic skills S. No	Existing list of Generic skills	Results derived from round 2 (see Table 18)	Results derived from round 1 (see Table 16)	Final list of generic skills to be replaced with the old list of skills within the questionnaires
1	Decision modelling	Decision making: having the ability to conceptually structuralize the situation and select one among available options	Decision making (20)	Decision making: having the ability to conceptually structuralise the situation and select one amongst available options.
2	Risk analysis	Financial risk analysis: having the ability to assess the factors that may jeopardize the project such as knowing cost benefit analysis, ratio analysis, portfolio management, NPV, IRR, sensitivity analysis etc	Financial risk analysis (10)	Financial risk analysis: having the ability to assess the factors that may jeopardize the project such as knowing cost benefit analysis, ratio analysis, portfolio management, NPV, IRR, sensitivity analysis etc.
3	Reporting	Financial accounting: concerned with the study of reporting the financial transactions and the preparation of financial statements	Financial accounting (1)	Financial accounting: concerned with the study of reporting the financial transactions and the preparation of financial statements.
4	Information technology competence	Information technology competence: having the ability to use computer softwares such as knowing MS Office, Peachtree, UBS etc	Information technology competence (4)	Information technology competence: having the ability to use computer softwares such as knowing MS Office, Peachtree, UBS etc.
5	Critical thinking	Critical thinking: having a sight to see things beyond its apparent meaning and not accepting anything until proven with logical reasoning or through some evidence		Critical thinking: having a sight to see things beyond its apparent meaning and not accepting anything until proven with logical reasoning or through some evidence.
6	International, industry and sector perspective	International global perspective: such as knowing international financial reporting standards and current developments in accounting profession		International global perspective: Knowledge and understanding of international financial reporting standards and of current developments in the accounting profession.
7	Legal regulatory perspective	Legal regulatory perspective: knowing the legal structure of the state such as corporate law, taxation and auditing standards	Business law (7) Auditing (16) Taxation (17)	A legal regulatory perspective: knowledge of the legal structure of the state such as corporate law, taxation and auditing standards.
8	Marketing/Clients Focus	Marketing/clients focus: customer care orientation such as knowing marketing tactics in order to deal with clients		Marketing/clients focus: customer care orientation such as knowing marketing tactics in order to deal with clients.
9	Problem Solving	Problem solving: coming up with a feasible and	Problem solving (19)	Problem solving: coming up with a practical and

	and Decision Making	practical solution to a problem		feasible solution to a problem.
10	Leadership	Leadership: having the ability to manage a group of people such as assigning tasks, giving directions, keeping staff motivated and make them answerable.	Leadership (5)	Leadership: having the ability to manage a group of people such as assigning tasks, giving directions, keeping staff motivated and make them answerable.
11	Project Management	Project management: having the ability to establish and run new projects		Project management: having the ability to establish and run new projects.
12	Think and behave ethically	Think and behave ethically: professional behavior of accountants must be according to accounting code of ethics	Accounting code of ethics (9)	Think and behave ethically: professional behavior of accountants must be according to accounting code of ethics.
13	Flexible and be adaptable to changing environment and situation	Flexibility and adaptability: be flexible and adaptable to changing environment in official routine activities		Flexibility and adaptability: be flexible and adaptable to changing environment in official routine activities.
14	Act strategically	Strategic management: concerned with the study of understanding organisation strategic requirements such as knowing porter's 5 forces, SWOT analysis, price differentiation strategies, product development, market penetration etc.	Strategic management (15)	Strategic management: concerned with the study of understanding organisation strategic requirements such as knowing porter's 5 forces, SWOT analysis, price differentiation strategies, product development, market penetration etc.
15	Think and act independently	Independent thinking: having independent professional judgment about company performance measurement	Professional independent judgement (8)	Independent thinking: having independent professional judgment.
16	Focused on outcomes	Focused on Outcomes: ability to focus on objective and subjective outcomes such as meeting financial targets		Focused on outcomes: ability to focus on objective and subjective outcomes such as meeting financial targets and deadlines.
17	Tolerate ambiguity	Tolerate ambiguity: having the ability to ignore annoying routine activities in official environment		Tolerate ambiguity: having the ability to ignore annoying routine activities in official environment.
18	Think creativity	Think creatively: coming up with new and more effective solutions to old problems	Creative thinking (14)	Think creatively: coming up with new and more effective solutions to old problems.
19	Listen effectively	Listen effectively: listen attentively and understanding what others are saying		Listen effectively: listen attentively and understanding what others are saying.
20	Present, discuss and defend views	Presentation skill: appropriately present your point of view in official meetings	Presentation skill (6)	Presentation skill: appropriately present your point of view in official meetings.
21	Transfer and	Removed from the questionnaires		Need to remove from the questionnaires

	receive knowledge			
22	Negotiate with people from different cultural background	Negotiation skill: making other understand what you are saying and convince them to a point where you both come to an agreement state		Negotiation skill: making others understand what you are saying and convincing them to a point where both parties arrive at an agreement.
23	Understand group dynamics	Understanding group dynamics: while working in group understanding others work potential, attitude, emotions, and patience level		Understanding group dynamics: while working in group understanding others work potential, attitude, emotions, and patience level.
24	Communicate in written format	Communicate in written format: having the ability to draft inter office memos and letters	Communication such as speaking and writing (3)	Communicate in written format: having the ability to draft inter office memos and letters.
25	Communicate orally	Communicate orally: having the ability to speak fluently using appropriate tone to address your boss and subordinates	Communication such as speaking and writing (3)	Communicate orally: having the ability to speak fluently, using appropriate tone to address your boss and subordinates.
26	Engage in lifelong learning	Engage in lifelong learning: attending professional development programs for self-learning		Engage in lifelong learning: attending professional development programs for self-learning.
27	Apply inter or multidisciplinary perspective	Inter or multidisciplinary perspective: while doing accounting considering others disciplinary perspective such as strategic management, corporate law and taxation etc.	inter or multidisciplinary perspective (18)	Inter or multidisciplinary perspective: while doing accounting considering others disciplinary perspective such as strategic management, corporate law and taxation etc.
28	Ability to collaborate with colleagues to resolve conflicts and work in team	Teamwork: having the ability to collaborate with colleagues to resolve conflicts while working in group		Teamwork: having the ability to collaborate with colleagues to resolve conflicts while working in group.
29	The ability to analyse and reason logically	The ability to analyse and reason logically: supporting your arguments with theoretical analysis or objective or subjective reasoning process		The ability to analyse and reason logically: supporting your arguments with theoretical analysis or objective or subjective reasoning process.
30	Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management	Personal attributes: having confidence, identifying owns strengths and weaknesses, motivation level, self-promotion and self-management etc	Confidence (13)	Personal attributes: having confidence, identifying owns strengths and weaknesses, motivation level, self-promotion and self-management etc.



31	Awareness of social and ethical responsibilities	Removed from the questionnaires		Need to remove from the questionnaires
32	Work effectively in diversified cultural settings	Work effectively in diversified cultural settings: understanding cultural norms and values to work in diversified culture or multinational firms		Work effectively in diversified cultural settings: understanding cultural norms and values to work in diversified culture or multinational firms.
33	Initiative	Self-initiative: taking the work responsibility on your own while considering work environment dynamics		Self-initiative: taking the work responsibility on your own while considering work environment dynamics.
34			English language (2)	English language: having the ability to read, write, listen and speak in English.
35			Statistics (12)	Statistics: study of the collection, organization, analysis, interpretation, and presentation of data such as knowing how to conduct regression analysis, correlation, chi-square, t-test, and hypothesis testing etc.
36			Cost and management accounting (21)	Cost and management accounting: study of the accounting information to managers within organizations, to provide them with the basis to make informed business decisions such as knowing budgeting techniques, costing, accounting for labour, and accounting for overheads etc.
37			Economics (11)	Economics background: analysing the production, distribution and consumption of goods and services such as knowing how to measure GDP, GNP, demand and supply curve, equilibrium, and price elasticity etc.

### **b) Constraining elements:**

The constraining elements represent those factors which are assumed to limit the ability of accounting educators, not the employers. Thus, any changes made in this section are only applicable for the educators' group questionnaire (see Appendix 5a).

During round 1 of the interview phase, in a Pakistani context, a number of constraining elements were found to limit the abilities of accounting education in the development of skills in their students. Among them, most are not yet part of the existing questionnaire. As the context of this research is Pakistan, therefore, they should be included in the questionnaire. In total, the participants identified 7 constraining elements in round 1. Among them, there was only 1 constraining element which was already part of the existing list of constraining elements in the questionnaire. The other 6 constraining elements which were found to be relevant in the Pakistan's context were not yet part of the existing list of constraining elements in the questionnaire. They are to be included now. In this regard, see Table 21 for the changes that were made in the constraining elements of the questionnaire. The changes made in this section have already been discussed in detail under section 6.4.1 (Data analysis after round 1) and under the heading of 'content comprehension' in section 6.4.2 (Data analysis after round 2). Therefore, Table 21 summarises the changes without discussing them again.

The structure of Table 21 is as follows:

- The first column from the left represents the serial number for each constraining element in the questionnaire that was used during the pre-testing phase (for reference see Appendix 5a).
- The 2nd column from the left represents the constraining elements in the questionnaire that are used during pre-testing phase round 2 (see Appendix 5a).
- The 3rd column from the left represents the modification in the statements for the constraining elements (that are represented in 2nd column from the left) that have arisen as a result of the analysis in round 2 (Table 19).
- The 4th column from the left represents the constraining elements that were identified from the analysis of round 1. The parenthesis in front of each constraining element represents the serial number of that statement in Table 17. Here in column 4, the

identified constraining elements are aligned with the similar statements of constraining elements evaluated in round 2.

- Lastly, the 5th column from the left represents the list of finalised constraining elements to be included in the questionnaire.

In summary, the final list includes 12 constraining elements. That has now replaced the old list of constraining elements in the questionnaire for the educators' group. For the changes see 'Appendix 5b'.

Table 21: Final list of constraining elements that is to be included within the questionnaire

Table 16: Final list of constraining elements that is to be included within the questionnaire				
Constraints S. No	Constraining elements	Results derived from round 2 (see Table 19)	Results derived from round 1 (see Table 17)	Final list of constraining elements to be replaced with the old list of constraining elements within the questionnaire
1	Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	No change		Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?
2	Students have an inappropriate attitude for learning?	No change	Students do not have serious attitude for learning? (1)	Students have an inappropriate (non-serious) attitude for learning?
3	Classes are pack with a large number of students?	No change		Classes are pack with a large number of students?
4	Accounting curriculum has insufficient provision to allow for the effective development of skills?	No change		Accounting curriculum has insufficient provision to allow for the effective development of skills?
5	As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	No change		As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?
6	Institution does not reward high quality teaching?	Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?		Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?
7			Students have a lack of interest in the accounting discipline? (2)	Students have a lack of interest in accounting discipline?
8			People (potential students) have misperception about accounting education as being highly mathematical in nature? (3)	People (potential students) have misperception about accounting education as being highly mathematical in nature?
9			Accounting institutes are not	Accounting institutes are not offering adequate

			offering adequate training opportunities to their academic staff? (4)	training opportunities to their academic staff?
10			Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies? (5)	Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?
11			For teaching in accounting institutes, it is difficult to find competent academic staff? (6)	For teaching in accounting institutes it is difficult to find competent academic staff?
12			During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations? (7)	During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations?

## Summary

This chapter comes at stage 2 of the study design (Figure 20) which involves pre-testing the preliminary drafted questionnaires to revise the content of them (generic skills and constraining elements) to fit from the respondents' (educators and employers) contextual perspective (accounting education of Pakistan). In order to do that, 6 cognitive interviews were conducted with 3 educators (accounting academics) and 3 employers (accounting practitioners). Using a mix of qualitative data analytical techniques such as content analysis, thematic analysis and textual analysis, the data from the interviews were analysed and then accordingly the content of the pre-drafted questionnaires were revised. The revised pre-tested questionnaires for the educators' and employers' groups are comprised of the following appendices:-

Educators' group questionnaire: demographic details (Appendix 1a), expectation gap and performance gap (Appendix 3b & 6b), and constraints gap (Appendix 5b).

Employers' group questionnaire: demographic details (Appendix 2a), and expectation gap and performance gap (Appendix 4b & 7b).

The next chapter (Stage 3- pilot testing) moves to the third stage of the study design. Pilot testing is the process through which the pre-tested questionnaires would be tested to check against the reliability standards.

## CHAPTER 7: STAGE 3 - PILOT TESTING

### 7.0 Introduction:

This chapter comes at stage 3 of the study design (see Figure 31). This chapter involves piloting the pre-tested questionnaires to check against the reliability standards.

Figure 31: Representing Pilot testing – stage 3; repeated section from Figure 16



The ‘reliability’ is defined as the amount of measurement error that has subjectively been deemed acceptable for the effective, practical use of the questionnaire (Atkinson and Nevill, 1998). In practice, there are different types of test that could be used to measure the reliability of a questionnaire depending upon the structure, collective data type and the objective of the questionnaire being developed (Carmines and Zeller, 1979). These reliability tests include:

1. Interrater reliability
2. Internal consistency
3. Test-retest reliability

as follows:

1. **Interrater reliability:** For example, if the concern is to measure atmospheric pressure using a barometer (instrument used in meteorology to measure atmospheric pressure) on 1<sup>st</sup> of July in Scotland and England something like the following procedure would have to be followed. For that purpose two individuals are appointed: one to be in Scotland and other to be in England at the same time to record the reading. But before sending them to England and Scotland, one would need to be assured that both of the individuals had adequate training to read the atmospheric pressure using standard barometers. In order to do this, one conducts an interrater reliability test in order to be assured that the quality of the barometers are standard and the training of the individuals is adequate for them to measure the atmospheric pressure accurately. In the case of this study, there are no

individuals (judges) used in observing the phenomenon of the expectation-performance gap. The data from the participants would be collected using self-administered questionnaires and would be analysed using statistical software later on. As there are no individuals involved in the research to observe the phenomenon from the participants, an interrater reliability test is irrelevant to this study.

2. **Internal consistency:** In this form of reliability test the researcher investigates whether the items (observed variables) used to measure a construct (latent variable - a variable that is not directly observed, rather inferred from observed variables) in a questionnaire are internally consistent or not (Aday and Cornelius, 2006), for example, a scale of overall job-satisfaction in which 7 Items (observed variables) are used to observe the overall job-satisfaction (latent variable).

Overall Job-satisfaction is measured by below mentions 7 items (Cook and Heptworth, 1981):

1. All in all, how satisfied are you with the persons in your work group?
2. All in all, how satisfied are you with your supervisor?
3. All in all, how satisfied are you with your job?
4. All in all, how satisfied are you with this organization, compared to most?
5. Considering your skills and the effort you put in your work; how satisfied are you with your pay?
6. How satisfied do you feel with the progress you have made in this organization up to now?
7. How satisfied do you feel with your chance for getting ahead in this organization in the future?

Responses on all 7 items (observed variables) are obtained on a 5-point Likert scale where 1 = completely satisfied and 5 = completely unsatisfied. But the question is how we come to know whether these 7 items are the right questions to measure the overall job satisfaction. The researcher has to conduct an internal consistency test - where the response from the participants on these 7 items would be statistically tested to check for a significant level of correlation. In the case of this study, there are no latent variables used to measure a construct. All the items (35 generic skills) used within the questionnaires are directly observable. Thus the internal consistency test has no relevance to this research.



- 3. Test-retest reliability:** This is the most general form of reliability test. In this form of test the researcher retests the outcome of a survey instrument in a different time framework (typically spanning 2-4 weeks) in order to check whether the same respondents yield similar responses or not. With this test the researcher is informed as to whether the quality of collected data is suitable for statistical analysis and the related conclusive results. This form of test is pertinent to this study in that it investigates a phenomenon in which conclusive results will be drawn about Pakistan's accounting education system.

In summary, only one reliability test is considered to be relevant to this research, namely, the test-retest reliability. Next, section 7.1, reports findings related to test-retest reliability of the developed questionnaires.

### 7.1 Findings related to test-retest reliability:

This section has the particular purpose of reporting the findings related to test-retest reliability of the designed questionnaires.

In order to check for the test-retest reliability; a survey instrument is tested by performing the same survey with the same respondent at two different moments of time (Statistical Glossary, 2013), the closer the findings of the retested survey are to the first test, the greater is the reliability of the instrument.

In order to measure for test-retest reliability in this research, twenty respondents from the employers' group and twenty from the educators' group were selected to pilot test the questionnaires. All of the respondents were contacted through their organisations to obtain their consent. Once they agreed, the questionnaires were delivered to their contact addresses. Initially, the questionnaires were sent to all of the forty respondents to fill in with advice to return them in a short time (one week). After, receiving all of the questionnaires back, the researcher waited for 14 days and then a fresh copy of the same questionnaires were sent again to fill-in (Table 22). Once all of the questionnaires were received the statistical software named Predictive Analytical SoftWare (PASW, version 18) was used to measure the test-retest reliability. The selection of PASW is based on the criterion that it provides all the necessary support that is required in terms of analysis for this research.

**Table 22: Representing time schedule with number of questionnaires for retesting the questionnaires from respondent groups.**

Group No.	Respondents group	Number of questionnaires (first round)	After 14 days	Number of questionnaire (second round)
1	Employers group	20		20
2	Educators group	20		20

In the questionnaires 5-point Likert scale has been used for the expectation gap, constraints gap and performance gap data (Table 23). As such, the first task was to know the symmetrical structure (normal or abnormal distribution) of the data across the aforementioned constituent elements. This is in order to decide which type of statistical analysis should be used for measuring the test-retest reliability of the questionnaires.

**Table 23: Scales that are used to collect data on measuring constituents from the respondent groups**

Constituents	Respondents group Questionnaire	Type of Scale
Expectation gap	Employers group	5-point Likert scale
	Educators group	5-point Likert scale
Constraint gap	Educators group	5-point Likert scale
Performance gap	Employers group	5-point Likert scale
	Educators group	5-point Likert scale

In order to determine the data symmetrical structure, the Kurtosis and Skewness statistical test has been evaluated for the constituents of the expectation gap, constraints gap and performance gap using the PASW. A value between -1.0 and +1.0 indicates a normal distribution (Ma et al., 2006). In this regard, the symmetrical structure of the data across the constituents of the expectation gap, constraints gap and performance gap is presented in Table 24. As there are observable abnormal distributions with all the constituent elements (expectation gap, constraints gap and performance gap) of the expectation-performance gap a Spearman correlation coefficient was employed to evaluate the test-retest reliability (see Medical Research Council, 2013).

**Table 24: Representing symmetrical structure (distribution pattern) of the data collected on pilot tested questionnaires and suggesting recommended statistical test to determine test-retest reliability.**

Questionnaire constituents	Distribution pattern Test 1	Distribution pattern Test 2	Recommended statistical test
Expectation gap	Abnormal	Abnormal	Spearman Correlation

	(See Appendix 9a)	(See Appendix 10a)	
Constraint gap	Abnormal (See Appendix 9b)	Abnormal (See Appendix 10b)	Spearman Correlation
Performance gap	Abnormal (See Appendix 9c)	Abnormal (See Appendix 10c)	Spearman Correlation

The next section 7.1.1 is about reporting the results of test re-test reliability in respect of the constituents of the expectation gap. The same task is respectively repeated in sections 7.1.2 and in 7.1.3 for the remaining constituent elements of the questionnaires: the constraints gap and performance gap.

### 7.1.1 Expectation gap:

The calculated Spearman correlation coefficient in respect of the expectation gap is presented in Table 25. The reader's attention is drawn again to Table 11 (in Chapter 4) as an aid to understanding the coefficients.

In Table 25, for the employers group, one can see that the Spearman correlation coefficient (column 3 from the left) values on all 35 generic skills are ranging from 0.507 to 0.991 and the entire values are significant at a 5% confidence interval. Similarly, for the educators group, the Spearman correlation coefficient (column 4 from the left) values on all of the 35 generic skills are ranging from 0.503 to 0.962 and the entire values are significant at a 5% confidence interval. As such, the test-retest reliability for this part of the questionnaire (expectation gap) is established for both of the respondent groups' (employers and educators) because all of the correlation values on generic skills are found to have a moderate to strong level of agreement.

**Table 25: Representing the value of Spearman correlation coefficient for the constituents of Expectation gap.**

S. No	Generic skills	Employers	Educators
		<b>Spearman Correlation</b>	<b>Spearman Correlation</b>
1	Decision making	.755**	.612**
2	Financial risk analysis	.849**	.524*
3	Financial accounting	.694**	<u>.503*</u>
4	Information technology competence	<u>.991**</u>	.783**

5	Critical thinking	.720**	.787**
6	International global perspective	.524*	.596**
7	Legal regulatory perspective	.672**	.631*
8	Marketing/clients focus	.708**	.721**
9	Problem solving	.706**	.579**
10	Leadership	.657**	.679**
11	Project management	.833**	<b><u>.962**</u></b>
12	Think and behave ethically	.687**	.503*
13	Flexibility and adaptability	.991**	.800**
14	Strategic management	.509*	.759**
15	Independent thinking	.889**	.703**
16	Focused on outcome	.560*	.560*
17	Tolerate ambiguity	.675**	.579**
18	Think creatively	.837**	.535*
19	Listen effectively	.648**	.698*
20	Presentation skills	.705**	.600**
21	Negotiation skills	.532*	.596**
22	Understanding group dynamics	.568**	.598**
23	Communicate in written format	.638**	.514*
24	Communicate orally	.593**	.530*
25	Engage in lifelong learning	.723**	.596**
26	Inter or multidisciplinary perspective	.908**	.670**
27	Teamwork	.682**	.707**
28	Ability to analyse and reason logically	.795**	.612**
29	Personal attributes	.640**	.596**
30	Work effectively in diversified cultural settings	.730**	.583**
31	Self-initiative	.624**	.743**
32	English language	<b><u>.507*</u></b>	.685**
33	Statistics	.663**	.664**
34	Cost and management accounting	.805**	.685*
35	Economics	.657**	.602**
* Correlation is significant at the 0.05 level (2-tailed)			
** Correlation is significant at the 0.01 level (2-tailed)			

In the next section 7.1.2, the results of test-retest reliability are reported in respect of the constituents of the constraints gap. As with the previous section 7.1.1, these findings come under the heading of section 7.1 (Findings related to test-retest reliability).

### 7.1.2 Constraints gap:

The calculated Spearman correlation coefficient in respect of the constituents of the constraint gap is presented in Table 26 for the pilot tested questionnaire. As before, the values of the Spearman correlation coefficient are interpreted with reference to Table 11 (in Chapter 4).

In Table 26, for the educators group, one can see the spearman correlation coefficient (column 3 from the left) values on all 12 constraining elements. All of the values are ranging from 0.524 to 0.953 and the entire values are significant at 5% confidence interval. As such, the test-retest reliability for this part of the questionnaire (constraints gap) is established for educators' group questionnaire because all of the correlation values on constraining elements are found to have a moderate to strong level of agreement.

**Table 26: Representing the value of Spearman correlation coefficient for the constituents of constraints gap.**

S. No	Constraining elements	Educators
		<b>Spearman Correlation</b>
1	Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	.830**
2	Students have an inappropriate (non-serious) attitude for learning?	.733**
3	Classes are pack with a large number of students?	.625**
4	Accounting curriculum has insufficient provision to allow for the effective development of skills?	.836**
5	As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	.583**
6	Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?	.637**
7	Students have a lack of interest in accounting discipline?	<u>.953**</u>
8	People (potential students) have misperception about accounting education as being highly mathematical in nature?	.608**

9	Accounting institutes are not offering adequate training opportunities to their academic staff?	<u>.524*</u>
10	Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?	.596**
11	For teaching in accounting institutes it is difficult to find competent academic staff?	.930**
12	During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations?	.533*
* Correlation is significant at the 0.05 level (2-tailed)		
** Correlation is significant at the 0.01 level (2-tailed)		

In section 7.1.3, the results of test re-test reliability in respect of the constituents of the performance gap are reported. Again, this discussion comes under section 7.1 (Findings related to test-retest reliability).

### 7.1.3 Performance gap:

The calculated Spearman correlation coefficient in respect of the performance gap is presented in Table 27. The reader's attention is drawn again to Table 11 as an aid to understanding the coefficients.

In Table 27, for the employers' group, it can be seen that the Spearman correlation coefficient (column 3 from the left) values on all 35 generic skills ranging from 0.585 to 0.900 and the entire values are significant at 5% confidence interval. Similarly for the educators' group the Spearman correlation coefficient (column 4 from the left) values on all of the skills ranging from 0.525 to 0.860 and the entire values are significant at 5% confidence interval. As such, the test-retest reliability for this part of the questionnaire (performance gap) is established for both of the respondent groups (employers and educators) because all of the correlation values on generic skills are found to have a moderate to strong level of agreement.

Table 27: Representing the value of Spearman correlation coefficient for the constituents of performance gap.

S. No	Generic skills	Employers	Educators
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		<b>Spearman Correlation</b>	<b>Spearman Correlation</b>
1	Decision making	.827**	.813**
2	Financial risk analysis	.870**	.567**
3	Financial accounting	.738**	.730**
4	Information technology competence	.777**	.675**
5	Critical thinking	.795**	.722**
6	International global perspective	.713**	.809**
7	Legal regulatory perspective	.809**	<b>.860**</b>
8	Marketing/clients focus	.851**	.819**
9	Problem solving	.786**	.689**
10	Leadership	.769**	.758**
11	Project management	.786**	.728**
12	Think and behave ethically	<b>.900**</b>	.572**
13	Flexibility and adaptability	.791**	.818**
14	Strategic management	.738**	.665**
15	Independent thinking	.868**	.751**
16	Focused on outcome	.810**	.816**
17	Tolerate ambiguity	.860**	.687**
18	Think creatively	.851**	.838**
19	Listen effectively	.621**	.760**
20	Presentation skills	.856**	<b>.525*</b>
21	Negotiation skills	.752**	.589**
22	Understanding group dynamics	.755**	.680**
23	Communicate in written format	.727**	.805**
24	Communicate orally	.728**	.829**
25	Engage in lifelong learning	.838**	.744**
26	Inter or multidisciplinary perspective	.810**	.749**
27	Teamwork	.758**	.591**
28	Ability to analyse and reason logically	.800**	.713**
29	Personal attributes	.833**	.580**
30	Work effectively in diversified cultural settings	.890**	.741**
31	Self-initiative	<b>.585**</b>	.571**
32	English language	.748**	.531*
33	Statistics	.733**	.734**
34	Cost and management accounting	.830**	.696**
35	Economic s	.710**	.616**

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)

In short the test-retest reliability of the measuring instrument over all of its component parts (expectation gap, constraints gap and performance gap) is established from both of the respondent groups (educators and employers). Therefore, now the questionnaire design process is fully completed and questionnaires for educators (Appendix 14a) and employers groups (14b) are now ready to be used for the survey purpose in the next stage of the study design (see Figure 16).

### Summary:

This chapter comes at stage 3 of the study design (Figure 31) which involves piloting the pre-tested questionnaires to check against the reliability standard, that is, test-retest reliability. In order to do that pre-tested questionnaires were surveyed twice from the same respondent at two different moments of time (after 14 days). Using the Spearman correlation coefficient over the data collected from the respondent groups (educators and employers) test-retest reliability of the pilot-tested questionnaires has been measured. Statistical findings represented moderate to strong level of agreement over all the constituents of the questionnaires, thus establishing satisfactory results. The pilot-tested questionnaires are now ready for the surveying purpose from the respondent groups (educators and employers). The final questionnaires for respective respondent groups (educators and employers) are shown in the following appendices:-

Educators' group questionnaire (**Appendix 14a**): comprised of demographic details (Appendix 1a), expectation gap and performance gap (Appendix 3b & 6b), and constraints gap (Appendix 5b).

Employers' group questionnaire (**Appendix 14b**): comprised of demographic details (Appendix 2a), and expectation gap and performance gap (Appendix 4b & 7b).

The next chapter (Survey) comes at stage 4 of the study design, reporting the findings from the surveyed questionnaires.



## CHAPTER 8: STAGE 4 - SURVEY

### 8.0 Introduction:

This chapter comes at stage 4 of the study design (Figure 32). This chapter involves reporting the survey findings.

Figure 32: Representing Survey – stage 4; repeated section from Figure 19



The structure of this chapter is as follows:

The first heading is the ‘Demographic details’ (section 8.1). This section reports the information about the surveyed respondents along with a justification for the sample size used for this research.

The second heading is ‘Missing data’ (section 8.2). This section has the particular purpose to report the findings related to missing data within the surveyed questionnaires and applies a remedy for it.

The third heading is ‘Findings from the surveyed questionnaires’ (section 8.3). This section has the purpose to report the findings from the surveyed questionnaires.

Lastly, the fourth heading is a ‘Discussion related to Findings’ (section 8.4). This section aims to discuss the statistical findings of the survey section (8.3 Findings related to surveyed questionnaires) in the context of the existing literature to understand its significance within the established body of knowledge.

The next section 8.1 is about reporting the demographic characteristics of surveyed respondents.

## 8.1 Demographic details:

This section reports information about the surveyed respondents (employers and educators) along with a justification for a sample size used for this research.

For any research, the sample size should be adequate enough in order to generalise for all the targeted population for reliable and trustworthy results. Unfortunately, unlike developed countries in Pakistan there is no database available providing information regarding population size of educators or practitioners working in accounting educational institutes and professional organisations (for example, in New Zealand - Wiley Directory of Accounting provides information about all accounting academics).

In Pakistan, from the educators' perspective; there are five accounting bodies providing certified accounting education, that is, the Institute of Chartered Accountants of Pakistan (ICAP); the Institute of Cost and Management Accountants of Pakistan (ICMAP); the Institute of Certified Public Accountants of Pakistan (ICPAP); the Society of Accounting Education (SOAE) and the Pakistan Institute of Public Finance Accountants (PIPFA). These professional bodies have a number of registered education centres across the country to provide professional accounting education (see Appendix 11a).

From the employers' perspective, the only list of professional organisations that are associated with accounting bodies are the auditing firms registered as training organisations/partners (see Appendix 11b). Initially considerations were given to the viability of surveying all the accounting academics (educators) and practitioners (employers) associated with these accounting bodies, but pragmatically it became impossible to survey the whole population, especially when the population size is so massive. Thus for this research, how large the sample size should be is a tricky question. If the selected sample of a study falls lower than the statistically adequate size then the results give weak statistical estimates. As such they will have a low degree of parameter accuracy (Hair et al., 2006; Comrey and Lee, 1992). However in contrast, a large sample size requires a lot of time to collect the data and is also very expensive (Bryman and Bell, 2007; Zikmund, 2000; Hair et al., 2006). In this case, as the exact population size is unknown, determining the required sample size with respect to the population is not possible. Thus, the only other possibility remaining is to determine the sample size by observing the requirements of the statistical techniques used for analysing the data within this research such as the Independent sample t-test, Mann Whitney U-test and Principal Component Analysis.

With Independent sample t-test and/or Mann Whitney U-test, an idea/assumption/hypothesis about a population is tested (that is,  $H_0: G1=G2$ ;  $H_1: G1 \neq G2$ ). This is an important fact to conceptualise here because the Independent sample t-test/Mann Whitney U-test compares two independent samples being taken directly from the population (about their size we know nothing) and based on sample findings an inference is made about the whole population. For example, with medical discoveries a new drug is tested over a sample and then, based on the results, makes the inference about the whole population. With regards to the independent sample t-test/Mann Whitney U-test, there is no specific sample size requirement (Wallace, 2013). But generally it is considered that the greater the sample size, the better the inference that can be drawn about the targeted population. However, the Principal Component Analysis requires a large sample size. In order to obtain reliable results, minimally a sample size of 100 subjects or subjects' equivalent to five times of the observed variables/items should be analysed, whichever is greater (SAS, 2013). In this study, Principal Component Analysis over the performance determinant of the employers' group has been used to reduce 35 generic skills (observed items) into components. Therefore, considering the rule of five times the observed items implies that a minimum of data should be collected from 175 subjects (that is,  $5 \times 35$  generic skills) from the employers' group for the underlying research. Thus the required sample size needs to be 175 subjects minimum for each of the respondents' groups (employers and educators) in this research.

In this research, from the employers, in total, 204 accounting practitioners have responded to the questionnaire. From the educators, in total, 201 accounting academics responded to the questionnaire. All of the responding accounting practitioners and academics were practicing and teaching in registered accounting organisations and education centres. Therefore, the data collected from the sample size of 405 respondents (that is, 204 employers and 201 educators) for this research is adequate considering the five times observed items rule stated earlier.

In total six questions related to gender, age, work experience, position, professional education and general academic qualification have been asked from both of the respondent groups (employers and educators). From the employers, in total, the data was collected from 204 accounting practitioners. In this regard, particulars related to demographic details of the employers' group are presented in Table 28. In the sample of 204 accounting practitioners 97.5% ( $n=199$ ) are male and rest 2.5% ( $n=5$ ) are female. The majority (64.7%) of the practitioners are in between the age group of 25-35 years. Most of them (55.4%) have 8-10 years of accounting practitioners' experience and working as middle level executives. All of

them hold certified accounting qualifications with a mix of general academic backgrounds. From the educators', in total, the data has been collected from 201 accounting academics. In this regard particulars related to demographic details of the educators' group are presented in Table 28. Of the sample of the responding academics 93.5% (n=188) were male and rest 6.5% (n=13) were female. The majority (70.1%) of the academics were in the age group of 25-35 years. Most of them (65.2%) had 1-3 years of teaching experience and were working as part time academics. Only a few of the academics (16.9%) held certified professional accounting qualifications at some level.

**Table 28: Representing the demographic details of the respondents**

<b>Demographic</b>	<b>Category</b>	<b>Employers group</b>	<b>Educators group</b>
<b>Gender</b>	Male	199 (97.5%)	188 (93.5%)
	Female	5 (2.5%)	13 (6.5%)
<b>Age</b>	20-24 years	---	3 (1.5%)
	25-35 years	132 (64.7%)	141 (70.1%)
	36-44 years	63 (30.9%)	52 (25.9%)
	45-54 years	8 (3.9%)	5 (2.5%)
	55- above	1 (0.5%)	---
<b>Experience</b>	Less than a year	---	2 (1%)
	1-3 years	---	131 (65.2%)
	4-7 years	48 (23.5%)	44 (21.9%)
	8-10 years	113 (55.4%)	19 (9.5%)
	11 years and more	43 (21.2%)	5 (2.5%)
<b>Position</b>	Top level executive	26 (12.7%)	N/A
	Middle level executive	165 (80.9%)	N/A
	Others	13 (6.4%)	N/A
	Full time academic	N/A	57 (28.4%)
	Part time academic	N/A	144 (71.6%)
<b>Professional accounting education</b>	Yes	204 (100%)	34 (16.9%)
	No	---	164 (83.1%)
<b>General academic qualification</b>	Higher Secondary School Certificate	96 (47.1%)	16 (8%)
	Bachelor degree	99 (48.5%)	91 (45.3%)
	Master degree	9 (4.4%)	64 (31.8%)
	Masters of Philosophy	---	30 (14.9%)
	Doctorate	---	---

The next section 8.2 is about reporting the findings related to missing data from the surveyed questionnaires.

## 8.2 Missing data:

This section has the particular purpose to state the findings related to missing data within the surveyed questionnaires.

The problem of missing data is very common in studies that manually administer questionnaires for survey purposes (Zikmund, 2000). Missing data can cause some serious problems at the data analysis stage. For instance, missing data can reduce the sample size which reduces statistical power which, in turn, implies that estimations are compromised because of insufficient data points (Corderio et al., 2010). Missing data can occur for several reasons but the most common ones are long questionnaire and participants who accidentally miss out questions (Shah, 2009). In order to deal with missing data, researchers have provided a number of suggestions, for example, using the mean of the scores on the variance (Stevens, 1996) or removing the samples who have not responded to the questions properly (Norusis, 1992). In this regard Tabachnick and Fidell (2007) suggested that if only a few data points are missing in a large data set (5% or less) then the problem of missing data is less serious and almost any of the mitigating procedure would yield similar results.

As regards this research, the missing data within the constituents of the expectation gap, constraints gap and performance gap for each item is less than 5%. (See Appendix 12a, Appendix 12b and Appendix 12c for missing data within the constituents of the expectation gap, constraints gap and performance gap respectively). The statistical procedure of ‘series mean’ (replaces missing values with the mean for the entire series) has been used here as a mitigating procedure to resolve the issue of missing data (IBM, 2013).

The next section 8.3 is about reporting the findings from the surveyed questionnaires.

## 8.3 Findings from the surveyed questionnaires:

This section has the particular purpose to report the findings from the surveyed questionnaires. For statistical tests, statistical software for the social sciences PASW Statistics (version 18) was used.

The findings from the questionnaires are reported in four parts, that is:-

8.3.1 Expectation gap

8.3.2 Constraints gap

### 8.3.3 Performance gap

### 8.3.4 Further analysis

In section 8.3.1, next, the findings from the constituents of the ‘expectation gap’ are presented.

### 8.3.1 Expectation gap:

In order to evaluate the ‘expectation gap’ the first task is to know the symmetrical structure (that is, normal/abnormal distribution) across the data. The shape of the symmetrical structure was investigated using the statistical techniques Kurtosis and Skewness (see Appendix 13a). From Appendix 13a, it can be seen that the data across all measured items (skills) within the expectation gap, from both of the respondent groups (educators and employers), does not possess a normal distribution. Therefore, amongst the available statistical techniques (that is, independent sample t-test and the Mann Whitney U-test) the Mann Whitney U-test was chosen for the evaluation of the expectation gap because it does not require a normal distribution assumption.

From Table 29, one can see the values of Mann-Whitney U-test for each of the 35 evaluated generic skills. Out of 35 generic skills, 16 skills (values without \*\*) were found to have statistically insignificant differences (listed in Table 29) which means respondent groups (employers and educators) share similar views about such skills. Whereas the rest of the 19 skills (values with \*\*) were found to have significant differences, which means both of the respondent groups (employers and educators) do not share similar views over such skills.

**Table 29: Representing the results of Mann-Whitney U-test and percentage of respondents agreement score**

S. No	Generic skills	Employers Expectation Mean/ (Percentage of Employers Strongly agree/agree)	Educators Expectation Mean/ (Percentage of Educators Strongly agree/agree)	Expectation Mismatch score (representing Expectation gap)	Mann-Whitney U test (Sig – 2 tailed)
1	Decision making	4.64 (93.1%)	4.23 (92.5%)	0.41	.000**
2	Financial risk analysis	4.43 (88.7%)	4.23 (81.6%)	0.19	.066
3	Financial accounting	4.79 (96.6%)	4.73 (97.5%)	0.06	.146
4	Information technology competence	4.32 (84.3%)	4.29 (88.6%)	0.03	.543
5	Critical thinking	4.75 (96.5%)	4.59 (88.0%)	0.17	.111
6	International global	4.64 (92.6%)	4.57 (94.5%)	0.08	.057

	perspective				
7	Legal regulatory perspective	4.68 (92.1%)	4.66 (95.6%)	0.02	.089
8	Marketing/clients focus	3.67 ( <b>64.2%</b> )	2.86 ( <b>23.9%</b> )	0.81	.000**
9	Problem solving	4.59 (97.0%)	4.47 (88.0%)	0.12	.144
10	Leadership	4.02 (75.0%)	3.19 (37.3%)	0.83	.000**
11	Project management	4.23 (78.9%)	3.09 (29.4%)	1.14	.000**
12	Think and behave ethically	4.04 (82.3%)	3.84 (73.2%)	0.20	.085
13	Flexibility and adaptability	4.25 (86.3%)	3.21 (50.8%)	1.04	.000**
14	Strategic management	3.89 (71.5%)	3.94 (64.6%)	-0.05	.842
15	Independent thinking	4.10 (87.3%)	4.03 (86.6%)	0.07	.128
16	Focused on outcome	4.34 (91.1%)	4.39 (95%)	-0.05	.805
17	Tolerate ambiguity	4.08 (93.1%)	2.78 ( <b>23.9%</b> )	1.31	.000**
18	Think creatively	4.46 (97.5%)	3.55 (60.2%)	0.91	.000**
19	Listen effectively	4.45 (96.5%)	4.34 (93.1%)	0.11	.240
20	Presentation skills	4.45 (92.2%)	3.62 (63.6%)	0.83	.000**
21	Negotiation skills	4.16 (77.4%)	3.39 (45.7%)	0.77	.000**
22	Understanding group dynamics	3.83 (64.7%)	3.04 (37.8%)	0.79	.000**
23	Communicate in written format	4.40 (94.6%)	4.29 (94.5%)	0.11	.054
24	Communicate orally	4.43 (92.7%)	3.55 (52.2%)	0.89	.000**
25	Engage in lifelong learning	4.15 (90.7%)	3.08 (40.3%)	1.07	.000**
26	Inter or multidisciplinary perspective	4.46 (90.2%)	4.30 (78.6%)	0.16	.174
27	Teamwork	4.39 (92.2%)	3.76 (61.7%)	0.64	.000**
28	Ability to analyse and reason logically	4.74 ( <b>98.6%</b> )	4.24 (91.0%)	0.50	.000**
29	Personal attributes	4.11 (86.3%)	3.03 (30.4%)	1.09	.000**
30	Work effectively in diversified cultural settings	3.89 (77.0%)	2.83 (24.4%)	1.06	.000**
31	Self-initiative	3.94 (68.6%)	3.55 (53.2%)	0.39	.000**
32	English language	4.19 (77.5%)	3.09 (35.9%)	1.10	.000**
33	Statistics	4.34 (81.9%)	4.35 (85.6%)	-0.01	.573
34	Cost and management accounting	4.63 (89.2%)	4.54 (91.0%)	0.09	.081
35	Economics	4.06 (73.0%)	3.69 (52.3%)	0.37	.000**

\*\*Mann-Whitney U-testis statistically significant at 0.05 alpha level.

If the Mann-Whitney U-test sig (2-tailed) value is greater than 0.05 then it means that the mean difference between the two groups' value is statistically insignificant. This can be interpreted as the mean difference between group 1 (G1) and group 2 (G2) values is by chance, therefore accept the null hypothesis (Ho: G1=G2). However, if the Mann-Whitney U-test sig (2-tailed) value is less than 0.05 then it means that the mean difference between the two group values is statistically significant. It can be interpreted as the mean difference between the group 1 (G1) and group 2 (G2) is not by chance, therefore reject the null hypothesis and accept

alternative hypothesis (H1: $G1 \neq G2$ ) (Laerd Statistics, 2013).
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The results of Mann-Whitney U-test tell us where the respondent groups have similar or dissimilar views but it does not tell us whether the respondent groups agree that such skills should be studied within accounting education or not. In order to know this, the percentage of number of respondents who have given the ‘agreement’ score (strongly agree/agree) is evaluated from each group (see Table 29). For the employers’ group, one can see that the percentage agreement score on generic skills items ranges from 64.2% (Marketing/clients focus) to 98.6% (Ability to analyse and reason logically). In contrast, for the educators’ group, the percentage agreement score is ranging from 23.9% (Tolerate ambiguity, Marketing/clients focus) to 97.5% (Financial accounting). Considering the values from Mann-Whitney U-test in collaboration with percentage agreement score the findings from Table 29 were classified into three categories (see Table 30) that is Category 1 (No differences), Category 2 (Minor differences) and Category 3 (Major differences):-

**Category 1 - No differences:** representing a skills set (16 generic skills) of insignificant differences, regarding which, respondents in a majority (>50%) from both of the groups (that is, employers and educators) agree to develop such skills in students. Such skills include statistics, strategic management, focused on outcomes, information technology, legal regulatory perspective, financial accounting, independent thinking, international global perspective, cost and management accounting, listen effectively, communicate in written format, problem solving, inter or multidisciplinary perspective, critical thinking, financial risk analysis, and think and behave ethically.

**Category 2 - Minor differences:** representing a skills set (8 generic skills) of significant differences, regarding which, respondents in a majority (>50%) from both of the groups (that is, employers and educators) still agree to develop such skills in students. Such skills include decision making, economics, ability to analyse and reason logically, teamwork, presentation skills, communicate orally, think creatively, and flexibility and adaptability.

**Category 3 - Major differences:** representing a skills set (11 generic skills) of significant differences, regarding which, respondents in a majority (>50%) from the educators’ group do not agree to develop such skills in students. Such skills include negotiation skill, understanding group dynamics, marketing/clients focus, leadership, self-initiative, work



effectively in diversified cultural settings, engage in lifelong learning, personal attributes, project management and English language.

Table 30: Representing the categorisation of skills considering the results of Mann-Whitney U-test with percentage agreement score

No. of skills	<u>Category 1 – No differences</u> Skills having insignificant differences - both of the groups in majority (>50%) agree to develop such skills in students			<u>Category 2 – Minor differences</u> Skills having significant differences - but still both of the groups in majority (>50%) agree to develop such skills in students			<u>Category 3 – Major differences</u> Skills having significant differences - educators group in majority do not agree (>50%) to develop such skills in students		
	List of 16 Generic skills	Percentage of Employers Strongly agree/agree	Percentage of Educators Strongly agree/agree	List of 8 Generic skills	Percentage of Employers Strongly agree/agree	Percentage of Educators Strongly agree/agree	List of 10 Generic skills	Percentage of Employers Strongly agree/agree	Percentage of Educators Strongly agree/agree
1	Statistics	81.9%	85.6%	**Decision making	93.1%	92.5%	**Negotiation skills	77.4%	45.7%
2	Strategic management	71.5%	64.6%	**Economics	73%	52.3%	**Understanding group dynamics	64.7%	37.8%
3	Focused on outcomes	91.1%	95%	**Ability to analyse and reason logically	98.6%	91%	**Marketing/clients focus	64.2%	23.9%
4	Information technology competence	84.3%	88.6%	**Teamwork	92.2%	61.7%	**Leadership	75%	37.3%
5	Legal regulatory perspective	92.1%	95.6%	**Presentation skills	92.2%	63.6%	**Self-initiative	68.6%	35.9%
6	Financial accounting	96.6%	97.5%	**Communicate orally	92.7%	52.2%	**Work effectively in diversified cultural settings	77%	24.4%
7	Independent thinking	87.3%	86.6%	**Think creatively	97.5%	60.2%	**Engage in lifelong learning	90.7%	40.3%
8	International global perspective	92.6%	94.5%	**Flexibility and adaptability	86.3%	50.8%	**Personal attributes	86.3%	30.4%
9	Cost and management accounting	89.2%	91%				**Project management	78.9%	29.4%
10	Listen effectively	96.5%	93.1%				**Tolerate ambiguity	93.1%	23.9%
11	Communicate in written format	94.6%	94.5%				**English language	77.5%	35.9%
12	Problem solving	97%	88%						
13	Inter or multidisciplinary perspective	90.2%	78.6%						
14	Critical thinking	96.5%	88%						
15	Financial risk analysis	88.7%	81.6%						
16	Think and behave ethically	82.3%	73.2%						

The next subsection 8.3.2 reports the findings from the constituents of the ‘constraints gap’.

### 8.3.2 Constraints gap:

This section has the particular purpose to report the findings in respect of the constituents of the ‘constraints gap’ from the surveyed questionnaires. The aim here was to identify the limiting factors which prevail in the accounting education system of Pakistan. As discussed in the previous chapter the views over the constituents of constraints gap were recorded from the educators’ perspective only.

In order to know which constraining elements prevailed, the statistical mean (central tendency of the data) for each of the elements of the constraints gap was calculated. From Table 31, it can be seen that the values of the statistical mean are in the range of 1.78 to 4.01. In interpreting these results, the constraining elements having a mean value of more than 3 would fall within the category of a valid constraint within the accounting education system of Pakistan. This is because any value greater than ‘3’ represents the data skewness towards ‘strongly agree/agree’ side of the response option continuum. Thus any value greater than 3 indicates the overall respondents’ agreement towards the existence of the constraint. But in order to enhance the level of confidence an additional measure was considered, that is, the percentage of respondents who have given the ‘agreement’ score. The percentage agreement score over the constraining elements was found to be in the range of 3.5% to 71.1%.

**Table 31: Representing the results of Statistical mean and percentage of educators’ agreement score**

S. No	Constraining elements	Agreement score in terms of mean values	Percentage of educators who Strongly agree/ Agree
1	Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	3.76	54.8%
2	Students have an inappropriate (non-serious) attitude for learning?	2.27	7%
3	Classes are pack with a large number of students?	1.98	7.5%
4	Accounting curriculum has insufficient provision to allow for the effective development of skills?	2.07	13.9%
5	As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	<b><u>1.78</u></b>	<b><u>3.5%</u></b>
6	Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?	3.92	54.7%
7	Students have a lack of interest in accounting discipline?	2.55	15.9%

8	People (potential students) have misperception about accounting education as being highly mathematical in nature?	3.75	58.7%
9	Accounting institutes are not offering adequate training opportunities to their academic staff?	3.42	57.7%
10	Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?	<b>4.01</b>	<b>71.1%</b>
11	For teaching in accounting institutes it is difficult to find competent academic staff?	1.87	6%
12	During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations?	3.69	55.7%

Hence, in interpreting the findings from Table 31, the constraining elements having a mean score greater than 3 and a percentage agreement score of more than 50% were considered to prevail within the accounting education system of Pakistan. The findings from the constituents of the constraints gap were categorised in Table 32 and placed into two categories: Category 1 (Prevailed) and Category 2 (Rejected):-

**Category 1 – Prevailed:** representing those elements (6 constraints), where a majority of educators (>50%) agreed, constrain the ability of accounting educators to effectively develop skills in students. Such constraints include training organisations are not following standard procedure to develop skills in students, people (potential students) have misperceptions about accounting education, enrolling students in accounting classes have inadequate academic skills, inadequate stipends offered by training organisations, accounting institutes are not appreciating teaching activities, and lack of training opportunities for academics.

**Category 2 – Rejected:** representing those elements (6 constraints), where a majority of educators (>50%) do not agree that such elements constrain the ability of accounting educators to effectively develop skills in students. Such constraints include, difficult to find competent academic staff, students' non-serious attitude to learning, too many students in a class, curriculum has no provision to develop skills effectively in students, research based culture, and students' lack of interest in the accounting discipline.

**Table 32: Representing the categorisation of constraining elements considering the results of Statistical mean and percentage agreement score.**

<u>S. No</u>	<u>Category 1 - Prevailed</u>	<u>Mean values with Percentage of agreement</u>	<u>Constraints status</u>
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		<b>score</b>	
1	Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?	<b>4.01 (71.1%)</b>	<b>Prevailed</b>
2	Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?	<b>3.92 (54.7%)</b>	<b>Prevailed</b>
3	People (potential students) have misperception about accounting education as being highly mathematical in nature?	<b>3.75 (58.7%)</b>	<b>Prevailed</b>
4	Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	<b>3.76 (54.8%)</b>	<b>Prevailed</b>
5	During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations?	<b>3.69 (55.7%)</b>	<b>Prevailed</b>
6	Accounting institutes are not offering adequate training opportunities to their academic staff?	<b>3.42 (57.7%)</b>	<b>Prevailed</b>
<b><u>S. No</u></b>	<b><u>Category 2 - Rejected</u></b>	<b><u>Mean values with Percentage of agreement score</u></b>	<b><u>Constraints status</u></b>
1	For teaching in accounting institutes it is difficult to find competent academic staff?	<b>1.87 (6%)</b>	<b>Rejected</b>
2	Students have an inappropriate (non-serious) attitude for learning?	<b>2.27 (7%)</b>	<b>Rejected</b>
3	Classes are pack with a large number of students?	<b>1.98 (7.5%)</b>	<b>Rejected</b>
4	Accounting curriculum has insufficient provision to allow for the effective development of generic skills?	<b>2.07 (13.9%)</b>	<b>Rejected</b>
5	As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	<b>1.78 (3.5%)</b>	<b>Rejected</b>
6	Students have a lack of interest in accounting discipline?	<b>2.55 (15.9%)</b>	<b>Rejected</b>

The next subsection 8.3.3 reports the findings from the constituents of the 'performance gap'.

### 8.3.3 Performance gap:

In order to evaluate the 'performance gap' the first task is to know the symmetrical structure (that is, the normal/abnormal distribution) across the data. Therefore, the shape of the symmetrical structure is investigated using the statistical techniques Kurtosis and Skewness (see Appendix 13b). From Appendix 13b, one can see that the data across all measured items (skills) within the performance gap, from both the respondents groups (educators and employers), does hold a normal distribution. Therefore, among the available statistical

techniques (that is, independent sample t-test and Mann Whitney U-test) the independent sample t-test was chosen for evaluating the performance gap because it holds the normal distribution assumption.

From Table 33 one can see the values of the independent sample t-test for each of the 35 evaluated generic skills. Out of the 35 generic skills, 11 skills (values without \*\*) were found to have statistically insignificant differences, which means the respondent groups (employers and educators) share similar views over such skills. Whereas the rest of the 24 skills (values with \*\*) were found to have significant differences. This means the respondent groups (employers and educators) do not share similar views over such skills.

**Table 33: Representing the results of Independent sample t-test with competence mismatch score**

S. No	Generic skills	Employers Competence Mean	Educators Competence Mean	Competence mismatch score (representing Performance gap)	Significance level
1	Decision making	3.91	3.44	.472	.000**
2	Financial risk analysis	3.61	3.38	.228	.012**
3	Financial accounting	<b>4.23</b>	<b>4.24</b>	-.013	.870
4	Information technology competence	3.48	3.30	.172	.087
5	Critical thinking	4.02	4.00	.020	.814
6	International global perspective	3.96	3.78	.171	.053
7	Legal regulatory perspective	4.02	3.92	.104	.217
8	Marketing/clients focus	3.00	1.97	1.020	.000**
9	Problem solving	3.76	3.58	.181	.068
10	Leadership	3.16	2.27	.892	.000**
11	Project management	3.40	2.25	1.151	.000**
12	Think and behave ethically	2.94	2.60	.336	.001**
13	Flexibility and adaptability	3.29	2.18	1.114	.000**
14	Strategic management	3.19	3.06	.132	.176
15	Independent thinking	2.96	2.62	.347	.000**
16	Focused on outcome	3.47	3.40	.071	.451
17	Tolerate ambiguity	2.79	<b>1.79</b>	1.003	.000**
18	Think creatively	3.38	2.45	.937	.000**
19	Listen effectively	3.34	2.84	.503	.000**
20	Presentation skills	3.47	2.49	.976	.000**
21	Negotiation skills	3.32	2.42	.897	.000**
22	Understanding group dynamics	2.89	1.99	.904	.000**
23	Communicate in written format	3.35	3.31	.040	.687

24	Communicate orally	3.40	2.51	.889	.000**
25	Engage in lifelong learning	2.96	1.96	.996	.000**
26	Inter or multidisciplinary perspective	3.63	3.43	.197	.047**
27	Teamwork	3.53	2.79	.743	.000**
28	Ability to analyse and reason logically	3.99	3.52	.479	.000**
29	Personal attributes	3.03	2.07	.965	.000**
30	Work effectively in diversified cultural settings	<u>2.77</u>	1.86	.914	.000**
31	Self-initiative	3.20	2.16	1.039	.000**
32	English language	3.59	2.64	.949	.000**
33	Statistics	3.41	3.45	-.031	.763
34	Cost and management accounting	4.13	4.01	.122	.159
35	Economics	3.13	2.75	.377	.000**

\*\* Independent sample T-test is statistically significant at 0.05 alpha level.

In independent sample t-test, if the sig (2-tailed) value is greater than 0.05 then it means that the mean difference between two groups' value is statistically insignificant. This can be interpreted as the mean difference between group 1 (G1) and group 2 (G2) values is by chance, therefore accept null hypothesis ( $H_0: G1=G2$ ). However, if the sig (2-tailed) value is less than 0.05 then it means that the mean difference between the two group values is statistically significant. This can be interpreted as the mean difference between the group 1 (G1) and group 2 (G2) is not by chance, therefore reject the null hypothesis and accept alternative hypothesis ( $H_1: G1 \neq G2$ ) (Laerd Statistics, 2013).

From Table 33, for the employers group, one can see that the mean score regarding the generic skills items is ranging from 2.77 (work effectively in diversified cultural settings) to 4.23 (Financial accounting). In contrast, for the educators group, the mean score ranges from 1.79 (Tolerate ambiguity) to 4.24 (Financial accounting). One can also see the mismatch in competence scores from Table 33 (4th column from the left) that is, representing the in/effectiveness of accounting educators in developing the skills in students desired by accounting employers. In considering the independent sample t-test values, the skills items within performance gap were classified into two categories (see Table 34), that is, Category 1 (Insignificant differences) and Category 2 (Significant differences):

**Category 1 - Insignificant differences:** representing a skills set (11 generic skills), regarding which, the perceived competence expected to be developed in students by educators coincides with the competence expected by employers for the purpose of employment. Such skills include financial accounting, statistics, critical thinking, communicate in written format, focused on outcomes, legal regulatory perspective, strategic management, cost and

management accounting, international global perspective, information technology competence, and problem solving.

**Category 2 – Significant differences:** representing a skills set (24 skills), regarding which, the perceived competence expected to be developed in students by educators does not coincide with the competence expected by employers for the purpose of employment. Such skills include an inter or multidisciplinary perspective, financial risk analysis, think and behave ethically, independent thinking, economics, decision making, ability to analyse and reasons logically, listen effectively, teamwork, leadership, negotiation skills, communicate orally, understanding group dynamics, work effectively in diversified cultural settings, think creatively, English language, presentation skills, personal attributes, tolerate ambiguity, engage in lifelong learning, marketing/clients focus, self-initiative, flexibility and adaptability, and project management.

**Table 34: Representing the categorisation of skills considering the results of Independent sample t-test with Competence mismatch score**

	<b><u>Category 1 – Insignificant differences</u></b>		<b><u>Category 2 – Significant differences</u></b>	
	<b>Skills having insignificant differences – views from both of the groups coincide with each other</b>		<b>Skills having significant differences –views from both of the groups do not coincide with each other</b>	
<b>S. No.</b>	<b>List of 11 Generic skills</b>	<b>Mismatch competence score</b>	<b>List of 24 Generic skills</b>	<b>Mismatch competence score</b>
1	Financial accounting	-.013	Inter or multidisciplinary perspective	0.197**
2	Statistics	-0.031	Financial risk analysis	0.228**
3	Critical thinking	0.020	Think and behave ethically	0.336**
4	Communicate in written format	0.040	Independent thinking	0.347**
5	Focused on outcomes	0.071	Decision making	0.472**
6	Legal regulatory perspective	0.104	Economics	0.377**
7	Cost and management accounting	0.122	Ability to analyse and reason logically	0.479**
8	Strategic management	0.132	Listen effectively	0.503**
9	International global perspective	0.171	Teamwork	0.743**
10	Information technology competence	0.172	Leadership	0.892**
11	Problem solving	0.181	Negotiation skills	0.897**
12			Communicate orally	0.889**
13			Understanding group dynamics	0.904**
14			Work effectively in diversified cultural settings	0.914**



15			Think creatively	0.937**
16			English language	0.949**
17			Personal attributes	0.965**
18			Presentation skills	0.976**
19			Engage in lifelong learning	0.996**
20			Tolerate ambiguity	1.003**
21			Marketing/clients focus	1.020**
22			Self-initiative	1.039**
23			Flexibility and adaptability	1.114**
24			Project management	1.151**

The next subsection 8.3.4, reports the additional findings related to the constituents of the performance gap from the perspective of employers' group.

### 8.3.4 Further analysis:

Having identified significant differences in perception between the two groups (employers and educators) regarding generic skills development, the analysis next focuses on dividing possible correlated skills into a set of values of linearly uncorrelated variables called components (see SAS, 2013). In order to evaluate these components in terms of skill base, this study employs Principal Components Analysis (PCA) on the 'performance gap' data from the employers' group only. This is because the purpose of this section is to develop a framework outlining the main components of employability related skills in order to guide the educational institutes in Pakistan for the creation of employability.

Principal Component Analysis (PCA) extracts components by taking account of data set variances. The first extracted component accounts for most of the variance explained by the data set. The second extracted component accounts for the second largest amount of variance explained by the data set and it is uncorrelated with the first component. And, the third extracted component accounts for the third largest amount of variance explained by the data set and is uncorrelated with component one or component two. This process continues until left with no more components to extract from the data set (Hair et al., 2006; Tabachnick and Fidell, 2007). PCA is used whenever the desire is to reduce the number of observed variables to a smaller number of components by taking account of variances. This test, in particular, is designed for interval data but it can also be used for ordinal data when the data is collected on a likert scale (Cornish, 2013). In this study, PCA is performed to reduce the number of observed generic skills (items) to a smaller number of components on the competence score (performance gap) from the employers' group perspective.

In order to conduct an appropriate Principal Component Analysis Norusis (1992) recommended computing the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of Sphericity first. KMO is a measure of sampling adequacy that is used to compare the magnitudes of the observed correlation coefficients in relation to the magnitudes of the partial correlations coefficients (Dusick, 2013; SPSS, 2006). The KMO value can be between 0 and 1, the more it is close to 1, the better it is (Dusick, 2013). If the KMO is below 0.5 then the data is not considered suitable for the component analysis. In this study (Table 35), the KMO is 0.816, which is greater than 0.5 and as such this suggests the observed data is suitable for Principal Component Analysis (see Tabachnick and Fidell, 2007). Further, the Bartlett's test of Sphericity is used to test whether the correlation matrix is an identity matrix or not. Here we are looking for a significance value less than 0.05 because we want the variables to be correlated. In this study (Table 35) the Bartlett's test of Sphericity 'sig' value that is, 0.000 indicates that there exists a statistically significant correlation among the observed variables (items). Therefore, the data is suitable for Principal Component Analysis (see Hair et al., 2006).

Table 35: KMO and Bartlett's Test<sup>a</sup>

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.816
Approx. Chi-Square		4001.762
Bartlett's Test of Sphericity	df	595
	Sig.	.000
a. Only cases for which group = Employers are used in the analysis phase.		

Next, Table 36 shows the communalities for each of the observed variables (items). Communality refers to the 'percentage of variance in an observed variable (item) that is accounted for by the retained components' (SAS, 2013). All of the observed variables (items) in this study are showing communality greater than 0.4 (40%) which means none of the observed variables (items) represents a weak correlation. Therefore, none of the observed variables (items) should be removed from the items list and all of them are considered while evaluating the Principal Component Analysis.

Table 36: Communalities<sup>a</sup>

	Initial	Extraction
Decision making	1.000	.565
Financial risk analysis	1.000	.521

Financial accounting	1.000	.513
Information technology competence	1.000	.585
Critical thinking	1.000	.551
International global perspective	1.000	.558
Legal regulatory perspective	1.000	.581
Marketing/clients focus	1.000	.698
Problem solving	1.000	.619
Leadership	1.000	.672
Project management	1.000	.606
Think and behave ethically	1.000	.724
Flexibility and adaptability	1.000	.739
Strategic management	1.000	.616
Independent thinking	1.000	.505
Focused on outcome	1.000	.633
Tolerate ambiguity	1.000	.637
Think creatively	1.000	.622
Listen effectively	1.000	.739
Presentation skills	1.000	.665
Negotiation skills	1.000	.639
Understanding group dynamics	1.000	.673
Communicate in written format	1.000	.713
Communicate orally	1.000	.620
Engage in lifelong learning	1.000	.670
Inter or multidisciplinary perspective	1.000	.589
Teamwork	1.000	.766
Ability to analyse and reason logically	1.000	.568
Personal attributes	1.000	.595
Work effectively in diversified cultural settings	1.000	.701
Self-initiative	1.000	.713
English language	1.000	.746
Statistics	1.000	.543
Cost and management accounting	1.000	.482
Economics	1.000	.489
Extraction Method: Principal Component Analysis.		
a. Only cases for which group = Employers are used in the analysis phase.		

Table 37 shows the total variance explained by each component extracted as a result of Principal Component Analysis. Only the number of components that contribute to a Eigenvalue>1 are significant. Thus, the remaining factors should be disregarded (Hair et al., 2006; Tabachnick and Fidell, 2007). In this study, there are 6 components that have

Eigenvalues greater than 1 and, therefore, only these 6 components are retained and the rest of the components are discarded. These 6 components cumulatively explain 62.440% of the total variance (see column ‘cumulative %’ in Table 37).

**Table 37: Total Variance Explained<sup>a</sup>**

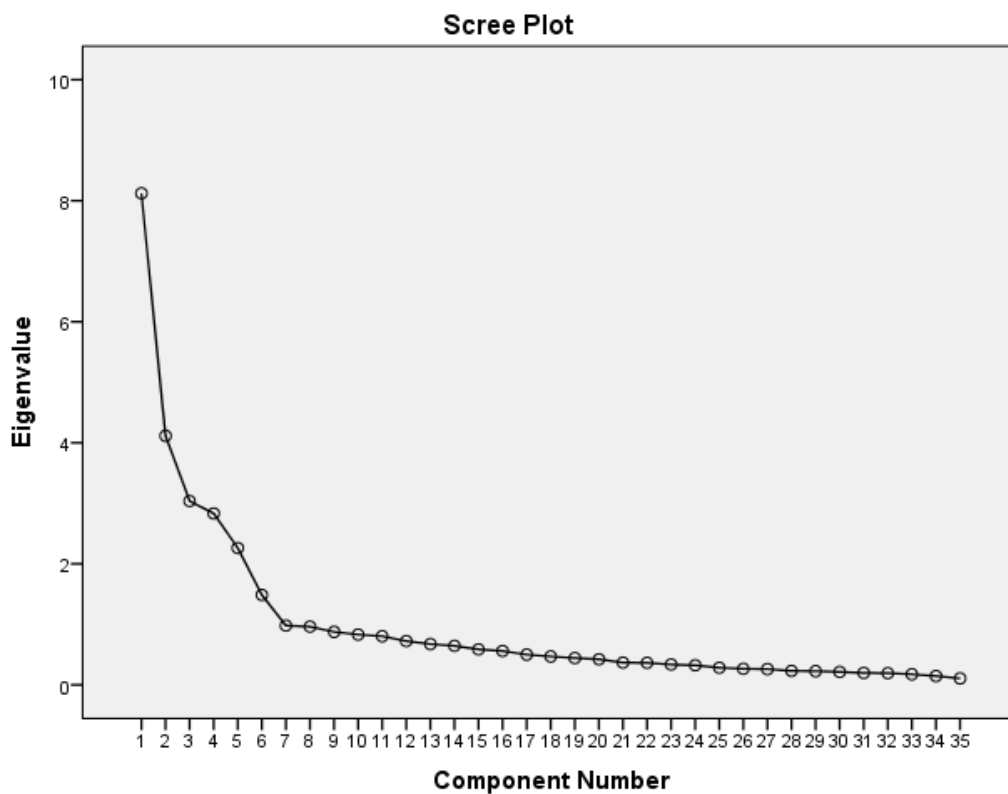
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.123	23.208	23.208	8.123	23.208	23.208	4.798	13.708	13.708
2	4.115	11.758	34.966	4.115	11.758	34.966	4.219	12.053	25.761
3	3.036	8.675	43.641	3.036	8.675	43.641	3.980	11.370	37.131
4	2.833	8.093	51.735	2.833	8.093	51.735	3.278	9.366	46.498
5	2.261	6.461	58.196	2.261	6.461	58.196	2.849	8.140	54.638
6	1.485	4.244	<b>62.440</b>	1.485	4.244	62.440	2.731	7.802	62.440
7	.979	2.797	65.237						
8	.961	2.747	67.984						
9	.875	2.501	70.485						
10	.830	2.372	72.857						
11	.803	2.294	75.151						
12	.722	2.064	77.215						
13	.673	1.924	79.139						
14	.644	1.840	80.979						
15	.586	1.674	82.652						
16	.559	1.599	84.251						
17	.499	1.425	85.676						
18	.468	1.339	87.015						
19	.442	1.264	88.278						
20	.423	1.209	89.487						
21	.367	1.049	90.536						
22	.364	1.039	91.575						
23	.336	.959	92.533						
24	.322	.921	93.454						
25	.282	.807	94.261						
26	.265	.757	95.018						
27	.259	.741	95.759						
28	.230	.657	96.415						
29	.225	.644	97.060						
30	.214	.610	97.670						
31	.197	.564	98.234						
32	.193	.550	98.784						
33	.174	.497	99.281						

34	.146	.416	99.697					
35	.106	.303	100.000					

Extraction Method: Principal Component Analysis.  
a. Only cases for which group = Employers are used in the analysis phase.

One can plot the extracted components on the x-axis and the Eigenvalue on the y-axis (Figure 33). The curve of the plotted graph determines the cut-off point (Hair et al., 2006). The change in the shape (usually elbow shape) indicates the clear distinction between components of interest having an Eigenvalue > 1 (Hair et al., 2006; Horn, 1965; Pallant and Manual, 2007). In this study, the inspection of the plotted line confirms 6 components, that are also extracted using Kaiser’s latent root criterion, that is, Eigenvalue > 1. Therefore, the Scree-test reveals a clear breakdown at the 6<sup>th</sup> component.

Figure 33: Representing Scree-plot



Lastly, Table 38 represents the rotated pattern matrix that displays the 6 components solution. From loaded components some of the psychometrists suggest omitting the items having a loading of less than 0.4 (Churchill, 1979). This is because psychometrists believe that such items reveal a weak correlation with the loaded components. Therefore, such items should be deleted from the component matrix because they have a negligible effect on the loaded

components. Thus items that are loaded equal to or less than 0.4 within this research are deleted from the rotated pattern matrix (see Table 38). In Table 38, the rotated pattern matrix shows the loaded items in 6 components, ranging from 0.560 to 0.845 component loading, which satisfy the minimum component loading criteria stated above.

Table 38: Rotated Component Matrix<sup>a,b</sup>

	Component					
	1	2	3	4	5	6
Presentation skills	.759					
Project management	.724					
Creative thinking	.713					
Information technology	.708					
Focused on outcomes	.707					
Inter or multi-disciplinary	.701					
Financial risk analysis	.653					
Economics	.634					
Statistics	.629					
Teamwork		.845				
English language		.829				
Listen effectively		.806				
Communication in written format		.790				
Oral communication		.765				
Negotiation skills		.661				
Ability to analyse and reason			.736			
Legal regulatory perspective			.727			
Problem solving			.717			
Critical thinking			.712			
Decision making			.681			
Cost and management accounting			.671			
International global perspective			.644			
Financial accounting			.632			
Leadership				.790		
Marketing/clients focus				.769		
Understanding group dynamics				.761		
Strategic management				.737		
Self-initiative					.782	
Flexibility and adaptability					.751	
Personal attributes					.737	
Engage in lifelong learning					.735	

Think and behaves ethically						.793
Work effectively in diversified						.761
Tolerate ambiguity						.714
Independent thinking						.560
<b>Cronbach alpha (α)</b>	.883	.802	.848	.855	.832	.815

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 6 iterations.  
 b. Only cases for which group = Employers are used in the analysis phase.

Once the components have been extracted, then it is required to know the extent to which the items in a component are loaded. Theoretically, it is recommended that the absolute correlation between a component and its measuring item (that is, Cronbach’s alpha) should be higher than 0.7 (Henseler et al., 2009). In this study, for all of the extracted 6 components Cronbach’s alphas are more than 0.7 and, therefore, they are all in the acceptable range from an internal consistency point of view (see Table 38). Thus, as a result of Principal Component Analysis, Table 39 in this analysis shows the 6 extracted components are those that are required in terms of skill-based education within the disciplinary context of accounting for employment purposes.

Table 39: Representing the 6 extracted components due to the result of Principal Component Analysis

Component 1	Component 2	Component 3	Component 4	Component 5	Component 6
<ul style="list-style-type: none"> <li>• <i>Presentation skills</i></li> <li>• <i>Project management</i></li> <li>• <i>Creative thinking</i></li> <li>• <i>Information technology competence</i></li> <li>• <i>Focused on outcomes</i></li> <li>• <i>Inter or multi-disciplinary perspective</i></li> <li>• <i>Financial risk analysis</i></li> <li>• <i>Economics</i></li> <li>• <i>Statistics</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Teamwork</i></li> <li>• <i>English language</i></li> <li>• <i>Listen effectively</i></li> <li>• <i>Communication in written format</i></li> <li>• <i>Oral communication</i></li> <li>• <i>Negotiation skills</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Ability to analyse and reason logically</i></li> <li>• <i>Legal regulatory perspective</i></li> <li>• <i>Problem solving</i></li> <li>• <i>Critical thinking</i></li> <li>• <i>Decision making</i></li> <li>• <i>Cost and management accounting</i></li> <li>• <i>International global perspective</i></li> <li>• <i>Financial</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Leadership</i></li> <li>• <i>Marketing/clients focus</i></li> <li>• <i>Understanding group dynamics</i></li> <li>• <i>Strategic management</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Self-initiative</i></li> <li>• <i>Flexibility and adaptability</i></li> <li>• <i>Personal attributes</i></li> <li>• <i>Engage in lifelong learning</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Think and behaves ethically</i></li> <li>• <i>Work effectively in diversified cultural settings</i></li> <li>• <i>Tolerate ambiguity</i></li> <li>• <i>Independent thinking</i></li> </ul>

		<i>accounting</i>			
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In the next section (8.5 Discussion related to Findings) there is a discussion of the statistical findings in comparison with the existing literature in order to understand its potential contribution to the body of knowledge.

## 8.4 Discussion related to Findings:

The objective of the thesis is to evaluate the expectation-performance gap in the development of generic skills offered by the accounting institutes of Pakistan for the purpose of their students' employability. In order to achieve this objective this thesis has adopted the theoretical framework of the 'expectation-performance gap' by Bui and Porter (2010). This framework has three constituent elements: the expectation gap, the constraints gap and the performance gap. In the previous section (8.3 Findings from the surveyed questionnaires) these constituent elements were evaluated statistically and the findings were presented. In alignment with those findings this section presents the related discussion in the following subsections:

8.4.1 Expectation gap (per section 8.3.1, previously)

8.4.2 Constraints gap (per section 8.3.2, previously)

8.4.3 Performance gap (per section 8.3.3, previously)

8.4.4 Further analysis (per section 8.3.4, previously)

### 8.4.1 Expectation gap:

This section aims to discuss the findings related to the 'expectation gap' which were earlier reported in section 8.3.1.

Within the theoretical framework of the expectation-performance gap (Bui and Porter, 2010) the expectation gap reflects the perceptual differences between the employers' and educators' expectations of the development of generic skills in accounting education.

Previously, the literature demonstrated that employers and educators perceived generic skills-acquisition differently in the accounting discipline. For example, Francis and Minchington (1999) investigated the expectation gap regarding skills taught in a management accounting syllabus in the UK. Though their findings were only relevant to quantitative skills, they reported a mismatch between employers' and academics' perceived expectations regarding



skills development. Similarly Kavanagh et al. (2009), in Australia, found that the accounting employers place more emphasis on communication, presentation skills, team working, good interpersonal skills, fitting in with an organisation's ethos, self-management, initiative and enterprise, technological skills, planning and organising skills for graduates' employability. Whereas in contrast, accounting academics focus more on problem solving skills, personal development skills, strategic management, routine-accounting, citizenship, cultural sensitivity, work ethics and appreciative skills (Kavanagh and Drennan, 2007). Though Kavanagh et al. (2009) and Kavanagh and Drennan (2007) were successful in drawing attention to a perspective on skill development from the viewpoint of employers and academics separately, the statistical relevance of the employers' group views to academics have yet to be explored. Gati (1998) explicitly stated that, if employers' prioritised skills are not developed in accounting students then this mismatch would lead to a limited number of opportunities for students to secure employment in the future. Therefore, it is very important for academics to synchronise their expectations with employers' expectations in terms of skills base education in order to enhance the students' chance of employment. In this regard, an attempt has been made to identify the perceptual differences in terms of skills-based education, from the perspective of employers' and educators' expectations in this research.

Here in this study the 'expectation gap' measures the views of educators quantitatively vis-avis their relevance to employers' employment expectations. In this regard Table 30 summarises the findings, that is, skills listed in Category 1 (No differences), Category 2 (Minor differences) and Category 3 (Major differences). Now it is easy to identify the specific skills where accounting employers and educators have a significant level of expectation differences, that is, skills listed in Category 2 (Minor differences) and Category 3 (Major differences) in Table 30.

Next in subsection 8.4.2, the statistical findings related to constraints gap (that are reported in section 8.3.2) are discussed.

#### **8.4.2 Constraints gap:**

This section discusses the findings related to constraints gap which were earlier reported in section 8.3.2.

Within the theoretical framework of the expectation-performance gap (Bui and Porter, 2010) the element of 'constraints gap' represents those constraints that are assumed to limit the

ability of accounting education in Pakistan to develop generic skills in the student learning process. In this research views of the constraints gap are investigated from the educators' perspective only. This is because accounting educators are considered to be the ones who are primarily responsible for the development of skills (Kavanagh et al., 2009; Hassall et al., 2005; Hancock et al., 2010).

Kavanagh and Drennan (2007) and Bui and Porter (2010) investigated the constraining elements which were impinging on the ability of accounting educators to develop skills effectively in their university students. But the context of this research is somewhat different. Kavanagh and Drennan (2007) and Bui and Porter (2010) identified constraining elements from a university education perspective, whereas this research identifies constraining elements on professional accounting institutions. These professional accounting institutions are quite different from the universities. These differences relate to the funding structure, employment policy, reward system, curriculum development, examination system, and students' intake criteria. Therefore, these differences suggest the possibility of a different set of constraints. It is therefore possible to argue that the constraining elements identified from the university context are an invalid basis on which to generalise to the Pakistani professional accounting institutes, at least, without having any prior evidence for their relevance. As such, in this study, an attempt has been made to identify the constraining elements that are prevailing within the Pakistani accounting education system of the professional accounting institutes. In this regard, 12 elements were identified earlier through the literature and cognitive interviews that could be constraints (Table 32). Then, in a survey, data has been collected from a large sample of educators to find out the prevailing constraints. The empirical findings from this research are summarised in Table 32, that is, Category 1 (Prevailed) and Category 2 (Rejected).

Previously, Kavanagh and Drennan (2007) investigated the constraining elements from a university education perspective in Australia. In their research, the prevailing constraints include; lack of time with academics to involve accounting practitioners in curriculum development, lack of financial resources to align the interface between practice and education, inadequate reward for effective teaching practices, academics are too much occupied with research to keep the curriculum update, and academic research underpinning course content that is not often recognised by accounting practitioners. Similarly Bui and Porter (2010) also identified constraining elements from a New-Zealand university context that includes; conflict between teaching and research, class size, and shift of funding structure

from teaching to a research based culture. However, in contrast, this research identifies the constraining elements from the professional accounting institutes rather than the university. The prevailing constraints within the accounting education system of professional accounting institutes are listed in Category 1 (Prevailed). Most of the constraining elements that are found in earlier literature to prevail within the system of university education are noticeably found to be rejected from the perspective of professional accounting institutes in this research. Such constraining elements include conflict between teaching and research, class size, and academics are too much occupied with research activities etc, for example, see Category 2 (Rejected) in Table 32.

Next in subsection 8.4.3, the statistical findings related to performance gap (that are reported in section 8.3.3) are discussed.

### **8.4.3 Performance gap:**

This section discusses the findings related to the performance gap which were earlier reported in section 8.3.3.

Within the theoretical framework of expectation-performance gap (Bui and Porter, 2010) the ‘performance gap’ is reflecting the in/effectiveness of pedagogical activities by the academic community. This in/effectiveness is investigated by determining the perceptual differences in the competence score in the skills expected to be developed by the educators and perceived to be possessed by the employers at the time of employment in students.

In the literature “pedagogical activities” refers to an act-of-persuasion process, that is, to convince students of the value of knowing or understanding and to influence or alter their views on various concepts (Murphy, 2001). Thus, an educator plays a powerful role in the generic skills development process. But it was quite alarming when the literature demonstrated that not all the accounting educators are supportive in the skills development process (Milner and Hill, 2008). For example, previously in the literature, Milner and Hill (2008) in qualitative research (interviews) conducted in UK universities; found that the academics’ approach to generic skills development is far from being uniform. Barrie (2006) also reported a similar finding by noticing a misconception among the academic community, namely, a sharing of a common attitude towards skills development as a university outcome. Later, Kavanagh and Drennan (2007) investigated the views of the academics community on 49 skills quantitatively. They reported the findings that except for three skills (technical

book-keeping, advanced technical and research skills) the rest of the skills were found to have statistically significant differences (such as teamwork, analytical, critical thinking, continuous learning, written communication, problem solving, oral communication, decision making, leadership etc). Milner and Hill (2008), Barrie (2006) and Kavanagh and Drennan (2007), on the other hand, have drawn attention to the misperception among the academic community in general, but none of them were able to identify the significance of academics' views in relevance to employers' competence score expectations. This is arguably a matter of utmost importance here considering the issue of students' employability. Therefore, in this research the 'performance gap' is measured in order to reflect the in/effectiveness of pedagogical activities practiced by accounting educators in the professional accounting institutes. In this regard Table 34 summarises the empirical findings in Category 1 (Insignificant differences) and Category 2 (Significant differences). Now, one can easily identify the specific skills in Table 34, where educators are found ineffective in the creation of enough competence in students as expected by employers for their potential employment, that is, the skills listed in Category 2 (Significant differences) in Table 34.

Next in subsection 8.4.4, the statistical findings related to further analysis (that are reported in section 8.3.4) are discussed.

#### **8.4.4 Further analysis:**

This section discusses the findings related to further analysis which were earlier reported in section 8.3.4.

Lloyd (2008) suggested that the UK's current skills policy is centred on the need to drive up the qualification obtainment system more employers led. The literature demonstrates that, most of the time, attempts at identifying generic skills has resulted in a plethora of superficially similar, but often significantly different lists of skills (Drummond et al., 1998). Further, the literature shows that different cultural values are influencing accounting practices (Askary, 2006; Fechner and Kilgore, 1994; Gray, 1988; Perera and Mathews, 1990). For example, in the USA, displaying a certain set of gestures such as the eye contact or body postures serves to illustrate good communication skills and confidence. However, in other culturally differentiated countries, displaying such behaviour is considered an act of aggression and rudeness (Brown, 2002). Perhaps this could be the reason why there is not a single definitive list and standard categorization of skills in the accounting discipline (For example, see Jones and Sin 2003; IFAC, 2008; Hassall et al., 2005; Albrecht and Sack, 2000;

Montano et al., 2001). Considering the underlying research context, to date there is a paucity of literature addressing the skills requirement from Pakistan's accounting job market. Therefore, in order to investigate this issue from the perspective of Pakistan's accounting job-market, Principal Component Analysis was used to develop a skill acquisition framework. This is specifically for the purpose of developing an outline of the core generic skills categories that will guide the educational institutes in Pakistan to improve the skills development process in order to enhance their students' chance of employment. In this regard, 6 components were extracted as a result of Principal Component Analysis (Table 39) from the findings of the earlier section 8.3.4.

Previously in the literature, Principal Component Analysis was used on a number of occasions to categorise the skills into a number of components. For example, Jackling and Keneley (2009) employed Principal Component Analysis to categorise the skills from the students' perspective. They categorised the skills in two components labelling them as behavioural and cognitive skills. Similarly, Kavanagh and Drennan (2007) also employed the Principal Component Analysis to categorise the skills from the academics' perspective. They reported seven components labelling them as problem solving, personal and strategic management, routine accounting, citizenship, cultural sensitivity, work ethics, and appreciative skills. Later, Kavanagh and Drennan (2008) also categorised the skills from the students' viewpoint again using Principal Component Analysis. This time they reported 6 components labelling them as personal and communication, cultural sensitivity, leadership and interpersonal, promotional, analytical and design, and appreciative skills. However, in this research, the competence score of skills expected to be possessed in students by employers for the purpose of employment have been categorised. The description of each extracted component (Table 39) is stated below:-

1. Component 1: The skills correlated in component 1 are: presentation, project management, creative thinking, information technology competence, focus on outcomes, inter or multi-disciplinary perspective, financial risk analysis, economics and statistics (see Table 39). Subjectively interpreting component 1 and the skills therein, reveal a set of skills that are used for the appreciation of a project before putting the company at risk (Jones and Sin, 2003). For example, project appraisal requires an individual to have the knowledge of multi-disciplinary perspective such as conducting statistical analysis to generate financial outcomes while simultaneously considering the economic situation. Further it also requires an individual to be outcome focused, creative, and having a good

command of information technology to present things effectively and efficiently. Therefore, in this research, component 1 is named as ‘Appreciative skills’ meaning a skill set that equips an individual to analyse a project using a multidisciplinary perspective and enables the one to present and discuss its findings effectively and efficiently.

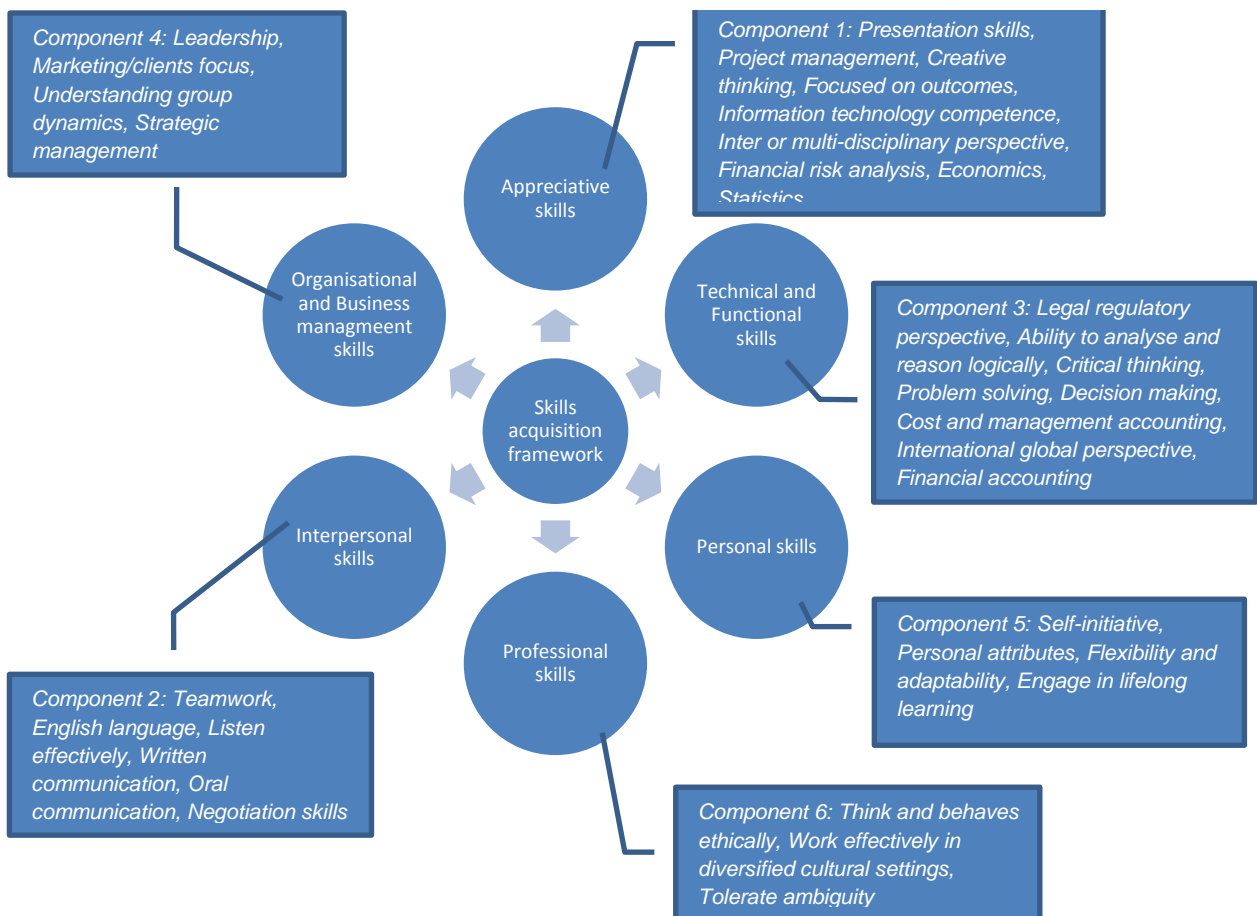
2. Component 2: The skills correlated in component 2 are; teamwork, English language, effective listening, written communication, oral communication, and negotiation skills (Table 39). Subjectively interpreting component 2 and the skills therein reveals a set of skills that are used for effective interpersonal communication. All such skills allow an individual to become effective in communication while working out official matters, such as knowing the English language, good oral and written communication, and having team working and negotiation skills. Therefore, in this research, component 2, is named as ‘Interpersonal skills’ which means a skill set that equips an individual to secure operational outcomes through effective interpersonal communication (For example, see Sin and Reid, 2006).
3. Component 3: The skills correlated in component 3 are ability to analyse and reason logically, legal regulatory perspective, problem solving, critical thinking, decision making, cost and management accounting, international global perspective, and financial accounting (Table 39). Subjectively interpreting component 3 and the skills therein reveals a set of skills that are used in the process of monitoring. Such skills enable the breakdown of the financial and operational outcomes into their component parts and the ability to see the whole in terms of its parts. For example, from a monitoring perspective, an accountant requires a critical understanding of a company’s operational activities (such as manufacturing, services) to make a decision about the company’s financial performance. Further, it also requires a high degree of financial accounting knowledge with a full understanding of the legal regularity structure from the reporting perspective. Therefore, in this research, component 3 is named as ‘Technical and Functional skills’ which means a skill set that equips an individual to monitor the -company’s financial performance for the effective running of day-to-day routine activities.
4. Component 4: The skills correlated in component 4 are; leadership, marketing/clients focus, understanding group dynamics, and strategic management (Table 39).

Subjectively interpreting component 4 and the skills therein, reveals a set of skills that equip an individual to play an active role in an organisation's day-to-day strategic activities. Previously the role of accountants was limited to providing the data for decision making but now they are considered as an important element of the strategic management team. Therefore, in this research, component 4 is named as 'Organisational and Business management skills' which means a skill set that equips an individual to play an active role in an organisation as a part of the strategic management team.

5. Component 5: The skills correlated in component 5 are; self-initiative, flexibility and adaptability, personal attributes, and engage in lifelong learning (Table 39). Subjectively interpreting component 5 and the skills therein reveals a set of skills that describes an individual's ability to learn and adjust in a work changing environment. Therefore, in this research, component 5 is named as 'Personal skills' which means a skill set that equips an individual to learn and be adaptable to a changing work environment.
6. Component 6: The skills correlated in component 6 are; think and behave ethically, work effectively in diversified cultural settings, tolerate ambiguity, and independent thinking (Table 39). Subjectively interpreting component 6 and the skills therein, reveal a set of skills that explains an individual's attitude and behaviour in his work place environment. Therefore, in this research component 6 is named as 'Professional skills' means a skill set that relates to an individual attitude and behaviour in a role of a professional accountant.

Figure 34 below, is a diagram of 6 skills components that are listed in Table 39 and presented here as a skills acquisition framework.

Figure 34: Representing skills acquisition framework; source author



## Summary:

This chapter comes at stage 4 of the study design (see Figure 32) which involves reporting the findings from the surveyed questionnaires. In this chapter, pilot tested questionnaires were used for surveying the targeted population (educators and employers). The data received from the returned questionnaires were analysed by using a mix of statistical data analytical techniques such as Independent Sample T-test, Mann-Whitney U-test, Statistical Mean, and Principal Component Analysis. The findings related to the constituents of the ‘expectation gap’ revealed that there are 19 skills where the accounting educators have dissimilar expectation from employers in terms of skills based education, such skills include decision making, economics, ability to analyse and reason logically, teamwork etc. The findings related to the constituents of the ‘constraints gap’ revealed that there are 6 constraining elements which are prevailing within the context of professional accounting education, such constraints include ‘training organisations are not following standard procedure to develop



skills in students’, ‘people (potential students) have misperception about accounting education’, ‘enrolling students have weak academic background’, ‘inadequate stipend offered by training organisations to trainees’, ‘accounting institutes are not appreciating teaching activities, and lack of training opportunities for academics’. The findings related to the constituents of the ‘performance gap’ revealed that there are 24 skills where the accounting educators were found to be ineffective in the development of skills in students as expected by employers for employment purposes, such skills include inter or multidisciplinary perspective, financial risk analysis, think and behave ethically, independent thinking etc. Furthermore, from the perspective of ‘skills acquisition’ in the context of Pakistan's accounting job-market overall 6 skills components have been identified as important for employability. Such skills components include appreciative skills, interpersonal skills, technical and functional skills, organisational and business management skills, personal skills and professional skills.

The next chapter is the ‘Conclusion’ chapter which gives an overview to the whole thesis along with an explanation of its policy implications, theoretical implications, research limitations and a recommendation for future research.

## CHAPTER 9: CONCLUSION

### 9.0 Introduction:

The objective of this thesis is:

*What is the expectation-performance gap in the development of generic skills for the purpose of employability offered by the accounting institutes of Pakistan?*

In order to fulfil the research objective this chapter draws in large measure upon the earlier analysis, to be presented under the following sub-headings:

Section 9.1 illustrates the critical reflection upon research findings that have been generated due to the result of research outcomes.

Section 9.2 illustrates the policy implications of the overall research that have been derived from the findings in relation to human capital theory and curriculum theory.

Section 9.3 illustrates the theoretical contribution of the overall research that has been accumulated towards discipline knowledge.

Section 9.4 illustrates a number of research limitations of the underlying research.

Section 9.5 illustrates the recommendations for future research in alignment with the continuity of the underlying research findings.

### 9.1 Critical reflection upon research findings:

In order to achieve the above stated objective, this thesis has conceptualised the notion of expectation-performance gap as similar to the notion offered by the theoretical framework of the 'expectation-performance gap' by Bui and Porter (2010). That 'expectation-performance gap' is composed of three factors that is, the expectation gap (reflecting differences in the expectations of accounting educators and employers), the constraints gap (representing the factors which are assumed to limit the ability of accounting education to inculcate generic skills into the student learning process) and the performance gap (reflecting in/effectiveness of teaching activities) (see literature review chapter - Section 3.1). Thus, in adapting the

theoretical framework of the expectation-performance gap (Bui and Porter, 2010), by default, the three related constituents are inherited as research objectives within the context of Pakistan. However, here in this research, there is also a fourth objective, that is, to evaluate an outline of the skills acquisition framework that could be used to guide the accounting institutes of Pakistan in the creation of their students' employability. This is because, within the context of Pakistan's accounting job-market, there is nothing found in the literature that specifies the skills based requirement. Hence the '**objectives**' which were set in this research were the following:-

1. **Performance gap** within the context of Pakistan's accounting education
2. **Expectation gap** within the context of Pakistan's accounting education
3. **Constraints gap** within the context of Pakistan's accounting education
4. **Skills acquisition framework** within the context of Pakistan's accounting job-market

In respect of the above mentioned four objectives, the findings from this research are presented in the previous chapter (Chapter 8: Stage 4 - survey). Here critical reflections on such findings are discussed in order to justify their extensive links to the stated objectives.

The *first objective* of this research is to investigate the 'performance gap' in terms of skills based education within the context of Pakistan's accounting education. The Performance gap represents the in/effectiveness of pedagogical activities by accounting educators. From the findings of the performance gap (Table 34), one can now identify the set of 24 skills where the accounting educators of Pakistan have been unable to develop enough competence in students as expected by employers for employment purposes (Category 2 - significant differences in Table 34). Hence, the first conclusion that could be drawn from the findings of this research is:

Conclusion 1: Within the professional accounting institutes of Pakistan, there were 24 skills where the accounting educators were found to be ineffective in the development of skills in students as expected by employers for employment purposes. Such skills include inter or multidisciplinary perspective, financial risk analysis, think and behave ethically, independent thinking, economics, decision making, ability to analyse and reasons logically, listen effectively, teamwork, leadership, negotiation skills, communicate orally, understanding group dynamics, work effectively in diversified cultural settings, think creatively, English language, presentation skills, personal attributes, tolerate ambiguity, engage in lifelong

learning, marketing/clients focus, self-initiative, flexibility and adaptability, project management.

Further, upon critical reflection there is a significant positive correlation found between the constituents of performance gap and expectation gap. This fact is supported by the evidence that the 11 skills which were found to have an insignificant performance gap within the context of Pakistan were also found to have an insignificant expectation gap (Table 40).

**Table 40: Representing 11 skills which are found to have insignificant performance gap are also found to have insignificant expectation gap**

<b>S. No</b>	<b>Generic skills</b>	<b>Performance gap (Competence mismatch score)</b>	<b>Expectation gap (Expectation mismatch score)</b>
1	Financial accounting	Cat 1-Insig Diff	Cat 1-No Diff
2	Statistics	Cat 1-Insig Diff	Cat 1-No Diff
3	Critical thinking	Cat 1-Insig Diff	Cat 1-No Diff
4	Communicate in written format	Cat 1-Insig Diff	Cat 1-No Diff
5	Focused on outcomes	Cat 1-Insig Diff	Cat 1-No Diff
6	Legal regulatory perspective	Cat 1-Insig Diff	Cat 1-No Diff
7	Cost and management accounting	Cat 1-Insig Diff	Cat 1-No Diff
8	Strategic management	Cat 1-Insig Diff	Cat 1-No Diff
9	International global perspective	Cat 1-Insig Diff	Cat 1-No Diff
10	Information technology competence	Cat 1-Insig Diff	Cat 1-No Diff
11	Problem solving	Cat 1-Insig Diff	Cat 1-No Diff

Further this fact is evidenced by the value of the Pearson correlation coefficient in Table 41 (Bivariate zero-order correlation) which is calculated over the mismatch score of the performance gap (see in Table 33) and the expectation gap (see in Table 29). The reason to calculate bivariate zero-order correlation is to investigate the linear relationship between two given continuous variables (ignoring the effects of other variables), in this case, that is, the performance gap and the expectation gap. This is in order to test the assumption that the mismatch between educators' group and employers' group expectation can have any effect on pedagogical incompetence or not. In this regard the value of the Pearson correlation coefficient was found to be significant (.000) at 1% and strongly correlated (0.923).

Table 41: Representing Pearson correlation between performance gap and expectation gap

		Performance gap	Expectation gap
Performance gap	Pearson	1	.923**
	Sig. (2-tailed)		.000
	N	35	35
Expectation gap	Pearson	.923**	1
	Sig. (2-tailed)	.000	
	N	35	35

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Hence the second conclusion that could be drawn from the findings of this research is:-

Conclusion 2: There is a significant positive correlation between the constituents of the performance gap and the expectation gap.

Conclusion 2 clearly reveals that the educators' performance in terms of skills development is negatively affected by educators' dissimilarities with employers' expectations in terms of skills based education. Thus, in order to enhance the quality of education in terms of skills based education, it becomes extremely important to identify the list of skills where accounting educators have perceptual dissimilarities with the employers' expectations. In this regard, the findings from the expectation gap (Table 30) revealed the set of skills where accounting educators were found to have dissimilar expectations with employers, which is the *second objective* of this research (see Category 2 - Minor Differences and Category 3 - Major Differences in Table 30). Hence, the third conclusion that could be drawn from the findings of this research was:-

Conclusion 3: Within the professional accounting institutes of Pakistan there were 19 skills where the accounting educators have dissimilar expectation to employers in terms of skills based education. Such skills include decision making, economics, ability to analyse and reason logically, teamwork, presentation skills, communicate orally, think creatively, Flexibility and adaptability, negotiation skill, understanding group dynamics, marketing/clients focus, leadership, self-initiative, work effectively in diversified cultural settings, engage in lifelong learning, personal attributes, project management and English language.

But accounting educators are not working in isolation. They are bound by the contextual limitations which affect their ability to develop skills in students (Bui and Porter, 2010). Such limitations, in this research were identified within the element of the constraints gap, which is the *third objective* of this research. From the findings (stated in Table 32), one can now easily identify the list of constraints that prevail within the accounting education of Pakistan (see Category 1 – Prevailed in Table 32).

Most of the constraining elements that were earlier found in the literature to prevail in the university education system were rejected by professional accounting institutes in Pakistan. Such constraining elements include conflict between teaching and research, class size and academics are too much preoccupied with research (see Category 2 – Rejected in Table 32). In this research, within the category of “prevailing constraints”, the first and fifth identified constraining elements is related to training organisations (see Category 1 – Prevailed in Table 32). The majority of the educators (71.1%) believe that some of the training organisations were not training their trainees to standards as suggested by accounting bodies. And, due to this reason, some of the accounting students remain naive in the development of some of the skills. Additionally, the majority of the educators (55.7%) also believed that the monthly stipend (Rs. 8000) offered to accounting students is inadequate during the job placement (articleship) and a reason for students’ de-motivation. Educators believed that students’ de-motivation was one of the barriers to the effective development of skills in students. The *second* and *sixth* prevailing constraining elements is related to the accounting institutes (see Category 1 – Prevailed in Table 32). Almost 54.7% of the educators believed that their teaching efforts were not appreciated by the accounting institutes in terms of reward. In such a situation accounting academics feel demoralised. Thus they exert no extra effort to develop skills in students. Other than that most of the educators (57.7%) also believed that accounting institutions were not offering adequate training opportunities to their academic staff for the development of their teaching abilities. This lack of training arguably makes accounting academics ineffective in the development of skills in students up to the desired competence level expected by employers. The *third* prevailing constraining element is related to students’ misperception (see Category 1 – Prevailed in Table 32). About 58.7% of the educators believed that most of the individuals in Pakistan have a misperception about accounting education as being mathematical in nature. And, due to this reason, most of the brilliant students who have the potential to become accountants become reluctant to opt for accounting education. As a result the accounting institutions remain with low numbers of

individuals, who have a weak academic background, to enrol in their educational programs. This argument is evidenced by the *fourth* constraining element, where a majority of the educators (54.8%) have asserted that most of the enrolling students' in accounting institutes were academically below the level of adequate standards (see Category 1 – Prevailed in Table 32). Thus the fourth conclusion that could be drawn from the findings of this research is:-

Conclusion 4: Within the professional accounting institutes of Pakistan, there were 6 prevailing constraints. Such constraints include 'training organisations are not following standard procedure to develop skills in students', 'accounting institutes are not appreciating teaching activities', 'people (potential students) have misperception about accounting education', 'enrolling students have weak academic background', 'inadequate stipend offered by training organisations to trainees', and lack of training opportunities for academics'.

Prior to this research there was nothing in the literature to illustrate the skills based requirement of Pakistan's accounting job-market. Therefore, the *fourth objective* of this research is to evaluate a skills acquisition framework for the context of Pakistan's accounting job-market. This is in order to guide the educational institutes of Pakistan in the enhancement of their students' chance of employability through skills based education. In order to do that, Principal Component Analysis (PCA) was used over the determinant of the performance gap (from the data collected from employers group only) in order to categorise the skills into a fewer number of components. In this regard, 6 components of related skills were extracted from the results of the analysis (For detail see Section 8.3.4). Now, these components of skills could be viewed as a skills acquisition framework (see Figure 34). Thus the fifth conclusion that could be drawn from the findings of this research is:-

Conclusion 5: The skills acquisition framework within the context of Pakistan's accounting job-market is the constituents of 6 components of skills that include: Appreciative skills, Interpersonal skills, Technical and Functional skills, Organisational and Business Management skills, Personal skills and Professional skills.

The next section 9.2 is illustrating the policy implications of the underlying research findings.

## 9.2 Policy implications:

Gati (1998) stated that, if employers' prioritised skills are not developed in accounting students, then this mismatch would lead to a limited number of opportunities for students to

secure employment in the future. In this regard, Lloyd (2008) suggested that the UK's current skills policy is centred on the need to drive up qualification obtainment system more employers led. Perhaps that is why higher education institutions are always directed through policy reforms to promote graduates' employability by developing skills in students that contribute to human capital (Knight and Yorke, 2003). This interest in employability through education system by developing skills reflects part of human capital theory (Yorke, 2006). Considering this, advocating the ideology of 'social efficiency' (maximise social utility or productivity of an individual as a societal future) in 'curriculum theory', Bui and Porter (2010) proposed a theoretical framework titled: 'expectation-performance gap' that investigates the shortfall between accounting employers' (accounting profession) expectations regarding skills acquisition for employment purposes and academics' pedagogical ineffectiveness in skills development. Further, along with investigating the above stated shortfall the Bui and Porter' (2010) framework also diagnoses the reasons of shortfall existence from the perspective of three contributing factors, that is, the expectation gap (reflecting differences in the expectations of accounting educators and employers), the constraints gap (representing the factors which are assumed to limit the ability of accounting education to develop skills in students) and the performance gap (reflecting ineffectiveness of pedagogical activities). In order to investigate the underlying research objective, this thesis has conceptualised the notion of the expectation-performance gap as similar to the notion offered by the Bui and Porter (2010) and adopted the Bui and Porter's (2010) framework to investigate the phenomenon of expectation-performance gap within Pakistan's accounting education context. Findings generated using Bui and Porter's (2010) framework which has the theoretical backing of social efficiency ideology in curriculum theory must have some implications at policy level for this research. In this regard the findings generated from this research have a number of important policy implications regarding skills-based accounting education, as follows:-

Conclusion 2 of this research clearly asserts that there is a significant positive correlation between the constituents of performance gap and expectation gap. Considering human capital theory this fact has an important policy implication for human capital development. For example, conclusion 2 of this research derives the meaning that the educators' performances are negatively affected by the educators' perceptual dissimilarities with employers' expectations in terms of skills based education. In this research, out of the 35 investigated skills, 24 skills were where accounting educators failed to develop enough competence in



students as expected by employers (stated in Conclusion 1). Thus, arguably, this pedagogical incompetence can be remedied by giving special attention to skills where a significant level of the expectation gap has been noticed among educators and employers (stated in Conclusion 3). Accounting institutions in Pakistan need to consider arranging seminars for their educators to eradicate their expectation dissimilarities with employers in terms of skills based education. This will also provide an opportunity for educators to discuss the constraints that are hindering their ability to develop skills in their students. In this regard special attention should be given to the prevailing constraints that are identified by this research (stated in Conclusion 4). These constraints should be addressed seriously to enhance accounting education learning outcomes. Further, regarding the constraints, which are beyond the capability of accounting institutions to handle (such as, inadequate stipend to accounting students and training organisations are not following standard procedures) then additional support should be requested from the training partners/organisation to resolve them. In summary, the accounting institutions of Pakistan need to discuss the issue of skills development at board level that will hopefully ignite an agenda orientated towards policy reforms for pedagogical effectiveness.

Considering ‘social efficiency ideology’ in ‘curriculum theory’ the skills acquisition framework developed in this research (see Conclusion 5) also has an important implication for accounting curriculum development. Prior to this research there was nothing in the literature to illustrate the skills-based requirement from the context of Pakistan’s accounting job market. This lack of knowledge implied, for most of the individuals, a belief that accounting education is mathematical in nature. This false belief can be remedied by publishing a skill acquisition framework (see Figure 34) through promotional media (such as newspapers and billboards). Additionally, to date, most of the education related to the accounting profession in Pakistan is delivered through ‘professional accounting institutions’. Therefore, those universities which are planning to start accounting degrees in Pakistan can also take guidance from this skill acquisition framework in the design of their academic programs.

The next section 9.3 is stating the theoretical contribution of this research.

### **9.3 Theoretical contribution:**

This research offers the following theoretical contribution to the literature:

1. Considering the novelty (newness) of the Bui and Porter (2010) framework (that is, the expectation-performance gap) there is a paucity of literature which uses it for empirical investigation using a questionnaire based approach. This research provides an empirical underpinning to this framework. From a methodological perspective this research is the first of its kind to use this framework within a questionnaire based approach and employing different statistical tests that could be used for the evaluation of its constituents (that is, the expectation gap, the constraints gap, and the performance gap).
2. From the literature Jones (2010) established that the respondents from distinct disciplines (history, physics, economics, law and medicine) define skills (such as critical thinking, problem solving, communication, and so on) differently. Therefore, keeping this in mind, this research has described the numerous skills by probing an explanation from the accounting educators and employers perspective collectively. This ensured the common understanding from all of the respondents during the survey process. Prior to this research most of the earlier studies were flawed in this regard (see, for example Kavanagh and Drennan, 2008, 2007; Lin et al., 2005; Jackling and Keneley, 2009; Abdolmohammadi et al., 2004).
3. This research brings a new theoretical perspective on skills development from the perspective of the professional accounting institutes. Professional accounting institutes are quite different to the universities where most of the research regarding skills development has been conducted previously. These differences relate to funding structure, employment policy, reward system, curriculum development, examination systems, and students' intake criteria. These differences suggest a different level of 'expectation-performance gap' from the professional accounting institution perspective when compared with universities and, hence, this research offers a unique theoretical understanding.
4. Lastly, prior to this research, there was lack of literature illustrating the skills-based requirement for new entrants into the job-market of the accounting profession in Pakistan. In this regard this research has delivered a skill acquisition framework that provides a reference point for new entrants in the accounting job market.

The next section 9.4 concerns the limitations of my research.

## 9.4 Research limitations:

Just like any other research this study is also subject to number of limitations that are stated as follows:-

1. In Pakistan there are five accounting bodies providing certified accounting education, that is, the Institute of Chartered Accountants of Pakistan (ICAP); the Institute of Cost and Management Accountants of Pakistan (ICMAP); the Institute of Certified Public Accountants of Pakistan (ICPAP); the Society of Accounting Education (SOAE) and the Pakistan Institute of Public Finance Accountants (PIPFA). And there are a number of educational centres that are working under accreditation arrangements with the aforementioned accounting bodies. To achieve a breadth of responses, preliminary considerations were given to the viability of surveying all the accounting educators and employers associated with such institutions. But pragmatically it was impossible to survey all the population with such a large number of respondent groups. Therefore, in this research sample size is determined by observing the requirements of the analytical techniques that are used for the analysis.
2. Another limitation of this research is the evaluation of skills based requirements from the perspective of accounting practitioners working in auditing firms only. This limitation is subject to the availability of registered accounting employers in Pakistan. The only list of registered accounting employers in Pakistan are the auditing firms with professional accounting bodies.
3. Another limitation of this research is the determination of outliers. An outlier is defined as ‘a case with such an extreme value on one variable (a univariate outlier) or such a strange combination of scores on two or more variable (multivariable outlier)’ (Tabachnick and Fidell, 2007). Researchers believe that outliers can result in the non-normality of data and can cause distorted outcomes (Kline, 2005; Hair et al., 2006; Tabachnick and Fidell, 2007). Generally outliers are omitted through application of different statistical procedures intended to normalise the data. But, in the case of this research these data normalisation procedures are considered inappropriate. This is because if the data from this research does not satisfy the normality assumption then this may indicate that the accounting educators and/or employers hold similar views in the majority (For example, Watty, 2004). In that case normalizing the data using statistical procedures (such as data log)

would be considered as manipulating the data and molding the findings towards wrong conclusions.

4. Another limitation within this research could be viewed as the non-use of control variables (demographic characteristics) for multivariate analysis. The justification for non-use of control variables to multivariate analysis is to restrain the focus of the study to the research objectives only (explicitly stated in conclusion chapter 9 - section 9.1), that is, evaluation of performance gap, constraints gap, expectation gap and development of skills acquisition framework. However, one may consider the availability of control variables data to multivariate analysis (demographic characteristics) as a subject of further research.
5. Another limitation is relevant to the element of 'constraints gap'. The nature of the constraints gap allows the views to be recorded from other stakeholders' perspectives (such as students). But considering the constraints gap's of foremost relevance to educators, the focus of this research is restricted to investigating constraints from the educators' perspective only and not from some other stakeholders.
6. Another limitation is the theoretical limitation that has been identified as relevant to the composition of the 'performance gap'. The performance gap within the theoretical framework of expectation-performance gap (Bui and Porter, 2010) reflects the in/effectiveness of teaching activities. In order to investigate the performance gap, Bui and Porter (2010) suggested the measurement of the perceptual differences in the level of skills competencies that educators can reasonably expect accounting students to have acquired by the time they graduate and which employers perceive the accounting graduates should possess when they enter the profession. Such an evaluation is subject to the educators' biasness in determination of the in/effectiveness of teaching activities.

The next section 9.5 is about recommendations for future research.

### **9.5 Recommendations for future research:**

According to Jackling and Keneley (2009), education institutions should have regard to the views and expectations of students as they are an essential part of the education system. De Lange et al. (2006) have acknowledged the students as a key stakeholder in the learning process. Hence in alignment with the continuity of this research, in future, consideration

should be given to reporting the students' views, especially over the constituents of the constraints gap and performance gap.

The findings from such research will have theoretical implications in two respects. First, the findings in respect of the component of the constraints gap from the students' perspective will identify those prevailing constraints which are hindering their skill development process. So far, the prevailing constraining elements identified within this research (Category 1 – Prevalent) are the representation of the educators' view only. Second, the findings in respect of the component of the performance gap from the students' perspective will cross-validate the findings of this research by having a second opinion on in/effectiveness of pedagogical activities by educators.

## REFERENCES:

- Abdolmohammadi, M.J., Searfoss, D.G. and Shanteau, J. (2004) "An investigation of the attributes of top industry audit specialists", *Behavioral Research in Accounting*, vol. 16, no. 1, pp. 1-17.
- AC Nielsen Research Services (2000) *Employer Satisfaction with Graduate Skills: Research Report, Evaluations and Investigations Programme*, Higher Education Division, DETYA.
- Accounting Education Change Commission (AECC) (1990) "Position statement number one: Objectives of education for accountants", *Issues in Accounting Education*, vol. 5, pp. 307-312.
- Adams, S., Pryor, L. and Adams, S. (1994) "Attraction and retention of high-aptitude students in accounting: An exploratory longitudinal study", *Issues in Accounting Education*, vol. 9, no. 1, pp. 45-58.
- Aday, L.A. and Cornelius, L.J. (2006) *Designing and conducting health surveys: a comprehensive guide*, Jossey-Bass Inc Pub.
- Albrecht, W.S. and Sack, R.J. (2000) *Accounting education: Charting the course through a perilous future*, American Accounting Association, Bessie Drive Sarasota, FL 34233.
- Aly, J.H. (2007) *Education in Pakistan: A White Paper (Revised)*, Report prepared by the National Education Policy Review Team, Islamabad, Pakistan.
- American Institute of Certified Public Accountants (AICPA) (1998) *Core Competency Framework for Entry into the Accounting Profession*, New York: AICPA.
- Archer, C. (2010) "Significance of Work Experience on a Graduate's Employability", *Hospitality Management Review Student Journal at Sheffield Hallam University*, [Online], vol. 1. Available from: <http://research.shu.ac.uk/domino/index.php/HMJ/article/view/10> (Accessed: 08/01 2013).

- Arnott, R. (1998) "Economic theory and the spatial mismatch hypothesis", *Urban Studies*, vol. 35, no. 7, pp. 1171-1185.
- Arthur Andersen & Co., Arthur Young, Coppers & Lybrand, Deloitte, Haskins & Sells, Ernst & Whinney, Peat Marwick Main & Co., Price Waterhouse and Touche´ Ross (1998) *Perspectives on Education: Capabilities for Success in the Accounting Profession (The White Paper)*.
- Askary, S. (2006) "Accounting professionalism—a cultural perspective of developing countries", *Managerial auditing journal*, vol. 21, no. 1, pp. 102-111.
- Atkinson, G. and Nevill, A.M. (1998) "Statistical methods for assessing measurement error (reliability) in variables relevant to sports medicine", *Sports Medicine*, vol. 26, no. 4, pp. 217-238.
- Atkinson, G. and Nevill, A.M. (1998) "Statistical methods for assessing measurement error (reliability) in variables relevant to sports medicine", *Sports Medicine*, vol. 26, no. 4, pp. 217-238.
- Atkinson, R. and Kintrea, K. (2004) "Opportunities and Despair, it's all in there", *Sociology*, vol. 38, no. 3, pp. 437.
- Australian Chamber of Commerce and Industry (ACCI) (2002) *Employability Skills – An Employer Perspective. Getting What Employers Want out of the Too Hard Basket*, Australian Chamber of Commerce and Industry, Kingston.
- Australian Council for Education Research (ACER) (2001a) *Graduate Skills Assessment*, Department of Education, Training and Youth Affairs, Canberra; DETYA.
- Awayiga, J.Y., Onumah, J.M. and Tsamenyi, M. (2010) "Knowledge and Skills Development of Accounting Graduates: The Perceptions of Graduates and Employers in Ghana", *Accounting Education*, vol. 19, no. 1, pp. 139-158.
- Barrie, S., Hughes, C. and Smith, C. (2009) *The national graduate attributes project: integration and assessment of graduate attributes in curriculum*, Australian Learning and Teaching Council, Sydney; ALTC.

- Barrie, S.C. (2006) "Understanding what we mean by the generic attributes of graduates", *Higher education*, vol. 51, no. 2, pp. 215-241.
- Baumgartner, T.A. (1989) "Norm-referenced measurement: reliability" in *Measurement concepts in physical education and exercise science*, eds. M.J. Safrit and T.M. Wood, Human Kinetics, Champaign, IL, pp. 45-72.
- Beach, J.M. (2009) "A critique of human capital formation in the US and the economic returns to sub-baccalaureate credentials", *Educational Studies*, vol. 45, no. 1, pp. 24-38.
- Beaven, Z. and Wright, R. (2006) "Experience! Experience! Experience! Employer attitudes to arts & event management graduate employability", *International Journal of Event Management Research*, vol. 2, no. 1, pp. 17-24.
- Beck, V. and Quinn, M. (2011) "The Importance of Health in Promoting Employability in the East Midlands", *Sociological Research Online*, vol. 16, no. 1, pp. 8.
- Becker, G.S. (1975) *Front matter, Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, .
- Becker, G.S. (2009) *Human capital: A theoretical and empirical analysis, with special reference to education*, University of Chicago Press.
- Bell, A. and Egan, D. (2009) "The case for a generic academic skills unit", *ILT Members Website Article*, [Online]. Available at:  
<http://www.qualityresearchinternational.com/esecttools/esectpubs/belleganunit.pdf>  
(Accessed: 08/01 2013)
- Bennett, N., Dunne, E. and Carre, C. (2002) *Developing skills in higher education and employment*, ESRC Learning Society Programme.
- Bertram, D. (2007) "Likert scales", *Calgary, Alberta, Canada: Retrieved May*, [Online], vol. 18, pp. 1-10. Available at: <http://poincare.matf.bg.ac.rs/~kristina/topic-dane-likert.pdf>  
(Accessed: 08/01 2013)



- Birkett, W.P., The Institute of Chartered Accountants in Australia, Australian Society of CPAs and New Zealand Society of Accountants (1993) *Competency based standards for professional accountants in Australia and New Zealand*.
- Bishop, J.H. (1990) "Job performance, turnover, and wage growth", *Journal of Labor Economics*, vol. 8, no. 3, pp. 363-386.
- Blumer, H. (1969) *The methodological position of symbolic interactionism*, University of California Press, Prentice-Hall Englewood Cliffs, New Jersey.
- Blundell, R., Dearden, L., Meghir, C. and Sianesi, B. (1999) "Human capital investment: the returns from education and training to the individual, the firm and the economy", *Fiscal studies*, vol. 20, no. 1, pp. 1-23.
- Bourdieu, P. (1986) "The forms of capital" in *Handbook of Theory and Research for the Sociology of Education*, ed. J.G. Richardson, Greenwood Publishing Group, Greenwood, New York, pp. 241-258.
- Braun, V. and Clarke, V. (2006) "Using thematic analysis in psychology", *Qualitative research in psychology*, vol. 3, no. 2, pp. 77-101.
- Brown, B.L. (2002) *Generic Skills in Career and Technical Education. Myths and Realities*. Available at: <http://www.eric.ed.gov/PDFS/ED472363.pdf> (Accessed: 08/01 2013).
- Brown, P., Hesketh, A. and Williams, S. (2002) "Employability in a knowledge-driven economy. In Knight, P. (compiler) Notes from the 13th June 2002 'Skills plus' conference, innovation in education for employability held at Manchester Metropolitan University."
- Bryman, A. and Bell, E. (2007) *Business research methods*, Oxford University Press, New York.
- Bui, B. and Porter, B. (2010) "The expectation-performance gap in accounting education: An exploratory study", *Accounting Education: an international journal*, vol. 19, no. 1-2, pp. 23-50.

- Burns, K.E.A., Duffett, M., Kho, M.E., Meade, M.O., Adhikari, N.K.J., Sinuff, T. and Cook, D.J. (2008) "A guide for the design and conduct of self-administered surveys of clinicians", *Canadian Medical Association journal*, vol. 179, no. 3, pp. 245-252.
- Business, Industry Higher Education Collaboration Council (BIHECC) (2007) *Graduate Employability Skills*, Precision Consultancy for the Department of Education, Science and Training, Commonwealth of Australia, Canberra.
- Calvo-Armengol, A. and Jackson, M.O. (2004) "The effects of social networks on employment and inequality", *The American Economic Review*, vol. 94, no. 3, pp. 426-454.
- Campbell, A. (2010) "Developing generic skills and attributes of international students: the (ir) relevance of the Australian university experience", *Journal of Higher Education Policy and Management*, vol. 32, no. 5, pp. 487-497.
- Carmines, E.G. and Zeller, R.A. (1979) *Reliability and validity assessment*, Sage Publications, Inc.
- Carroll, A. and Buchholtz, A. (1989) *Business and Society: Ethics and Stakeholder Management*, South-Western Cengage Learning, 5191 Natorp Boulevard, Mason, OH 45040, USA.
- Cavanagh, S. (1997) "Content analysis: concepts, methods and applications", *Nurse researcher*, vol. 4, no. 3, pp. 5-13.
- Certified Practising Accountants (CPA) (2008) *International Accreditation Guidelines for Accounting Degree Programs*. Available at: <http://www.cpaaustralia.com.au/cps/rde/xbcr/cpa-site/international-accreditation-guidelines.pdf> (Accessed: 7/28 2013).
- Churchill Jr, G.A. (1979) "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, vol. 16, no. 1, pp. 64-73.
- Clanchy, J. and Ballard, B. (1995) "Generic skills in the context of higher education", *Higher Education Research and Development*, vol. 14, no. 2, pp. 155-166.

- Clarkson, M.B.E. (1995) "A stakeholder framework for analyzing and evaluating corporate social performance", *Academy of management review*, vol. 20, no. 1, pp. 92-117.
- Cole, F.L. (1988) "Content analysis: process and application", *Clinical Nurse Specialist*, vol. 2, no. 1, pp. 53-57.
- Coleman, S. and Keep, E. (2001) *Background literature review for PIU project on workforce development*, Performance Improvement Unit, UK Cabinet Office, London.
- Comrey, A. and Lee, H. (1992) *A first course in factor analysis*, 2nd edn, Lawrence Erlbaum Associates Inc, New Jersey.
- Confederation of British Industry (CBI) (2009) *Future Fit: preparing graduates for the world of work*, CBI, UK.
- Cook, J.D. and Heptworth, S.J. (1981) *The experience of work: A compendium and review of 249 measures and their use*, Academic Press New York.
- Coopers and Lybrand (1998) *Skills Development in Higher Education*, London, Committee of Vice-Chancellors and Principals / Department for Education and Employment.
- Cordeiro, C., Machás, A. and Neves, M.M. (2010) "A Case Study of a Customer Satisfaction Problem: Bootstrap and Imputation Techniques" in *Handbook of Partial Least Squares* Springer, pp. 279-287.
- Cornish, R. *Statistics: Factor Analysis*. Available at: <http://mlsc.lboro.ac.uk/resources/statistics/Factoranalysis.pdf> (Accessed: 03/13/2013 2013).
- Council for Industry and Higher Education (CIHE) (1996) *Helping Students towards Success at Work: Declaration of Intent*, CIHE, London.
- Craig, R. and Amernic, J. (2001) "Accountability of accounting educators and the rhythm of the universities: resistance strategies for post-modern blues", *Accounting Education: an international journal*, vol. 11, no. 2, pp. 121-171.

- Cranmer, S. (2006) "Enhancing graduate employability: best intentions and mixed outcomes", *Studies in Higher Education*, vol. 31, no. 2, pp. 169-184.
- Creswell, J.W. (2003) *Research design: Qualitative, quantitative, and mixed methods approaches*, (2nd ed.) edn, Thousand Oaks: Sage.
- Creswell, J.W., Plano Clark, V.L., Gutmann, M.L. and Hanson, W.E. (2003) "Advanced mixed methods research designs" in *Handbook of Mixed Methods in Social & Behavioral Research*, eds. A. Tashakkori and C. Teddlie, Sage Publication Inc, 2455 Teller Road, Thousand Oaklands, California 91320, pp. 209-240.
- De La Harpe, B., Radloff, A. and Wyber, J. (2000) "Quality and generic (professional) skills", *Quality in Higher Education*, vol. 6, no. 3, pp. 231-243.
- De Lange, P., Jackling, B. and Gut, A.M. (2006) "Accounting graduates' perceptions of skills emphasis in undergraduate courses: an investigation from two Victorian universities", *Accounting & Finance*, vol. 46, no. 3, pp. 365-386.
- De Vaus, D.A. (ed) (1995) *Surveys in social research*, 4th edn, St. Leonards, NSW: Allen and Unwin, Sydney.
- Dearden, L. (1999) *Qualifications and Earnings in Britain: how reliable are conventional OLS estimates of the returns to education?*, FS Working Papers W99/07. Available at: <http://www.econstor.eu/handle/10419/90862> (Accessed: 03/13/2013 2013).
- Dearing, R. (1997) *Higher education in the learning society*, National Centre for Vocational Education Research (NCVER).
- Denison, E.F. (1962) "Sources of economic growth in the United States and the alternatives before us", *Journal of the American Statistical Association*, Vol. 58, No. 304, pp. 1168-1171.
- Dennis, A. (2011) "Symbolic Interactionism and Ethnomethodology", *Symbolic Interaction*, vol. 34, no. 3, pp. 349-356.
- Department of Education, Victoria, Australia (2006) *Employability Skills Framework*, Department of Education, Victoria, Australia.

- Department of Trade and Industry (DTI) (2005) *A Literature Review on Skills and Innovation: How Does Successful Innovation Impact on the Demand for Skills and How Do Skills Drive Innovation?*, DTI, London.
- Dey, I. (1993) *Qualitative data analysis: A user friendly guide for social scientists*, Routledge, London.
- Dmitrijeva, J. (2009) *The employment effects of public training programme: evidence from Latvian micro and macro data*, Available at: [http://epee.univ-evry.fr/EPEE/colloques/DMITRIJEVA\\_2009\\_The\\_employment%20effects\\_of\\_training.pdf](http://epee.univ-evry.fr/EPEE/colloques/DMITRIJEVA_2009_The_employment%20effects_of_training.pdf) (Accessed: 07/31 2013).
- Dominelli, L. and Hoogvelt, A. (1996) "Globalisation, the privatisation of welfare, and the changing role of professional academics in Britain", *Critical perspectives on Accounting*, vol. 7, no. 1, pp. 191-212.
- Dougherty, C. and Jorgenson, D.W. (1997) "There is no silver bullet: investment and growth in the G7", *National Institute Economic Review*, vol. 162, no. 1, pp. 57.
- Douglas W. Maynard, Teddy Kardash and George Ritzer *Ethnomethodology*. Available at: [http://www.sociologyencyclopedia.com/fragr\\_image/media/ethnomethodology](http://www.sociologyencyclopedia.com/fragr_image/media/ethnomethodology) (Accessed: 01/16 2012).
- Dowling, M. (2007) "Ethnomethodology: Time for a revisit? A discussion paper", *International journal of nursing studies*, vol. 44, no. 5, pp. 826-833.
- Drummond, I., Nixon, I. and Wiltshire, J. (1998) "Personal transferable skills in higher education: the problems of implementing good practice", *Quality assurance in education*, vol. 6, no. 1, pp. 19-27.
- Duncan, J. and Schmutte, J. (2006) "Change in accounting programs: the impact of influences and constraints", *The Accounting Educators' Journal*, vol. 16, pp. 52-81.
- Dusick, D.M. *What is factor analysis: a simple solution ...* Available at: <http://bold-ed.com/factor.pdf> (Accessed: 03/13 2013).

- Edvinsson, L. and Malone, M.S. (1997) *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*, Harper Business.
- Edward Freeman, R. and Evan, W.M. (1990) "Corporate governance: A stakeholder interpretation", *Journal of Behavioral Economics*, vol. 19, no. 4, pp. 337-359.
- Elo, S. and Kyngäs, H. (2008) "The qualitative content analysis process", *Journal of advanced nursing*, vol. 62, no. 1, pp. 107-115.
- Estienne, M. (1997) "An organizational culture compatible with employability", *Industrial and Commercial Training*, vol. 29, no. 6, pp. 194-199.
- Fechner, H.H.E. and Kilgore, A. (1994) "The influence of cultural factors on accounting practice", *The International Journal of Accounting*, vol. 29, no. 3, pp. 267-277.
- Felton, S., Buhr, N., & Northey, M. (1994) "Factors influencing the business student's choice of a career in chartered accountancy", *Issues in Accounting Education*, vol. 9, no. 1, pp. 131-141.
- Fishman, D.B. (1991) "An introduction to the experimental versus the pragmatic paradigm in evaluation", *Evaluation and program planning*, vol. 14, no. 4, pp. 353-363.
- Fitzsimons, P. (1999) "Human capital theory and education", *Retrieved November*, [Online], vol. 2. Available from:  
[http://eepat.net/doku.php?id=human\\_capital\\_theory\\_and\\_education](http://eepat.net/doku.php?id=human_capital_theory_and_education) (Accessed: 08/01 2013)
- Francis, G. and Minchington, C. (1999) "Quantitative skills: is there an expectation gap between the education and practice of management accountants?", *Accounting Education*, vol. 8, no. 4, pp. 301-319.
- Frary, R.B. (2003) "A brief guide to questionnaire development", *Virginia Polytechnic Institute & State University*. Retrieved October, [Online], vol. 9, pp. 2003. Available from: <http://www.ericae.net/ft/tamu/vpiques3.htm> (Accessed: 08/01 2013)
- Frizzle (2013), Commentary on Schiro (2012): curriculum theory, available from:  
<http://subbingformissfrizzle.wordpress.com> (Accessed 06/17 2014)

- Fugate, M., Kinicki, A.J. and Ashforth, B.E. (2004) "Employability: A psycho-social construct, its dimensions, and applications", *Journal of vocational behavior*, vol. 65, no. 1, pp. 14-38.
- Furlong, A. and Cartmel, F. (2004) *Vulnerable young men in fragile labour markets: Employment, unemployment and the search for long-term security*, National Centre for Vocational Education Research (NCVER).
- Garavan, T.N., Morley, M., Gunnigle, P. and Collins, E. (2001) "Human capital accumulation: the role of human resource development", *Journal of European Industrial Training*, vol. 25, no. 2/3/4, pp. 48-68.
- Gardner, H.H. and Gardner, B.D. (2012) *Health as Human Capital: Theory and Implications*, HCMS Group, Cheyenne, WY 82001.
- Gardner, P.D. and Liu, W.Y. (1997) "Prepared to Perform? Employers Rate Work Force Readiness of New Grads", *Journal of Career Planning & Employment*, vol. 57, no. 3, pp. 32-35.
- Garfinkel, H. (2002) *Ethnomethodology's program: Working out Durkheim's aphorism*, Rowman & Littlefield Publishers Inc, P.O Box 137 Oxford OX2 9RU, UK.
- Gati, I. (1998) "Using career-related aspects to elicit preferences and characterize occupations for a better person-environment fit", *Journal of vocational behavior*, vol. 52, no. 3, pp. 343-356.
- Granovetter, M. (1982) "The strength of weak ties: A network theory revisited. PV Marsden, N. Lin, eds" in *Social Structure and Network Analysis*, eds. P.V. Marsden and N. Lin, Sage Publications, London, pp. 105-130.
- Gray, R. and Collison, D. (2002) "Can't see the wood for the trees, can't see the trees for the numbers? Accounting education, sustainability and the public interest", *Critical Perspectives on Accounting*, vol. 13, no. 5-6, pp. 797-836.
- Gray, S.J. (1988) "Towards a theory of cultural influence on the development of accounting systems internationally", *Abacus*, vol. 24, no. 1, pp. 1-15.

- Greatbatch, D. and Lewis, P. (2007) *Generic employability skills II*, Centre for Developing and Evaluating Lifelong Learning, Nottingham in collaboration with the South West Skills and Learning Intelligence Module, University of Exeter.
- Grip, A., Loo, J. and Sanders, J. (2004) "The Industry Employability Index: Taking account of supply and demand characteristics", *International Labour Review*, vol. 143, no. 3, pp. 211-233.
- Guba, E.G. and Lincoln, Y.S. (1994) "Competing paradigms in qualitative research" in *Handbook of Qualitative Research*, eds. N.K. Denzin and Y.S. Lincoln, Sage Publication Inc, Thousands Oaks, California, pp. 105-117.
- Haigh, N. (1994) "Promoting intellectual independence: a legislative catalyst", *HERDSA annual conference, Canberra*.
- Hair, J., Black, B., Babin, B.J., Anderson, R. and Tatham, R. (eds) (2006) *Multivariate Data Analysis*, 6th edn, Upper Saddle River, New Jersey, Pearson Prentice Hall.
- Haley, S.M. and Osberg, J.S. (1989) "Kappa coefficient calculation using multiple ratings per subject: a special communication", *Physical Therapy*, vol. 69, no. 11, pp. 970-974.
- Hambur, S., Rowe, K. and Luc, L. (2002) *Graduate skills assessment*, Australian Council for Educational Research.
- Hancock, P., Howieson, B., Kavanagh, M., Kent, J., Tempone, I., Segal, N. and Freeman, M. (2009) "The roles of some key stakeholders in the future of accounting education in Australia", *Australian Accounting Review*, vol. 19, no. 3, pp. 249-260.
- Harvey, L. and Bowers-Brown, T. (2004) "Employability cross country comparisons", [Online], vol. 5, Available from:  
[http://ww2.prospects.ac.uk/cms/ShowPage/Home\\_page/Members\\_Log\\_in/Labour\\_market\\_information/Graduate\\_Market\\_Trends/Employability\\_cross\\_country\\_comparisons\\_Winter\\_04\\_05\\_/p!epmjlid](http://ww2.prospects.ac.uk/cms/ShowPage/Home_page/Members_Log_in/Labour_market_information/Graduate_Market_Trends/Employability_cross_country_comparisons_Winter_04_05_/p!epmjlid) (Accessed: 08/01 2013)
- Harvey, L. (2003) "On employability", *The Higher Education Academy*. Retrieved April, [Online], vol. 30, Available from:



<http://www.qualityresearchinternational.com/esecttools/esectpubs/harveyonemp.pdf>

(Accessed: 08/01 2013)

Harvey, L. and Green, D. (1994) *Employer satisfaction*, Quality in Higher Education Project, Birmingham, QHE.

Harvey, L., Moon, S., Geall, V. and Bower, R. (1997) *Graduates' Work: Organisational Change and Students' Attributes*. ERIC.

Harvey, L. and Team, Enhancing Student Employability Co-ordination (2003) *Employability and Transitions from Higher Education to Work*, LTSN Generic Centre.

Hassall, T. and Joyce, J. (2001) "Approaches to learning of management accounting students", *Education Training*, vol. 43, no. 3, pp. 145-153.

Hassall, T., Joyce, J., Arquero Montano, J.L. and Donoso Anes, J.A. (2005) "Priorities for the development of vocational skills in management accountants: A European perspective", vol. 29, no. 4, pp. 379-394.

Hassall, T., Joyce, J., Montano, J.L.A. and Anes, J.A.D. (2003) "The vocational skills gap for management accountants: the stakeholders' perspectives", *Innovations in education and teaching international*, vol. 40, no. 1, pp. 78-88.

Hassall, T., Joyce, J., Montano, J.L.A. and Anes, J.A.D. (1999) "Vocational Skills and capabilities for management accountants", *Management Accounting*, vol. 77, no. 11, pp. 52-57.

Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009) "The use of partial least squares path modeling in international marketing", *Advances in international marketing*, vol. 20, no. 1, pp. 277-319.

Hermanson, R. H., Deines, D. S., Eldridge, C., Hermanson, D. R., Ivancevich, S. H., & Williams, D. Z. (1996) "Strategies for recruiting the best and brightest students into accounting : American accounting association teaching and curriculum section", *Journal of Accounting Education*, vol. 14, no. 3, pp. 347-365.

Higher Education Council (HEC) (1992) *Achieving Quality*. Available at:

[http://www.dest.gov.au/sectors/training\\_skills/publications\\_resources/indexes/documents/92\\_37\\_pdf.htm](http://www.dest.gov.au/sectors/training_skills/publications_resources/indexes/documents/92_37_pdf.htm) (Accessed: 03/06 2012).

Higher Education Funding Council for England (HEFCE) (2001) *Indicators of Employment*, HEFCE, London.

Hill, C.W.L. and Jones, T.M. (1992) "Stakeholder-agency theory", *Journal of management studies*, vol. 29, no. 2, pp. 131-154.

Hill, M.C. (1998) "Class Size and Student Performance in Introductory Accounting Courses: Further Evidence.", *Issues in Accounting Education*, vol. 13, no. 1, pp. 47-64.

Hillage, J. and Pollard, E. (1998) "Employability: developing a framework for policy analysis. Research Brief 85, Department for Education and Employment. Hollingsworth Model of Employee Turnover", *Journal of Applied Psychology*, vol. 64, no. 5, pp. 509-517.

HM Treasury (2000) *Productivity in the UK: the evidence and the Government's approach*, HM Treasury, London: UK Treasury.

HM Treasury (1997) *Treasury Press Release 122/97, 13th October: Gordon Brown unveils UK Employment Action Plan.*, HM Treasury., London.

Horn, J.L. (1965) "A rationale and test for the number of factors in factor analysis", *Psychometrika*, vol. 30, no. 2, pp. 179-185.

Hussey, J. and Hussey, R. (1997) *Business Research methods: Qualitative and Quantitative Approaches*, Pearson Education, USA.

IBM *Estimation Methods for Replacing Missing Values*. Available at:

[http://pic.dhe.ibm.com/infocenter/spssstat/v20r0m0/index.jsp?topic=%2Fcom.ibm.spss.statistics.help%2Freplace\\_missing\\_values\\_estimation\\_methods.htm](http://pic.dhe.ibm.com/infocenter/spssstat/v20r0m0/index.jsp?topic=%2Fcom.ibm.spss.statistics.help%2Freplace_missing_values_estimation_methods.htm) (Accessed: 08/18 2013).

Institute of Chartered Accountants in Australia (ICAA) (2002) *Trends in Accounting at Australian Universities*, ICAA, Australia.

- Institute of Chartered Accountants in England and Wales (ICAEW) (2010) *ACA Advanced staged syllabus*, ICAEW.
- International Federation of Accountants (IFAC) (2008) *Framework for International Education Pronouncements*. Available at: [http://www.fiscontexpert.ro/libs/docs/standarde\\_internationale\\_de\\_educatie.pdf](http://www.fiscontexpert.ro/libs/docs/standarde_internationale_de_educatie.pdf) (Accessed: 07/27 2013).
- International Labour Conference (ILC). (2005) *Youth: Pathways to decent work: Promoting youth employment – Tackling the challenge*, International Labour Office, Geneva.
- Ivankova, N.V., Creswell, J.W. and Stick, S.L. (2006) "Using mixed-methods sequential explanatory design: From theory to practice", *Field Methods*, vol. 18, no. 1, pp. 3-20.
- Jackling, B. and Calero, C. (2006) "Influences on undergraduate students' intentions to become qualified accountants: evidence from Australia", *Accounting education*, vol. 15, no. 4, pp. 419-438.
- Jackling, B. and Keneley, M. (2009) "Perceptions of generic skill development: international and local accounting students in Australia", *Accounting and Finance Association of Australia and New Zealand. Conference (2009: Adelaide, South Australia)*.
- Jackling, B. and Watty, K. (2010) "Generic skills", *Accounting Education*, vol. 19, no. 1-2, pp. 1-3.
- Jadama, L.M. (2014) "Impact of Subject Matter Knowledge of a Teacher in Teaching and Learning Process", *Middle Eastern & African Journal of Educational Research*, Issue: 7, pp. 20-29.
- James, W. (2000) "What pragmatism means" in *Pragmatism and classical American philosophy: essential readings and interpretive essays*, ed. J.J. Stuhr, 2nd edn, Oxford university press, New York, pp. 193-202.
- Jamieson, S. (2004) "Likert scales: how to (ab) use them", *Medical education*, vol. 38, no. 12, pp. 1217-1218.

- Johnes, G. and Johnes, J. (2004) *International handbook on the economics of education*, Edward Elgar Pub.
- Johnson, L.M. and Johnson, V.E. (1995) "Help Wanted—Accountant: What the Classifieds Say about Employers' Expectations", *Journal of Education for Business*, vol. 70, no. 3, pp. 130-134.
- Jones, A. (2010) "Generic attributes in accounting: the significance of the disciplinary context", *Accounting Education*, vol. 19, no. 1, pp. 5-21.
- Jones, A.A. and Sin, S. (2003) *Generic Skills in Accounting: Competencies for Students and Graduates*, Pearson/Prentice Hall.
- Jones, G. and Abraham, A. (2009) "The value of incorporating emotional intelligence skills in the education of accounting students", *Australasian Accounting Business and Finance Journal*, vol. 3, no. 2, pp. 4.
- Kavanagh, M. and Drennan, L. (2007) "Graduate attributes and skills: are we as accounting academics delivering the goods?", *Proceedings of the 2007 AFAANZ Conference* Accounting & Finance Association of Australia and New Zealand, .
- Kavanagh, M., Hancock, P., Howieson, B., Kent, J. and Tempone, I. (2009) "Stakeholders' perspectives of the skills and attributes for accounting graduates", *Proceedings of the 2009 AFAANZ Conference* Accounting & Finance Association of Australia and New Zealand, .
- Kavanagh, M.H. and Drennan, L. (2008) "What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations", *Accounting & Finance*, vol. 48, no. 2, pp. 279-300.
- Kirubahar, J.S., Santhi, V.J. and Subashini, A. (2010) "Personal and Labour Market Environment Factors in English for Employability: A Case Study of KSA", *Language in India*, vol. 10, pp. 253-262.
- Kline, R. (2005) *Principles and practice of structural equation modeling*, 3rd edn, The Guilford press, United States of America.

- Knight, P.T. and Yorke, M. (2003) "Employability and good learning in higher education", *Teaching in Higher Education*, vol. 8, no. 1, pp. 3-16.
- Kwon, D. (2009) "Human capital and its measurement", *The 3rd OECD World Forum on "Statistics, Knowledge and Policy" Charting Progress, Building, Vision, Improving Life*, OECD World Forum.
- Laerd Statistics *Independent T-Test using SPSS*. Available at: <https://statistics.laerd.com/spss-tutorials/independent-t-test-using-spss-statistics.php> (Accessed: 08/17 2013).
- Laerd Statistics *Mann-Whitney U Test using SPSS*. Available at: <https://statistics.laerd.com/spss-tutorials/mann-whitney-u-test-using-spss-statistics-2.php> (Accessed: 08/17 2013).
- Laughlin, R. (2004) "Putting the record straight: a critique of methodology choices and the construction of facts: some implications from the sociology of knowledge", *Critical Perspectives on Accounting*, vol. 15, no. 2, pp. 261-277.
- Laughlin, R. (2000) *Introduction to Research Approaches and Data Collection Methods*, Session 1 given at CHA/BAA research methods workshop 24-26 May 2000, University of Portsmouth, held at Chichester. edn.
- Laughlin, R. (1995) "Empirical research in accounting: alternative approaches and a case for "middle-range" thinking", *Accounting, Auditing & Accountability Journal*, vol. 8, no. 1, pp. 63-87.
- Lees, D. and Learning and Teaching Support Network. Generic Centre (2002) *Information for Academic staff on Employability*, LTSN Generic Centre.
- Leon, M.R. (1990) "Use of arithmetic mean: An investigation of four properties issues and preliminary results", In D. Vere-Jones (Ed.), *Proceedings of the III International Conference on Teaching Statistics*.
- Lepak, D.P. and Snell, S.A. (1999) "The human resource architecture: Toward a theory of human capital allocation and development", *Academy of management review*, vol. 24, no. 1, pp. 31-48.

- Lévesque, M. and White, D. (2001) "Capital social, capital humain et sortie de l'aide sociale pour des prestataires de longue durée", *Canadian Journal of Sociology/Cahiers canadiens de sociologie*, vol. 26, no. 2, pp. 167-192.
- Lillis, A.M. (1999) "A framework for the analysis of interview data from multiple field research sites", *Accounting & Finance*, vol. 39, no. 1, pp. 79-105.
- Lin, Z.J., Xiong, X. and Liu, M. (2005) "Knowledge base and skill development in accounting education: Evidence from China", *Journal of Accounting Education*, vol. 23, no. 3, pp. 149-169.
- Lindsay, C. (2002) "Long-term unemployment and the "employability gap": priorities for renewing Britain's New Deal", *Journal of European industrial training*, vol. 26, no. 9, pp. 411-419.
- Little, A.W. (2003) "Motivating learning and the development of human capital", *Compare*, vol. 33, no. 4, pp. 437-452.
- Lloyd, C. (2008) "Recruiting for fitness: qualifications and the challenges of an employer-led system", *Journal of Education and Work*, vol. 21, no. 3, pp. 175-195.
- Ma, K.H., Yam, K.L., Tsui, K.W. and Yau, F.T. (2006) "Internal consistency and test-retest reliability of the Chinese version of the self-report health-related quality of life measure for children and adolescents with epilepsy", *Epilepsy & behavior: E&B*, vol. 9, no. 1, pp. 51-57.
- Mackenzie, N. and Knipe, S. (2006) "Research dilemmas: Paradigms, methods and methodology", *Issues in Educational Research*, vol. 16, no. 2, pp. 193-205.
- Manakyan, W. and Tanner, J. R. (1994) "Research productivity and teaching effectiveness: accounting faculty perspective", *The Accounting Educators' Journal*, vol. 6, no. 2, pp. 1-21.
- Manning, A. (2000) "Pretty Vacant: Recruitment in Low-Wage Labour Markets", *Oxford Bulletin of Economics and Statistics*, vol. 62, no. special issue, pp. 747-770.

- Marriott, P. and Marriott, N. (2003) "Are we turning them on? A longitudinal study of undergraduate accounting students' attitudes towards accounting as a profession", *Accounting Education*, vol. 12, no. 2, pp. 113-133.
- Matthews, R.C.O., Feinstein, C.H. and Odling-Smee, J.C. (1982) *British economic growth, 1856-1973*, Stanford Univ Pr.
- Maxcy, S.J. (2003) "Pragmatic threads in mixed methods research in the social sciences: The search for multiple modes of inquiry and the end of the philosophy of formalism" in *Handbook of mixed methods in the social and behavioral sciences*, eds. A. Tashakkori and C. Teddlie, Sage Publications Inc, Thousand Oaks, CA, pp. 51-89.
- Mazuki, J. and Rizal, M. "AR and Chong, SC (2007), "Employers' preference and assessment of the qualities of fresh business graduates: empirical evidence from Malaysia"", *International Journal of Management and Enterprise Development*, vol. 4, no. 3, pp. 316-336.
- McGrath, S. and Akoojee, S. (2009) "Vocational education and training for sustainability in South Africa: The role of public and private provision", *International Journal of Educational Development*, vol. 29, no. 2, pp. 149-156.
- McGrath, S., Needham, S., Papier, J., Wedekind, V. and van der Merwe, T. (2010) *Employability in the College Sector: A Comparative Study of England and South Africa*, Available at:  
[file:///acfs2/cbpg/cbpggsp/Downloads/EPA%20report%20for%20workshop\\_final.pdf](file:///acfs2/cbpg/cbpggsp/Downloads/EPA%20report%20for%20workshop_final.pdf)  
(Accessed: 08/01 2013)
- McKee, A. (2003) *Textual analysis: A beginner's guide*, Sage.
- McKinnon, S. (2011) *A mismatch of expectations? An exploration of international students' perceptions of employability skills and work-related learning*. Available at:  
[http://www.heacademy.ac.uk/resources/detail/internationalisation/16June11\\_McKinnon](http://www.heacademy.ac.uk/resources/detail/internationalisation/16June11_McKinnon)  
(Accessed: 08/01 2013).
- McQuaid, R.W. (2006) "Job search success and employability in local labor markets", *The Annals of Regional Science*, vol. 40, no. 2, pp. 407-421.

- McQuaid, R.W. and Lindsay, C. (2005) "The concept of employability", *Urban Studies*, vol. 42, no. 2, pp. 197.
- McQuaid, R.W. and Lindsay, C. (2002) "The 'employability gap': long-term unemployment and barriers to work in buoyant labour markets", *Environment and Planning C: Government and Policy*, vol. 20, no. 4, pp. 613-628.
- Mcskimming, C. (2007) *An investigation to identify the key strategies Cardonald College can use to improve the employability of its students*, A Report for Cardonald College Strategic Management Group.
- Medical Research Council (2013) *Reliability*. Available at: <http://dapa-toolkit.mrc.ac.uk/basic-concepts/reliability.html> (Accessed: 08/01 2013).
- Meltzer, B.N., Petras, J.W. and Reynolds, L.T. (1975) *Symbolic interactionism: Genesis, varieties and criticism*, Routledge & Kegan Paul London.
- Middlehurst, R. (1992) "Quality: an organising principle for higher education?", *Higher Education Quarterly*, vol. 46, no. 1, pp. 20-38.
- Miles, M.B. and Huberman, A.M. (1994) *Qualitative data analysis: An expanded sourcebook*, SAGE publications, Inc.
- Millard, P. (2003) "Promoting the profession", *Chartered Accountant Journal of New Zealand*, vol. 82, no. 1, pp. 13.
- Miller, M.D. (1994) *Philosophy: A foundation for envisioning the future and workplace education*, Lincoln, NE: University Council for Vocational Education.
- Milner, M.M. and Hill, W.Y. (2008) "Examining the skills debate in Scotland", *International Journal of Management Education*, vol. 6, no. 3, pp. 13.
- Milner, M.M. and Hill, W.Y. (2008) *Setting the skills agenda: The views of UK accounting academics*. Available at: [http://www.gla.ac.uk/media/media\\_187302\\_en.pdf](http://www.gla.ac.uk/media/media_187302_en.pdf) (Accessed: 08/01 2013).



- Mincer, J. (1974) *Schooling, Experience, and Earnings (Human Behavior & Social Institutions)*, Proquest Info & Learning.
- Montano, J.L.A., Donoso, J.A., Hassall, T. and Joyce, J. (2001) "Vocational skills in the accounting professional profile: the Chartered Institute of Management Accountants (CIMA) employers' opinion", *Accounting education*, vol. 10, no. 3, pp. 299-313.
- Moore, D.S. and McCabe, G. (2008) *Introduction to the Practice of Statistics Study Guide with Solutions Manual*, WH Freeman.
- Morgan, D.L. (2007) "Paradigms lost and pragmatism regained", *Journal of mixed methods research*, vol. 1, no. 1, pp. 48-76.
- Morley, L. (2001) "Producing new workers: quality, equality and employability in higher education", *Quality in Higher Education*, vol. 7, no. 2, pp. 131-138.
- Mukaka, M. (2012) "A guide to appropriate use of Correlation coefficient in medical research", *Malawi Medical Journal*, vol. 24, no. 3, pp. 69-71.
- Murdoch, B. and Guy, P.W. (2002) "Active learning in small and large classes", *Accounting Education*, vol. 11, no. 3, pp. 271-282.
- Murphy, P.K. (2001) "Persuasive pedagogy: A new metaphor for a new decade", *Theory into Practice*, vol. 40, no. 4, pp. 224-227.
- Nachar, N. (2008) "The Mann-Whitney U: A test for assessing whether two independent samples come from the same distribution", *Tutorials in Quantitative Methods for Psychology*, vol. 4, no. 1, pp. 13-20.
- Nelson, L.D. (1998) *Herbert Blumer's Symbolic Interactionism*. Available at: [http://www.colorado.edu/communication/meta-discourses/Papers/App\\_Papers/Nelson.htm](http://www.colorado.edu/communication/meta-discourses/Papers/App_Papers/Nelson.htm) (Accessed: 01/16 2012).
- Norusis, M. (1992) *SPSS: SPSS for Windows Professional Statistics Release 6.0*, Chicago: SPSS Inc.

- Nusche, D. (2008) *Assessment of learning outcomes in higher education: a comparative review of selected practices*. Available at: <http://www.oecd.org/brazil/40256023.pdf> (Accessed: 08/01 2013).
- Pallant, J. (2007) *Manual SPSS Survival: A Step by Step Guide to Data Analysis Using SPSS for Windows Version 15*, 3rd edn, Open University Press, Milton Keynes, UK.
- Pansiri, J. (2005) "Pragmatism: A methodological approach to researching strategic alliances in tourism", *Tourism and Hospitality Planning & Development*, vol. 2, no. 3, pp. 191-206.
- Patokorpi, E. (2006) *Role of abductive reasoning in digital interaction*, Åbo Akademi University.
- Patton, M.Q. (1990) *Qualitative evaluation and research methods* . Sage Publications, Inc.
- Perera, M.H.B. and Mathews, M.R. (1990) "The cultural relativity of accounting and International patterns of social accounting", *Advances in International Accounting*, vol. 13, pp. 215-251.
- Pinar, W.F. (2004) *What is curriculum theory?* Routledge.
- Plummer, K. (2000) "A World in the Making: Symbolic Interactionism in the Twentieth Century" in *The Blackwell companion to sociology*, ed. B.S. Turner, 2nd edn, Blackwell Publishers, , pp. 193-222.
- Poole, V.A. and Zahn, D.K. (1993) "Define and teach employability skills to guarantee student success", *The Clearing House*, vol. 67, no. 1, pp. 55-59.
- Porter, B. A. and Carr, S.A. (1999) "From Strategic Plan to Practical Realities: Developing and Implementing a Zero-Based Accounting Curriculum", *Issues in Accounting Education*, vol. 14, no. 4, pp. 565-588.
- Powell, T.C. (2001) "Competitive advantage: Logical and philosophical considerations", *Strategic Management Journal*, vol. 22, no. 9, pp. 875-888.

- Presser, S., Couper, M.P., Lessler, J.T., Martin, E., Martin, J., Rothgeb, J.M. and Singer, E. (2004) "Methods for testing and evaluating survey questions", *Public opinion quarterly*, vol. 68, no. 1, pp. 109-130.
- Preston, V. and McLafferty, S. (1999) "Spatial mismatch research in the 1990s: progress and potential", *Papers in Regional Science*, vol. 78, no. 4, pp. 387-402.
- Psacharopoulos, G. (1994) "Returns to investment in education: A global update", *World Development*, vol. 22, no. 9, pp. 1325-1343.
- Purposive sampling (2013), Available from: [www.dissertation.laerd.com/purposive-sampling.php](http://www.dissertation.laerd.com/purposive-sampling.php). (Accessed 02/28 2013)
- Quality Assurance Agency (QAA) (2009) *Learning from ELIR 2003-07: Emerging approaches to employability and personal development planning*, QAA.
- Quality Assurance Agency (QAA) (2007) *Subject Benchmark statement: accounting*, QAA.
- Quinn, P. and Seaman, P. (2008) *Social networks and employability*, Glasgow center for population health.
- Rastogi, P. (2002) "Knowledge management and intellectual capital as a paradigm of value creation", *Human Systems Management*, vol. 21, no. 4, pp. 229-240.
- Richardson, J.G. (1986) *Handbook of Theory and Research for the Sociology of Education*, Greenwood Publishing Group.
- Riodan, M. P., Pierre, E. K. and Matoney, J. (1996) "Some initial empirical evidence regarding the impact of introductory accounting sequence on the selection of accounting as a major", vol. 1, no. 2, pp. 127-136.
- Robinson, J.P. (2000) "What are employability skills", *The workplace*, vol. 1, no. 3, pp. 1-3.
- Robinson, P. (1997) *The myth of parity of esteem: qualifications and earnings*, CEP discussion paper; CEPDP0354, 354. edn, Centre for Economic Performance, London School of Economics and Political Science, London, UK.

- Rorty, R. (1991) *Essays on Heidegger and others*, Cambridge University Press, 32 Avenue of the Americas, New York, NY 10013-2473 USA.
- Rosen, H.S. (2004) *Public finance*, Springer.
- Rothwell, A., Herbert, I. and Rothwell, F. (2008) "Self-perceived employability: Construction and initial validation of a scale for university students", *Journal of vocational behavior*, vol. 73, no. 1, pp. 1-12.
- Rowntree, D. and O'Hehir, R. (1981) *Statistics without tears: A primer for non-mathematicians*, Penguin.
- Rubinfeld, G.D. (2004) "Surveys: an introduction", *Respiratory care*, vol. 49, no. 10, pp. 1181-1185.
- Rummel, R.J. (1970) *Applied factor analysis*, Northwestern University Press.
- Russell, J. (2014) *What is Curriculum Theory by William F. Pinar (Multiple Participant Book Review)*. Available at:  
[http://www.academia.edu/3605466/What\\_is\\_Curriculum\\_Theory\\_by\\_William\\_F.\\_Pinar\\_Multiple\\_Participant\\_Book\\_Review](http://www.academia.edu/3605466/What_is_Curriculum_Theory_by_William_F._Pinar_Multiple_Participant_Book_Review) (Accessed: 05/30 2014).
- Sadler, P.M., Sonnert, G., Coyle, H.P., Cook-Smith, N. and Miller, J.L. (2013) "The influence of teachers' knowledge on student learning in middle school physical science classrooms", *American Educational Research Journal*, vol. 50, no. 5, pp. 1020-1049.
- SAS *Principal Component Analysis*. Available at:  
<http://support.sas.com/publishing/pubcat/chaps/55129.pdf> (Accessed: 03/13 2013).
- Savage, G.T., Nix, T.W., Whitehead, C.J. and Blair, J.D. (1991) "Strategies for assessing and managing organizational stakeholders", *Academy of management executive*, vol. 5, no. 2, pp. 61-75.
- Schiro, M.S. (2012) *Curriculum theory: Conflicting visions and enduring concerns*, Sage.
- Schultz, T.W. (1961) "Investment in human capital", *The American Economic Review*, vol. 15, no. 1, pp. 1-17.

- Scruton, R. (1982) *Kant*, Oxford University Press, Oxford.
- Seldin, P. (1995) *Improving college teaching*, Anker Publishing Company, Inc, 176, Ballville road, P.O Box 249 Bolton.
- Shafie, L.A. and Nayan, S. (2010) "Employability Awareness among Malaysian Undergraduates", *International Journal of Business and Management*, vol. 5, no. 8, pp. 119-123.
- Shah, N. (2009) *Determinants of employee readiness for organisational change*, Brunel University Brunel Business School PhD Theses.
- Sidorkin, A.M. (2007) "Human capital and the labor of learning: A case of mistaken identity", *Educational Theory*, vol. 57, no. 2, pp. 159-170.
- Siegel, G. and Sorensen, J.E. (1999) *Counting More, Counting Less: Transformations in the Management Accounting Profession: the 1999 Practice Analysis of Management Accounting*, Institute of Management Accountants.
- Sin, S. and Reid, A. (2006) "Developing generic skills in accounting: resourcing and reflecting on trans-disciplinary research and insights", *Annual conference for the Association for Research in Education (2005)* Coldstream, VIC: Australian Association for Research in Education., .
- Somekh, B. and Lewin, C. (2005) *Research methods in the social sciences*, Sage Publications Ltd, 1 Oliver's Yard, 55 City Road, London EC1Y 1SP.
- SPSS (2006) *SPSS 15.0 Base User's Guide*, 1st edn, Prentice Hall, United States of America.
- Statistical Glossary *Test-retest reliability*. Available at:  
<http://www2.statistics.com/resources/glossary/t/trtreliab.php> (Accessed: 08/01 2013).
- Stemler, S.E. and Tsai, J. (2008) "Best practices in interrater reliability: Three common approaches" in *Best practices in quantitative methods*, J. W. Osborne (Ed) edn, Thousand Oaks, CA: Sage, , pp. 29-49.

- Stengel, D., Bhandari, M. and Hanson, B.P. (2009) *Statistics and Data Management: A Practical Guide for Orthopaedic Surgeons: Handbook*, AO Publishing.
- Stevens, J. (ed)(1996) *Applied multivariate statistics for the social sciences*, Lawrence Erlbaum Publishers, Mahwah, NJ.
- Street, D.L., Baril, C.P. and Benke, R.L. (1993) "Research, teaching, and service in promotion and tenure decisions of accounting faculty", *Journal of Accounting Education*, vol. 11, no. 1, pp. 43-60.
- Strom, B.T. (1996) "The Role of Philosophy in Education-for-Work", *Journal of Industrial Teacher Education*, vol. 33, no. 2, Available at:  
<http://scholar.lib.vt.edu/ejournals/JITE/v33n2/strom.html> (Accessed: 08/01 2013)
- Sugahara, S. and Coman, R. (2010) "Perceived Importance of CPA's Generic Skills: A Japanese Study", *Asian Journal of Finance & Accounting*, vol. 2, no. 1, pp. 1-24.
- Sugahara, S., Suzuki, K. and Boland, G. (2010) "Students' major choice in accounting and its effect on their self-efficacy towards generic skills: An Australian study", *Asian Review of Accounting*, vol. 18, no. 2, pp. 131-147.
- Tabachnick, B. and Fidell, L.S. (eds) (2007) *Using Multivariate Statistics*, 5th edn, Allyn and Bacon, Boston.
- Tabachnick, B.G. and Fidell, L.S. (eds) (2007) *Using multivariate statistics*, 5th edn, Pearson International, Upper Saddle River, NJ.
- Tan, L.M., Fowler, M.B. and Hawkes, L. (2004) "Management accounting curricula: striking a balance between the views of educators and practitioners", *Accounting Education*, vol. 13, no. 1, pp. 51-67.
- Tashakkori, A. and Teddlie, C. (2003) *Handbook of mixed methods in social & behavioral research*, Sage Publications, Inc, 2455 Teller Road, Thousand Oaks, California 91320.

- The University of Nottingham (2008) *Making the Most of Work Experience*. Available at: [http://www.nottingham.ac.uk/shared/shared\\_careers/pdf/wkex-Making the Most of Work Experience.pdf](http://www.nottingham.ac.uk/shared/shared_careers/pdf/wkex-Making the Most of Work Experience.pdf) (Accessed: 08/01 2013).
- Turok, I. (2006) *Worklessness in Glasgow and the Challenges for the New Economic Strategy*, Discussion paper produced for OECD/ LEED programme.
- Turok, I. and Edge, N. (1999) *The jobs gap in Britain's cities Employment loss and labour market consequences*, The policy press, Fourth Floor, Beacon House, Queen's Road Bristol BS8 1QU.
- UK Commission of Employment and Skills (UKCES) (2009) *The Employability Challenge*, UK Commission of Employment and Skills, Grosvenor Gardens, London SW1W 0TT.
- Urwin, P. and Shackleton, J. (1999) "Search methods and transitions into employment and inactivity: An analysis of linked records from the Labour Force Survey", *International Journal of Manpower*, vol. 20, no. 3/4, pp. 189-237.
- Vroeijenstijn, T.I. (1990) "Autonomy and assurance of quality: two sides of one coin", *Higher Education Research & Development*, vol. 9, no. 1, pp. 21-38.
- Wallace, D. *Independent Sample T-test*. Available at: <http://faculty.uncfsu.edu/dwallace/lesson%2014.pdf> (Accessed: 13/03 2013).
- Watty, K. (2004) *quality in accounting education – an empirical analysis of academic accountants' view*, Royal Melbourne Institute of Technology, PhD thesis.
- Wellman, M.N. (2010) "The employability attributes required of new marketing graduates", *Marketing Intelligence & Planning*, vol. 28, no. 7, pp. 908-930.
- Wells, P.K. (2006) *The supply of accounting graduates in New Zealand*, AUT Faculty of Business.
- Whiteley, T. (1995) "Enterprise in higher education—an overview from the Department for Education and Employment", *Education Training*, vol. 37, no. 9, pp. 4-8.

- Willcoxson, L., Wynder, M. and Laing, G.K. (2010) "A whole-of-program approach to the development of generic and professional skills in a university accounting program", *Accounting Education*, vol. 19, no. 1, pp. 65-91.
- Wye, C.K. and Lim, Y.M. (2009) "Perception Differential between Employers and Undergraduates on the Importance of Employability Skills", *International Education Studies*, vol. 2, no. 1, pp. 95-105.
- Yorke, M. (2006) "Employability in higher education: what it is, what it is not", Available from: <http://www.heacademy.ac.uk/resources/detail/employability/employability336>. (Accessed: 08/03 2013).
- Yorke, M. (1992) "Quality in higher education: a conceptualisation and some observations on the implementation of a sectoral quality system", *Journal of further and higher education*, vol. 16, no. 2, pp. 90-104.
- Zikmund, W.G., Carr, Barry J Babin Jon C, Griffin, M., Babin, B.J. and Carr, J.C. (2000) *Business research methods*, Dryden Press Fort Worth, TX.



**Appendix 1a: Demographic details – for Educators**

**This part of the questionnaire includes demographic details such as sex, age, years of experience, position and qualification.**

1) What is your gender?

Male

Female

2) What is your age?

20 - 24 years

25 - 35 years

36 - 44 years

45 - 54 years

55 or above

3) How many years of teaching experience do you have?

Less than a year

1-3 years

4 - 7 years

8 - 10 years

11 years or more

4) What position you hold within the organisation?

Full time academic

Part time academic

5) Do you have certified accounting education at any level (such as CPA, CA, CIMA, ICMAP etc)?

Yes

No

6) What is your general academic qualification?

Higher Secondary School Certificate (FA, FSc etc)

Bachelor degree (BA, BBA, B.Com etc)

Master degree (MSc, MA, MBA, M.Com etc)

Masters of Philosophy (MS or M. Phil)

Doctorate (PhD)

**Appendix 2a: Demographic details – for Employers**

This part of the questionnaire includes demographic details such as sex, age, years of experience, position and qualification.

1) What is your gender?

Male

Female

2) What is your age?

20 - 24 years

25 - 35 years

36 – 44 years

45 – 54 years

55 or above

3) How many years of accounting practitioner experience do you have?

Less than a year

1 – 3 years

4 - 7 years

8 - 10 years

11 years or more

4) What position you hold within the organisation?

Top level executive (CEO, Managing director etc)

Others

Middle level executive (Chief financial officer, auditor etc)

5) Do you have certified accounting education at any level (such as CPA, CA, CIMA, ICMAP etc)?

Yes

No

6) What is your general academic qualification?

Higher Secondary School Certificate (FA, FSc etc)

Bachelor degree (BA, BBA, B.Com etc)

Master degree (MSc, MA, MBA, M.Com etc)

Masters of Philosophy (MS or M. Phil)

Doctorate (PhD)

### Appendix 3a: Expectation gap determinant - for Educators

**For each of the generic skills listed below, please:**

**(1) Rate the following skills that you expect of students to acquire in accounting education for their career development.**

S. N	Generic Skills	(1)				
		<u>Skills that must be acquired in education by students for career development</u>				
		1(strongly disagree)-----3(neutral) -----5(strongly agree)				
1	Decision modelling	1	2	3	4	5
2	Risk analysis	1	2	3	4	5
3	Reporting	1	2	3	4	5
4	Information technology competence	1	2	3	4	5
5	Critical thinking	1	2	3	4	5
6	International, Industry and sector perspective	1	2	3	4	5
7	Legal regulatory perspective	1	2	3	4	5
8	Marketing/clients focus	1	2	3	4	5
9	Problem solving and decision Making	1	2	3	4	5
10	Leadership	1	2	3	4	5
11	Project Management	1	2	3	4	5
12	Think and behave ethically	1	2	3	4	5
13	Flexible and be adaptable to changing environment and situation	1	2	3	4	5
14	Act strategically	1	2	3	4	5
15	Think and act independently	1	2	3	4	5
16	Focused on outcomes	1	2	3	4	5
17	Tolerate ambiguity	1	2	3	4	5
18	Think creativity	1	2	3	4	5
19	Listen effectively	1	2	3	4	5
20	Present, discuss and defend views	1	2	3	4	5
21	Transfer and receive knowledge	1	2	3	4	5
22	Negotiate with people from different	1	2	3	4	5
23	Understand group dynamics	1	2	3	4	5
24	Communicate in written format	1	2	3	4	5
25	Communicate orally	1	2	3	4	5
26	Engage in lifelong learning	1	2	3	4	5
27	Apply inter or multidisciplinary perspectives	1	2	3	4	5
28	Ability to collaborate with colleagues to resolve conflicts and work in team	1	2	3	4	5
29	The ability to analyse and reason logically	1	2	3	4	5
30	Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-	1	2	3	4	5

31	Awareness of social and ethical	1	2	3	4	5
32	Work effectively in diversified cultural	1	2	3	4	5
33	Initiative	1	2	3	4	5

### Appendix 4a: Expectation gap determinant - for Employers

For each of the generic skills listed below, please:

**(1) Rate the following skills that you expect of students to acquire in accounting education for their career development.**

S. N	Generic Skills	(1)				
		<u>Skills that must be acquired in education by students for career development</u>				
		1(strongly disagree)-----3(neutral) -----5(strongly agree)				
1	Decision modelling	1	2	3	4	5
2	Risk analysis	1	2	3	4	5
3	Reporting	1	2	3	4	5
4	Information technology competence	1	2	3	4	5
5	Critical thinking	1	2	3	4	5
6	International, Industry and sector perspective	1	2	3	4	5
7	Legal regulatory perspective	1	2	3	4	5
8	Marketing/clients focus	1	2	3	4	5
9	Problem solving and decision Making	1	2	3	4	5
10	Leadership	1	2	3	4	5
11	Project Management	1	2	3	4	5
12	Think and behave ethically	1	2	3	4	5
13	Flexible and be adaptable to changing environment and situation	1	2	3	4	5
14	Act strategically	1	2	3	4	5
15	Think and act independently	1	2	3	4	5
16	Focused on outcomes	1	2	3	4	5
17	Tolerate ambiguity	1	2	3	4	5
18	Think creativity	1	2	3	4	5
19	Listen effectively	1	2	3	4	5
20	Present, discuss and defend views	1	2	3	4	5
21	Transfer and receive knowledge	1	2	3	4	5
22	Negotiate with people from different	1	2	3	4	5
23	Understand group dynamics	1	2	3	4	5
24	Communicate in written format	1	2	3	4	5
25	Communicate orally	1	2	3	4	5
26	Engage in lifelong learning	1	2	3	4	5
27	Apply inter or multidisciplinary perspectives	1	2	3	4	5
28	Ability to collaborate with colleagues to resolve conflicts and work in team	1	2	3	4	5
29	The ability to analyse and reason logically	1	2	3	4	5
30	Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-	1	2	3	4	5

31	Awareness of social and ethical responsibilities	1	2	3	4	5
32	Work effectively in diversified cultural settings	1	2	3	4	5
33	Initiative	1	2	3	4	5

### Appendix 5a: Constraints gap determinant- for Educators

**For each statement listed below, please determine:**

- 1. Rate the following elements of constraints towards skills development in accounting education environment?**

S. N	Constraining factors	1(strongly disagree) -----3(neutral)----- 5(strongly agree)				
1	Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	1	2	3	4	5
2	Students have an inappropriate attitude for learning?	1	2	3	4	5
3	Classes are pack with a large number of students?	1	2	3	4	5
4	Accounting curriculum has insufficient provision to allow for the effective development of skills?	1	2	3	4	5
5	As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	1	2	3	4	5
6	Institution does not reward high quality teaching?	1	2	3	4	5

### Appendix 5b: Constraints gap determinant - for Educators

**For each statement listed below, please determine:**

- 1. Rate the following elements of constraints towards skills development in accounting education environment?**

S. N	Constraining factors	1(Strongly disagree) -----3(Neutral)-----5(Strongly agree)				
1	Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	1	2	3	4	5
2	Students have an inappropriate (non-serious) attitude for learning?	1	2	3	4	5
3	Classes are pack with a large number of students?	1	2	3	4	5
4	Accounting curriculum has insufficient provision to allow for the effective development of skills?	1	2	3	4	5
5	As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	1	2	3	4	5
6	Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?	1	2	3	4	5
7	Students have a lack of interest in accounting discipline?	1	2	3	4	5
8	People (potential students) have misperception about accounting education as being highly mathematical in nature?	1	2	3	4	5
9	Accounting institutes are not offering adequate training opportunities to their academic staff?	1	2	3	4	5
10	Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?	1	2	3	4	5
11	For teaching in accounting institutes it is difficult to find competent academic staff?	1	2	3	4	5
12	During articleship, students' get demotivated due to inadequate stipend offered by most of the training organisations?	1	2	3	4	5



### Appendix 6a: Performance gap determinant - for Educators

For each of the generic skills listed below, please:

**(2) Considering teaching practices, state the students' competence level that will be developed in real by the end of professional academic program.**

S. N	Generic Skills	(2)				
		<u>Skills competence level that will be developed in real by the end of professional academic program</u>				
		1(no competence) ----- 5(high competence)				
1	Decision modelling	1	2	3	4	5
2	Risk analysis	1	2	3	4	5
3	Reporting	1	2	3	4	5
4	Information technology competence	1	2	3	4	5
5	Critical thinking	1	2	3	4	5
6	International, Industry and sector perspective	1	2	3	4	5
7	Legal regulatory perspective	1	2	3	4	5
8	Marketing/clients focus	1	2	3	4	5
9	Problem solving and decision Making	1	2	3	4	5
10	Leadership	1	2	3	4	5
11	Project Management	1	2	3	4	5
12	Think and behave ethically	1	2	3	4	5
13	Flexible and be adaptable to changing environment and situation	1	2	3	4	5
14	Act strategically	1	2	3	4	5
15	Think and act independently	1	2	3	4	5
16	Focused on outcomes	1	2	3	4	5
17	Tolerate ambiguity	1	2	3	4	5
18	Think creativity	1	2	3	4	5
19	Listen effectively	1	2	3	4	5
20	Present, discuss and defend views	1	2	3	4	5
21	Transfer and receive knowledge	1	2	3	4	5
22	Negotiate with people from different backgrounds	1	2	3	4	5
23	Understand group dynamics	1	2	3	4	5
24	Communicate in written format	1	2	3	4	5
25	Communicate orally	1	2	3	4	5
26	Engage in lifelong learning	1	2	3	4	5
27	Apply inter or multidisciplinary perspectives	1	2	3	4	5
28	Ability to collaborate with colleagues to resolve conflicts and work in team	1	2	3	4	5
29	The ability to analyse and reason logically	1	2	3	4	5
30	Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	1	2	3	4	5
31	Awareness of social and ethical responsibilities	1	2	3	4	5

32	Work effectively in diversified cultural settings	1	2	3	4	5
33	Initiative	1	2	3	4	5

### Appendix 7a: Performance gap determinant - for Employers

For each of the generic skills listed below, please:

**(2) State the skills competence level that is expected from a student to possess for employment at the time of certification.**

S. N	Generic Skills	(2)				
		<u>Skills competence level required to get employment at entry level</u>				
		1(no competence) ----- 5(high competence)				
1	Decision modelling	1	2	3	4	5
2	Risk analysis	1	2	3	4	5
3	Reporting	1	2	3	4	5
4	Information technology competence	1	2	3	4	5
5	Critical thinking	1	2	3	4	5
6	International, Industry and sector perspective	1	2	3	4	5
7	Legal regulatory perspective	1	2	3	4	5
8	Marketing/clients focus	1	2	3	4	5
9	Problem solving and decision Making	1	2	3	4	5
10	Leadership	1	2	3	4	5
11	Project Management	1	2	3	4	5
12	Think and behave ethically	1	2	3	4	5
13	Flexible and be adaptable to changing environment and situation	1	2	3	4	5
14	Act strategically	1	2	3	4	5
15	Think and act independently	1	2	3	4	5
16	Focused on outcomes	1	2	3	4	5
17	Tolerate ambiguity	1	2	3	4	5
18	Think creativity	1	2	3	4	5
19	Listen effectively	1	2	3	4	5
20	Present, discuss and defend views	1	2	3	4	5
21	Transfer and receive knowledge	1	2	3	4	5
22	Negotiate with people from different backgrounds	1	2	3	4	5
23	Understand group dynamics	1	2	3	4	5
24	Communicate in written format	1	2	3	4	5
25	Communicate orally	1	2	3	4	5
26	Engage in lifelong learning	1	2	3	4	5
27	Apply inter or multidisciplinary perspectives	1	2	3	4	5
28	Ability to collaborate with colleagues to resolve conflicts and work in team	1	2	3	4	5
29	The ability to analyse and reason logically	1	2	3	4	5
30	Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management	1	2	3	4	5
31	Awareness of social and ethical responsibilities	1	2	3	4	5

32	Work effectively in diversified cultural settings	1	2	3	4	5
33	Initiative	1	2	3	4	5

### Appendix 3a & 6a: Expectation gap and Performance gap determinants- for Educators

For each of the generic skills listed below, please:

**(1) Rate the following skills that you expect of students to acquire in accounting education for their career development.**

**(2) Considering teaching practices, state the students' competence level that will be developed in real by the end of professional academic program.**

		<b>(1)</b> <b><u>Skills that must be acquired in education by students for career development</u></b>	<b>(2)</b> <b><u>Skills competence level that will be developed in real by the end of professional academic program</u></b>
S. N	Generic Skills	1(Strongly disagree)----3(Neutral) -----5 (Strongly agree)	1(No competence) ----- 5(High competence)
1	Decision modelling	1      2      3      4      5	1      2      3      4      5
2	Risk analysis	1      2      3      4      5	1      2      3      4      5
3	Reporting	1      2      3      4      5	1      2      3      4      5
4	Information technology competence	1      2      3      4      5	1      2      3      4      5
5	Critical thinking	1      2      3      4      5	1      2      3      4      5
6	International, Industry and sector perspective	1      2      3      4      5	1      2      3      4      5
7	Legal regulatory perspective	1      2      3      4      5	1      2      3      4      5
8	Marketing/clients focus	1      2      3      4      5	1      2      3      4      5
9	Problem solving and decision Making	1      2      3      4      5	1      2      3      4      5

10	Leadership	1	2	3	4	5	1	2	3	4	5
11	Project Management	1	2	3	4	5	1	2	3	4	5
12	Think and behave ethically	1	2	3	4	5	1	2	3	4	5
13	Flexible and be adaptable to changing environment and situation	1	2	3	4	5	1	2	3	4	5
14	Act strategically	1	2	3	4	5	1	2	3	4	5
15	Think and act independently	1	2	3	4	5	1	2	3	4	5
16	Focused on outcomes	1	2	3	4	5	1	2	3	4	5
17	Tolerate ambiguity	1	2	3	4	5	1	2	3	4	5
18	Think creativity	1	2	3	4	5	1	2	3	4	5
19	Listen effectively	1	2	3	4	5	1	2	3	4	5
20	Present, discuss and defend views	1	2	3	4	5	1	2	3	4	5
21	Transfer and receive knowledge	1	2	3	4	5	1	2	3	4	5
22	Negotiate with people from different backgrounds	1	2	3	4	5	1	2	3	4	5
23	Understand group dynamics	1	2	3	4	5	1	2	3	4	5
24	Communicate in written format	1	2	3	4	5	1	2	3	4	5
25	Communicate orally	1	2	3	4	5	1	2	3	4	5
26	Engage in lifelong learning	1	2	3	4	5	1	2	3	4	5
27	Apply inter or multidisciplinary perspectives	1	2	3	4	5	1	2	3	4	5

28	Ability to collaborate with colleagues to resolve conflicts and work in team	1	2	3	4	5	1	2	3	4	5
29	The ability to analyse and reason logically	1	2	3	4	5	1	2	3	4	5
30	Personal attributes such as identifying own strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	1	2	3	4	5	1	2	3	4	5
31	Awareness of social and ethical responsibilities	1	2	3	4	5	1	2	3	4	5
32	Work effectively in diversified cultural settings	1	2	3	4	5	1	2	3	4	5
33	Initiative	1	2	3	4	5	1	2	3	4	5

**Appendix 3b & 6b: Expectation gap and Performance gap determinants- for Educators**

For each of the generic skills listed below, please:

(1) Rate the following skills that you expect of students to acquire in accounting education for their career development.

(2) Considering teaching practices, state the students' competence level that will be developed in real by the end of professional academic program.

		<b><u>(1)</u></b>	<b><u>(2)</u></b>
		<b><u>Skills that must be acquired in education by students for career development</u></b>	<b><u>Skills competence level that will be developed in real by the end of professional academic program</u></b>
S. N	Generic Skills with descriptions	1(Strongly disagree)-----3(Neutral) -----5(Strongly agree)	1(No competence) ----- 5(High competence)
1	Decision making: having the ability to conceptually structuralize the situation and select one amongst available options.	1      2      3      4      5	1      2      3      4      5
2	Financial risk analysis: having the ability to assess the factors that may jeopardize the project such as knowing cost benefit analysis, ratio analysis, portfolio management, NPV, IRR, sensitivity analysis etc.	1      2      3      4      5	1      2      3      4      5
3	Financial accounting: concerned with the study of reporting the financial transactions and the preparation of financial statements.	1      2      3      4      5	1      2      3      4      5
4	Information technology competence: having the ability to use computer softwares such as knowing MS Office, Peachtree, UBS etc.	1      2      3      4      5	1      2      3      4      5
5	Critical thinking: having a sight to see things beyond its apparent meaning and not accepting anything until proven	1      2      3      4      5	1      2      3      4      5



	with logical reasoning or through some evidence.										
6	International global perspective: Knowledge and understanding of international financial reporting standards and of current developments in the accounting profession.	1	2	3	4	5	1	2	3	4	5
7	A legal regulatory perspective: knowledge of the legal structure of the state such as corporate law, taxation and auditing standards.	1	2	3	4	5	1	2	3	4	5
8	Marketing/clients focus: customer care orientation such as knowing marketing tactics in order to deal with clients.	1	2	3	4	5	1	2	3	4	5
9	Problem solving: coming up with a practical and feasible solution to a problem.	1	2	3	4	5	1	2	3	4	5
10	Leadership: having the ability to manage a group of people such as assigning tasks, giving directions, keeping staff motivated and make them answerable.	1	2	3	4	5	1	2	3	4	5
11	Project management: having the ability to establish and run new projects.	1	2	3	4	5	1	2	3	4	5
12	Think and behave ethically: professional behavior of accountants must be according to accounting code of ethics.	1	2	3	4	5	1	2	3	4	5
13	Flexibility and adaptability: be flexible and adaptable to changing environment in official routine activities.	1	2	3	4	5	1	2	3	4	5
14	Strategic management: concerned with the study of understanding organisation strategic requirements such as knowing porter's 5 forces, SWOT analysis, price differentiation strategies, product development, market penetration etc.	1	2	3	4	5	1	2	3	4	5
15	Independent thinking: having independent professional judgment.	1	2	3	4	5	1	2	3	4	5

16	Focused on outcomes: ability to focus on objective and subjective outcomes such as meeting financial targets and deadlines.	1	2	3	4	5	1	2	3	4	5
17	Tolerate ambiguity: having the ability to ignore annoying routine activities in official environment.	1	2	3	4	5	1	2	3	4	5
18	Think creatively: coming up with new and more effective solutions to old problems.	1	2	3	4	5	1	2	3	4	5
19	Listen effectively: listen attentively and understanding what others are saying.	1	2	3	4	5	1	2	3	4	5
20	Presentation skill: appropriately present your point of view in official meetings.	1	2	3	4	5	1	2	3	4	5
21	Negotiation skill: making others understand what you are saying and convincing them to a point where both parties arrive at an agreement.	1	2	3	4	5	1	2	3	4	5
22	Understanding group dynamics: while working in group understanding others work potential, attitude, emotions, and patience level.	1	2	3	4	5	1	2	3	4	5
23	Communicate in written format: having the ability to draft inter office memos and letters.	1	2	3	4	5	1	2	3	4	5
24	Communicate orally: having ability to speak fluently, using appropriate tone to address your boss and subordinates.	1	2	3	4	5	1	2	3	4	5
25	Engage in lifelong learning: attending professional development programs for self-learning.	1	2	3	4	5	1	2	3	4	5
26	Inter or multidisciplinary perspective: while doing accounting considering others disciplinary perspective such as strategic management, corporate law and taxation etc.	1	2	3	4	5	1	2	3	4	5
27	Teamwork: having the ability to collaborate with colleagues to	1	2	3	4	5	1	2	3	4	5

	resolve conflicts while working in group.										
28	The ability to analyse and reason logically: supporting your arguments with theoretical analysis or objective or subjective reasoning process.	1	2	3	4	5	1	2	3	4	5
29	Personal attributes: having confidence, identifying owns strengths and weaknesses, motivation level, self-promotion and self-management etc.	1	2	3	4	5	1	2	3	4	5
30	Work effectively in diversified cultural settings: understanding cultural norms and values to work in diversified culture or multinational firms.	1	2	3	4	5	1	2	3	4	5
31	Self-initiative: taking the work responsibility on your own while considering work environment dynamics.	1	2	3	4	5	1	2	3	4	5
32	English language: having the ability to read, write, listen and speak in English.	1	2	3	4	5	1	2	3	4	5
33	Statistics: study of the collection, organization, analysis, interpretation, and presentation of data such as knowing how to conduct regression analysis, correlation, chi-square, t-test, and hypothesis testing etc.	1	2	3	4	5	1	2	3	4	5
34	Cost and management accounting: study of the accounting information to managers within organizations, to provide them with the basis to make informed business decisions such as knowing budgeting techniques, costing, accounting for labour, and accounting for overheads etc.	1	2	3	4	5	1	2	3	4	5
35	Economics background: analysing the production, distribution and consumption of goods and services such as knowing how to measure GDP, GNP, demand and supply curve, equilibrium, and price elasticity etc.	1	2	3	4	5	1	2	3	4	5

**Appendix 4a & 7a: Expectation and Performance gap determinants - for Employers**

For each of the generic skills listed below, please determine:

- (1) Rate the following skills that you expect of students to acquire in accounting education for their career development.
- (2) State the skills competence level that is expected from a student to possess for employment at the time of certification.

		<b><u>(1)</u></b>	<b><u>(2)</u></b>
		<b><u>Skills that must be acquired in education by students for career development</u></b>	<b><u>Skills competence level required to get employment at entry level</u></b>
S. N	Generic Skills	1(Strongly disagree)----3(Neutral) -----5(Strongly agree)	1(No competence) ----- 5(High competence)
1	Decision modelling	1      2      3      4      5	1      2      3      4      5
2	Risk analysis	1      2      3      4      5	1      2      3      4      5
3	Reporting	1      2      3      4      5	1      2      3      4      5
4	Information technology competence	1      2      3      4      5	1      2      3      4      5
5	Critical thinking	1      2      3      4      5	1      2      3      4      5
6	International, Industry and sector perspective	1      2      3      4      5	1      2      3      4      5
7	Legal regulatory perspective	1      2      3      4      5	1      2      3      4      5
8	Marketing/clients focus	1      2      3      4      5	1      2      3      4      5
9	Problem solving and decision Making	1      2      3      4      5	1      2      3      4      5

10	Leadership	1	2	3	4	5	1	2	3	4	5
11	Project Management	1	2	3	4	5	1	2	3	4	5
12	Think and behave ethically	1	2	3	4	5	1	2	3	4	5
13	Flexible and be adaptable to changing environment and situation	1	2	3	4	5	1	2	3	4	5
14	Act strategically	1	2	3	4	5	1	2	3	4	5
15	Think and act independently	1	2	3	4	5	1	2	3	4	5
16	Focused on outcomes	1	2	3	4	5	1	2	3	4	5
17	Tolerate ambiguity	1	2	3	4	5	1	2	3	4	5
18	Think creativity	1	2	3	4	5	1	2	3	4	5
19	Listen effectively	1	2	3	4	5	1	2	3	4	5
20	Present, discuss and defend views	1	2	3	4	5	1	2	3	4	5
21	Transfer and receive knowledge	1	2	3	4	5	1	2	3	4	5
22	Negotiate with people from different backgrounds	1	2	3	4	5	1	2	3	4	5
23	Understand group dynamics	1	2	3	4	5	1	2	3	4	5
24	Communicate in written format	1	2	3	4	5	1	2	3	4	5
25	Communicate orally	1	2	3	4	5	1	2	3	4	5
26	Engage in lifelong learning	1	2	3	4	5	1	2	3	4	5
27	Apply inter or multidisciplinary perspectives	1	2	3	4	5	1	2	3	4	5

28	Ability to collaborate with colleagues to resolve conflicts and work in team	1	2	3	4	5	1	2	3	4	5
29	The ability to analyse and reason logically	1	2	3	4	5	1	2	3	4	5
30	Personal attributes such as identifying own strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	1	2	3	4	5	1	2	3	4	5
31	Awareness of social and ethical responsibilities	1	2	3	4	5	1	2	3	4	5
32	Work effectively in diversified cultural settings	1	2	3	4	5	1	2	3	4	5
33	Initiative	1	2	3	4	5	1	2	3	4	5

### Appendix 4b & 7b: Expectation and Performance gap determinants - for Employers

For each of the generic skills listed below, please determine:

- (1) Rate the following skills that you expect of students to acquire in accounting education for their career development.
- (2) State the skills competence level that is expected from a student to possess for employment at the time of certification.

		<u>(1)</u> <u>Skills that must be acquired in education by students for career development</u>	<u>(2)</u> <u>Skills competence level required to get employment at entry level</u>
S. N	Generic Skills with descriptions	1(Strongly disagree)----3(Neutral) ----5(Strongly agree)	1(No competence) ----- 5(High competence)
1	Decision making: having the ability to conceptually structuralize the situation and select one amongst available options.	1      2      3      4      5	1      2      3      4      5
2	Financial risk analysis: having the ability to assess the factors that may jeopardize the project such as knowing cost benefit analysis, ratio analysis, portfolio management, NPV, IRR, sensitivity analysis etc.	1      2      3      4      5	1      2      3      4      5
3	Financial accounting: concerned with the study of reporting the financial transactions and the preparation of financial statements.	1      2      3      4      5	1      2      3      4      5
4	Information technology competence: having the ability to use computer softwares such as knowing MS Office, Peachtree, UBS etc.	1      2      3      4      5	1      2      3      4      5
5	Critical thinking: having a sight to see things beyond its apparent meaning and not accepting anything until proven with logical reasoning or through some evidence.	1      2      3      4      5	1      2      3      4      5

6	International global perspective: Knowledge and understanding of international financial reporting standards and of current developments in the accounting profession.	1	2	3	4	5	1	2	3	4	5
7	A legal regulatory perspective: knowledge of the legal structure of the state such as corporate law, taxation and auditing standards.	1	2	3	4	5	1	2	3	4	5
8	Marketing/clients focus: customer care orientation such as knowing marketing tactics in order to deal with clients.	1	2	3	4	5	1	2	3	4	5
9	Problem solving: coming up with a practical and feasible solution to a problem.	1	2	3	4	5	1	2	3	4	5
10	Leadership: having the ability to manage a group of people such as assigning tasks, giving directions, keeping staff motivated and make them answerable.	1	2	3	4	5	1	2	3	4	5
11	Project management: having the ability to establish and run new projects.	1	2	3	4	5	1	2	3	4	5
12	Think and behave ethically: professional behavior of accountants must be according to accounting code of ethics.	1	2	3	4	5	1	2	3	4	5
13	Flexibility and adaptability: be flexible and adaptable to changing environment in official routine activities.	1	2	3	4	5	1	2	3	4	5
14	Strategic management: concerned with the study of understanding organisation strategic requirements such as knowing porter's 5 forces, SWOT analysis, price differentiation strategies, product development, market penetration etc.	1	2	3	4	5	1	2	3	4	5
15	Independent thinking: having independent professional judgment.	1	2	3	4	5	1	2	3	4	5
16	Focused on outcomes: ability to focus on objective and subjective outcomes such as meeting financial targets and deadlines.	1	2	3	4	5	1	2	3	4	5
17	Tolerate ambiguity: having the ability to ignore annoying routine activities in official environment.	1	2	3	4	5	1	2	3	4	5



18	Think creatively: coming up with new and more effective solutions to old problems.	1	2	3	4	5	1	2	3	4	5
19	Listen effectively: listen attentively and understanding what others are saying.	1	2	3	4	5	1	2	3	4	5
20	Presentation skill: appropriately present your point of view in official meetings.	1	2	3	4	5	1	2	3	4	5
21	Negotiation skill: making others understand what you are saying and convincing them to a point where both parties arrive at an agreement.	1	2	3	4	5	1	2	3	4	5
22	Understanding group dynamics: while working in group understanding others work potential, attitude, emotions, and patience level.	1	2	3	4	5	1	2	3	4	5
23	Communicate in written format: having the ability to draft inter office memos and letters.	1	2	3	4	5	1	2	3	4	5
24	Communicate orally: having the ability to speak fluently, using appropriate tone to address your boss and subordinates.	1	2	3	4	5	1	2	3	4	5
25	Engage in lifelong learning: attending professional development programs for self-learning.	1	2	3	4	5	1	2	3	4	5
26	Inter or multidisciplinary perspective: while doing accounting considering others disciplinary perspective such as strategic management, corporate law and taxation etc.	1	2	3	4	5	1	2	3	4	5
27	Teamwork: having the ability to collaborate with colleagues to resolve conflicts while working in group.	1	2	3	4	5	1	2	3	4	5
28	The ability to analyse and reason logically: supporting your arguments with theoretical analysis or objective or subjective reasoning process.	1	2	3	4	5	1	2	3	4	5
29	Personal attributes: having confidence, identifying owns strengths and weaknesses, motivation level, self-promotion and self-	1	2	3	4	5	1	2	3	4	5

	management etc.										
30	Work effectively in diversified cultural settings: understanding cultural norms and values to work in diversified culture or multinational firms.	1	2	3	4	5	1	2	3	4	5
31	Self-initiative: taking the work responsibility on your own while considering work environment dynamics.	1	2	3	4	5	1	2	3	4	5
32	English language: having the ability to read, write, listen and speak in English.	1	2	3	4	5	1	2	3	4	5
33	Statistics: study of the collection, organization, analysis, interpretation, and presentation of data such as knowing how to conduct regression analysis, correlation, chi-square, t-test, and hypothesis testing etc.	1	2	3	4	5	1	2	3	4	5
34	Cost and management accounting: study of the accounting information to managers within organizations, to provide them with the basis to make informed business decisions such as knowing budgeting techniques, costing, accounting for labour, and accounting for overheads etc.	1	2	3	4	5	1	2	3	4	5
35	Economics background: analysing the production, distribution and consumption of goods and services such as knowing how to measure GDP, GNP, demand and supply curve, equilibrium, and price elasticity etc.	1	2	3	4	5	1	2	3	4	5

**Appendix 8: Designed matrix to collect interview data using Structural data display approach**

1	<b>Group: Employer or Educator</b>	1. Participant profile: 2. Location: 3. Date:	
2	<b>Round 1</b>		
3	<b>Asked Questions</b>	Q1: What generic skills do you think accounting students should acquire for the career development of their accounting profession?  Q2: What constraining factors do you think are limiting your ability towards generic skills development in your students?	
4	<b>Transcripts</b>	<b>Skills that should be acquired (response from Q1)</b>	<b>Constraints that prevails (response from Q2)</b>

5	<b>Round 2</b>		
6	<b>Components under scrutiny</b>	The following components of the questionnaire are put for scrutiny under this step i.e. <ul style="list-style-type: none"> <li>• Content comprehension</li> </ul>	
7	<b>Content comprehension</b>	Q1: What comes to your mind when you read out the following content?	
		<u><b>Generic skills</b></u>	<u><b>Transcripts</b></u>
8		Decision modelling	
9		Risk analysis	
10		Reporting	
11		Information technology competence	
12		Critical thinking	
13		International, Industry and sector perspective	
14		Legal regulatory perspective	
15		Marketing/clients focus	
16		Problem solving and decision Making	
17		Leadership	
18		Project Management	

19		Think and behave ethically	
20		Flexible and be adaptable to changing environment and situation	
21		Act strategically	
22		Think and act independently	
23		Focused on outcomes	
24		Tolerate ambiguity	
25		Think creativity	
26		Listen effectively	
27		Present, discuss and defend views	
28		Transfer and receive knowledge	
29		Negotiate with people from different backgrounds	
30		Understand group dynamics	
31		Communicate in written format	
32		Communicate orally	
33		Engage in lifelong learning	
34		Apply inter or multidisciplinary perspectives	
35		Ability to collaborate with colleagues to resolve conflicts and work in team	
36		The ability to analyse and reason logically	

37		Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	
38		Awareness of social and ethical responsibilities	
39		Work effectively in diversified cultural settings	
40		Initiative	
41		<b><u>Constraining elements</u></b>	<b><u>Transcripts</u></b>
42		Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	
43		Students have an inappropriate attitude for learning?	
44		Classes are pack with a large number of students?	
45		Accounting curriculum has insufficient provision to allow for the effective development of skills?	
46		As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	
47		Institution does not reward high quality teaching?	

**Appendix 8a: Representing the recoded data from the Participant 1 (educator) of the pre-testing phase**

1	<b>Group: Educator</b>  <b>Participant 1</b>	Personal information deleted due to ethical reasons	
2	<b>Round 1</b>		
3	<b>Asked Questions</b>	<p>Q1: What generic skills do you think accounting students should acquire for the career development of their accounting profession?</p> <p>Q2: What constraining factors do you think are limiting your ability towards generic skills development in your students?</p>	
4	<b>Transcripts</b>	<p align="center"><b>Skills that should be acquired (response from Q1)</b></p> <p>Basically the courses which we are teaching here they are very much market oriented, job oriented. The syllabus which we have is from the employers' perspective. There staked, there expectation has been accounted for and their recommendations are included in it. Therefore for us that is not a big issue our syllabus is tailor made as per the requirement, expectations of the employers. In spite of this still we expect that the skills normally we have; from basic <b>book keeping skills [1]</b> like basic accounting to <b>reporting skills [1]</b>, our focus is on it. Normally in academic courses focus is on recording restricted to <b>book keeping [1]</b>. In our case our focus is on higher level. If you see our courses there are three accounting papers, 1 is financial accounting and 2 are reporting papers. Among 2 <b>financial reporting [1]</b> papers, 1 is at fundamental stage and 1 is at advance stage. We are more focused on the reporting thing that how we make that report and present it.</p> <p>SIR CAN YOU NAME ANY OTHER SKILLS LIKE SOFT SIDE OF THE SKILLS?</p> <p>The need we have felt, is the one we are soon going to start is <b>business English [2]</b>, <b>certificate courses like certificate of functional English [2]</b>.</p>	<p align="center"><b>Constraints that prevails (response from Q 2)</b></p> <p><b>As for related to accounting there is a misconception misperception about accounting discipline. People think that to be accountant you have to be very competent in mathematical skills. This differentiation is needed to be clear about accounting and mathematics [6].</b> Other than that <b>I think there is a need to work on students' aptitude [7]. Students have no idea what is accounting they have not studied [8].</b> Normally in other countries education system of O-levels, A-levels, before coming to professional courses students have know-how of the subject. In that case interest is already been developed in the subject, if you are interested in pursuing a career in accounting. When we have students from A-levels who have already been studied accounting as a major subjects in their A-level, this help us a lot. Because their interest is already there, their basic skills have already been developed. The education system we have in Pakistan where accounting or finance related subjects have never been taught. Students come from pre-medical or pre-engineering.</p> <p>AND ANY OTHER CONSTRAINTS OTHER THAN STUDENTS MISCONCEPTION?</p>

		<p>DO YOU CONSIDER ANY OTHER SKILLS OTHER THAN BUSINESS LANGUAGE SKILL FOR ACCOUNTING STUDENTS?</p> <p>As I told you, I consider <b>writing skills [3]</b>. We have seen that what is in the mind of students is the same as we are expecting of them. But when we tell them to write it down then they can't do it. So there is a gap in writing and mind. What they are thinking they could not translate in writing. That is why, we are thinking there should be something through which they have more competencies to achieve writing skills. Because ultimately they have to give exams in writing.</p> <p>SO DON'T YOU THINK THEY NEED OTHER SKILLS LIKE LEADERSHIP SKILLS, CRITICAL THINKING SKILLS?</p> <p>Definitely, from grooming perspective the responsibility of accountants are also at management level as well. They suppose to be trained like managers. In future they have to work in a team of three or four. So all the soft skills related to that like <b>communication skills [3], leadership skills [4]</b> needed. Courses should be on leadership program like certified courses will help a lot. According to me this will help a lot related to their professional grooming if such types of skills would be included in the courses. In this regard there is quite a space of improvement what we are teaching here. Skills related to <b>leadership skills [4], communication skills [3] or presentations skills [5]</b> lack in the professional courses are quite a lot. I think the professional bodies have left this on the academic institute where students have been taught. Professional bodies have more focused on hard skills rather than soft skills. That is why I think there is required a lot of improvement. I think professional bodies have to consider that thing they have to focus on employability skills also.</p>	<p>Second <b>unfortunately here accounting is considered as a last option. Students when get drop from the entry test exams of engineering or medical colleges or they don't qualify to get admissions in universities then they come towards accounting institutes [9]</b>. So they are pushed in to it, either by their parents. They have no interest in it basically, they are forced in it. So it takes time to create their interest and aptitude in it. By the time they settle down with the course with new things, their acceptability according to their mind accept this, they have to study this and adopt it as a career it is difficult for us. That is why the drop out ratio is high. Students come to us at the age of 16 or 18 so when they induct with us they also think they have a lot of time so they can bother spending 6 or 8 months <b>if they don't come to have interest in it then they will move to other courses or leave. For us we want students to come here who have really interest in it [10]</b>.</p>
5	<h2>Round 2</h2>		
6	<p><b>Components under scrutiny</b></p>	<p>The following components of the questionnaire are put for scrutiny under this step i.e.</p> <ul style="list-style-type: none"> <li>• Content comprehension</li> </ul>	



7	<b>Content comprehension</b>	Q1: What comes to your mind when you read out the following content?	
		<u>Generic skills</u>	<u>Transcripts</u>
8		Decision modelling	Decision modelling ok career development yes of course it is important. Oh I put it on wrong side can I cancel it or you want me to fill on other page. NO THATS OK SIR YOU CAN CANCEL IT AND MARK ANOTHER CHOICE. Ok so it's 5. And competence level I guess 3. our students do have problem in it. let's move on to second risk analysis. OK SIR DO YOU MIND IF I ASK YOU TO STOP HERE. Sure yes. PLEASE TELL ME SIR WHEN YOU READ 'DECISION MODELLING' WHAT COMES TO YOUR MIND. <b>Decision modelling to me is how you come to make some decision. So basically it is the structuration of the situation coming across through which you take decision.</b> OK SIR WE CAN MOVE TO NEXT. [14]
9		Risk analysis	Ok 2 is risk analysis that is also very important and yes our students do have this skill. SIR WHILE YOU WERE FILLING RISK ANALYSIS WHAT WAS IN YOU MIND. In my mind risk analysis is associated with analysis of pros and cons of the situation. <b>While I was filling in my mind it was project appraisal like NPV, IRR etc.</b> [15]
10		Reporting	Next is reporting obviously that is very important. SIR WHAT HAS IN YOUR MIND WHEN YOU READ REPORTING. obviously that is <b>financial reporting like how you mention assets liabilities current investments.</b> [17]
11		Information technology competence	Information technology competence of course that is important. Now you will ask me what does it mean so <b>that means to me as computer software handling.</b> [19]
12		Critical thinking	Critical thinking that is also very important. One must have to have critical approach and I think our students do have this ability to some extent. [20]
13		International, Industry and sector perspective	What does this mean [international, industry and sector perspective]? SIR IT MEANS HAVING IDEA ABOUT INDUSTRY IN WHICH YOU ARE WORKING. Ok I didn't understand that so I leave it. [21]
14		Legal regulatory perspective	Next is legal regulatory perspective it's very important also, in fact very very important. SIR CAN YOU EXPLAIN THIS TERM AS WELL. Yes <b>it means compliance with legal regulatory authorities like SECP [security exchange commission of Pakistan] and FBR [Federal Board of Revenue].</b> [22]

15		Marketing/clients focus	Marketing/clients focus, explain what does it mean? OK SIR IT MEANS HAVING SKILLS TO DEAL WITH DIFFERENT CLIENTS. Ok but <b>accountants normally does not need such skills. May be someone need it in some role but what I have seen in working environment they have no public dealing therefore I don't agree with it. [23]</b>
16		Problem solving and decision Making	That is important as well, Problem solving. CAN YOU EXPLAIN IT AS WELL SIR. See in practical life having skills to solve real time problem is all that it matter. <b>Most of the time you come across situation where you don't have immediate solutions to it but you have to move on, you can't stop there. So at that moment you need a skill to make immediate solution to it and move on.</b> It is very important therefore I mark it 5. [24]
17		Leadership	Next is leadership of course everyone need this skill. <b>Giving directions to your staff is always important.</b> let's move on to next. [25]
18		Project Management	Project management I guess this one is not very important. <b>If it is there then its good but not a compulsion. Accountants normally don't deal with management of projects.</b> SO WHAT YOU THINK. As I said it's not important but if there then it's not bad either. So I will give it 3. [26]
19		Think and behave ethically	This one [think and behave ethically] is very important. I will give it 5. SIR CAN YOU EXPLAIN. <b>See in our profession ethical approved behaviour is very important. Even we can't accept someone's client without having written approval from other accountants. If we do so then we can have warning from the accounting body.</b> So this is very important. [27]
20		Flexible and be adaptable to changing environment and situation	What is next, flexible and be adaptable to changing environment and situation. Obviously one should have that ability. <b>Flexibility is important, a person has to adjust with changing environment.</b> [28]
21		Act strategically	<b>Act strategically I guess you are asking strategic management skills.</b> YES SIR. Of course it is required at some moderate level but not very important. [29]
22		Think and act independently	This one [think and behave ethically] is very important. I will give it 5. SIR CAN YOU EXPLAIN. See in our profession ethical approved behaviour is very important. Even we can't accept someone's client without having written approval from other accountants. If we do so then we can have warning from the accounting body. So this is very important. [30]

23		Focused on outcomes	Focused on outcome obviously yes. <b>Everyone has to focused on professional outcomes in working environment</b> , there is no doubt about it. I will mark it 4 and 4. [31]
24		Tolerate ambiguity	Tolerate ambiguity important, almost all of them are important here. SIR CAN YOU EXPLAIN WHAT COMES IN YOUR MIND. <b>Well what I comprehended is work environment ambiguity like having issues in daily working environment with boss and colleagues may be with clients.</b> Am I right? YES SIR. Ok let me mark it. [32]
25		Think creativity	<b>Think creatively I guess that is creative thinking right? RIGHT SIR. It is important but you see here we [accountants] don't have much to deal with. I mean a job of an accountant is normally to present report with standards so not left with much choice for creativity to come in.</b> So I will give it 3 because this is not required everywhere. [33]
26		Listen effectively	21 is listen effectively again that is important. <b>Listening skills are always important to understand what others want.</b> [34]
27		Present, discuss and defend views	Presentation skill is also very important. We do have programs on it. [35]
28		Transfer and receive knowledge	Transfer and receive knowledge what does it mean? OK SIR IT MEANS THE ABILITY TO INFORM SOMEONE, TRANSFER AND RECEIVE MESSAGE OR SOME SORT OF INFORMATION . ok I didn't understand it in first so I leave it. [36]
29		Negotiate with people from different backgrounds	Negotiate with people, again important. If you can't speak you are almost useless. [37]
30		Understand group dynamics	Understand group dynamics important. [38]
31		Communicate in written format	26 is <b>communicate in written format ok that is writing skills</b> again that is important. [39]
32		Communicate orally	Communicate orally obviously, speaking is important. [40]
33		Engage in lifelong learning	Engage in lifelong learning very important. In fact that should be important for everyone. Learning process shouldn't be stopped. This is important. [41]

34		Apply inter or multidisciplinary perspectives	Apply inter or multidisciplinary perspective important. OK SIR WHAT DOES IT MEANS TO YOU. <b>Well its easy mean conceptualising financial planning with strategic management or let's say combining taxation issues with accounting treatments. [42]</b>
35		Ability to collaborate with colleagues to resolve conflicts and work in team	Next is ability to collaborate with colleagues to resolve conflicts and work in team. Ok that is very important. ok so what is next. <b>[43]</b>
36		The ability to analyse and reason logically	Ability to analyse and reason logically very important always that is important. Illogical reasoning has no place anywhere, may be in politics I guess only. <b>[44]</b>
37		Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	32 is personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management etc. Again very important. In fact every employer ask these in hiring interviews. <b>[45]</b>
38		Awareness of social and ethical responsibilities	Awareness of social and ethical responsibilities important. <b>[46]</b>
39		Work effectively in diversified cultural settings	Work effectively in diversified cultural settings that is important as well but I don't think everyone cares much about it. <b>[47]</b>
40		Initiative	Initiative of course important. WHAT DOES IT SOUNDS TO YOU? <b>Self-initiative like doing something on your own what you feel is necessary. Not waiting for someone to come and tell you. If you are obvious about something and it is important then do it. [48]</b>
41		<b><u>Constraining elements</u></b>	<b><u>Transcripts</u></b>
42		Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	Students enrolling in accounting classes do not have basic skills to learn at face, ok. SIR MAY I ASK WHAT YOU COMPREHENDED BY THIS STATEMENT. <b>This statement is asking about what is the level of students, quality of students is more appropriate word. How they see things their intelligence level, how quick and sharp they are mentally. [49]</b>

43		Students have an inappropriate attitude for learning?	<b>Students have inappropriate attitude for learning, strongly relevant. This is very important you see as I have talked before they are not serious in it. They think it [accounting] has no importance. We need to work on their attitude. [50]</b>
44		Classes are pack with a large number of students?	Classes are pack with large number of students. Are you asking this question from here's point of view? Because I can't say about others. SIR I'M ASKING THIS QUESTION FROM YOUR'S POINT OF VIEW. THE WAY YOU HAVE EXPERIENCED. <b>Ok so then it is not right, hardly we have 25 to 30 students in a class which are not much. [51]</b>
45		Accounting curriculum has insufficient provision to allow for the effective development of skills?	Accounting curriculum has no sufficient provision to allow for the effective development of skills, <b>no I think that is not right. We do have a good curriculum so I disagree with it. [ACCOUNTING BODY NAME] program is a lot better than university programs. And as I told you earlier our programs are basically developed in consultation with employers' expectation. So that is not right, we even have work experience requirement that is very important for skills development. So I disagree. [52]</b>
46		As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	<b>As a shift to research based culture, educators are too busy with research that left them to affect their teaching abilities negatively, no I disagree with it. We don't have academics research like you have. Sometimes new standards come only then we request teachers to do a little research on it. But it is not like you what you are doing so I disagree. [53]</b>
47		Institution does not reward high quality teaching?	<b>Institution does not reward high quality teaching. It depends so I give it 3. Like I can't say, for someone having 6-digit figure is not enough while for others 50k is more than enough. So I would say 3. [54]</b>

**Appendix 8b: Representing the recoded data from the Participant 2 (educator) of the pre-testing phase**

1	<b>Group: Educator Participant 2</b>	Personal information deleted due to ethical reasons	
2	<b>Round 1</b>		
3	<b>Asked Questions</b>	<p>Q1: What generic skills do you think accounting students should acquire for the career development of their accounting profession?</p> <p>Q2: What constraining factors do you think are limiting your ability towards generic skills development in your students?</p>	
4	<b>Transcripts</b>	<p align="center"><b>Skills that should be acquired (response from Q1)</b></p> <p>Accounting profession as being a professional accountant the skills should be updated, that is the request from our side to the institutes. Because accounting profession is basically run for public interest. The accountant is a bridge. Companies do invest, they take money from people, then they provide balance sheet as you know. So the shareholder and other stakeholders know what company is doing in terms of financial matters. And in Pakistan these financial statements get pass through these financial accountants. They [statements] get created by these accountants and get audited and checked by the same so he [accountants] needs to be aware of those things. Basically accounting profession is get strengthen by these <b>legal regulations [1]</b> but also by <b>professional obligation [2]</b> as well. Here I think the emphasis over <b>ethical [3]</b> and <b>professional obligation [2]</b> is a little low. Most of the things are <b>legal based [1]</b>, laws are also there. But one should follow the laws but <b>ethical obligations [3]</b> as well. One of the example I put here that by law there could be an accounting treatment in financial statements that allows the one but as an accountant professional I feel this treatment is not right it should be like other way. So here the <b>professional judgment obligation [3]</b> comes. It is written in accounting boards codes. So coded wise there is too much stress over it but here in the society the</p>	<p align="center"><b>Constraints that prevails (response from Q 2)</b></p> <p>Yes, this is a very good question. <b>The big problem is grooming. Grooming means not of students or teachers, it means accounting profession in the country. For that we need on a country level government or other institutes to come and play a role. For-example in Lahore there is a very good institute which runs a very good MBA program but on the same side there are hundred other institutes which exploit the same. So we should be looking to evaluate such non value added things. In our profession there are some non value added things just like doing things on lower feeses and like that [9].</b> Rest as I told you mashallah here if the setup gets more better, then we do have the basics, we also do have the brains and resources. For-example in US after recent scandals, they have made an institution called Public company Accounting Oversight Board (PCAOB). Its job is just to see that whether the audits of public companies are in a right way or not. This thing was there before as well but it was handled by public service security exchange commission. But after two or three scandals in which auditors were found to be involved so they took that thing as separate and considered to have an individual institute which should not handle other matters other than this, so that to ensure that this profession is whether performing its role or not, <b>so that to put a</b></p>

	<p>problem is still there.</p> <p>OK SIR DON'T YOU THINK ACCOUNTING STUDENTS NEED SOME SOFT SIDE OF THE SKILLS AS WELL?</p> <p>In modern times the management is not just a single tool which that was in the past that a plan has been developed implement it and then results came and then made the changes. There is a very competitive environment out there, Like in some industries the environment is very competitive if we see their environment, in some there is almost perfect competition. So accountants there have the job to make judgements as well, see the environment, do analysis so there they are hired as consultants these days. So they should have the ability to do <b>financial analysis [4]</b> not only <b>recording transactions [5]</b> and <b>providing accounts [5]</b> but also have <b>judgemental skill [4]</b> definitely. They should have <b>economics background [7]</b>, <b>economics knowledge [6]</b>, <b>quantitative methods [7]</b>. That is there in the course. But here you know in Pakistan still our environment is a little traditional the accountants job is still limited to accounts therefore employers does not care about leadership skills, that what I am telling you from the market perspective. But as relevant to your topic expectation the accountants should also have the skills relevant to <b>leadership [8]</b> as well. But employer does not see all this. He sees if there is an accountant and he knows the rules then he is acceptable. Basically the market requirement is still focused on technical skills and non technical skills are secondary here. When you go to them [employers] for job they will ask you, do you know that tax adjustment? And that things and they are least bothered that whether you have analytical skills or not or judgemental skills or not. I have given lots of interviews as well so I know these things are still there.</p>	<p><b>check on this profession. This kind of activity if should be done over here [10].</b> It is not like that here there is nothing at the moment like professional negligence. Mashallah, I have rarely seen there is professional negligence in my career but if there is more grooming of the profession in terms of government involvement or kind of global relationship between things then it would be much better.</p> <p><b>Other than that our teaching methodologies should have some change. Because the problem of a generation gap is started here. Teachers are quite old and students are new [11]. So students do have the attitude problem, they play with iphone, there mood is inappropriate in the class room. Just for instance at that day I have asked a one [students] in the classroom, he was rubbing his eyes so I told him what's the problem? Are you ok? [Student replied] sir I am fine I am ok. Then I asked why are you sitting like that? So he replied, sir, I was awake till 3 o'clock. Then I asked why you were awake till 3 o'clock? He [student] replied sir I was watching a movie. Then I said its fine that is not a bad thing but you have to be responsible for the things that you have to do tomorrow [12]. So I think students' environment from the home comes as constraint some times as well. But I think teaching methodologies should be more modern as well because we also have to give some gap to children. You can't treat people like the way we used to treat them in old times. Then we used to criticise in old times as well that teachers were quite strict on us. But nowadays it's a bit difficult to do like that [13].</b></p> <p>ANY OTHER CONSTRAINT WHICH YOU THINK IS IN PAKISTAN'S ACCOUNTING EDUCATION ENVIRONMENT THAT NEEDS TO BE CONSIDERED?</p> <p><b>Another problem is from the perspective of training organisations. Over here good training organisations quantity is much lower. So for them it is a little hard to take more intakes of students. So rest of the students either wait in the pipeline or they have to go here and there. So they can't learn what is expected of them like leadership and analytical skills which you are talking about. One has goes to government or some small private institution for-example XY &amp; Co. There he will come to learn</b></p>
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			<p><b>ledger entries and book keeping [14].</b> Now that is even not so bad because as I said earlier ultimately employer has to see these things. Do you understand what I am saying? He is not in a problem in one sense. But according to your topic the best answer would be the one that expectation should be little higher means what is currently going on and one area is what we should do. There should be a little expectation higher, the students should be provided with more analytic thinking, but it does not happen generally. Some of the children go to better places like high calibre firms where they learn all good things because they have multinational companies, they have their accounts, they have their regular consultancies but other does not. <b>So, there is no standard criterion for measuring skills level to students in articleship. We have to believe on training organisation. That is why when students from average or below average firms goes to employment then these things they have to face in the interviews [15].</b> if an individual is coming there from above average or high level firm then he will be preferred there than the individual coming from average or below one.</p>
5	<h2>Round 2</h2>		
6	<b>Components under scrutiny</b>	<p>The following components of the questionnaire are put for scrutiny under this step i.e.</p> <ul style="list-style-type: none"> <li>Content comprehension</li> </ul>	
7	<b>Content comprehension</b>	<p>Q1: What comes to your mind when you read out the following content?</p>	
		<u>Generic skills</u>	<u>Transcripts</u>
8		Decision modelling	<p><b>Ok decision modelling is decision making.</b> The ability to take decision while analysing the situation. Is it right? YES SIR IT IS FINE. OK let me fill it. [19]</p>
9		Risk analysis	<p>Risk analysis, you see it depends, if there is an accountant who is going to insurance industry then he need this more. But if someone is going for pure accounting job then he does not required it. It does not mean that he does not required it at all, obviously he need it to a certain level for measuring financial statements, but not at</p>



			that level which an insurance guy required. OK WHAT COME TO YOUR MIND WHEN YOU READ RISK ANALYSIS. <b>As I said, related to financial statement analysis like ratio analysis, and project appraisal. If you want to clarify it more, according to my perspective you should mention it as financial risk analysis. Because risk analysis is a very general term it should be more specific. Did you get it, because risk analysis could be there in strategic management but that is the different one than this one. [20]</b>
10		Reporting	What next is, reporting, that is important. SIR DO YOU MIND IF I ASK YOU WHAT DID YOU COMPREHENDED BY REPORTING. <b>In my mind was financial reporting like producing like how to make balance sheet, cash flow statements. The way you present financial to your bosses and board of directors, to shareholders. Did you get it. [22]</b>
11		Information technology competence	Information technology competence, this is not very important, actually nowadays there are software available, which are very easy to learn, simple like MS access. Other than that <b>every company has its own software to work, on which they give trainings to accountants when they go there.</b> So I personally think it is an issue of moderate importance because when students join an organisation after that they will have training on it. So we don't need to focus much on it. <b>[24]</b>
12		Critical thinking	Critical thinking that is important. But I don't think our students gain much of it. SIR CAN YOU EXPLAIN WHAT IS CRITICAL THINKING. See according to me <b>critical thinking is having sight to see things beyond its apparent meaning.</b> Like you have a situation e.g. your company has made huge losses this year and you are looking for the reasons to it. Now you should have a critical vision on it you suppose looking at the relevant variables to it e.g. labour, capital structure, economic condition. Did you get it so this is what i mean by critical thinking. <b>[25]</b>
13		International, Industry and sector perspective	International, industry and sector perspective. This is also important and definitely students have to know about international industry perspective and associated developments with it. But unfortunately here the course is so tight and tough that most of the time of the students go in learning reporting standards, laws and auditing standards. Therefore they catch quite less of a time for it. SIR CAN YOU EXPLAIN TO ME WHAT COME TO YOUR WHEN YOU READ INTERTATIONAL, INDUSTRY AND SECTOR PERSPECTIVE. <b>It is international global perspective on accounting profession, knowledge of accounting profession like IFR standards, what are the current developments in accounting profession, what are the specific industry requirement for accounting profession, like this. [26]</b>
14		Legal regulatory perspective	Legal regulatory perspective, of course important. In fact accountants are here for the compliance of standards set by regulatory authority. WHAT COME TO YOUR MIND WHEN YOU READ LEGAL REGULATORY PERSPECTIVE. <b>Taxation, compliance with SECP standards these are the things that are in my mind. [27]</b>

15		Marketing/clients focus	<b>Marketing is important but subject to ethics. SIR CAN YOU EXPLAIN? I mean an accountant is not a marketer he has ethical responsibilities, even he has [marketer] ethical responsibilities. An accountant is not even allowed to take others client without having permission from the first one. But still it's a competitive environment out there therefore I would say an individual must have good marketing skills to sell himself in the market. So it does require at some level. I will give it 4 not 3. [28]</b>
16		Problem solving and decision Making	Problem solving is again very important. We do have this skill in our syllabus. we have scenarios and case study based examinations in which [ACCOUNTING BODY NAME] specifically examine this thing. Even in routine life problem solving is the skill which makes an individual better than others. Being particular to accounting profession this skill is very important. Often clients have inappropriate books, incomplete documentation but he [accountant] can't refuse services to them. In our culture normally it is considered the responsibility of accountants to keep clients inform and updated. So this is the matter of routine importance where an accountant has to deal with such problems and <b>produce self created solutions to it. [29]</b>
17		Leadership	Leadership ok. SIR CAN YOU EXPLAIN. <b>See accountants are normally hired as managers and at that post it is common to have the team of 3 to 8 members depends on the organisation size. Now a manager suppose to guide his team, assign task, keep them motivated and make them answerable.</b> So these things are important which comes eventually with the passage of time with experience. So I don't think it is very important to teach such stuff within the course. As I said they [students] will learn it eventually during work environment. <b>[30]</b>
18		Project Management	<b>Project management I would say same as leadership because normally here accountants do not have the job to manage projects. They have back office work where most of the time they have to check the compliance of standards and deal with taxation and laws. Project management is basically the job of project managers who may be an MBA or some technical expert. SIR DONT YOU THINK IT IS IMPORTANT.</b> As I said this is not normally the job of an accountant and specially the fresh ones so I would say 3 to it. It is better if an accountant has that skill there but not a mandatory or necessary requirement. <b>[31]</b>
19		Think and behave ethically	<b>Think and behave ethically, very important. Compliance with accounting code of ethics is very important. Even this is the part of our code of ethics. Accountants must have to strictly follow it otherwise we will be no different to grocery stores. SIR CAN YOU EXPLAIN WHAT DOES IT MEAN BY THINK AND BEHAVE ETHICALLY? I MEAN HOW YOU TOOK ITS MEANING?</b> See professional independent judgement is our legal as well as our ethical responsibility. When a client comes to us and wants us to not disclose this or that thing in the books then

			it becomes our legal as well as ethical responsibility to inform our client about this misconduct and disclose that thing in the books. So similarly within our society we have code of ethics where we can't take others client with in writing approval from the previous accountant. [32]
20		Flexible and be adaptable to changing environment and situation	Flexible and be adaptable to changing environment it is important but again it is not as important that we should have a subject on it in the syllabus. Flexibility and adaptability comes with the change which is a time consuming process. And even I don't think this could be taught within the course work. We have to leave something on time. [33]
21		Act strategically	Act strategically, again this is the issue of considerable importance. But as I said before accountants has back end work mostly. They normally deal with issues related to compliance. This is not there job. In some role they may have this task but mostly not. So I will give it 3. SIR CAN YOU EXPLAIN WHAT IS ACT STRATEGICALLY? <b>Well when I read it strategic management came to my mind where we have price differentiation and porter's 5 forces like that.</b> [34]
22		Think and act independently	Think and act independently I guess this was before as well. SIR THAT WAS THINK AND BEHAVE ETHICALLY AND THIS IS THINK AND ACT INDEPENDENTLY. <b>Ok yes of course professional independent judgement is very important as I said before it is the legal requirement. Auditors must have to have independent judgement and students should know about it.</b> This is very important aspect which we should not miss. [35]
23		Focused on outcomes	Next is Focused on outcomes, I will say again it depends. <b>It is situational because sometimes you have to focus on some financial outcomes but you may also come in a situation where you have to see other aspects as well like legal or ethical one. SIR YOU MEAN LIKE SUBJECTIVE OUTCOME. Yes exactly, that's what I mean like that, it is not always necessary to focus on objective outcomes sometimes also have to focus on subjective things and achievements as well.</b> [36]
24		Tolerate ambiguity	<b>Tolerate ambiguity, I will totally disagree with it. In our profession we do not have any place for ambiguity. In fact it is our job to clarify and properly disclose if anything is kept secret. So I disagree with it. SIR BUT HERE TOLERATE AMBIGUITY MEANS AMBIGUITY IN ROUTINE OFFICIAL ACTIVITIES. Oh sorry I took it in a wrong way then. But you have to clarify and explain this here. You have to state its true meaning. Others could make a wrong judgement about it like I made it.</b> [37]
25		Think creativity	Think creatively is important. Definitely this should be developed in students. <b>Creative thinking is always</b>

			<b>important from growth perspective. Changing old techniques to new ones, no one will personally come and tell you. It is you, who has this personal responsibility to make yourself useful within the work environment. Whether whatever means you use they should be effective. [38]</b>
26		Listen effectively	Listen effectively, very important. I would say this is the most important one. <b>Listening is very important when you deal with someone. Even this is important when you are taking notes from your boss. No one will sit the whole day to tell you what is required of you. A good listener will always be a good leader one day, so that is important and students should focus on that. [39]</b>
27		Present, discuss and defend views	Next is presentation skill that is important. <b>It is useful in professional life as well. We even have certificate courses on it. But students don't take them much seriously. We still need to work on it to make them aware of its importance.</b> Even in my profession [teaching] I needed this. <b>[40]</b>
28		Transfer and receive knowledge	Transfer and receive knowledge what is this can you explain it to me? SIR IT MEANS THE ABILITY TO INFORM SOMEONE, TRANSFER AND RECEIVE MESSAGE OR SOME SORT OF INFORMATION. <b>It sounds communication skill to me Yes of course it is important, in fact it is very important. SIR CAN YOU ELABORATE WHAT SORT OF COMMUNICATION SKILL. This could be any form, form like written communication this could be letters, memos and orally such as telephonic conversation, face to face meetings. [41]</b>
29		Negotiate with people from different backgrounds	Negotiate with people it sounds again similar to communication skills to me. <b>Though negotiation has some additional traits to it like defending your point of view and convincing others to come aside you. Indeed it is an important skill but I don't think so accountants need much of it. They have back office work so they don't need to convince someone.</b> Most of the public dealing is the job of marketing managers so I will give it 3 and 2 on other scale. <b>[42]</b>
30		Understand group dynamics	Understanding group dynamics is important. SIR DO MIND TELLING ME WHAT COME TO YOUR MIND WHEN YOU READ THIS. <b>Well it is related to interpersonal skills. My personal understanding to it is knowing each other's emotions, patience level, and potential. This thing is very important when you work in team because these are the things that helps to negotiate and make things done. [43]</b>
31		Communicate in written format	Communicate in written format important. <b>Writing skills are always necessary.</b> Let's move on to next. <b>[44]</b>

32		Communicate orally	Communicate orally. I guess here it says about speaking skills indeed it is important. A person is normally known by the way he speaks and the way he dress up. Accountants are normally appointed at managers level and mangers have to communicate with their subordinates. If a manager does not know how to speak with his colleagues then how could he get their loyalties. So it is important one. [45]
33		Engage in lifelong learning	Next is engage in lifelong learning, it was before as well I guess. SIR THAT WAS ACADEMIC RESEARCH. Oh yes, of course this is the most important one. <b>Change is the pet of life, if you will not improve yourself you will be outdated, you will have no place in this competitive world. I told you often we have to look for solutions to new accounting treatments. Other than this we also have 40 hours yearly requirement to participate in learning activities like seminars, conferences or online learning activities.</b> Otherwise accounting board can cancel our registration of membership so this is a mandatory requirement. [46]
34		Apply inter or multidisciplinary perspectives	Apply inter or multidisciplinary perspective, yes in some role this could also have some important. SIR DO YOU MIND TELLING ME THE MEANING OF IT. Well here it sounds using multi-disciplinary knowledge. SIR CAN YOU ELABORATE? <b>Like making a marketing strategic plan for the next five years while also considering financial figures from the financial statements as well.</b> So this kind of inter-disciplinary perspective I mean it by that. [47]
35		Ability to collaborate with colleagues to resolve conflicts and work in team	Ability to collaborate with colleagues to resolve conflicts and work in team. <b>This is required, often in official environment you have to deal with it. You should have stated it as team working skill it is more concise and includes everything in it.</b> [48]
36		The ability to analyse and reason logically	The ability to analyse and reason logically. Unfortunately our students are weak in such things. Actually most of the course is memorizing stuff. So I personally believe they don't need such things. [49]
37		Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self management. <b>Important and employer ask these things. Especially confidence that is very important.</b> [50]
38		Awareness of social and ethical responsibilities	<b>Awareness of social and ethical responsibilities, it was there before as well. See 14 think and behave ethically. A person can only think and behave ethically if only he has awareness of social and ethical responsibilities. So according to me it's a repetition. So either remove one or combine both of the statements together.</b> [51]

39		Work effectively in diversified cultural settings	Work effectively in diversified cultural settings. See these are the things, which comes with the time. I mean if it is there in advance then it is good but if not then eventually they will come to learn when they will have practical work. So I will mark it 3. Because it is not possible for us. In the classroom they already have students from different background so you can say a kind of learning is already there. [52]
40		Initiative	<b>Initiative, see it's a personal trait Sometimes taking self- initiative is not good. It involves personal situational judgement as well as confidence. So with that an individual decides considering official dynamics that whether it is required or not. But in general it is important and an individual should have that. [53]</b>
41		<b><u>Constraining elements</u></b>	<b><u>Transcripts</u></b>
42		Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	Students enrolling in accounting classes do not have basic academic skills to learn at face . <b>Here I will say 3 (on scale) because in a class you have a mix of students. Some will be very good; some will be below the quality standards. It is impossible to get always good students in a class. But overall I think they are not very bad, academically they are good enough. [54]</b>
43		Students have an inappropriate attitude for learning?	<b>Students have inappropriate attitude for learning? No I don't think so. Most of the students here are for learning. They have good attitude and are very well behaved. [55]</b>
44		Classes are pack with a large number of students?	Classes are pack with large number of students? <b>Not exactly, it depends sometimes we have too many students registered in a course. In such case then we have larger classes. But most of the time we also have fewer students in our classes. [56]</b>
45		Accounting curriculum has insufficient provision to allow for the effective development of skills?	Accounting curriculum has no sufficient provision to allow for the effective development of skills. <b>Again I would say so so. I will mark it 3 because I personally believe the curriculum is well designed but still have some gaps for the improvement. [57]</b>
46		As a shift to research based culture, educators are too busy with	As a shift to research based culture, educators are too busy with research that led them to affect their teaching abilities negatively? <b>No I do not agree on this. If someone is involved in research then he would be in his personal capacity, not enforced by the institution. [58]</b>

		research such that this impacts their teaching abilities negatively?	
47		Institution does not reward high quality teaching?	Institution does not reward high quality teaching. <b>Yes some what I do agree on this point. Institutions have a fixed rate for lecture. Even they have no reviewing system during the classes so I agree with you on this point. Most of the teachers they don't do extra efforts to make students learn. And there is a reason for it because they know in market certified chartered accountants are short for teaching. [59]</b>

**Appendix 8c: Representing the recoded data from the Participant 3 (educator) of the pre-testing phase**

1	<b>Group: Educator Participant 3</b>	Personal information deleted due to ethical reasons	
2	<b>Round 1</b>		
3	<b>Asked Questions</b>	<p>Q1: What generic skills do you think accounting students should acquire for the career development of their accounting profession?</p> <p>Q2: What constraining factors do you think are limiting your ability towards generic skills development in your students?</p>	
4	<b>Transcripts</b>	<p align="center"><b>Skills that should be acquired (response from Q1)</b></p> <p>If you talk about academics, what I have learned, there are six fears in life, the first one is to speak in front of people, and the last one is death. What I have come to know when I came over here from studies from UK that there is no difference there and here. When I took step in practical experience then there is day night difference. If the <b>confidence [1]</b> is not there, whatever profession there he [student] are, if he [student] can't speak in front of people, as I told you the first one is to <b>speak [2]</b> in front of people the last one is death. Then there is extreme important when an individual is passing through academics pipeline that he should develop the confidence, his <b>presentation skills [3]</b> should be versatile. It is very easy to teach within the class but when you are sitting in a board level meeting then it is very difficult to satisfy people there that what we have achieved over the year, what our future plans are, and how we will going to achieve. So to fill that gap the extra add ones like your <b>confidence [1]</b>, your <b>presentations [3]</b> plus your knowledge level should up to the mark. And plus in our profession we'll have to keep ourselves up to date. But anyways our profession keep ourselves updated. Any new issues that come arise so they [accounting board]let us know through proper way. They send us online videos, they have proper articles on it. So have to strengthen that thing I personally feel</p>	<p align="center"><b>Constraints that prevails (response from Q2)</b></p> <p>In our country corporate environment lacks a lot. As you know references works in the whole world but in our country reference works a lot. We miss our cream just because of these references. Children who come to us either have passed graduation or matric or inter. Now the question is where they are coming from how they have been facilitated. The constraint which we face, honestly speaking the big constraint is the communication, which is English. You will agree with me that in our country there is problem of English and we must accept that thing. honestly speaking if tell you from my personal experience then like the way you don't know the grammar of Urdu same is the way to English they don't know its grammar. The English is the easiest language in the world. You can speak one thing with ten's of ways. We don't have any entry test requirements here so the lot which come to us they test their selves here. So the problem is at their end. <b>What I think the problem is at their academic level. Their confidence is so low mean when they ask questions within class even then they are hesitating [7].</b> If some day we call them for a meeting or talk about something then their whole body is shivering. I mean why do they have so much fear, why? <b>My question is he comes to me from an institute where he has studied almost 12 years</b></p>



	<p>along with academics. If an individual does not have <b>communication skills [2]</b> how he goes to send message across the table so it is very important without that it is not possible.</p> <p>ANY OTHER SKILL OTHER THAN COCOMMUNICATION SKILL SIR YOU THINK IS IMPORTANT?</p> <p>In our profession it is told us you do not need to be an accountant, you have to be managers. There is one we call follower (karcon) and there is another we call leader (karfarma). Our mission make us leader (karfarma) <b>[4]</b>. You will give work to follower (karcon) and he will do it accordingly. But leader (karfarma) is the one who has school of thoughts, he has <b>creative thinking [5]</b>, he has the <b>strategies [6]</b>. So our discipline do the efforts to make our professionals make managers. It is very easy to make computer work but it is very difficult to take work from humans. So managers should have the quality to <b>take work from human [4]</b>. My point is organisations are run by the people, for people to run the organisations there must be processes, without processes you cannot run organisations. And to develop these processes this is the job of the manager. Every morning my tea boy brings a cup of tea to me, this is a process. Without this process I mean starting from this processes within institute like someone's report me, I will report someone. But the point is if there is a gap between reporting and then there is no <b>communication [2]</b> or inappropriate communication then what is the point of reporting. Let's say you are <b>writing a letter [2]</b> to one of yours manager and there is no clarity in it then what is the benefit of such communication. So it will be very much important, the <b>leadership skills [4]</b> which I have told you should be there, that what I told you follower (karcon) and leader (karfarma). The leader (karfarma) should have leadership skills.</p>	<p><b>then why such things have not been developed there [8]</b>. I can't only blame institutions only in it, it is also the responsibility of parents in it that how they have groomed their children.</p> <p>ANY OTHER CONSTRAINTS THAN STUDENTS GROOMING LEARNING ABILITIES?</p> <p>Another issue which I have noticed and one of my staff member as well noticed that here <b>we are not been able to retain good teaching staff members. Most of the individuals who work here as teachers prefer to be as part timers rather than full time basis [9]</b>. For instance that day we have offered a full time position to a one of our part time teacher, on a good pay scale, but he refused straight away. That particular member is working with us from last one year but still we do not have his loyalty and commitment to us. I know the reason why he refused, because he does not want to bind himself here. Wherever he will get a better lecture rate he will go there. But the main issue is behind it and that I think he can't see his career in teaching over here. <b>Because here our academic setup is institutional, we don't have big organisational hierarchy here. Therefore he [teacher] can't see his career in it [10]</b>. So I personally believe we need to work on it. We should have enough large organisational setup so that we can bring in the notion of career in our institutes. So that individuals teaching over here consider teaching as a professional career rather than part time money making thing. In universities they have long organisational hierarchy, you know what I am talking, and that is why when individuals go there they like to stay there, so we need to have something like that.</p> <p>ANY OTHER PARTICULAR ISSUE WHICH YOU LIKE TO SAY?</p> <p><b>Another problem is financial incentives. If you don't give good enough incentives then their [students] performance gets effected. The problem accounting students do face when they go to training organisation firms is that they have set stipend. Looking at the inflation factor in our country, the amount of money which they are getting they can't fulfil their daily expenses, even not their travelling which is very much big</b></p>
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			<p><b>constraint [11].</b> Most of the cases come to use like a student gets a job offer after 1 years of training so he leave his education in the middle and start working on a job as a partly qualified accountant most of the time in middle east. Another problem is in such firms there is no over time policy so they can fulfil their expenses through it. Now they can't say these things to manager but when they sit together they do discuss all that like in some conference room or rest room. <b>So I think it is a very big constraint I mean Rs. 8000 is nothing nowadays [12].</b> So I personally believe this should be more.</p>
5	<h2>Round 2</h2>		
6	<p><b>Components under scrutiny</b></p>	<p>The following components of the questionnaire are put for scrutiny under this step i.e.</p> <ul style="list-style-type: none"> <li>• Content comprehension</li> </ul>	
7	<p><b>Content comprehension</b></p>	<p>Q1: What comes to your mind when you read out the following content?</p>	
		<p><u>Generic skills</u></p>	<p><u>Transcripts</u></p>
8		<p>Decision modelling</p>	<p>Ok, can I fill now. SURE. Decision modelling, what does it mean. SIR IT MEANS STRUCTURISING THE SITUATION TO HELP DECISION MAKERS to TAKE DECISIONS. Indeed this is important, you should write explanation to it. It is important 5 and 4. [16]</p>
9		<p>Risk analysis</p>	<p>Risk analysis, yes it is important. SIR CAN YOU TELL ME WHAT YOU PERCEIVE WHEN YOU FILLED IN THE RISK ANALYSIS. <b>Financial risk analysis. LIKE? Like ratio analysis, sensitivity analysis, project appraisal techniques.</b> [17]</p>
10		<p>Reporting</p>	<p>Reporting, is important. SIR CAN YOU TELL WHAT YOU PERCEIVED BY REPORTING. <b>I perceived it as financial reporting , you know making balance sheet, income statement.</b> Such kind of stuff is important for an accountant. [19]</p>

11	Information technology competence	<b>Information technology competence, of course. SIR WHAT HAVE YOU PERCEIVED BY IT. Peachtree, excel, MS office. AND WHAT ABOUT COMPUTER HARDWARE. No I don't think so, they [students] only should know the basics of it like how to start and connect wires. This is not an accountant job.</b> Every organisation has separate departments for its computer maintenance. This is there's job not an accountant. So I will give it three if you mean by that. [21]
12	Critical thinking	Critical thinking is very important. I will give it 5. SIR CAN YOU EXPLAIN TO ME WHAT IS CRITICAL THINKING. It is about not believing in something, if someone's says something to you. It is about asking questions and looking for the credibility of it from all aspects. And do not believing until you get assure yourself that whatever he is saying is seems possible to be true from all aspects. <b>So it is being critical on something, not accepting it in first, until you examine the situation.</b> [22]
13	International, Industry and sector perspective	International, industry and sector perspective. It is important as well. SIR CAN YOU EXPLAIN WHAT DOES IT SOUNDS TO YOU. <b>It means, to know about accounting discipline, standards and the recent developments in accounting profession across the globe not just in Pakistan.</b> [23]
14	Legal regulatory perspective	<b>Legal regulatory perspective of course, this is important. In fact this the is the job of accountants. If an accountant does know what are the FBR Federal Board of Revenue] requirements then how he comes to manage accounting books for taxation.</b> There is no doubt about it. I will mark it 5. [24]
15	Marketing/clients focus	Marketing/Clients focus. <b>Yes, marketing tactics should be there especially in consultancy business, you need this skill. People often get offended if you don't treat them good after all business is all that it matters in consultancy. I don't think it is much required in organisational setup.</b> There they are separate team for it. They handle marketing matters. But who knows where the one is going so this thing should be there. [25]
16	Problem solving and decision Making	Problem Solving, very important. In fact that is the most important among all of them. SIR CAN YOU ELABORATE WHAT DID YOU MEAN BY PROBLEM SOLVING. <b>According to my perspective problem solving is the ability to understand issue and produce most effective solution to it in a given time limit and situation. It should not be like that a solution which is workable but not feasible. Did you get I mean, realistic one not an idealistic one. For-example employees attitude in some organisation is a problem and there could be many solutions to it like change management, bringing policy on employees attitude, anger management courses. But they are just the solutions to it Now it's you who has to decide which one will be feasible in your situation so it's important.</b> [26]

17		Leadership	Leadership yes it should be there, Of course. <b>Accountants work are at managers level and they need this skill to guide their sub-ordinates. [27]</b>
18		Project Management	<b>Project Management, yes this should be there as well. But I don't think our students get much of it. SIR CAN YOU EXPLAIN WHAT IS PROJECT MANAGEMENT TO YOU. It is about managing projects like doing things start till end e.g. introducing new accounting software within the organisation now for that you have to arrange training programs on it. Have to invite speakers to come and guide your staff members. Let them know about the advantages of new software and what is the benefit we will have with it. You know people don't like changes. [28]</b>
19		Think and behave ethically	Think and behave ethically. Very important. <b>Professionally approved ethical behaviour is the requirement of accounting profession. We have code of ethics on it. So it is important. [29]</b>
20		Flexible and be adaptable to changing environment and situation	<b>Flexible and adaptable to changing environment and situation. The one should be like that. Organisations do have changes time to time and individuals have to adjust themselves with that. Even in some cases when one gets promotion his whole set of environment also changes like new office and colleagues. So this should be there and this thing eventually gets develop with the time. [30]</b>
21		Act strategically	<b>Act strategically. There is even a module on it in our syllabus. Strategic management skills are important. Accountants suppose to know all such stuff. That won't be come in immediate use to them but once they will be promoted to higher levels, then the talks which normally goes there, to understand that accountants do need to have that knowledge. Otherwise there will be a gap between management team and finance team. [31]</b>
22		Think and act independently	Think and act independently, important. Theoretically speaking, an accountant suppose to work independently without any pressure from management side. But from practicality it is not the case. Accountant is the part of management team therefore they have to work together. They have to understand management problems and they suppose to give them solutions which should be acceptable to management and legal regulatory authorities. So I will give it 4 not 5. Because pure independence is not always the case one has to listen the management. <b>[32]</b>
23		Focused on outcomes	Focused on outcomes. Yes of course. SIR CAN YOU EXPLAIN THIS TO ME. <b>Of course, it means like not doing something which has no particular objective. Whatever we do in official environment that has some</b>

			reason to it. And that reasons lead us to work in offices. So if a task is assigned to you then you have to know, there is a deadline to it and you have to achieve that task within giving timeframe. This helps to waste your time. [33]
24		Tolerate ambiguity	<b>Tolerate ambiguity, you mean ambiguity in official environment? YES SIR I DO MEAN BY THAT. Yes, of course this is very important. In offices you often do have such bosses who always like bossing around. Even colleagues are such annoying that they are difficult to tolerate.</b> But this is life and that's how things go around. So it is important otherwise have your own consultancy firm and then you do bossing on others. But still that element should be there because you never know to whom you have to deal with may be the clients who come to you are annoying or people from the taxation department. So it depends. [34]
25		Think creativity	Think creatively, important. SIR DO YOU MIND IF I WANT YOU TO EXPLAIN THIS TO ME. See Gohar, <b>creative thinking is about coming up with new ideas and solutions to old problems. It is about coming up with new and effective solutions like designing new formulas and accounting sheets.</b> This such kind of stuff is important in accounting profession. This shows an accountant dedication and motivation towards its profession. When you like something creativity automatically comes in. [35]
26		Listen effectively	Listen effectively, yes of course. <b>If someone can't listen then how he become follow the instructions. Then there will be a big mess.</b> [36]
27		Present, discuss and defend views	Present, discuss and defend views important. <b>I guess you mean presentation skill.</b> [37]
28		Transfer and receive knowledge	<b>Transfer and receive knowledge, of course important. SIR CAN YOU EXPLAIN WHAT YOU PERCEIVED BY THIS. This is quite clear basically it states about communication skills. The way you interact with others and make them understand what you are saying.</b> [38]
29		Negotiate with people from different backgrounds	24 is negotiate with people, important. This is very important. EXPLAIN THIS PLEASE. <b>This means making others understand what you are saying and convince them to a point where you and the other person come to an agreement state. Did you get it, I mean where you can finalise the deal at the price that is acceptable for both of you.</b> [39]
30		Understand group dynamics	Understand group dynamics, important. SIR CAN YOU EXPLAIN WHAT YOU UNDERSTAND BY IT. <b>It's quite simple I mean it means understanding others attitude, when you work in a group. This really helps a lot.</b>

			<b>You should know who will be the individuals that will come towards you when you will have an opinion and who will be against. This is very important especially nowadays when leg pulling is quite the tradition in most of the offices. [40]</b>
31		Communicate in written format	Communicate in written format, that is very important. <b>If a professional accountant doesn't know how to draft a letter then he should be ashamed of himself. In offices it is the general requirement to write inter-office memos. This is the way you inform each other about the progress of the work. Now if you are in a situation and you don't know how to draft a letter, now you can imagine your position in the office then. [41]</b>
32		Communicate orally	Communicate orally, important. <b>Good speaking is always important</b> especially English. In our most of the offices people like the individuals who have good communication skills. <b>[42]</b>
33		Engage in lifelong learning	Engage in lifelong learning? What does that mean, can you explain. SIR IT MEANS SELF-LEARNING, HAVING DESIRE TO KNOW NEW THINGS. Yes of course that is important, I told you before, in our career we often come across situations for which we do not have solutions. In such cases we have to go through a little research, we have to ask from our colleagues, book, and we may consult [ACCOUNTING BODY NAME] for its treatment. So of course this is important. <b>[43]</b>
34		Apply inter or multidisciplinary perspectives	Apply inter or multi disciplinary perspective, yes it is important, in fact very important. SIR CAN YOU EXPLAIN. <b>See in practical world there is no such thing in isolation. If you are doing accounting for sales transaction then you should have knowledge for GST [general sales tax] otherwise how would you know what is the required GST deduction for so and so product. Nowadays an individual is only considered to be a well competent person if he knows all the relevant knowledge of a profession. For-example in our field one should know all about taxation, reporting standards, accounting, corporate law. I hope you get it what I mean. [44]</b>
35		Ability to collaborate with colleagues to resolve conflicts and work in team	Ability to collaborate with colleagues to resolve conflicts and work in team, very important. SIR I WANT YOU TO TELL ME WHAT YOU UNDERSTOOD BY READING THIS. This is quite simple FOR-EXAMPLE SIR? <b>Like Collaborating with your colleagues, how to talk with each other, how to commend each other, how to divide the work in between, such kind of stuff. So these are things. [45]</b>

36		The ability to analyse and reason logically	The ability to analyse and reason logically, that is important as well. <b>Analytical or logical reasoning are both important in accounting profession. See no one expects a person who is at CFO [Chief financial officer] position and to talk stupid in board meetings. He [CFO] is a very important person to an organisation. Only he knows whether company can meet its upcoming marketing or strategic plan financially. So he needs to have very strong analytical skills to properly forecast financial figures. [46]</b>
37		Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence. <b>All of them are almost very important. But confidence and knowing your own strengths and weaknesses are extremely the important once. To date I have given many interviews in my life and almost in 50% of them they have asked about it.</b> Confidence is the thing that you can't ask in the interviews, it reveals through your way of answering the questions and life style. That is why I normally tell my students to get yourself bold and say to me whatever you have to say. Here there is no one who will beat you. But I like to mention that this is the problem of our schooling system where teachers physically punish their students for not doing homework or naughty things what they do there. Even this is a responsibility of parents that they should not punish them [Children] so hard that their personality become suppressed. <b>[47]</b>
38		Awareness of social and ethical responsibilities	<b>Awareness of social and ethical responsibilities, important. This is again related to code of ethics.</b> Yes, of course an accountant has the primary responsibilities to disclose right facts to management as well as to other stakeholders. This could have serious consequence if someone found fraudulent or misleading in it. <b>[48]</b>
39		Work effectively in diversified cultural settings	Work effectively in diversified cultural settings, important again. <b>Who knows where he [accountant] will go after the qualification, so one has to mentally get ready for this. Anyways nowadays this is not a big deal for accountants because during their articleship or job contract, we call it now, they work with different individuals and clients. So they automatically get this skill in 3 years of time. [49]</b>
40		Initiative	Initiative? What does that mean? SIR IT MEANS SELF-INITIAITVE. TAKING DECISION ON YOUR OWN, WHERE YOU FEEL IT IS REQUIRED NECESSARY. Of course that is an important thing, it shows an employee dedication towards its work. And Believe me Gohar management knows all that. They are monitory all such things. Good employers always have eye on their employees and they do notice such small things. <b>[50]</b>
41		<b><u>Constraining</u></b>	<b><u>Transcripts</u></b>

		<u>elements</u>	
42		Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	Students enrolling in accounting classes do not have basic skills to learn at face. <b>There is no doubt about it, this problem is here, we have faced it. We have very weak schooling system. Most of the students who come to us they even don't know how to talk, confidence level is totally zero. They don't even know basic English. We have to work a lot on them to bring them to our standards. [51]</b>
43		Students have an inappropriate attitude for learning?	Students have inappropriate attitude for learning, that's true. <b>I told you before, we normally have the drop-outs from engineering and medical college entry tests. So basically this is not the field which they have ever thought for. As they don't have any other choice so they come to us. I don't know, may be their parents force them or some other reasons. [52]</b>
44		Classes are pack with a large number of students?	Classes are pack with large number of students, no I don't think so. <b>I will disagree with you on this point. Normally people don't like to come in this field. They have misperception about it like this is the field only good for people who have mathematical skills. So normally students strength in our classes is very low. SIR DO YOU MIND IF I ASK YOU HOW MUCH. This thing varies. APPROXIMATELY? Then I will say around 10 to 25 students per class. [53]</b>
45		Accounting curriculum has insufficient provision to allow for the effective development of skills?	<b>Accounting curriculum has no sufficient provision to allow for the effective development of skills, not at all. [ACCOUNTING BODY NAME] program has all what it needs to have in a good accountant. Even there is articleship requirement within this program. So I don't think this point is true. [54]</b>
46		As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	As a shift to research based culture, educators are too busy with research that led them to affect their teaching abilities negatively? No, again we don't have as such any requirement like that. Syllabus is already designed by [ACCOUNTING BODY NAME]. Here we need only the people who can easily teach that. Why we would say anything such like that to them? If a teacher wants to do some sort of research like publishing papers then he is welcomed. SIR DO YOU GIVE ANY PERKS OR BENEFIT FOR THAT ACADEMIC RESEARCH. <b>Not exactly, as I told you we don't have any need for such things. Syllabus design is not our job, we need only people who can teach, so why we pay for such activities. Even teachers don't want either to do academic research. Normally they [teachers] all are engage at some level in consultancy or with professional firms, so they even don't have the time for this. [55]</b>



47		Institution does not reward high quality teaching?	<b>Intutions does not reward high quality teaching, I will not agree with this statement as well. I personally believe we pay a very handsome amount to our teachers. Getting Rs. 1000 per hour is not a bad amount. You know that, you are teacher. [56]</b>
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**Appendix 8d: Representing the recoded data from the Participant 4 (employer) of the pre-testing phase**

1	<b>Group: Employer</b> <b>Participant 4</b>	Personal information deleted due to ethical reasons	
2	<b>Round 1</b>		
3	<b>Asked Questions</b>	<p>Q1: What generic skills do you think accounting students should acquire for the career development of their accounting profession?</p> <p>Q2: What constraining factors do you think are limiting your ability towards generic skills development in your students? (N/A)</p>	
4	<b>Transcripts</b>	<p align="center"><b>Skills that should be acquired (response from Q1)</b></p> <p>This is a very good question, in this regard the most important thing is that almost all the accountancy professional bodies have their own standards. An individual who knows accounting and meet you, it does not mean he is an accountant. There is a proper criteria to it, we have an international body we call it international federation of accountants that monitors all global professional bodies. In Pakistan we have local two or three bodies, some are in UK two or three, almost all countries have two or three bodies that work under their charter and provide education and experience to individuals accounting to their standards. Now the thing is when IFAC make its curriculum which is the detailed setup of training and education then according to that setup when an individual acquired that education plus experience then he will be recognised as professional accountant otherwise not. If there is left anything in his membership requirement then the important thing is if that is incomplete then he will not be considered as a professional accountant. So in that way the total amount of professional accountant in the world at the moment is around 2.5 million and somewhat above who have fulfilled the requirement of all the professional bodies in the world.</p>	<p align="center"><b>Constraints that prevails (response from Q2)</b></p> <p align="center">N/A</p>

SIR BUT I WANT NAMES OF THE SKILLS WHICH YOU CONSIDER ARE IMPORTANT FOR STUDENTS CAREER DEVELOPMENT?

First of all there are certain subjects and areas which are compulsory for them [accountants]. Like if accounting is there then **audit [1]** must be there, if **audit [1]** is there then **tax laws [2]** must be there. Like all business related subject which are important for an accountant required knowledge that are there within the course from IFAC. Whether individual is in England or Pakistan the situation would be the same, they are studying the same curriculum. So we can't say there is any lack in that regard but we can say that this is a bookish approach. Now for training for-example you have done the education, you have studied all the subjects in it but for every area, I call it economic jurisdiction, there are some things which have more importance than others. So I tell you from our area that is Pakistan and specially from Peshawar area situation, suppose an individual have studied all **accounting, auditing [1]** subjects, he has done ACCA so he will study **UK's law [3]** in ACCA. Now when he will work in Peshawar what he will going to do with **UK's law [3]** here because it does not apply here. That is why with UK stream now they [ACCA] have eventually offered Pakistani stream as well. Now the children who has studied education over here and has worked in Pakistani stream I can accommodate him over here as being an employer. Because the solution which I need to my problem he can understand more, he has studied it. If he study UK's law what help he can do for me. If he goes to UK and he has studied Pakistani law he is also useless there. So this is a dilemma. In [ACCOUNTING BODY NAME] they [Student] study **Pakistani law [3]**. But like ACCA global body I suggest there students should have awareness to employability that if they would like to practice in UK then opt for UK's law otherwise select respective country law where they wants to practice. Being an employer sometimes I feel that this awareness is not given at the right time to students. So if they are coming to me like somebody has done ACCA and he is coming to me for the training then I can't help him because he has done his qualification from UK perspective. He has done and qualified in UK's **taxation [2]** so then I can't help it. So he should know these are the available options and what are his objectives.

ANY OTHER THING THAT YOU FEEL IS IMPORTANT FROM ACCOUNTING

		<p>EDUCATION PERSPECTIVE?</p> <p>Another important thing is from both ACCA and [ACCOUNTING BODY NAME] perspective that when a child is doing training he should focus on all areas. Because today's accountant is not considered good without the knowledge of <b>taxation [2]</b> and <b>business law [3]</b>. Earlier there was a time when people used to consider accounting as separate field to taxation. But now <b>taxation [2]</b> is so mixed up with <b>accounting [4]</b> that if an individual does not have command in all subjects, both education as well as skills, until then he is not considered as a good accountant. He has done his education; he has studied it all but it depends how much concentration he gives to <b>interdisciplinary perspective [5]</b> during his training. In our setup we have multiple departments so individual should know what is required in the field and there is need to bring individuals attention to it. Sometimes it happens I am making you learn three things at a time, now if you have taking interest in two and being reluctant to one. Now I know the importance of that one but you does not know. So this is the job of education institutes and colleges to let individuals realise the importance of all three. When you sit on the seat of a CFO [chief financial officer] then you are a dynamic personality. Then issues related to <b>taxations [2]</b>, <b>sales tax [2]</b> and <b>accounting issues [4]</b> will defiantly come to you because that is your core area that is your job. During training if you have ignored that and have an attitude like I am an accountant why should I go for tax knowledge in that much detail then you will be in a hot water when you will be in a position of CFO. Because CFO can't excuse himself that I am an accountant I don't understand taxation. I agree he is not necessary to be an expert in it, but at least he should know that enough so he can resolve day to day issues. So I think it is important to realise the importance of <b>multi-tasking [5]</b> at institutional and colleges level that we are in multi-prone environment and our task is multitasking means that won't be confined to accounting only. So in this regard if awareness comes in students that would be very good.</p> <p>WHAT ABOUT THE SOFT SIDE OF THE SKILLS BECAUSE YOU ARE NORMALLY EMPHASIS TOO MUCH ON TECHINICAL SKILLS SUCH AS AUDITING, TAXATION?</p> <p>An important skill to an accountant is his <b>problem solving skill [6]</b>. Normally all the issues which comes in front of him are related to post-mortem activities. Digging out old corpses is normally considered as his work means he is looking in past so he can't be a futuristic unless he deals issues related to it. Now if we</p>	
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		talk about an army then they need strategic planning when they are at war but if we talk about an accountant he is always in the strategic planning phase throughout his career. But in general if we talk, most of the time in a day almost 90%, an accountant deals with day to day activities. So he does not live in a dreams world like the other business professionals who lives in dreams world. So that is why accountants have normally the image of individuals sitting on the side of the room who deals with current situation rather than more futuristic one. However analysts are normally considered as forward looking which is obvious, because both of them have different job nature and tasks. One has the responsibility to look forward whereas other has to look in past and run things accordingly.	
5	<b>Round 2</b>		
6	<b>Components under scrutiny</b>	The following components of the questionnaire are put for scrutiny under this step i.e. <ul style="list-style-type: none"> <li>• Comprehension of the content</li> </ul>	
7	<b>Content comprehension</b>	Q1: What comes to your mind when you read out the following content?	
		<b>Generic skills</b>	<b>Transcripts</b>
8		Decision modelling	<b>When I read decision modelling, what comes to my mind is the pattern of decision making, the way we make decisions.</b> I hope it's clear. OK. [10]
9		Risk analysis	Risk analysis. SIR PLEASE TELL ME THE MEANING OF RISK ANALYSIS. ACTUALLY THE PURPOSE OF THIS EXERCISE IS TO SEE HOW YOU COGNITIVLY COMPREHEND THE MEANING OF LISTED SKILLS. SO IT WOULD BE MUCH KIND IF YOU TELL me THE MEANING OF ALL OF IT. <b>Risk analysis is basically business risk, like evaluating the economic situation. If the situation is not good in the market and there is a serious fear of closing down the businesses then the same risk will be to your business as well. So you should have the ability to properly evaluate the expected financial losses and come up with strategies to hedge it. SO YOU MEAN FINANCIAL RISK ANALYSIS.</b> Yes that's what I mean. [11]

10		Reporting	Reporting, strongly agree. This is the job of an accountant that's what he do. SIR WHAT DOES IT MEAN BY REPORTING TO YOU. <b>It means financial statements reporting. How you record financial transactions and then income statement. [13]</b>
11		Information technology competence	Information technology competence, no doubt about it. This is an additional thing. I forgot to tell you this in the beginning. SIR PLEASE TELL ME WHAT YOU COMPREHEND BY INFORMATION TEHNOLOGY COMPETENCE. <b>Information technology competence means to know about computer softwares, in which you do accounting. CAN YOU NAME COUPLE OF NAMES? Yes, for-example peach tree, UBS, SAP, Excel such kind of. You will also need to know text softwares, where you can draft letters. FOREXAMPLE? Like Microsoft office and Wordpad. [15]</b>
12		Critical thinking	Critical thinking, no doubt about it. In fact an accountant has the job to think critically. Almost 15% of the accountants have the job of auditors and this skill is what they required on the job. There is a term in law, everybody is innocent unless proven guilty. But for us [auditors] we take it reverse, everybody is guilty unless proven innocent. <b>So this [critical thinking] should be there, even it has been advised to us that in your profession you have to show scepticism. Means whenever something is told to you, you do not take it true unless you completely satisfied with it. So the questioning in mind is always necessary for us. [16]</b>
13		International, Industry and sector perspective	<b>International industry and sector perspective, this is rarely involved in developing countries, as they are isolated from rest of the developed world. But they are eventually towards it. So I will keep this at 4rth. Because of globalisation we are getting connected to international world now. For example if I am working in Unilever and I don't know what standards are getting followed in Germany then I've got no place in Unilever. But if I am working in a local organisation then I will survive. Then I don't need anything such like that, so it all depends. [17]</b>
14		Legal regulatory perspective	Legal that is very important. <b>An accountant today in himself is a very big tax expert and a legal advisor. [18]</b>
15		Marketing/clients focus	<b>Marketing/clients focus that is important, but not that much. Because an accountant job is inward looking, he has no public dealing. So I don't think so it is very important without which an accountant cannot survive. [19]</b>
16		Problem solving and decision Making	<b>Problem solving and decision making, yes, indeed it is important. See decision making should not be here with problem solving. It [decision making] was there before as well, see 1 decision modelling you should use decision making with it. They both are interconnected. Problem solving is different to decision making skill. It is the way using which you solve the given task that is assigned to you. SO YOU MEAN DECISOIN MAKING IS DIFFERENT THEN PROBLEM SOLVING, CAN YOU ELABORATE SIR? See in decision making you just decide, you have nothing to do physically. Whereas in problem solving you should have practical skills involve it. CAN YOU</b>

			GIVE AN EXAMPLE TO IT SIR? <b>There are many individuals who are very good on taking decision on the table. But they are totally fail in the market. If you tell them to go and implement their decision practically in the market then they will get flop. Because they have no market experience, they don't know what are the resources which they have to engage, who the people they need to talk. For-example there are many accountants in the market but not everyone can run his own consultancy firm. These are the people who knows how to grab the market, what are the practical solution to clients problem. That is why if you meet any consultant he will have years of practical experience that brings him the problem solving skill. [20]</b>
17		Leadership	Leadership is important as well. <b>As I told you 15% of the accountants who run their own consultancy firms if they don't have leadership skills then they can't even run their own offices, so this is important. And this should be there in other accountants as well because tomorrow they will have their own team and they have to guide them, lead them. [21]</b>
18		Project Management	Project management, there is a role of accountants in there. SIR MAY I ASK HOW YOU THINK OF PROJECT MANAGEMENT, I MEAN WHAT IS THIS TO YOU? <b>Project management you see is doing things start till end, means managing, labour, organising resources, project planning and completing things in given time frame. [22]</b>
19		Think and behave ethically	Think and behave ethically, the is the matter of utmost importance. SIR CAN YOU EXPLAIN WHAT YOU COMPREHEND BY READING THINK AND BEHAVE ETHICALLY? <b>It means compliance with accounting code of ethics, it's simple. [23]</b>
20		Flexible and be adaptable to changing environment and situation	<b>Flexible and be adaptable to changing environment, there is no doubt about it. See whatever knowledge I have or whatever knowledge I have attained during my life I should not expect that everyone else will have the same level of knowledge. That is why you have to be flexible you have to be open hearted. Because you know things but others do not.</b> It is not necessary that you have done chartered accountancy from Wales and whatever you will say is right. The person who is working in local environment from the last 20 years maybe he is not a CA like you but he has 20 years of market exposure. He has the experience, maybe he won't say anything to you but inside he will be laughing-at you, if you will tell him your great theories. So this is important, flexibility should be important. I am telling you all this because I know. See I've graduated in 2000, at that time the IT skills we used have is related to dial-up internet and Winword, Lotus 123 softwares, but today I use MS Office, excel, peach tree so how I come to learn all that. I've learned all from the new people, my juniors. When I've worked with them I come to know that these are the new things now in demand, so adapted all that. [24]

21		Act strategically	<b>Act strategically, absolutely it is important. It should be there, accountants should not always have backward thinking they should also have forward looking thinking, but not too much emphasis on it. SIR HOW YOU PERCEIVE THE MEANING OF ACT STRATEGICALLY. I perceive the meaning of it as strategic management like market penetration strategies, product development strategy, low cost strategies, like that. [25]</b>
22		Think and act independently	<b>Think and act independently, this is our requirement legally. Whenever a report come to us for audit we must have to have independent and critical review on that. And must give our views on it without any biased opinion. So that is very important I must give it 5. [26]</b>
23		Focused on outcomes	Focused on outcomes, obviously. This is very important because recently accountants have been very criticised for the economic crisis which is going around. Because there were many companies who existed but they are suddenly gone because of economic recession. This is all because of inappropriate or lack of proper assessment tools. This is your job, a CFO's job, why his company has such kind of problems. When companies gets collapse the first eyebrow raises to financial advisors, CFOs, that why they won't be able to analyse this situation. <b>So they have to do outcomes oriented work. [27]</b>
24		Tolerate ambiguity	Tolerate ambiguity. WHAT COMES TO YOUR MIND WHEN YOU READ THIS? <b>I think it is when someone is not clear about his role?</b> SIR IT MEANS AMIBIGUITIES IN ROUTINE ACITIVITIES. Ok yes that is important. <b>[28]</b>
25		Think creativity	Think creatively, very important. Everyone should have this skills. This is the world of change where without learning new things you can't continue. SIR WHAT COMES TO YOUR MIND, WHAT IS CREATIVE THINKING ACCORDING TO YOU. <b>Creative thinking is a very simple term, it means doing things in new and more effective way. For-example the work which you used to complete in 3 days time now the same thing you achieve with new method in 2 days time.</b> So this is one of the example I've given to you. There could be many others. <b>[29]</b>
26		Listen effectively	Listening is very important. <b>You must be known this fact that whatever we know today there is a major contribution of listening in it. If someone is telling you about his situation and you are not mentally present there so you will going to miss all the major stuff that you may never get it again.</b> So that is indeed an important skill and students should develop that skill. Otherwise they will miss what their tutors will say. <b>[30]</b>
27		Present, discuss and defend views	<b>Presentation skill that is important, but I disagree with you on defending views. Yes negotiation ability should be there but it doesn't mean if you are wrong, still you show stubbornness. One should have the flexibility. But as you stated presentation skills are important and one should know how to present his point of view to others. [31]</b>



28		Transfer and receive knowledge	<b>Transfer and receive knowledge, yes of course. The one who can't understand or make others understand his point of view I guess he is not suitable for any job, not just accounting. SIR WHAT YOU PERCEIVE WHEN YOU READ TRANSFER AND RECEIVE KNOWLEDGE. Its communication skills, properly conveying your message to others. It's simple. [32]</b>
29		Negotiate with people from different backgrounds	<b>Negotiate with people from different backgrounds, yes that's what I said, negotiation skills should be there. SIR DO YOU MIND IF YOU CAN EXPLAIN TO ME WHAT NEGOTIATION SKILLS MEAN TO YOU. See it means communication in a way that other understands you, and think of those things which you want to make him understand. Because normally when you talk with someone he has his own state of mind, I mean he has his own perception on that issue. But it's you who has to make him think beyond his state of mind and let him understand what you are saying. It is relevant and important. [33]</b>
30		Understand group dynamics	<b>Understand group dynamics, indeed it is important one. SIR WHAT YOU PERCEIVED WHEN YOU READ UNDERSTAND GROUP DYNAMICS? It is about understanding each other. See in meetings you have to understand each other's attitude. My mom used to say, always speak what other wants to listen. So indirectly she means to say understand others and then speak your point of view in a way that they like it. For-example you can't speak loud with your father similarly in official environment there are many people, some will be elder, some will be younger then you but you have to communicate with all of them. But you can't speak in a bossy way to all of them. So you have to understand them first and then see how you should communicate with them. [34]</b>
31		Communicate in written format	<b>Communicate in written format, very important, writing skills are basic part of our elementary education. [35]</b>
32		Communicate orally	<b>Communicate orally, indeed it is important as well. Speaking is something through which you influence others. There is a famous saying 'think before you speak' so there is a message in it that use your tongue with carefulness. You should know how to talk with your boss, what would be your attitude with subordinates, how you should talk with taxation authorities. So this is important one. [36]</b>
33		Engage in lifelong learning	<b>Engage in lifelong learning, this is continuing professional development very important. I guess we have discussed this before. [37]</b>

34		Apply inter or multidisciplinary perspectives	Apply inter or multidisciplinary perspective, I've already told you this before, so it is important. <b>An accountant must know all relevant knowledge to accounting. He should have knowledge of financial reporting standards, taxation, corporate law as we have talked before. [38]</b>
35		Ability to collaborate with colleagues to resolve conflicts and work in team	<b>Indeed it is important. Obviously we have to work as team, no one on his own can do the complete audit of a firm. We have to rely on each other. We must have the environment of trust in between so that we can understand each other and divide different responsibilities. [39]</b>
36		The ability to analyse and reason logically	The ability to analyse and reason logically, logical reasoning is very important. <b>Often during meetings we talk to each other and discuss different matters on agenda, there logical reason is required. There is no question of right or wrong in the meetings. We have to see things according to law and fair practices and for that we need logics not just talks. [40]</b>
37		Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self promotion and self management. Indeed these are important. Almost all of the employer see these things in the interview. <b>These are basically the qualities which help to decide an individual quality. Especially confidence is very important. This is particularly been noticed in almost all the interviews and it is not very difficult to find out. The way you talk, sit, walk, this has reflection in all of them. [41]</b>
38		Awareness of social and ethical responsibilities	<b>Awareness of social and ethical responsibilities, very important. That is why the accountants are here. I guess it was before as well. SIR THAT WAS THINK AND BEHAVE ETHICALLY. Yes this also means almost the same. [42]</b>
39		Work effectively in diversified cultural settings	Work effectively in diversified cultural setting, yes this is important. <b>If someone is going in multinational then he should have that skill. He needs to understand others culture, values, tradition. [43]</b>
40		Initiative	Initiative, yes of course. <b>Having the ability to take self-initiative makes you favourite in the work environment. Initially, maybe no one expects you to do things on your own. But after sometime this becomes expected of you to do things on your own. A person must have to be self-responsible for the things which he do. No one will come and guide you step by step that you have to do this thing and then do that. So you have to take the responsibility on your own and do your work. [44]</b>

41		<b><u>Constraining elements</u></b>	<b><u>Transcripts</u></b>
42		Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	N/A
43		Students have an inappropriate attitude for learning?	N/A
44		Classes are pack with a large number of students?	N/A
45		Accounting curriculum has insufficient provision to allow for the effective development of skills?	N/A
46		As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	N/A
47		Institution does not reward high quality teaching?	N/A

**Appendix 8e: Representing the recoded data from the Participant 5 (employer) of the pre-testing phase**

1	<b>Group: Employer</b>  <b>Participant 5</b>	Personal information deleted due to ethical reasons	
2	<b>Round 1</b>		
3	<b>Asked Questions</b>	<p>Q1: What generic skills do you think accounting students should acquire for the career development of their accounting profession?</p> <p>Q2: What constraining factors do you think are limiting your ability towards generic skills development in your students? (N/A)</p>	
4	<b>Transcripts</b>	<p align="center"><b>Skills that should be acquired (response from Q1)</b></p> <p>Specifically if we talk about [ACCOUNTING BODY NAME] students then they lack <b>in presentation skills [1]</b>. Two three years back they have realised this thing that <b>presentation skills [1]</b> in [ACCOUNTING BODY NAME] students are not that enough which should be required. So now they have introduced a subject related to <b>presentation skills [1]</b> where they teach <b>presentation skills [1]</b> to them and make them to practically <b>present things in the class [1]</b>. I guess that is 90 hours course that every student has to complete there. That was the thing which used to lack in students.</p> <p>OTHER THAN PRESENTATION WHAT OTHER SKILLS AN ACCOUNTING STUDENTS SHOULD ACQUIRE?</p> <p>Another thing is one should have the <b>confidence [2]</b>; I have seen many people when they come to interviews they can't deliver what is required of them during the interview. They <b>speak with shivering voices [2]</b>. This is very important, <b>confidence [2]</b> must be there, everyone has to work on it. Another thing that is required is <b>decision making skill [3]</b>. The post where most of the accountants work required these skills. There you</p>	<p align="center"><b>Constraints that prevails (response from Q2)</b></p> <p align="center">N/A</p>

		<p><b>have to make prompt decision [3]</b> and at the right time. You have financial matter where you can't do mistakes which could be dangerous. Normally students coming from [ACCOUNTING BODY NAME] are quite filtered and they are polished ones.</p> <p>WHAT ABOUT SOFT SIDE OF THE SKILLS?                  If you see [ACCOUNTING BODY NAME] course all main key skills are already there. For-example If you talk about organisational behaviour then everything is there like <b>leadership [4], job stress [4], motivational theory [4]</b>, all management related things are there. So they teach all the key skills to them and also try to develop in them as well. So all these things are very important, yes they are important. So the course which actually they have designed is very relevant it includes all the required knowledge which suppose to be there and is there e.g. <b>mercantile law [5], income tax law [6]</b>. They check accounting standards and treatments couple of times during the course and make sure they [students] follow strict standards.</p>	
5	<h2>Round 2</h2>		
6	<b>Components under scrutiny</b>	The following components of the questionnaire are put for scrutiny under this step i.e. <ul style="list-style-type: none"> <li>• Comprehension of the content</li> </ul>	
7	<b>Content comprehension</b>	Q1: What comes to your mind when you read out the following content?	
		<b>Generic skills</b>	<b>Transcripts</b>
8		Decision modelling	Decision modelling, this is important and this should be there in students. WHAT DO YOU MEAN BY THIS? I mean this skill is important for accountants and at the time of employment people do need this skill to get hired. OK DO YOU MIND TELLING ME THE MEANING OF DECISION MODELLING, LIKE HOW YOU CONCEPTUALISE IT, WHAT WAS IN YOUR MIND? <b>Ok, decision modelling I conceptualise it as the way you come to a decision.</b> This is very important because in work environment you not always make decisions on your own choice. You need to have a mechanism, you have to set standards, procedures for yourself and even for others. This can't be always like that

			if a situation comes to you and you solve it but later if the same situation comes again then you solve it through another way. There should be a consistency in the procedures you follow and this will only come if you will have the habit of decision making, the way how you come to have the decision. [10]
9		Risk analysis	Risk analysis, important. This means financial risk analysis to me. SIR MAY I ASK WHAT DO YOU MEAN BY FINANCIAL RISK ANALYSIS? <b>Gohar I hope you would be aware of the terms, NPV, sensitively analysis, ratio analysis.</b> These are the simple analysis which are there even in MBA and BBA programs. [11]
10		Reporting	Reporting, of course that is an important one. SIR WHAT DO YOU MEAN BY REPORTING, I MEAN WHAT DO YOU UNDERSTAND BY IT. <b>It means financial reporting to me, balance sheet, income statement, profit and loss accounts.</b> [13]
11		Information technology competence	Information technology competence, yes it is important. Students should have this skill. Nowadays most of the things are done in computers. <b>They [students] must have this skill, they must know how to make accounts in peach tree. They must be very proficient in excel. SIR WHAT ABOUT HARDWARE COMPETENCIES? No I don't think so they need to know hardware. What they have to do with the inside knowledge of LCD or Laptop? The things which required is software competences. If they have the basic knowledge of hardware that is an additional thing but I don't think employers are interested in hardware competencies.</b> I need individuals who should do accounting not computer repairing for me. [15]
12		Critical thinking	Critical thinking, yes this should be there in students and of course employer check this as well. They don't want people who just do routine stuff. For-example if a company is appointing an individual at CFO or internal auditors position then they expect him to do forecasting and tell them the spaces where they need improvement. Therefore accounting students need to have critical thinking. SIR CAN YOU TELL ME WHAT IS CRITICAL THINKING TO YOU. <b>Critical thinking is basically the process of questioning and disbelieving what you see. If you have a critical thinking then what you will see, the first reaction from your side should be why is it like that? Is it suppose to be like that they way I see. Are the financial records correct? I think he is hiding something?</b> So these things come in it. [16]
13		International, Industry and sector perspective	International, industry and sector perspective, what does that mean? SIR IT MEANS TO HAVE THE KNOWELDGE OF ACCOUNTING PROFESSION, Recent DEVELOPMENTS THAT ARE GOING AROUND THE GLOBE IN PROFESSION, WHAT ARE THE NEW STANDARDS AND WHAT ARE THE DEMANDS OF DIFFERENT INDUSTRIES FOR ACCOUNTING PROFESSION. <b>Yes of course, that is already there in [ACCOUNTING BODY NAME] syllabus, we do have international financial reporting standards. If any new standard comes, they directly inform us through email.</b> Other than that we also do have conferences, recently I've attended one in Karachi. They continuously let us

			know about updates in accounting profession. [17]
14		Legal regulatory perspective	<b>Legal regulatory perspective, yes this is important one and employer also see this. For an accountant this is very elementary stuff to know the legal requirements of different authorities. If you don't know auditing then you come to be an auditor. Let's assume you are a tax consultant and someone comes to you, bringing his tax problem, now how you will going to advise him when you, yourself don't know the legal requirement of taxation. This will only be possible if you know the tax legalities'. Only then you can advise someone to do recording in such as way that his tax can be minimised. [18]</b>
15		Marketing/clients focus	Marketing/Clients focus, I don't think employer wants to see this. Most of the people who works in organisational setup they don't have clients dealing. Normally they are appointed are CFO chief financial officer or internal auditors. Normally they have the job of doing financial forecasting or looking internal financial matters of the company. A new individual can't have his own consultancy firm, he has no experience, basically it's not possible for him to start. So I would give 3. If this skill is there then its better but if not then I don't think students will have a major problem. [ACCOUNTING BODY NAME] by laws also don't allow this. Even they don't allow an accountant to approach a client on his own because in that way there is a fear that their independent judgement will be compromised. That's why you would even have noticed that chartered accountants do not do advertisement. This is because [ACCOUNTING BODY NAME] do not allow any sort of professional misconduct. [19]
16		Problem solving and decision Making	Problem solving skill is very important for career development as well as for job attainment. Often people ask a question in the interviews that what will be the benefit to us if we hire you. What extra thing you will add on to us, we already have economists what extra input you can give to us in that regard. So normally employer do check these things and they do ask relevant questions to it. SIR MAY I ASK WHAT DO YOU MEAN BY PROBLEM SOLVING SKILL. <b>Problem solving is the skill that develops over a passage of time. This enables the one to find solutions to new problems. It's not like that you always come for the solutions to seniors which you do not know, you have to figure it by yourself. You have to find solutions on your own. [20]</b>
17		Leadership	Leadership, is important. <b>See when you work at managerial position then you have a team to take along with. So in that position, you should have managerial or say leadership skills. Sometimes you require to have late sittings in the evening then how you will going to make them [staff] stop. Now what are the ways to make them understand all that. Me, myself often take my staff outside on dinners, we have chit chat there. Through this way I come to understand their problems, I come to understand their limitation. This will help me to control my staff. You have to take all of them on board if you want to get maximum out of them. [21]</b>

18		Project Management	<b>Project management. If you are talking about new CA's so I don't think so this is very much relevant. Employers don't expect to hire a fresh CA for the establishment of complete new projects. Normally fresh people come and join a team of CA's. So I don't think project management skill is required in fresh people.</b> Yes you could say this can be a requirement on top level where accountants are hired for setting up new projects, but not in the case which you are asking. Project management skill comes with the time. It requires a lot of experience and understanding which no one expects from and fresh CA. [22]
19		Think and behave ethically	Think and behave ethically, is very important for the career development point of view and at the time of employment as well. In the interviews employer take the notice how an individual perform, what is his general approach. SIR WHAT DO YOU UNDERSTOOD BY READING THINK AND BEHAVE ETHICALLY? See <b>think and behave ethically means how an individual attitude is toward work environment, does he has the ability to obey office decorum. His behaviour should not be anti-social.</b> [23]
20		Flexible and be adaptable to changing environment and situation	<b>Flexible and be adaptable to changing environment and situation, this what I have just told you. In offices you have to work with different people so an individual must be flexible enough to adjust with peoples changing attitude. Need to understand each other otherwise life becomes miserable. One has to come out of his shell to see others life and adjust his work accordingly.</b> [24]
21		Act strategically	<b>Act strategically, Yes of course, this should be there. Students need to have the understanding of different strategic skills and employer often ask about it. When you are hired as a part of a team then you have to understand limitation of others. Because you have to support company's financial matters. You must know, following under this strategy what will be the effect on financial figures. You must have the ability to visualise the situation, you can forecast so that you inform the management before crises situation comes.</b> [25]
22		Think and act independently	<b>Think and act independently, that is very important. I just told you an accountant has to work in team but it does not mean that he should not compromise on his professional independent Judgement. He has to give his views on company's performance without any biasness.</b> Wherever matters he has to bring reality to in front of all stakeholders, whether they are management or shareholders. [26]
23		Focused on outcomes	Focused on outcomes, of course. WHEN YOU READ FOCUSED ON OUTCOMES WHAT WAS IN YOUR MIND. <b>I am talking about financial outcomes, like financial target.</b> [27]



24		Tolerate ambiguity	Tolerate ambiguity, yes that should be there. SIR WHAT DO YOU THINK WHAT IS THIS TOLERATE AMBIGUITY? <b>In my mind it is in the daily routine activities within office e.g. fan is not working, no electricity, tolerating personal jokes in the offices, boss is not in the right mood. So all these things comes in it.</b> In auditing, we often go far areas to visit clients premises. Sometimes we have to stay there to complete the whole audit. During that we have to stay there, eat there, have to use their toilets. So this is an important one. [28]
25		Think creativity	Think creatively, is important but I don't think employers expect this from the fresh people. Normally what they are interested is, what they [employers] are required and whether you can deliver it or not. SIR CAN YOU EXPLAIN HOW YOU TAKE THE MEANING OF THINK CREATIVITY. <b>Creative thinking means doing something positive. For-example you have manufacturing unit then you will have a routine procedure let's say you come in the morning, start production in a set standard way. But if you have a critical thinking you will have a keen eye on your production plant. You will be continuing thinking how you can further reduce the cost of your product. For-example, why this procedure comes first and why its final shape is like that? What would be the effect if you change this thing to another. What is the change, that if you do, you will have a better quality. So all these things reveal your creative thinking.</b> [29]
26		Listen effectively	Listening is indeed important. SIR DO YOU MIND EXPLAINING TO ME WHAT DO YOU MEAN BY LISTEN EFFECTIVELY. This means having good listening skills. <b>Whatever others are saying you should take it serious and understand the instructions, not like that when you go out then you think of what did he say. When you are dealing with someone you should have full attention, understanding what he wants. If talking to boss then understand fully what he told you for and follow his instructions fully. This is very irritating when you say something to someone and after a while he come again and then you have to tell him the whole story start till end again.</b> This is not good for professional career. Those who have such kind of attitude in the office are considered lazy and goof. [30]
27		Present, discuss and defend views	<b>Presentation, discuss and defend views, explain this to me? SIR IT MEANS PRESENTATION SKILLS. Ok, of course, that is important one. Trend is changed a lot, one should have that skill now. In board meetings you have to present quite often. Power point is the software which we normally use for this purpose. Discussing and defending views are not always the case. Discussion is good, having a different opinion is good for healthy discussion. But defending the wrong view is not good. Generally this leaves bad impression of yours on other colleagues. People will think of you as a stupid person. So I don't think this is valid here. So keeping in mind presentation skills only it is 5 then.</b> [31]
28		Transfer and receive knowledge	<b>Transfer and receive knowledge, of course that must be there in students and employers do consider this. In fact, without communication no one can keep himself in official environment. Our job is such kind of that we</b>

			<b>are kind of a bridge between management and legal authorities. If we cannot communicate properly the records then what is the point for us to be here. [32]</b>
29		Negotiate with people from different backgrounds	Negotiation skills, yes, that must be there. SIR CAN YOU EXPLAIN TO ME WHAT DID YOU MEAN BY NEGOTIATE WITH PEOPLE FROM DIFFERENT BACKGROUNDS. <b>Negotiation skills is a technique, normally we see this skill in salesmanship. I mean it is the way they [salesman] convince you to sale his things on you. This is about give and take but in a way that once objective must be achieved. [33]</b>
30		Understand group dynamics	Understanding group dynamics, 4. SIR WHAT COME TO YOUR MIND WHEN YOU READ UNDERSTAND GROUP DYNMAICS. <b>Group dynamics means when you have to work in a team you have to understand others temperament, others potential to work, attitude. You must know who is what capable of.</b> So these are the things that comes in. <b>[34]</b>
31		Communicate in written format	<b>Writing skills are of course important. This one is quiet fundamental skill. Even staff at clerical level need this skill. [35]</b>
32		Communicate orally	Communicate orally, of course, this is very important one. <b>I told you before without having communication skill you stands nowhere in official environment. An accountant who works at managerial level, he has responsibilities on his shoulders, now without this speaking skill how could he manage his daily operations. You can imagine yourself in that position this would be a complete disaster. [36]</b>
33		Engage in lifelong learning	Engage in lifelong learning, this is important. Reading habit is very important for everyone. I tell me son to read a page or two of a book before going to bed. SIR DO YOU MEAN ENGAGE IN LIFELONG LEARNING MEAN READING ABILITY. No I didn't mean by <b>that it means professionally developing yourself.</b> But to develop yourself you must have to have reading habit. People often don't like reading that is why they ignore reading material on different topics. What I've generally noticed those who have reading habits are professionally more updated and well informed. So reading is a kind of pre-request for professional development. <b>[37]</b>
34		Apply inter or multidisciplinary perspectives	Apply inter or multi-disciplinary perspective. Yes, this is very important point. <b>It should not be like that you know accounting but you don't know tax laws or you know accounting but you don't know corporate law. In professional life people expect you to know all such things. You can't continue without knowing such things. Especially organisation expects you to save some of their tax doing creative accounting. Now this is only possible if you know the tax laws, you know reporting standards, you must know what are corporate laws.</b>

			[38]
35		Ability to collaborate with colleagues to resolve conflicts and work in team	<b>Ability to collaborate with colleagues to resolve conflicts and work in team, this is obviously important. In official environment, I told you before, we have to work as a one family. Now conflicts do come and go this is the part of work life. This does not mean we have to fight and stop doing work. On some assignments we even have to stay together and work. Employers see these things, whether new individuals have this ability, and whether they would be able to settle down in their environment. [39]</b>
36		The ability to analyse and reason logically	The ability to analyse and reason logically, indeed this is important as well. SIR MAY I ASK WHAT COME TO YOUR MIND WHEN YOU READ THE ABILITY TO ANALYSE AND REASON LOGICALLY. <b>What come to my mind is when you do argument on some issue you must have some theoretical background to it. Now this background could be objective or subjective or both. SIR WHAT DO YOU MEAN BY OBJECTIVE AND SUBJECTIVE HERE. See objective means like having mathematical, statistical analysis and by subjective I meant by some subjective analysis like TOWS analysis, PESTAL analysis. So these are the things that support your arguments. If your argument is based on some analysis then I would say you have reasoned logically or say analytically otherwise it has no importance to me. [40]</b>
37		Personal attributes such as identifying own strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	Personal attributes such as identifying own strengths and weaknesses, motivation, confidence, self promotion and self-management etc. <b>Of course employers notice these things. Confidence is very important. This is the thing which makes a hero to a zero and a zero to a hero. Often I have noticed that an individual with very ordinary skills get hired at very senior post just because of his confidence skill. This is because, whatever he is saying irrespective of right or wrong he owns it and he says it in a manner that makes other think of that may be he is right.</b> I strongly suggest confidence should be there in students because this matters a lot in the job interviews. One has to work on this one. [41]
38		Awareness of social and ethical responsibilities	<b>Awareness of social and ethical responsibilities, obviously, that I've already told you before. We have accounting code of ethics and it is mandatory for all of us. We have to follow it strictly.</b> But there is nothing comes with its limitation. Sometimes accountants also need to accommodate the will of his employer. You understand what I'm saying. [42]
39		Work effectively in diversified cultural settings	Work effectively in diversified cultural settings, this is important as well. <b>This is life, where nothing is static. God knows where one has to go tomorrow, especially with salaried class individuals, this is quite common. God Knows your rizk (food) is in Pakistan or somewhere in America. So you have to be ready for the change. [43]</b>

40		Initiative	Initiative, can you explain this to me what do you mean by that. SIR IT MEANS SELF INITIATIVE. ok yes that is important, but I don't think employer can check this thing in the interview. So that is 3 from my side. <b>[44]</b>
41		<b><u>Constraining elements</u></b>	<b><u>Transcripts</u></b>
42		Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	N/A
43		Students have an inappropriate attitude for learning?	N/A
44		Classes are pack with a large number of students?	N/A
45		Accounting curriculum has insufficient provision to allow for the effective development of skills?	N/A
46		As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	N/A
47		Institution does not reward high quality teaching?	N/A

**Appendix 8f: Representing the recoded data from the Participant 6 (employer) of the pre-testing phase**

1	<b>Group: Employer Participant 6</b>	Personal information deleted due to ethical reasons	
2	<b>Round 1</b>		
3	<b>Asked Questions</b>	<p>Q1: What generic skills do you think accounting students should acquire for the career development of their accounting profession?</p> <p>Q2: What constraining factors do you think are limiting your ability towards generic skills development in your students? (N/A)</p>	
4	<b>Transcripts</b>	<p align="center"><b>Skills that should be acquired (response from Q1)</b></p> <p>I personally believe <b>auditing [1]</b> is very important. Unfortunately this is the subject which is not in our university education. Even in ACCA there is only one paper in which <b>audit [1]</b> is compulsory. Rest all of the audit associated stuff they have put in as optional. Therefore most of the people bypass it, they don't opt for it. So basically they study only one audit paper. And as that is there first and last paper so their focus is just only on passing it, so they don't do much on it. But the plus point of ours CA program is we study <b>auditing [1]</b>, <b>financial accounting [2]</b> in detail, <b>tax [3]</b>, <b>cost management accounting [4]</b>, <b>laws [5]</b>, <b>IT information system [6]</b>, then we go to firms. So academically we have all the things. In firms we get the opportunity to apply those things what we have studied in books. we see the real accounting there. Plus the professional work experience, the time we spend during it. I appreciate this thing that ours institute [ACCOUNTING BODY NAME] has designed this CA program in such a way that they insure that when our students who qualified as chartered accountant, when goes in the market then the skills which they have learned in verbal and writing, they should also know in practical. Our three and a half years of articleship, first it was of four years now it is</p>	<p align="center"><b>Constraints that prevails (response from Q2)</b></p> <p align="center">N/A</p>

of three and a half years, which I have also done as well, in that they [training organisation] send us to different clients as part of audit team. We have a hierarchy over there, initially we go as audit assistant then audit assistant to semi senior, senior and finally supervisor. After every season they do ours evaluation and then they promote us based on performance appraisal. During that the good opportunity we get is within our team. We do have senior members within team so we get a lot to learn from them. It is really a tough time. I would say the articleship we have in CA, according to me I don't think is there any other program tougher than this one. Because the way we get groomed in this one, the way we are polished, and when once, one get out of it then even employer says good about him. I just want to say in comparison to ACCA and CA students the main difference is the exam qualification. Students from them [ACCA] come to employer after qualification, straight away, so actually they have no practical work or hands on experience. Our qualification does not complete without articleship so it is not possible for us unless you go join a firm and you register with them, even you can't register for CA final exam without it. Actually ACCA has put a difference here. They say first you qualify the exams, pass the exams, and then you become an ACCA qualified accountant, afterwards you may join a firm or industry. There you get three years of work experience from ACCA panel registered employer and then they will offer you ACCA membership. So if you want to become a member of ACCA then you does required work experience, not for exams qualification. Whereas in our CA you can't even qualify for the final exams unless you have the work experience. So for us it is a compulsory part whereas for them this is an optional. If someone does not wants to be a member of ACCA then simply he should qualify ACCA exams and join the market. What we have studied in books we do it there [articleship]. What we have studied we see their compliance there [articleship]. So we get the opportunity there. Now within the firm [training organisation], the thing is, within the three and a half years of period which we have there, our [ACCOUNTING BODY NAME] has designed some grids to divide our time in the firm. They ensured training organisation and CA training firms to divide like 20 to 30% of students time in text, so that the student get practical idea of it. He [student] has already studied it [text] at the inter level and in the final

level he will study it again. But he should have some practical idea of it. But to ensure this they [[ACCOUNTING BODY NAME]] suggest 20 to 30% of students time has to be embedded in practice relevant to text in which he [student] has to make tax returns etc. So [ACCOUNTING BODY NAME] does have a grid for it but unfortunately I will say the compliance of it is does not follow strictly. But being an institute [ACCOUNTING BODY NAME] does have worked on it. So they do have said it, like spend 60 to 70% of student time in auditing. Because the main field we have is basically auditing, consultancy and insurance. For-example if the one [student] has spend some time in **tax [3]** then you suppose to direct him to corporate setup, in which he will come to understand **companies law [5], corporation statutory filing [5]** etc. Because in industry, employers expect us, like when a CA qualified comes to them he knows everything about **taxation [3], knows accounting [2], auditing [1]**, knows company's matters like **corporation, statutory filing [5]**, everything. He expects us all that and all that things are in our CA syllabus. Means related to corporate sector there is not anything or area which is not there in CA syllabus. We do study **financial accounting [2]** at three levels, two papers we pass in CA inter, third paper advance financial accounting we give in CA final. **Cost accounting [4]** we study in inter level, theirs **advance management accounting [4]** and **strategic management [8]** we study in CA finals. Introduction to **taxation [3]** we study in CA inter, advance **taxation [3]** we study in CA finals. Auditing we study in inter, advance auditing in CA finals. **Financial management [7]** named with business finance management is our paper, **strategic financial management [7]** SFM is our paper where we study **investment appraisal [7], portfolios management [7], forex management [7], international finance [7]** everything is there, and this thing we study in CA final. And along with we also have **information system audit and control [6]** in final, which we have already studied in inter subject named **information system [6]**. So there is as such not any subject left which you could think of has link with corporate world and not included in CA. I appreciate [ACCOUNTING BODY NAME] body for the way they have designed the syllabus. And another thing is, this is the beauty of our CA program that academically all the CA's are equal. In ours program, we do not have grading, division, GPA's system, we have either pass or fail. Only if we do have the

differences then it is of the exposure which we get during articleship. Like I have worked in Fergusons, the way I have got the exposure there, I can't get this in small firm. Even the difference varies from city to city, I have worked in Fergusons Karachi, in last year of it [articleship] I have transferred myself to Fergusons Islamabad, that was inter-office transfer. I still regret my decision, I didn't get the same exposure there [Fergusons Islamabad]. The industry, peoples working attitude was totally different in Islamabad. Our institute [[ACCOUNTING BODY NAME]] does have worked on that issue, like three four years back. Our CA president came, he really worked on that, the mandate he came up with is like those small firms who are on [ACCOUNTING BODY NAME] panel and are with less resources should do networking. This is the way through which there resources get pool together and they will get access to those resources which they do not have individually. But unfortunately there are many firms who are reluctant to it. Because they don't want to lose their identity like in Fergusons there are more than twenty partners, no one knows each one of them individually other than Fergusons name. Similarly nobody knows the partners of KPMG but everyone knows KPMG. So small firms like Shouqat Amin shah & Co and Rifaqat Baber & Co, people don't like to losing their identity, so the trainees also do suffer there. Here the difference comes.

THAT ARE WONDERFUL THINGS YOU JUST SAID TO ME BUT MOST OF THE SKILLS YOU TOLD ME ARE OF TECHNICAL NATURE, WHAT ABOUT THE SOFT SIDE OF THE SKILLS?

I normally classify skills in two ways; one is the academics related skills which he [student] comes with e.g. the ones from the core field as like **auditing [1]**, In that [ACCOUNTING BODY NAME] insure in our syllabus that we do study all areas in **auditing [1]**. First we get the topic understanding and clarity and concept and then we go to the firm apply it and learn practically. Similarly there are **financial reporting standards [2]** we learn them at inter level. They [[ACCOUNTING BODY NAME]] insure conceptual clarity by giving us different examples and scenarios to it. But practically how accounting is actually be done, we go to firms and learn it there, while doing audit to different firms. Another is **taxation [3], company law [5], business language skills [11]**, even formally we



have **presentation skills [10]** course at CA inter level. There is a certification with the name of PC which is normally conducted by the institutes in which we study. In that we have long presentation, short presentation, group discussions, interviews, panel interviews, all these things are included there. This is a mandatory requirement by [ACCOUNTING BODY NAME]. It is a 90 hours course, in that within the institute our tutors design this course for us. I mean obviously the guidelines are given to them by [ACCOUNTING BODY NAME] but here the testing is not been done by them [[ACCOUNTING BODY NAME]]. So it is through internal assessment system by the institute. And institute give certification that goes to [ACCOUNTING BODY NAME]. The other classification I would say is of practical and analytical skills. These are the skills, that, we go in the firm and apply it there. See if you don't have the clarity like you don't know international reporting standards then how you can check the compliance of it. So you have to learn **accounting standards [2]**, **auditing standards [1]** as well, also have to learn **tax laws and provisions [3]**. Academically we also learn soft side of the skills like **leadership [13]** we do learn. **Leadership theory, styles, types, everything motivation theory [13]**, all such things. Organisational behaviour is a subject in CA inter, in that all such things are included. I mean in soft skills it has **decision making [12]**, change process management, all these areas are there.

BEING AN EMPLOYER WHAT SKILLS YOU WOULD LIKE TO SEE IN NEW ACCOUNTING RECRUITS?

Being an employer the skills which I see are important that I can asses in the interview, in that short span of time as an interviewer, first I see the person's **communication [9]** and **presentation skills [10]**. The **communication [9]** is the most important skill I say. If you know everything and you can't communicate, you know the problem and you even have the solutions to it but you can't convince someone, then according to me it's a total failure. So today, in the world, the most important element is **communication skills [9]**. In interpersonal skills, we say if a person is not been able to understand others problem, can't understand their feelings, can't understand their situation, position, what their problem is, can't find them then I would say again it's a

communication gap and then its again a failure and that is very important. In fact I would say whether an individual is an accountant or from some other profession, see all our accounting professionals at least they come as assistant manager or above so at managerial position these things matter a lot. Now as I have joined here, I have two years of post qualification experience. so I have joined here directly as a manager.

Ok, WHAT OTHER SKILLS YOU WOULD LIKE TO ASSESS WITHIN INTERVIEW?

After **presentation [10]** and **communication skill [9]** the **decision making skill [12]** is very important. Means, often you come across critical situations where you have two or more options there. After assessing different aspects of it you choose one. So **decision making [12]** is equally important and interviewer does check this thing in the interview. They may give you a scenario, like giving you a paper scenario and ask different questions to it, it all depends on the interviewer style. He may verbally make a scenario, or make a picture like this or that way to visualise the situation and asks what you will do if you are in that position, so it all depends. But all such things we do learn in the firms. In the firm there is a proper organised hierarchy. Everyone is been told in the beginning that grooming is very important. Whatever task we [training organisation] give you, you [student] have to note it down. At the moment you are not in a position to decide whether this thing is worth noting or not, whether this is worth reporting or not, but you have to note each and everything. So you have to do that, whatever are the observation one has to write it down. When they [managers] sat for review then the reviewer will decide and he will discuss with you that whether this thing is worth recording it or not. So like in that way your **decision making skills[12]** gets polish in two to three years of training time, and become full polished when you come to a supervisor or manager position.

ANY OTHER SKILL?

Other skills are also important for a manger like **leadership skills [13]**. But skills like **leadership [13]**, I personally believe is very difficult to assess in the interview. Normally, the interviewer asks questions like

		where you have previously worked, how many sub-ordinates or team members you have, how many people reports to you, how many people to whom you report. But it is difficult to analyse this thing in the interview. But <b>leadership skill [13]</b> is indeed very important because as I said, in managerial position it is obvious you will have a team and then without leadership ability how you will manage or guide it. If let's say you have a very competent team and they are committed towards hardworking but as said if you can't lead them, you can't give them guideline or path then you can't get the contribution from their side. But still I say again it is very difficult to assess in the interview because it is the scenario based skill, which could be assessed only there.	
5	<b>Round 2</b>		
6	<b>Components under scrutiny</b>	The following components of the questionnaire are put for scrutiny under this step i.e. <ul style="list-style-type: none"> <li>• Comprehension of the content</li> </ul>	
7	<b>Content comprehension</b>	Q1: What comes to your mind when you read out the following content?	
		<b>Generic skills</b>	<b>Transcripts</b>
8		Decision modelling	Decision modelling, 4 and this one is 3. THE PURPOSE OF THIS EXERCISE IS TO IDENTIFY ANY COGNITIVE MISUNDERSTANDING FROM RESPONDENTS POINT OF VIEW. I WANT YOU TO TELL ME THE MEANING OF EACH GENERIC SKILLS ONE BY ONE WHEN YOU FILL IN. Ok, next one is risk analysis. SIR PLEASE TELL ME WHAT COMES TO YOUR MIND WHEN YOU READ DECISION MODELLING. <b>Decision modelling is decision making. Whenever you have two or more choices you should have the ability to analyse each choice. Find out its pros and cons and take the decision accordingly.</b> So that was in my mind. And employer do notice decision making skill in the interview as well. But in 15 or 20 minutes time, it is quite difficult to judge such kind of skill, but he [employer] may ask you a couple question or give you a scenario as we discussed earlier and tell you what would be your choice if you would be in that position. This is what I mean by that. <b>[17]</b>

9		Risk analysis	Risk analysis, of course this is important one for student career development as well. In [ACCOUNTING BODY NAME] there is a subject related to risk analysis, SFM [strategic financial management] <b>in which we study investment appraisal, portfolios management techniques. So risk analysis already is covered in that subject. [18]</b>
10		Reporting	Reporting, I guess you mean by business report writing skills. WHAT DO YOU MEAN BY THAT CAN YOU ELEGORATE IT, ARSHAD? <b>Business report writing skills means like making profit and loss statement, preparation of balance sheet account.</b> OK AND WHAT DO THINK IS THAT IMPORTANT? Yes of course this is very important. One must know how to make profit and loss account. He must know how to do reporting. <b>[20]</b>
11		Information technology competence	Information technology competence, of course. <b>Knowledge of basic software is necessary.</b> SIR MAY I ASK WHAT DO YOU MEAN BY BASIC SOFTWARES. This means at least an accountant must know how to make spreadsheets in excel, putting in the formulas, Microsoft project. He must also be able to write the letters in MS word. AND WHAT ABOUT THE HARDWARE SKILL? No, I don't think so they need to know about parts of the computer. That would be an extra burden on them which I'm afraid would have no objective output. <b>[22]</b>
12		Critical thinking	Critical thinking, of course, there is no doubt it. This is very important. <b>An accountant always need to see things with scepticism. He needs to assure whatever the reports are saying must match with actual reality.</b> This is their job otherwise no one will have trust on them. This should will be 5. <b>[23]</b>
13		International, Industry and sector perspective	International, industry and sector perspective, can you explain? SIR IT MEANS TO HAVE THE KNOWELDGE OF ACCOUNTING PROFESSION, RECENT DEVELOPMENTS AROUND THE GLOBE, NEW ACCOUNTING STANDARDS AND WHAT ARE THE DEMANDS OF DIFFERENT INDUSTRIES FOR ACCOUNTING PROFESSION. Yes, there is no doubt it, this is important. <b>We do have a course on international financial reporting standards, this thing covers in that. Other than that as I told you we have a CPD program for all its registered member. Through this way they let us continuously inform about new updates in accounting world.</b> So this is important and is already there. <b>[24]</b>
14		Legal regulatory perspective	Legal regulatory perspective, of course, this is important and they [students] should have the knowledge of it. <b>They must know which company is following which standards. Especially for people who are working in Pepsi cola or coca cola multinationals, they need to understand the legal regulatory structure of the parent and subsidiary firms. This is important for them and this is mandatory requirement for them to understand in multinationals.</b> So they should not avoid this. <b>[25]</b>
15		Marketing/clients focus	<b>Marketing/clients focus, this should be there but I don't think employers will be much interested in this one.</b> Those who are thinking of their own consultancy firms they should have this marketing skills. But I think employers in Pakistan will be least bothered about it. I don't think they will ask hardly a question in relevance to

			this one in the interview. [26]
16		Problem solving and decision Making	<b>Problem solving and decision making. I guess I've already told you about decision making. Whereas problem solving that is important as well. DO YOU MIND TELLING ME THE DIFFERENCE. Decision making is when you have to select one among multiple choices. However, problem solving is something different. LIKE IN WHAT WAY? Problem solving means coming up with a feasible solution to a problem CAN YOU ELABORATE THIS POINT FURTHER?</b> For-example you have to register a general sales tax company in one weeks time in order to collect order from the cupola. But the problem is, minimum it takes 15 days to register a new company. Now you have to propose a solution that should be feasible to execute so that you don't miss the order. Now this is the problem which had no solution before. The only solution would be the one which you will propose. But must keep in mind that should be workable. That must be logical, management do not appreciate illogical proposal. [27]
17		Leadership	Leadership, we have a subject organisation behaviour on that one. We study different types of leadership styles. <b>This is an important skill because most of the people after passing CA start works in supervisory positions. They need to know how to handle their staff in this position. You know our culture, they have to get strict sometimes but they should not be like that of military style. Their purpose is to get the work done.</b> But as we have discussed before this is a difficult to assess in 15 or 20 minutes interview. But this one is indeed important and students should have this skill developed. [28]
18		Project Management	<b>Project management, of course. I'm appointed here [current employer] subject to a new project establishment. My employer wants me to establish a whole new internal audit system, which was not there before. For this purpose they have given me the full authority to hire a team of people who could support me in that cause.</b> In my organisation before coming to me there was as such no internal auditing system but as I said to you it's a growing company therefore they wanted me to establish this system so they can find loop holes in the production and maintain good quality standards and stop financial embezzlements, which they are doubted for. So of course this is important. [29]
19		Think and behave ethically	<b>Think and behave ethically, indeed this one is very important. [ACCOUNTING BODY NAME] has very strict code of ethics that everyone has to follow. If any misconduct they notice from any of its member then they give proper notice to his misconduct as a warning.</b> And if they notice again the misconduct of the member then this can leads to cancellation of the membership. So we have to be very careful about that. [30]
20		Flexible and be adaptable to changing	<b>Flexible and adaptable to changing environment and situation. Flexibility is very important in every aspect of life. Even in marital life one has to show flexibility. Same is the case here, see my case, I told you I've worked</b>

		environment and situation	in Fergusons which is the part of Pricewatercoopers. Now I work in a local industry of Peshawar, not even in Karachi. I don't know whether you can imagine the difference or not but I have to compromise on many things. People attitude is different, even the work environment is not the same. But I have to adjust myself here. [31]
21		Act strategically	Act strategically, what do you mean by this? THIS MEANS ACCOUNTANTS NEED TO HAVE STATEGIC MANAGEMENT SKILLS LIKE SWOT ANALYSIS, PESTEL ANALYSIS, TOWS ANALYSIS, PORTERS 5 FORCES. Yes, what I think they [students] should know about these things. They are important especially at higher level. I am not sure whether employers are interested in such kind of things but they may be important in some role. If you ask me whether I would consider such things for employment then I would say no. But this depends on the nature of the job role. In my organisation, they have separate, analyst for it. Therefore I don't think I will ask for such qualification from my sub-ordinates. In [ACCOUNTING BODY NAME] there is a subject of business management, all such things are already covered in. [32]
22		Think and act independently	Think and act independently, obviously. This is one of the requirement in our accounting code of conduct. <b>We must have to give fair and unbiased opinion on our own professional judgment. Believe me there are many things which people try to hide, especially in my case people don't want me in there premises.</b> My job is to tell management about that grey areas where company employees are doing embezzlements or where there is a space for it. When I go they offer me seat bring tea for me but I do not have to distract my attention from my work. Where I see such kind of attitude I become more conscious of it. [33]
23		Focused on outcomes	Focused on outcomes, yes, of course. <b>Things needs to be outcome oriented and anyways the job of accountants are very hectic. I agree with this point they should have focus on outcomes rather than routine activities. SIR DO YOU MIND IF I ASK WHAT DO YOU MEAN BY OUTCOME ORIENTED. I mean to say that whatever you do there should be some purpose for it.</b> For-example if I am doing internal audit then there is some purpose behind it. Recently I've told my management to give me in writing, when they hired me what was in their mind. What was the objectives they want to achieve through me because before me there was no internal audit system. Now they have given me the objectives which they want me to achieve within this year, now I can work accordingly. So now my work becomes outcome oriented because now I do not need to waste my time in here and there, petty activities. Now I'm much more focused. So this is what I meant. [34]
24		Tolerate ambiguity	Tolerate ambiguity, obviously, this is what I say professional attitude. CAN YOU EXPLAIN THIS TO ME. <b>See work environment often becomes very annoying especially when you have the deadlines. During that time people normally gets very aggressive and often in that pressure they do stupid things. But you have to ignore such</b>

			<b>things because people also ignore you, so it is vice versa. You have to be very calm and keep patience, ups and downs do come and go. So tolerate ambiguity to me means ignoring the mistakes of each other. [35]</b>
25		Think creativity	Think creatively, this should be there also. This is how organisations grow. CAN YOU EXPLAIN WHAT DO YOU MEAN BY CREATIVITY. Creativity is such kind of a thing that makes you differentiated from others. People starts liking you, management wants you to be there in board meetings. Boss likes to share his problems with you and these are the things that helps in your promotion. Your colleagues may get envy of this but here it is the survival of the fittest. So <b>the one who comes up with the great ideas, having better solutions will get promoted. [36]</b>
26		Listen effectively	Listen effectively. Of course listening is important. <b>Without this skill how could you expect one to follow proper instructions. Even this skill is important at college level, in order to learn things. You must need to under what your teachers are saying and follow what exactly they are required. Must have to be attentive all the time.</b> This is important for their career development. [37]
27		Present, discuss and defend views	<b>Present, discuss and defend views. There is no doubt that presentation skills are important. But here I slightly disagree with you on these points, discuss and defend views. YES SIR, WHAT IS THAT? Whereas presentation is concerned that is indeed an important skill but defending the wrong is not right thing to do. We all are human beings and human do make mistakes. So if you are wrong on some point then you should not stand beside it. You have to accept it and do not argue on it further that will make your position weak.</b> Having stubborn attitude is not good for career development. This should not be there in one's personality. [38]
28		Transfer and receive knowledge	<b>Transfer and receive knowledge, of course. Almost all the skills you have mentioned here are important. CAN YOU TELL ME WHAT DO YOU THINK THIS SKILL, WHAT IT IS ABOUT. Transfer and receiving knowledge sounds to me as communication skill. It is the other way of saying it. SIR CAN YOU ELEABORATE? Transfer and receiving knowledge means, understanding what others are saying and let others understand what you are saying. [39]</b>
29		Negotiate with people from different backgrounds	Negotiate with people from different background. Negotiation is an important skill, especially at management level. Management delegate you responsibilities and expect from you to deliver it. In such you may have to compromise on many things. But you are an accountant you can compromise on many thing but not everything. You have some certain limitation beyond which your reach is not possible. For that you need to have negotiation skills. DO YOU MIND EXPLAINING IT MORE. <b>Negotiation skills to me is making other understand what you are saying. Let others know what's your limitation are and trying to accommodate others at maximum in that. It is just like finalising a deal on a project, let each other understand what you can deliver and what you cannot and what are the reasons for it. So in short it is all about give and take. [40]</b>

30		Understand group dynamics	Understand group dynamics, you mean group of people? YES, I MEAN BY THAT. Yes that is important. <b>One need to understand the in between chemistry of people. In general it is not good to be the part of official politics but unfortunately this is the true reality and one has to understand such things. Especially this thing matters in the meeting where you have to understand, when you have to speak and when not, because your promotion is depending on all that. Tomorrow these will be the people who will write your ACR [Annual Credibility Report].</b> So of course understating group dynamics is important, even in the interview you have to understand what is the expectation of interview panel from me and then you have to speak accordingly. So these, all things come under it. [41]
31		Communicate in written format	<b>Communicate in written format, of course. Writing skills is the matter of utmost importance. One should be capable of drafting letters, office memos.</b> Even there is a subject on business communication in [ACCOUNTING BODY NAME]. [42]
32		Communicate orally	<b>Communicate orally, of course. Speaking is the skill which is normally get tested in the interview. For jobs in multinational you have to give interviews on telephone, normally in Pakistan. In that you must have very clear English. Almost all of the multinationals demand for fluency in English in their advertisements. You know that there is a general trend of English in our offices, people like speaking in it. So undoubtedly this is an important thing one must have to have English proficiency.</b> [43]
33		Engage in lifelong learning	Engage in lifelong learning, I guess we have already discussed this one. YES SIR IN RESEARCH WE DID. [44]
34		Apply inter or multidisciplinary perspectives	Apply inter or multidisciplinary perspective. Yes of course this should be there in students. <b>Practically things are not like the books, they are quite interconnected with each other. As we were talking of strategic management before here its part comes in. Being a financial analyst you must know what would be the effect on your financials if you follow so and so strategy. If you do such kind of accounting what would be its effect on taxation, are you violating any corporate law.</b> These kind of things are indeed important for an accountant to know especially. Because his job is at management level. He at least should know what are these things. [45]
35		Ability to collaborate with colleagues to resolve conflicts and work in team	Ability to collaborate with colleagues to resolve conflicts and work in team. Employers do focus on these ting during interviews. Actually when you work as an internal auditor you become the part of an organisation. Your job there is to work for the betterment of the company, there you must have to show the concern for the company. You are not an external auditor who will get his fee and then audit. You have to point out things in a



			way that management rectify its operations in a way that minimize its cost. In order to do this you have to work in close with the operation team. <b>You have to understand them, their environment, their limitation, you have to give them alternatives, ask their opinions. So you need to collaborate, you have to work with them. Only then you can take the positive feedback out of them. Otherwise grievances and grudges will come in between and that will make your task more difficult. [46]</b>
36		The ability to analyse and reason logically	The ability to analyse and reason logically, important, indeed. CAN YOU EXPLAIN THIS TO ME LIKE WHAT YOU COMPREHEND BY ANALYSE AND REASON LOGICALLY. <b>See logical reasoning is only possible when you have some sort of analysis supporting your argument or some reference. When one is suggesting something and you are negating saying it's not possible then you should have a reason for it, why it's not possible, what are the analytical reasons behind it. So whenever you say something like that you need to do proper work on it supporting whatever you are saying. This is what I meant. [47]</b>
37		Personal attributes such as identifying owns strengths and weaknesses, motivation, confidence, self-promotion and self-management etc.	Personal attributes of course these are important things. Confidence and knowing your own strengths and weaknesses are especially very important. Others are important as well but not as much as confidence. If you ask collectively then I would say 4 because there are many things in it. <b>[48]</b>
38		Awareness of social and ethical responsibilities	Awareness of social and ethical responsibilities. SIR DO YOU MIND EXPLAINING ITS MEANING TO ME? This mean accountants must know what are their responsibilities towards shareholders and other people. They must disclose all accounting facts and do not hide anything from the society. They should have professional independent judgement on financial records. So these are the things that comes in it. <b>[49]</b>
39		Work effectively in diversified cultural settings	Work effectively in diversified cultural settings. SIR DO YOU MIND EXPLAINING ITS MEANING TO ME AS WELL? I <b>told you before, one should have to be ready for any sort of change. Especially who are thinking to work in Unilever, Procter &amp; Gamble, Johnsons &amp; Johnsons, such kind of multinationals. They need to understand organisational culture, need to be flexible enough to absorb cultural change and settle their self there. So of course this one is important, People must know how to work with foreign community. [50]</b>
40		Initiative	Initiative, that is important as well. <b>Initiative is what management is looking for. They wants to have individuals on top level positions who work on their own. They should not have a need to tell them. They should consider things important by themselves and solve different upraising issues. Top level management</b>

			has lots of other things to handle they don't think of petty concerns. So taking self initiative is an important quality. [51]
41		<b><u>Constraining elements</u></b>	<b><u>Transcripts</u></b>
42		Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	N/A
43		Students have an inappropriate attitude for learning?	N/A
44		Classes are pack with a large number of students?	N/A
45		Accounting curriculum has insufficient provision to allow for the effective development of skills?	N/A
46		As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	N/A
47		Institution does not reward high quality teaching?	N/A

### Appendix 9a: Test 1 – Expectation gap

As the skewness and kurtosis statistics across all skills items are not in between the range of +1.0 and -1.0. Therefore data recorded over the constituent of expectation gap observe abnormal distribution from the respondent groups (20 educators and 20 employers).

#### Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Decision making	40	-.171	.374	-.467	.733
Financial risk analysis	40	-.559	.374	-.559	.733
Financial accounting	40	-.559	.374	-.559	.733
Information technology competence	40	-.720	.374	1.136	.733
Critical thinking	40	-1.195	.374	.525	.733
International global perspective	40	-.654	.374	-.467	.733
Legal regulatory perspective	40	-.766	.374	-.470	.733
Marketing/clients focus	40	-1.092	.374	1.653	.733
Problem solving	40	-.245	.374	-.536	.733
Leadership	40	-.214	.374	-.585	.733
Project management	40	-.583	.374	.100	.733
Think and behave ethically	40	-.765	.374	.765	.733
Flexibility and adaptability	40	-.852	.374	1.339	.733
Strategic management	40	-.164	.374	-.786	.733
Independent thinking	40	-.598	.374	-.252	.733
Focused on outcome	40	.608	.374	.106	.733
Tolerate ambiguity	40	-.623	.374	.638	.733
Think creatively	40	-.357	.374	-.012	.733
Listen effectively	40	.356	.374	.567	.733
Presentation skills	40	.306	.374	-.643	.733
Negotiation skills	40	-.170	.374	-.637	.733
Understanding group dynamics	40	.098	.374	.159	.733
Communicate in written format	40	-.400	.374	-.592	.733
Communicate orally	40	.036	.374	-.060	.733
Engage in lifelong learning	40	-.076	.374	-.551	.733
Inter or multidisciplinary perspective	40	-.581	.374	1.166	.733
Teamwork	40	-.467	.374	-.622	.733
Ability to analyse and reason logically	40	-.030	.374	-.233	.733
Personal attributes	40	-.004	.374	-.004	.733
Work effectively in diversified cultural	40	-.764	.374	1.078	.733
Self-initiative	40	-.371	.374	.281	.733
English language	40	.306	.374	-.643	.733

Statistics	40	-0.315	.374	-.282	.733
Cost and management accounting	40	-.171	.374	-.467	.733
Economics	40	-.039	.374	-.202	.733

### Appendix 9b: Test 1 – Constraints gap

As the skewness and kurtosis statistics across all constraining elements are not in between the range of +1.0 and -1.0. Therefore data recorded over the constituent of constraints gap observe abnormal distribution from the respondent group (20 educators).

#### Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	20	.108	.512	-.410	.992
Students have an inappropriate (non-serious) attitude for learning?	20	-1.251	.512	-.497	.992
Classes are pack with a large number of students?	20	1.148	.512	3.667	.992
Accounting curriculum has insufficient provision to allow for the effective development of skills?	20	.004	.512	.178	.992
As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	20	-.442	.512	-2.018	.992
Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?	20	-.396	.512	-.547	.992
Students have a lack of interest in accounting discipline?	20	-.250	.512	-.263	.992
People (potential students) have misperception about accounting education as being highly mathematical in nature?	20	-.292	.512	-.734	.992
Accounting institutes are not offering adequate training opportunities to their academic staff?	20	.945	.512	-1.242	.992
Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?	20	-.152	.512	-.880	.992
For teaching in accounting institutes it is difficult to find competent academic staff?	20	.120	.512	-.207	.992
During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations?	20	.218	.512	-2.183	.992

### Appendix 9c: Test 1 – Performance gap

As the skewness and kurtosis statistics across all skills items are not in between the range of +1.0 and -1.0. Therefore data recorded over the constituent of performance gap observe abnormal distribution from the respondent groups (20 educators and 20 employers).

#### Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Decision making	40	-.081	.374	-.617	.733
Financial risk analysis	40	-.290	.374	-.499	.733
Financial accounting	40	-.711	.374	-.247	.733
Information technology competence	40	-.470	.374	.131	.733
Critical thinking	40	-.167	.374	-1.338	.733
International global perspective	40	-.222	.374	-.955	.733
Legal regulatory perspective	40	-.417	.374	-.817	.733
Marketing/clients focus	40	-.259	.374	-.216	.733
Problem solving	40	-.159	.374	-.522	.733
Leadership	40	-.206	.374	-.606	.733
Project management	40	.052	.374	-.392	.733
Think and behave ethically	40	-.654	.374	-.010	.733
Flexibility and adaptability	40	-.618	.374	.033	.733
Strategic management	40	.108	.374	-.658	.733
Independent thinking	40	-.249	.374	-.240	.733
Focused on outcome	40	-.255	.374	-.249	.733
Tolerate ambiguity	40	-.451	.374	-.259	.733
Think creatively	40	-.067	.374	-.593	.733
Listen effectively	40	.188	.374	-.541	.733
Presentation skills	40	-.294	.374	-.438	.733
Negotiation skills	40	.278	.374	-.994	.733
Understanding group dynamics	40	.065	.374	-.830	.733
Communicate in written format	40	-.182	.374	-.712	.733
Communicate orally	40	-.358	.374	-.388	.733
Engage in lifelong learning	40	.143	.374	-.278	.733
Inter or multidisciplinary perspective	40	-.420	.374	-.112	.733
Teamwork	40	.018	.374	-.721	.733
Ability to analyse and reason logically	40	.000	.374	-.385	.733
Personal attributes	40	.086	.374	-.240	.733
Work effectively in diversified cultural settings	40	-.519	.374	-.151	.733
Self-initiative	40	-.264	.374	-.463	.733
English language	40	.076	.374	-.778	.733
Statistics	40	-.028	.374	-.767	.733
Cost and management accounting	40	.199	.374	-.387	.733
Economics	40	-.058	.374	-.592	.733

### Appendix 10a: Test 2 – Expectation gap

As the skewness and kurtosis statistics across all skills items are not in between the range of +1.0 and -1.0. Therefore data recorded over the constituent of expectation gap observe abnormal distribution from the respondent groups (20 educators and 20 employers).

#### Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Decision making	40	-.036	.374	-.503	.733
Financial risk analysis	40	-.377	.374	-.656	.733
Financial accounting	40	-.080	.374	-1.011	.733
Information technology competence	40	-.303	.374	.394	.733
Critical thinking	40	-.829	.374	-.280	.733
International global perspective	40	-.080	.374	-1.011	.733
Legal regulatory perspective	40	-.400	.374	-.592	.733
Marketing/clients focus	40	-.707	.374	.342	.733
Problem solving	40	-.119	.374	-.588	.733
Leadership	40	-.157	.374	-.483	.733
Project management	40	-.559	.374	.352	.733
Think and behave ethically	40	-.588	.374	.174	.733
Flexibility and adaptability	40	-.585	.374	.954	.733
Strategic management	40	-.060	.374	-.708	.733
Independent thinking	40	-.663	.374	.037	.733
Focused on outcome	40	.036	.374	-.060	.733
Tolerate ambiguity	40	-.876	.374	1.958	.733
Think creatively	40	-.157	.374	-.372	.733
Listen effectively	40	.282	.374	.240	.733
Presentation skills	40	-.245	.374	-.536	.733
Negotiation skills	40	-.121	.374	-.520	.733
Understanding group dynamics	40	-.380	.374	-.636	.733
Communicate in written format	40	-.737	.374	-.395	.733
Communicate orally	40	-.119	.374	-.588	.733
Engage in lifelong learning	40	-.057	.374	-.190	.733
Inter or multidisciplinary perspective	40	-.665	.374	1.235	.733
Teamwork	40	-.649	.374	-.483	.733
Ability to analyse and reason logically	40	-.380	.374	-.636	.733
Personal attributes	40	-.034	.374	-.848	.733
Work effectively in diversified cultural settings	40	-.652	.374	1.435	.733
Self-initiative	40	-.233	.374	-.345	.733
English language	40	.208	.374	-.790	.733
Statistics	40	-.623	.374	.638	.733
Cost and management accounting	40	-.115	.374	-.339	.733
Economics	40	-.170	.374	-.637	.733

### Appendix 10b: Test 2 – Constraints gap

As the skewness and kurtosis statistics across all constraining elements are not in between the range of +1.0 and -1.0. Therefore data recorded over the constituent of constraints gap observe abnormal distribution from the respondent group (20 educators).

#### Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	20	-.196	.512	-.612	.992
Students have an inappropriate (non-serious) attitude for learning?	20	-1.251	.512	-.497	.992
Classes are pack with a large number of students?	20	1.148	.512	3.667	.992
Accounting curriculum has insufficient provision to allow for the effective development of skills?	20	-.112	.512	1.649	.992
As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	20	-.442	.512	-2.018	.992
Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?	20	.132	.512	-.076	.992
Students have a lack of interest in accounting discipline?	20	-.198	.512	-.497	.992
People (potential students) have misperception about accounting education as being highly mathematical in nature?	20	-.292	.512	-.734	.992
Accounting institutes are not offering adequate training opportunities to their academic staff?	20	.945	.512	-1.242	.992
Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?	20	-.062	.512	-.630	.992
For teaching in accounting institutes it is difficult to find competent academic staff?	20	.152	.512	-.880	.992
During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations?	20	-.442	.512	-2.018	.992



### Appendix 10c: Test 2 – Performance gap

As the skewness and kurtosis statistics across all skills items are not in between the range of +1.0 and -1.0. Therefore data recorded over the constituent of performance gap observe abnormal distribution from the respondent groups (20 educators and 20 employers).

#### Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Decision making	40	-.197	.374	-.887	.733
Financial risk analysis	40	-.226	.374	-.427	.733
Financial accounting	40	-.611	.374	.018	.733
Information technology competence	40	-.341	.374	-.303	.733
Critical thinking	40	-.140	.374	-1.155	.733
International global perspective	40	-.260	.374	-.649	.733
Legal regulatory perspective	40	-.292	.374	-.553	.733
Marketing/clients focus	40	.046	.374	-.376	.733
Problem solving	40	.015	.374	-.770	.733
Leadership	40	.031	.374	-.532	.733
Project management	40	.382	.374	-.349	.733
Think and behave ethically	40	-.227	.374	-.579	.733
Flexibility and adaptability	40	-.648	.374	-.462	.733
Strategic management	40	-.156	.374	-.782	.733
Independent thinking	40	.009	.374	-.040	.733
Focused on outcome	40	-.153	.374	-.755	.733
Tolerate ambiguity	40	-.483	.374	-.447	.733
Think creatively	40	.436	.374	-.261	.733
Listen effectively	40	-.128	.374	-.819	.733
Presentation skills	40	-.129	.374	-.746	.733
Negotiation skills	40	.135	.374	-1.084	.733
Understanding group dynamics	40	-.110	.374	-.845	.733
Communicate in written format	40	-.182	.374	-.712	.733
Communicate orally	40	-.105	.374	-.450	.733
Engage in lifelong learning	40	.203	.374	.245	.733
Inter or multidisciplinary perspective	40	-.425	.374	-.237	.733
Teamwork	40	-.308	.374	-.661	.733
Ability to analyse and reason logically	40	.123	.374	-.802	.733
Personal attributes	40	.117	.374	-1.116	.733
Work effectively in diversified cultural settings	40	-.059	.374	-.132	.733
Self-initiative	40	.041	.374	-.607	.733
English language	40	.051	.374	-1.044	.733

Statistics	40	-.115	.374	.012	.733
Cost and management accounting	40	.360	.374	-.676	.733
Economics	40	-.143	.374	-.278	.733

**Appendix 11a: List of Accounting Education Centres**

<b>S. N</b>	<b>NAME</b>	<b>NO. OF CAMPUSES IN CITY</b>
1	PROFESSIONALS' ACADEMY OF COMMERCE (PAC)	1-Lahore 1-Peshawar
2	AL-HAMD ACADEMY	1-Karachi 1-Hyderabad
3	SKANS SCHOOL OF ACCOUNTANCY (SKANS)	1-Karachi 1-Faisalabad 1-Peshawar 1-Islamabad 1-Lahore 1-Multan 1-Sialkot 1-Gujranwala
4	INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN	3-Karachi 1-Lahore 1-Islamabad 1-Multan 1-Faisalabad
5	COLLEGE OF ACCOUNTING AND MANAGEMENT SCIENCES (CAMS)	1-Karachi
6	TABANI'S SCHOOL OF ACCOUNTANCY (TSA)	1-Karachi
7	COLLEGE OF BUSINESS PROFESSIONALS (CBP)	1-Karachi
8	FERZAN SCHOOL OF ACCOUNTANCY	1-Karachi
9	ESCRIBIR COLLEGE OF ADVANCE STUDIES	1-Karachi
10	ANIS HASSAN SCHOOL OF ACCOUNTANCY (AHSA)	1-Karachi
11	PROFESSIONALS' COLLEGE OF ACCOUNTANCY (PCA)	1-Faisalabad
12	SCHOOL OF BUSINESS AND MANAGEMENT	1-Islamabad
13	COLLEGE OF FINANCIAL & MANAGEMENT SCIENCES (CFMS)	1-Islamabad
14	COLLEGE OF COMMERCE PROFESSIONALS (CCP)	1-Faisalabad
15	WAH COLLEGE OF ACCOUNTANCY	1-Wah
16	NATIONAL COLLEGE OF BUSINESS & MANAGEMENT SCIENCES (NCBMS)	1-Islamabad
17	COLLEGE OF ACCOUNTANCY & PROFESSIONAL STUDIES (CAPS)	1-Lahore
18	THE UNIVERSITY OF LAHORE (UOL)	1-Lahore
19	RISE SCHOOL OF ACCOUNTANCY	1-Lahore
20	CFE COLLEGE OF ACCOUNTANCY AND FINANCE	1-Lahore
21	INDUS COLLEGE OF BUSINESS AND FINANCE	1-Peshawar
22	PIONEER FINANCE COLLEGE (PC)	1-Multan
23	EDUCATION CITY	1-Karachi
24	COLLEGE OF PROFESSIONAL STUDIES (CPS)	1-Karachi
25	THE TIPS	1-Faisalabad
26	ZAKARIYA COLLEGE OF COMMERCE	1-Multan
27	MEHAR ACADEMY FOR PROFESSIONAL STUDIES (MAPS)	1-Multan
28	LEADERSHIP COLLEGE OF ACCOUNTANCY	1-Multan
29	RISE SCHOOL OF ACCOUNTANCY	1-Multan
30	COLLEGE OF INNOVATIVE MANAGEMENT SCIENCES,	1-Rawalpindi
31	SCHOOL OF BUSINESS & MANAGEMENT	1-Rawalpindi
32	COLLEGE OF BUSINESS ADMINISTRATION (CBA)	1-Lahore
33	KNOWLEDGE & APPLICATION INSTITUTE OF MANAGEMENT STUDIES (KAIMS)	1-Lahore
34	THE TIPS FOUNDATION CANAL CAMPUS	1-Faisalabad
35	PUNJAB INSTITUTE OF MANAGEMENT & TECHNOLOGY (PIMAT)	1-Rawalpindi
36	LEGEND SCHOOL OF ACCOUNTANCY	1-Lahore
37	AL-WADOOD INSTITUTE OF PROFESSIONAL STUDIES	1-Islamabad

**Appendix 11b: List of Professional Organisations**

<b>S. N</b>	<b>NAME</b>	<b>NO. OF OFFICES IN CITY</b>
1	HUSSAIN RATHORE & CO.	1-Islamabad
2	MUHAMMAD ARSHAD & CO.	1-Sialkot
3	ERNST & YOUNG FORD RHODES SIDAT HYDER	1-Karachi
		1-Islamabad
		1-Lahore
4	MANZOOR HUSSAIN MIR & CO.	1-Lahore
5	RAFAQAT MANSHA MOHSIN DOSSANI MASOOM & CO.	1-Peshawar
		1-Lahore
		1-Karachi
		1-Islamabad
6	A. F. FERGUSON & CO.	1-Karachi
		1-Lahore
		1-Islamabad
7	KPMG TASEER HADI & CO.	1-Karachi
		1-Lahore
		1-Islamabad
8	ZEESHAN ALI & CO.	1-Peshawar
9	AVAIS HYDER LIAQUAT NAUMAN	1-Peshawar
		1-Faisalabad
		1-Islamabad
		1-Lahore
		1-Quetta
10	ILYAS SAEED & CO.	1-Lahore
		1-Karachi
		1-Gujranwala
		1-Islamabad
11	HLB IJAZ TABUSSUM & CO.	1-Gujranwala
		1-Islamabad
		1-Lahore
12	SHEKHA & MUFTI	1-Karachi
13	RAFAQAT BABAR & CO.	1-Peshawar
14	M. YOUSUF ADIL SALEEM & CO.	1-Multan
		1-Faisalabad
		1-Lahore
		1-Islamabad
		1-Karachi
15	RAHMAN SARFARAZ RAHIM IQBAL RAFIQ	2-Lahore
		1-Karachi
16	NAZIR CHAUDHRI & CO.	1-Lahore
17	EHTISHAM & CO.	1-Lahore
18	ZAHEER BABAR & CO.	1-Lahore
19	AMIN MUDASSAR & CO.	1-Faisalabad
		1-Lahore
20	MAHBOOB SHEIKH & CO.	1-Multan
21	NAVEED ZAFAR ASHFAQ JAFFERY & CO.	1-Islamabad
		1-Lahore
		1-Karachi
22	RIAZ AHMAD & CO.	1-Karachi
		1-Lahore
		1-Islamabad
		1-Faisalabad
23	VIQAR A. KHAN & CO.	1-Lahore
24	YUSAF SAEED & CO.	1-Lahore
25	SHEIKH & CHAUDHRI	1-Lahore
26	SARWARS	1-Lahore
27	AHMAD USMAN SHABBIR & CO.	1-Lahore

28	<b>RIZWAN &amp; CO.</b>	1-Lahore
29	<b>OMER ADIL &amp; CO.</b>	1-Islamabad
30	<b>HORWATH HUSSAIN CHAUDHURY &amp; CO.</b>	1-Rawalpindi 1-Lahore
31	<b>BDO EBRAHIM &amp; CO.</b>	1-Islamabad
32	<b>MALIK &amp; CO.</b>	1-Lahore
33	<b>SHAHZAD QAZI &amp; CO.</b>	1-Islamabad
34	<b>YAQUB &amp; CO.</b>	1-Faisalabad
35	<b>NADEEM AHMAD &amp; CO.</b>	1-Lahore
36	<b>MUNIFF ZIAUDDIN &amp; CO.</b>	1-Lahore 1-Karachi 1-Islamabad
37	<b>BAKER TILLY MEHMOOD IDREES QAMAR</b>	1-Lahore 1-Karachi
38	<b>ANJUM ASIM SHAHID RAHMAN</b>	1-Lahore 1-Karachi 1-Islamabad
39	<b>M. ATHER &amp; CO.</b>	1-Faisalabad
40	<b>AGHA MUJEEB &amp; CO.</b>	1-Rawalpindi
41	<b>TABUSSUM SALEEM &amp; CO.</b>	1-Lahore
42	<b>F.R.A.N.T.S. &amp; CO.</b>	1-Islamabad 1-Multan 1-Sialkot 1-Karachi 1-Lahore 1-Peshawar
43	<b>AHMED MUSHIR &amp; CO.</b>	1-Lahore
44	<b>TAHIR SIDDIQI &amp; CO.</b>	1-Lahore
45	<b>SANDHU &amp; CO.</b>	1-Karachi
46	<b>JALIS AHMAD &amp; CO.</b>	1-Karachi
47	<b>WASEEM SIDDIQI &amp; CO.</b>	1-Islamabad
48	<b>HAROON ZAKARIA &amp; CO.</b>	1-Karachi
49	<b>AKRAM &amp; CO.</b>	1-Faisalabad
50	<b>M. ALMAS &amp; CO.</b>	1-Lahore
51	<b>KAMRAN &amp; CO.</b>	1-Lahore
52	<b>SALARIYA &amp; CO.</b>	1-Lahore
53	<b>DAUDALLY LALANI &amp; CO.</b>	1-Karachi
54	<b>AWAN &amp; CO.</b>	1-Lahore
55	<b>NASIR JAVAID MAQSOOD IMRAN</b>	1-Karachi 1-Lahore 1-Islamabad
56	<b>SARWAR AWAN &amp; CO.</b>	1-Lahore
57	<b>M. A. CHAUDHRI &amp; CO.</b>	1-Lahore 1-Gujranwala
58	<b>KARAMAT CHAUDHRI &amp; CO.</b>	1-Sialkot
59	<b>AZHAR ZAFAR &amp; CO.</b>	1-Faisalabad 1-Lahore
60	<b>PARKER RANDALL-A.J.S.</b>	1-Faisalabad
61	<b>A. AZIZ CHAUDURY &amp; CO.</b>	1-Lahore
62	<b>LATIF &amp; CO.</b>	1-Lahore
63	<b>QAVI &amp; CO.</b>	1-Karachi 1-Lahore
64	<b>TANZEEM &amp; CO.</b>	1-Karachi
65	<b>AMIR ALAM KHAN &amp; CO.</b>	1-Rawalpindi
66	<b>HASSAN FAROOQ &amp; CO.</b>	1-Lahore
67	<b>RIAZ AHMAD, SAQIB, GOHAR &amp; CO.</b>	1-Lahore 1-Karachi
68	<b>FARUQ ALI &amp; CO.</b>	1-Karachi
69	<b>S. M. MASOOD &amp; CO.</b>	1-Lahore
70	<b>FAKHARUDDIN YOUSAFALI &amp; CO.</b>	1-Lahore

71	JAVED & CO.	1-Lahore
72	ZAHID JAMIL & CO.	1-Faisalabad 1-Lahore
73	HAIDER SHAMSI & CO.	1-Karachi
74	ALE IMRAN & CO.	1-Lahore
75	AKHTER MAHMOOD MIAN	1-Gujranwala 1-Lahore
76	MAQBOOL HAROON SHAHID SAFDAR & CO.	1-Lahore
77	FAZAL MAHMOOD & CO.	1-Lahore
78	UHY HASSAN NAEEM & CO.	1-Lahore 1-Islamabad
79	KALEEM & CO.	1-Lahore
80	YAMEEN & CO.	1-Lahore
81	S. ZAFAR SHAH & CO.	1-Lahore
82	HYDER BHIMJI & CO.	1-Faisalabad
83	MANSOOR ASLAM SERAJ SALEEM SHAHID	1-Lahore 2-Karachi
84	HASHMI & CO.	1-Karachi
85	KABANI & CO.	1-Lahore 1-Islamabad
86	JAVAID JALAL AMJAD & CO.	1-Lahore
87	AMIN & CO.	1-Lahore
88	A. A. BAIG & CO.	1-Karachi
89	MUHAMMAD AYUB & CO.	1-Lahore
90	ZAHID FAROOQ & CO.	1-Rawalpindi
91	MUHAMMAD FAROOQ & CO	1-Karachi
92	S. M. SUHAIL & CO.	1-Karachi
93	MUSHTAQ & CO.	1-Lahore 1-Karachi
94	RAHIM JAN & CO.	1-Karachi
95	HABIB ALAM & CO.	1-Faisalabad
96	MAJEED FAIZI SUHAIL & CO	1-Karachi
97	HYDER & CO.	2-Karachi
98	ZAKARIA LOYA & CO.	1-Karachi
99	GUL AHMED & CO.	1-Karachi
100	AFTAB NABI & CO.	1-Karachi
101	ALLIOTT SHAHID HADI	1-Karachi
102	ARIF CHAUDHRY & CO.	1-Lahore
103	INAAM-UL-HAQUE & CO.	1-Lahore
104	F. R. MERCHANT & CO.	1-Karachi
105	ARSHAD RAHEEM & CO.	1-Lahore
106	HAROON SHARIF GOGAN & CO.	1-Karachi
107	IFTIKHAR ALI & CO.	1-Peshawar
108	Z. LAKHANI & CO.	1-Karachi
109	HAMEED KHAN & CO.	1-Lahore
110	QADEER & CO.	1-Lahore
112	JAWAID ANWAR & CO	1-Rawalpindi
113	UZAIR HAMMAD FAISAL & CO.	1-Lahore
114	SHAH & CO.	1-Hyderabad
115	PHINEHAS & CO	1-Lahore
116	F. MAJID & CO.	1-Lahore
117	A. M. LALIWALA & CO.	1-Karachi
118	ABDUL SATTAR & CO.	1-Multan
119	S. P. AMJAD & CO.	1-Lahore
120	MOOCHHALA GANGAT & CO.	1-Karachi
121	TALAT MEHBOOB & CO.	1-Faisalabad
122	MASOOM AKHTAR & CO.	1-Islamabad
123	ISHTIAQ RANA & CO.	1-Lahore
124	GHAFOOR & CO.	1-Peshawar

125	<b>KODVAVI &amp; CO.</b>	1-Karachi
126	<b>DILROZE KHAN &amp; CO.</b>	1-Peshawar
127	<b>NASIR MAHMOOD &amp; CO.</b>	1-Karachi
128	<b>GHAZI &amp; CO.</b>	1-Multan
129	<b>SHAHID AHMAD &amp; CO.</b>	1-Peshawar
130	<b>MUDASSAR EHTISHAM &amp; CO.</b>	1-Lahore
131	<b>SAJID IQBAL &amp; CO.</b>	1-Lahore
132	<b>SHAHID WAHEED YOUNUS JAMIL</b>	1-Peshawar 1-Karachi
134	<b>SAJJAD HAIDER &amp; CO.</b>	1-Dubai
135	<b>IBRAHIM, SHAIKH &amp; CO.</b>	1-Karachi
136	<b>TARIQ AYUB ANWAR &amp; CO.</b>	1-Peshawar 1-Islamabad 1-Lahore
137	<b>FEROZE SHARIF TARIQ &amp; CO.</b>	1-Karachi
138	<b>MUSHTAQ AKBAR &amp; CO.</b>	1-Peshawar
139	<b>TARIQ HANIF &amp; CO.</b>	1-Rawalpindi
140	<b>A. S. SHEIKH &amp; CO.</b>	1-Lahore
141	<b>HAMEED CHAUDHRI &amp; CO.</b>	1-Lahore 1-Karachi
142	<b>ASLAM MALIK &amp; CO.</b>	1-Lahore 1-Islamabad
143	<b>MUNAWAR ASSOCIATES</b>	1-Lahore
144	<b>NADEEM &amp; CO.</b>	1-Lahore
145	<b>TARIQ ABDUL GHANI MAQBOOL &amp; CO.</b>	1-Lahore
146	<b>RIAZ &amp; CO.</b>	1-Lahore
147	<b>HAMEED ZAHID &amp; CO.</b>	1-Lahore
148	<b>NAUMAN RAFIQUE &amp; CO.</b>	1-Islamabad
149	<b>TALIB ZAFAR ASSOCIATES</b>	1-Lahore 1-Multan
150	<b>MIAN NAIM ASIF RASHID &amp; CO.</b>	1-Lahore
151	<b>SHAFIQ &amp; CO.</b>	1-Lahore
152	<b>RAO &amp; COMPANY</b>	1-Lahore 1-Karachi 1-Rahim Yar Khan
153	<b>MUNAF YUSUF &amp; CO.</b>	1-Karachi
154	<b>ZIA MASOOD KIANI &amp; CO.</b>	1-Islamabad
155	<b>IQBAL YASIR ASIM &amp; CO.</b>	1-Islamabad 1-Lahore
156	<b>NASIR JAMIL &amp; CO.</b>	1-Lahore
157	<b>A. SALAM JAN &amp; CO.</b>	1-Peshawar
158	<b>TAHIR JAWAD IMRAN FECTO</b>	1-Karachi
159	<b>ZULFIQAR AHMAD &amp; CO.</b>	1-Lahore
160	<b>ASIF ASSOCIATES</b>	1-Islamabad
161	<b>KHALID MAJID REHMAN</b>	1-Islamabad
162	<b>VIQAR AHMED &amp; CO.</b>	1-Karachi
163	<b>ASHIQ AAMER SATTAR &amp; CO.</b>	1-Multan
164	<b>MUHAMMAD ALI SAFDAR &amp; CO.</b>	1-Lahore
165	<b>NADEEM ANWAR &amp; CO.</b>	1-Islamabad
166	<b>FAISAL LATIF &amp; CO.</b>	1-Islamabad
167	<b>H. A. M. D. &amp; CO.</b>	1-Lahore 1-Karachi 1-Islamabad
168	<b>USMANI &amp; CO.</b>	1-Karachi
169	<b>J. A. S. B. &amp; ASSOCIATES</b>	1-Karachi 1-Islamabad
170	<b>RAFQAT HUSSAIN &amp; CO.</b>	1-Lahore

**Appendix 12a: Missing values- Expectation gap**

Univariate Statistics							
	N	Mean	Std. Deviation	Missing		No. of Extremes <sup>a</sup>	
				Count	Percent	Low	High
Decision making	405	4.4444	.69296	0	.0	6	0
Financial risk analysis	405	4.3358	.81193	0	.0	11	0
Financial accounting	403	4.7618	.50650	2	.5	.	.
Information technology	405	4.3136	.72980	0	.0	3	0
Critical thinking	402	4.6766	.65865	3	.7	.	.
International global	404	4.6089	.65369	1	.2	5	0
Legal regulatory perspective	403	4.6749	.63170	2	.5	5	0
Marketing/clients focus	405	3.2741	1.12639	0	.0	30	0
Problem solving	401	4.5362	.63191	4	1.0	2	0
Leadership	405	3.6173	1.00700	0	.0	15	0
Project management	399	3.6717	1.06331	6	1.5	0	0
Think and behave ethically	405	3.9432	.94357	0	.0	39	0
Flexibility and adaptability	402	3.7463	1.08045	3	.7	0	0
Strategic management	399	3.9223	.95184	6	1.5	0	0
Independent thinking	405	4.0716	.78495	0	.0	20	0
Focused on outcome	402	4.3706	.68064	3	.7	9	0
Tolerate ambiguity	400	3.4475	1.01233	5	1.2	14	0
Think creatively	401	4.0150	.92454	4	1.0	36	0
Listen effectively	405	4.4000	.65097	0	.0	5	0
Presentation skills	401	4.0449	.88486	4	1.0	24	0
Negotiation skills	401	3.7880	.98866	4	1.0	0	0
Understanding group	405	3.4444	1.00000	0	.0	10	0
Communicate in written	405	4.3506	.65289	0	.0	6	0
Communicate orally	402	3.9950	.90715	3	.7	0	0
Engage in lifelong learning	400	3.6300	.98769	5	1.2	8	0
Inter or multidisciplinary	402	4.3856	.79153	3	.7	6	0
Teamwork	401	4.0848	.90708	4	1.0	18	0
Ability to analyse and reason	405	4.4938	.69159	0	.0	8	0
Personal attributes	401	3.5810	1.01442	4	1.0	11	0
Work effectively in	405	3.3679	1.04145	0	.0	11	0
Self-initiative	404	3.7475	1.08251	1	.2	0	0
English language	405	3.6469	1.09963	0	.0	0	0
Statistics	402	4.3507	.80451	3	.7	9	0
Cost and management	404	4.5916	.74156	1	.2	10	0
Economics	399	3.8822	.89592	6	1.5	0	0

a. Number of cases outside the range ( $Q1 - 1.5 \times IQR$ ,  $Q3 + 1.5 \times IQR$ ).

b. . indicates that the inter-quartile range (IQR) is zero.



**Appendix 12b: Missing values – Constraints gap**

Univariate Statistics							
	N	Mean	Std. Deviation	Missing		No. of Extremes <sup>a</sup>	
				Count	Percent	Low	High
Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	199	1.8794	.91868	2	1.0	0	12
Students have an inappropriate (non-serious) attitude for learning?	201	2.2786	.84970	0	.0	0	2
Classes are pack with a large number of students?	200	1.9800	.93486	1	.5	0	15
Accounting curriculum has insufficient provision to allow for the effective development of skills?	201	2.0746	1.09517	0	.0	0	0
As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	200	1.7800	.82766	1	.5	0	7
Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?	198	3.9242	1.01227	3	1.5	0	0
Students have a lack of interest in accounting discipline?	199	2.5528	1.01304	2	1.0	0	7
People (potential students) have misperception about accounting education as being highly mathematical in nature?	200	3.7550	.97968	1	.5	0	0
Accounting institutes are not offering adequate training opportunities to their academic staff?	200	3.4250	1.07711	1	.5	8	0
Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?	201	4.0100	.94863	0	.0	0	0
For teaching in accounting institutes it is difficult to find competent academic staff?	199	3.7638	.95320	2	1.0	0	0
During articleship, students' get de-motivated due to inadequate stipend offered by most of the training organisations?	199	3.6935	.95954	2	1.0	4	0
a. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).							

**Appendix 12c: Missing values – Performance gap**

Univariate Statistics							
	N	Mean	Std. Deviation	Missing		No. of Extremes <sup>a</sup>	
				Count	Percent	Low	High
Decision making	404	3.68	.895	1	.2	1	0
Financial risk analysis	402	3.50	.924	3	.7	2	0
Financial accounting	405	4.23	.818	0	.0	14	0
Information technology	403	3.39	1.015	2	.5	7	0
Critical thinking	405	4.01	.835	0	.0	20	0
International global	402	3.87	.892	3	.7	0	0
Legal regulatory perspective	405	3.97	.848	0	.0	0	0
Marketing/clients focus	403	2.49	1.040	2	.5	0	14
Problem solving	404	3.67	1.001	1	.2	7	0
Leadership	404	2.72	.963	1	.2	0	13
Project management	403	2.83	1.063	2	.5	0	0
Think and behave ethically	402	2.77	1.025	3	.7	0	0
Flexibility and adaptability	404	2.74	1.106	1	.2	0	0
Strategic management	402	3.12	.982	3	.7	0	0
Independent thinking	402	2.79	.923	3	.7	0	13
Focused on outcome	404	3.44	.942	1	.2	5	0
Tolerate ambiguity	405	2.30	.950	0	.0	0	5
Think creatively	404	2.92	1.119	1	.2	0	0
Listen effectively	404	3.09	1.021	1	.2	0	0
Presentation skills	403	2.98	1.064	2	.5	0	0
Negotiation skills	403	2.88	1.058	2	.5	0	0
Understanding group	402	2.45	.970	3	.7	0	7
Communicate in written	405	3.33	.987	0	.0	7	0
Communicate orally	404	2.96	.983	1	.2	0	0
Engage in lifelong learning	401	2.47	.995	4	1.0	0	10
Inter or multidisciplinary	404	3.53	.999	1	.2	4	0
Teamwork	405	3.17	1.051	0	.0	0	0
Ability to analyse and reason	403	3.76	1.008	2	.5	0	0
Personal attributes	403	2.56	.982	2	.5	0	5
Work effectively in	405	2.32	1.013	0	.0	0	7
Self-initiative	403	2.68	1.080	2	.5	0	18
English language	402	3.12	1.176	3	.7	0	0
Statistics	403	3.43	1.040	2	.5	9	0
Cost and management	405	4.07	.874	0	.0	0	0
Economics	402	2.94	.964	3	.7	0	0

a. Number of cases outside the range (Q1 - 1.5\*IQR. Q3 + 1.5\*IQR).

### Appendix 13a: Survey data – Expectation gap

**As the skewness and kurtosis statistics across all skills items are not in between the range of +1.0 and -1.0. Therefore data recorded over the constituent of expectation gap observe abnormal distribution from the respondent groups (201 educators and 204 employers).**

#### Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Decision making	405	-1.392	.121	2.984	.242
Financial risk analysis	405	-1.160	.121	1.105	.242
Financial accounting	405	-2.524	.121	9.040	.242
Information technology competence	405	-.793	.121	.304	.242
Critical thinking	405	-2.284	.121	5.517	.242
International global perspective	405	-1.857	.121	4.021	.242
Legal regulatory perspective	405	-2.234	.121	5.718	.242
Marketing/clients focus	405	-.252	.121	-.625	.242
Problem solving	405	-1.155	.121	.807	.242
Leadership	405	-.492	.121	-.015	.242
Project management	405	-.391	.121	-.431	.242
Think and behave ethically	405	-1.006	.121	.860	.242
Flexibility and adaptability	405	-.724	.121	-.264	.242
Strategic management	405	-.658	.121	.058	.242
Independent thinking	405	-1.299	.121	3.037	.242
Focused on outcome	405	-1.197	.121	2.571	.242
Tolerate ambiguity	405	-.570	.121	-.424	.242
Think creatively	405	-1.004	.121	.791	.242
Listen effectively	405	-1.221	.121	3.383	.242
Presentation skills	405	-.938	.121	.909	.242
Negotiation skills	405	-.449	.121	-.398	.242
Understanding group dynamics	405	-.279	.121	-.528	.242
Communicate in written format	405	-1.149	.121	3.354	.242
Communicate orally	405	-.639	.121	-.174	.242
Engage in lifelong learning	405	-.652	.121	-.213	.242
Inter or multidisciplinary perspective	405	-1.171	.121	1.043	.242
Teamwork	405	-1.015	.121	1.185	.242
Ability to analyse and reason logically	405	-1.783	.121	4.988	.242
Personal attributes	405	-.482	.121	-.323	.242
Work effectively in diversified cultural	405	-.240	.121	-.789	.242
Self-initiative	405	-.560	.121	-.387	.242
English language	405	-.467	.121	-.475	.242
Statistics	405	-1.070	.121	.569	.242
Cost and management accounting	405	-1.934	.121	3.454	.242

Economics	405	-.362	.121	-.186	.242
Valid N (listwise)	405				

### Appendix 13b: Survey data – Performance gap

As the skewness and kurtosis statistics across all skills items are between the range of +1.0 and -1.0. Therefore data recorded over the constituent of performance gap observe normal distribution from the respondent groups (201 educators and 204 employers).

#### Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Decision making	405	-.256	.121	-.556	.242
Financial risk analysis	405	-.077	.121	-.653	.242
Financial accounting	405	-.833	.121	.020	.242
Information technology competence	405	-.055	.121	-.752	.242
Critical thinking	405	-.617	.121	.023	.242
International global perspective	405	-.442	.121	-.509	.242
Legal regulatory perspective	405	-.575	.121	-.074	.242
Marketing/clients focus	405	.344	.121	-.419	.242
Problem solving	405	-.388	.121	-.469	.242
Leadership	405	.202	.121	-.392	.242
Project management	405	.130	.121	-.601	.242
Think and behave ethically	405	.037	.121	-.692	.242
Flexibility and adaptability	405	.128	.121	-.705	.242
Strategic management	405	.215	.121	-.671	.242
Independent thinking	405	.291	.121	-.421	.242
Focused on outcome	405	-.055	.121	-.528	.242
Tolerate ambiguity	405	.370	.121	-.374	.242
Think creatively	405	.122	.121	-.772	.242
Listen effectively	405	-.049	.121	-.625	.242
Presentation skills	405	.113	.121	-.690	.242
Negotiation skills	405	.129	.121	-.571	.242
Understanding group dynamics	405	.296	.121	-.416	.242
Communicate in written format	405	-.044	.121	-.711	.242
Communicate orally	405	-.047	.121	-.492	.242
Engage in lifelong learning	405	.339	.121	-.359	.242
Inter or multidisciplinary perspective	405	-.142	.121	-.793	.242
Teamwork	405	.000	.121	-.648	.242
Ability to analyse and reason logically	405	-.479	.121	-.517	.242
Personal attributes	405	.065	.121	-.695	.242
Work effectively in diversified	405	.373	.121	-.538	.242
Self-initiative	405	.144	.121	-.670	.242
English language	405	-.092	.121	-.812	.242
Statistics	405	-.118	.121	-.737	.242

Cost and management accounting	405	-.541	.121	-.620	.242
Economics	405	.324	.121	-.584	.242
Valid N (listwise)	405				

**Appendix 14a – Educators group questionnaire complete****Demographic details - for Educators (representing Appendix 1a)**

This Part of the questionnaire includes demographic details such as sex, age, years of experience, and qualification etc.

1) What is your gender?

Male

Female

2) What is your age?

20 - 24 years

25 - 35 years

36 - 44 years

45 - 54 years

55 or above

3) How many years of teaching experience do you have?

Less than a year

1-3 years

4 - 7 years

8 - 10 years

11 years or more

4) What position you hold within the organisation?

Full time academic

Part time academic

5) Do you have certified accounting education at any level (such as CPA, CA, CIMA, ICMAP and CFA etc)?

Yes

No

6) What is your general academic qualification?

Higher Secondary School Certificate (FA, FSc etc)

Bachelor degree (BA, BBA, B.Com etc)

Master degree (MSc, MA, MBA, M.Com etc)

Masters of Philosophy (MS or M. Phil)

Doctorate (PhD)

**Expectation gap and Performance gap - for Educators (representing Appendix 3b & 6b)**

For each of the generic skills listed below, please:

**(1) Rate the following skills that you expect of students to acquire in accounting education for their career development.**

**(2) Considering teaching practices, state the students' competence level that will be developed in real by the end of professional academic program.**

S. N	Generic Skills	<b>(1)</b> <b><u>Skills that must be acquired in education by students for career development</u></b>	<b>(2)</b> <b><u>Skills competence level that will be developed in real by the end of professional academic program</u></b>
		1(Strongly disagree)-----3(Neutral) -----5(Strongly agree)	1(No competence) -----5(High competence)
1	Decision making: having the ability to conceptually structuralize the situation and select one amongst available options.	1            2            3            4            5	1            2            3            4            5
2	Financial risk analysis: having the ability to assess the factors that may jeopardize the project such as knowing how to conduct ratio analysis, portfolio management, NPV, IRR, cost benefit analysis, sensitivity analysis etc.	1            2            3            4            5	1            2            3            4            5
3	Financial accounting: concerned with the study of reporting the financial transactions and the preparation of financial statements.	1            2            3            4            5	1            2            3            4            5
4	Information technology competence: having the ability to use computer softwares such as knowing MS Office, Peachtree, UBS etc.	1            2            3            4            5	1            2            3            4            5
5	Critical thinking: having a sight to see things beyond its apparent meaning and not accepting anything until proven with logical reasoning or through some evidence.	1            2            3            4            5	1            2            3            4            5
6	International global perspective: Knowledge and understanding of international financial	1            2            3            4            5	1            2            3            4            5



	reporting standards and of current developments in the accounting profession.										
7	A legal regulatory perspective: knowledge of the legal structure of the state such as corporate law, taxation and auditing standards.	1	2	3	4	5	1	2	3	4	5
8	Marketing/clients focus: customer care orientation such as knowing marketing tactics in order to deal with clients.	1	2	3	4	5	1	2	3	4	5
9	Problem solving: coming up with a practical and feasible solution to a problem.	1	2	3	4	5	1	2	3	4	5
10	Leadership: having the ability to manage a group of people such as assigning tasks, giving directions, keeping staff motivated and make them answerable.	1	2	3	4	5	1	2	3	4	5
11	Project management: having the ability to establish and run new projects.	1	2	3	4	5	1	2	3	4	5
12	Think and behave ethically: professional behavior of accountants must be according to accounting code of ethics.	1	2	3	4	5	1	2	3	4	5
13	Flexibility and adaptability: be flexible and adaptable to changing environment in official routine activities.	1	2	3	4	5	1	2	3	4	5
14	Strategic management: concerned with the study of understanding organisation strategic requirements such as knowing porter's 5 forces, SWOT analysis, price differentiation strategies, product development, market penetration etc.	1	2	3	4	5	1	2	3	4	5
15	Independent thinking: having independent professional judgment.	1	2	3	4	5	1	2	3	4	5
16	Focused on outcomes: ability to focus on objective and subjective outcomes such as meeting financial targets and deadlines.	1	2	3	4	5	1	2	3	4	5
17	Tolerate ambiguity: having the ability to ignore annoying routine activities in official environment.	1	2	3	4	5	1	2	3	4	5
18	Think creatively: coming up with new and	1	2	3	4	5	1	2	3	4	5

	more effective solutions to old problems.										
19	Listen effectively: listen attentively and understanding what others are saying.	1	2	3	4	5	1	2	3	4	5
20	Presentation skill: appropriately present your point of view in official meetings.	1	2	3	4	5	1	2	3	4	5
21	Negotiation skill: making others understand what you are saying and convincing them to a point where both parties arrive at agreement.	1	2	3	4	5	1	2	3	4	5
22	Understanding group dynamics: while working in group understanding others work potential, attitude, emotions, and patience level.	1	2	3	4	5	1	2	3	4	5
23	Communicate in written format: having the ability to draft inter office memos and letters.	1	2	3	4	5	1	2	3	4	5
24	Communicate orally: having ability to speak fluently, using appropriate tone to address your boss and subordinates.	1	2	3	4	5	1	2	3	4	5
25	Engage in lifelong learning: attending professional development programs for self-learning.	1	2	3	4	5	1	2	3	4	5
26	Inter or multidisciplinary perspective: while doing accounting considering others disciplinary perspective such as strategic management, corporate law and taxation etc.	1	2	3	4	5	1	2	3	4	5
27	Teamwork: having the ability to collaborate with colleagues to resolve conflicts while working in group.	1	2	3	4	5	1	2	3	4	5
28	The ability to analyse and reason logically: supporting your arguments with theoretical analysis or objective or subjective reasoning process.	1	2	3	4	5	1	2	3	4	5
29	Personal attributes: having confidence, identifying owns strengths and weaknesses, motivation level, self-promotion and self-management etc.	1	2	3	4	5	1	2	3	4	5
30	Work effectively in diversified cultural	1	2	3	4	5	1	2	3	4	5

	settings: understanding cultural norms and values to work in diversified culture or multinational firms.										
31	Self-initiative: taking the work responsibility on your own while considering work environment dynamics.	1	2	3	4	5	1	2	3	4	5
32	English language: having the ability to read, write, listen and speak in English.	1	2	3	4	5	1	2	3	4	5
33	Statistics: study of the collection, organization, analysis, interpretation, and presentation of data such as knowing how to conduct regression analysis, correlation, chi-square, t-test, and hypothesis testing etc.	1	2	3	4	5	1	2	3	4	5
34	Cost and management accounting: study of the accounting information to managers within organizations, to provide them with the basis to make informed business decisions such as knowing budgeting techniques, costing, accounting for labour, and accounting for overheads etc.	1	2	3	4	5	1	2	3	4	5
35	Economics background: analysing the production, distribution and consumption of goods and services such as knowing how to measure GDP, GNP, demand and supply curve, equilibrium, and price elasticity etc.	1	2	3	4	5	1	2	3	4	5

### Constraints gap - for Educators (representing Appendix 5b)

For each statement listed below, please determine:

1. Rate the following constraining elements that are true to exist in accounting education environment?

S. N	Constraining factors	1(Strongly disagree) -----3(Neutral)-----5(Strongly agree)				
1	Students enrolling in accounting classes do not have adequate academic skills to learn at fast pace?	1	2	3	4	5
2	Students have an inappropriate (non-serious) attitude for learning?	1	2	3	4	5
3	Classes are pack with a large number of students?	1	2	3	4	5
4	Accounting curriculum has insufficient provision to allow for the effective development of skills?	1	2	3	4	5
5	As a shift to research based culture, educators are too busy with research such that this impacts their teaching abilities negatively?	1	2	3	4	5
6	Teachers extra efforts are not appreciated in terms of extra reward by the accounting institutes?	1	2	3	4	5
7	Students have a lack of interest in accounting discipline?	1	2	3	4	5
8	People (potential students) have misperception about accounting education as being highly mathematical in nature?	1	2	3	4	5
9	Accounting institutes are not offering adequate training opportunities to their academic staff?	1	2	3	4	5
10	Some of the training organisations are not following the standard procedures to develop skills in students as suggested by the accounting bodies?	1	2	3	4	5
11	For teaching in accounting institutes it is difficult to find competent academic staff?	1	2	3	4	5
12	During articleship, students' get demotivated due to inadequate stipend offered by most of the training organisations?	1	2	3	4	5

## **Appendix 14b – Employers group questionnaire complete**

### **Demographic details - for Employers (representing Appendix 2a)**

**This part of the questionnaire includes demographic details such as sex, age, years of experience, position and qualification etc.**

1) What is your gender?

Male

Female

2) What is your age?

20 - 24 years  25 - 35 years  36 - 44 years  45 - 54 years  55 years or above

3) How many years of accounting practitioner experience do you have?

Less than a year  1 - 3 years  4 - 7 years  8 - 10 years  11 years or more

4) What position you hold within the organisation?

Top level executive (CEO, Managing director etc)

Others

Middle level executive (Chief financial officer, auditor etc)

5) Do you have certified accounting education at any level (such as CPA, CA, CIMA, ICMAP and CFA etc)?

Yes

No

6) What is your general academic qualification?

Higher Secondary School Certificate (FA, FSc etc)

Bachelor degree (BA, BBA, B.Com etc)

Master degree (MSc, MA, MBA, M.Com etc)

Masters of Philosophy (MS or M. Phil)

Doctorate (PhD)

**Expectation and Performance gap - for Employers (representing Appendix 4b &7b)**

**For each of the generic skills listed below, please determine:**

**(1) Rate the following skills that you expect of students to acquire in accounting education for their career development.**

**(2) State the skills competence level that is expected from a student to possess for employment at the time of certification.**

S. N	Generic Skills	<b>(1)</b> <b><u>Skills that must be acquired in education by students for career development</u></b>					<b>(2)</b> <b><u>skills competence level required to get employment at entry level</u></b>				
		1(Strongly disagree)-----3(Neutral) --- -----5(Strongly agree)					1(No competence) ----- 5(High competence)				
1	Decision making: having the ability to conceptually structuralize the situation and select one amongst available options.	1	2	3	4	5	1	2	3	4	5
2	Financial risk analysis: having the ability to assess the factors that may jeopardize the project such as knowing how to conduct ratio analysis, portfolio management, NPV, IRR, cost benefit analysis, sensitivity analysis etc.	1	2	3	4	5	1	2	3	4	5
3	Financial accounting: concerned with the study of reporting the financial transactions and the preparation of financial statements.	1	2	3	4	5	1	2	3	4	5
4	Information technology competence: having the ability to use computer softwares such as knowing MS Office, Peachtree, UBS etc.	1	2	3	4	5	1	2	3	4	5
5	Critical thinking: having a sight to see things beyond its apparent meaning and not accepting anything until proven with logical reasoning or through some evidence.	1	2	3	4	5	1	2	3	4	5
6	International global perspective: Knowledge and understanding of international financial reporting standards and of current developments in the accounting profession.	1	2	3	4	5	1	2	3	4	5

7	A legal regulatory perspective: knowledge of the legal structure of the state such as corporate law, taxation and auditing standards.	1	2	3	4	5	1	2	3	4	5
8	Marketing/clients focus: customer care orientation such as knowing marketing tactics in order to deal with clients.	1	2	3	4	5	1	2	3	4	5
9	Problem solving: coming up with a practical and feasible solution to a problem.	1	2	3	4	5	1	2	3	4	5
10	Leadership: having the ability to manage a group of people such as assigning tasks, giving directions, keeping staff motivated and make them answerable.	1	2	3	4	5	1	2	3	4	5
11	Project management: having the ability to establish and run new projects.	1	2	3	4	5	1	2	3	4	5
12	Think and behave ethically: professional behavior of accountants must be according to accounting code of ethics.	1	2	3	4	5	1	2	3	4	5
13	Flexibility and adaptability: be flexible and adaptable to changing environment in official routine activities.	1	2	3	4	5	1	2	3	4	5
14	Strategic management: concerned with the study of understanding organisation strategic requirements such as knowing porter's 5 forces, SWOT analysis, price differentiation strategies, product development, market penetration etc.	1	2	3	4	5	1	2	3	4	5
15	Independent thinking: having independent professional judgment.	1	2	3	4	5	1	2	3	4	5
16	Focused on outcomes: ability to focus on objective and subjective outcomes such as meeting financial targets and deadlines.	1	2	3	4	5	1	2	3	4	5
17	Tolerate ambiguity: having the ability to ignore annoying routine activities in official environment.	1	2	3	4	5	1	2	3	4	5
18	Think creatively: coming up with new and more effective solutions to old problems.	1	2	3	4	5	1	2	3	4	5
19	Listen effectively: listen attentively and understanding what others are saying.	1	2	3	4	5	1	2	3	4	5
20	Presentation skill: appropriately present your point of view in official meetings.	1	2	3	4	5	1	2	3	4	5

21	Negotiation skill: making others understand what you are saying and convincing them to a point where both parties arrive at agreement.	1	2	3	4	5	1	2	3	4	5
22	Understanding group dynamics: while working in group understanding others work potential, attitude, emotions, and patience level.	1	2	3	4	5	1	2	3	4	5
23	Communicate in written format: having the ability to draft inter office memos and letters.	1	2	3	4	5	1	2	3	4	5
24	Communicate orally: having ability to speak fluently, using appropriate tone to address your boss and subordinates.	1	2	3	4	5	1	2	3	4	5
25	Engage in lifelong learning: attending professional development programs for self-learning.	1	2	3	4	5	1	2	3	4	5
26	Inter or multidisciplinary perspective: while doing accounting considering others disciplinary perspective such as strategic management, corporate law and taxation etc.	1	2	3	4	5	1	2	3	4	5
27	Teamwork: having the ability to collaborate with colleagues to resolve conflicts while working in group.	1	2	3	4	5	1	2	3	4	5
28	The ability to analyse and reason logically: supporting your arguments with theoretical analysis or objective or subjective reasoning process.	1	2	3	4	5	1	2	3	4	5
29	Personal attributes: having confidence, identifying owns strengths and weaknesses, motivation level, self-promotion and self-management etc.	1	2	3	4	5	1	2	3	4	5
30	Work effectively in diversified cultural settings: understanding cultural norms and values to work in diversified culture or multinational firms.	1	2	3	4	5	1	2	3	4	5
31	Self-initiative: taking the work responsibility on your own while considering work environment dynamics.	1	2	3	4	5	1	2	3	4	5
32	English language: having the ability to read, write, listen and speak in English.	1	2	3	4	5	1	2	3	4	5
33	Statistics: study of the collection, organization,	1	2	3	4	5	1	2	3	4	5



	analysis, interpretation, and presentation of data such as knowing how to conduct regression analysis, correlation, chi-square, t-test, and hypothesis testing etc.										
34	Cost and management accounting: study of the accounting information to managers within organizations, to provide them with the basis to make informed business decisions such as knowing budgeting techniques, costing, accounting for labour, and accounting for overheads etc.	1	2	3	4	5	1	2	3	4	5
35	Economics background: analysing the production, distribution and consumption of goods and services such as knowing how to measure GDP, GNP, demand and supply curve, equilibrium, and price elasticity etc.	1	2	3	4	5	1	2	3	4	5