

ACCOUNTABILITY AND PERFORMANCE OF NEPALI BUREAUCRACY: A
SURVEY OF THE MINISTRY OF EDUCATION

Anil Kumar Gupta

A Dissertation

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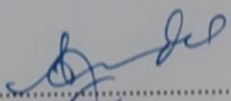
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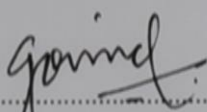
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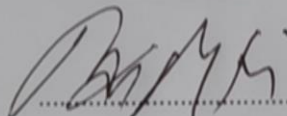
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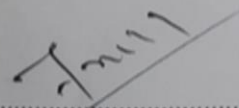


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I understand and agree that my dissertation will become a part of permanent collection of Kathmandu University. My signature below authorizes the release of my dissertation to any reader upon request for scholarly purposes.



.....

23 July 2018

Anil Kumar Gupta,
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DEDICATION

I would like to dedicate this dissertation to my mother (Late. Bindu Devi) and father (Nandu Sah).

DECLARATION

I hereby declare to the best of my knowledge that this dissertation is my original. No part of it was earlier submitted for the candidature of research in degree of any college, university, and educational institutions.

.....

Anil Kumar Gupta,
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23 July 2018

AN ABSTRACT OF THE DISSERTATION OF

Anil Kumar Gupta for the Degree of *Master of Philosophy in Education*

(Development Studies) presented on 23 July 2018.

Title: *Accountability and Performance of Nepali Bureaucracy: A Survey of the Ministry of Education*

Abstract Approved

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Ramesh Chandra Paudel, PhD

Dissertation Supervisor

Accountability is an instrument of ensuring good governance within the bureaucratic structure throughout the world, and Nepal is not an exception. Time and again, the government of Nepal has adopted various plans, policies, and institutional mechanisms to hold duty bearers accountable for their actions and performance. However, it is a general feeling that the practice and exercise of accountability in the Nepali bureaucracy are still not as expected. Citizens often feel that bureaucrats are being irresponsible and unaccountable, and criticize them for this. Perhaps, many of us have similar personal experiences that have led us to the same conclusion. Bearing such in mind, this quantitative study examined the determinants of accountability and performance of bureaucrats working in the education sector, employing three research questions: i) What is the level of accountability and performance? ii) To what extent do accountability and performance differ based on demographics? iii) What is the association of accountability with performance and vice versa?

To address these questions, I adopted a quantitative approach based on primary data, employing survey as a strategy of inquiry. My target population for the survey was educational bureaucrats working in the central level of organization of the

Ministry of Education. According to the Ministry records, there were a total of 592 posts (*Darbandi*) across the different central level organizations. I excluded employees without ranks and vacant posts from the sampling frame. Hence, the total number of educational bureaucrats working in different levels of the central organization was 459. From this, I selected 213 respondents using the most popular and widely accepted formula proposed by Yamane (1967). Data was collected through a self-administered structured questionnaire, and analyzed by using descriptive and inferential statistics. For descriptive statistics, I calculated frequency, percentages, crosstab mean, median, and standard deviation; and for inferential statistics, I used Phi, Rank-Correlation, Chi-square, and Logistic Regression to determine the association between the variables.

The results of the study show that the educational bureaucrats working in central level of organization of the Ministry of Education seem to be accountable. Transparency, responsibility, and responsiveness also appear to be good; however, liability and controllability were not found to meet expectations. This scenario reveals that there is a weak controllability mechanism. Similarly, there was a weak system for performance-based reward and punishment. Educational bureaucrats were found to perform at a higher level, executing defined duties in a timely manner to achieve organizational goals and standards effectively and efficiently.

It is interesting to note that accountability and performance of educational bureaucrats differed by their demographic attributes, results that were confirmed by descriptive statistics. On the other hand, inferential statistics did not produce significant effects, except in regards to job position. Therefore, it can be said that accountability and performance of educational bureaucrats were independent, except for their position. Nevertheless, this scenario was different when examining the

relationship between accountability and performance. Accountability and performance of educational bureaucrats were significantly associated with each other, as indicated by the results.

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I have finally come to the end of this stage of the MPhil academic journey, which was not an easy task for me. I thank the Almighty God, all my mentors, family, and friends who did not leave me to trek alone during this journey. I would like to extend my heartfelt appreciation to everyone without whom my dissertation would not have been completed today, and I would not be where I am today.

I am very much indebted, and express my profound gratitude to my respected supervisor, Ramesh Chandra Paudel, PhD, who provided continuous guidance, mentorship, criticism, support, and encouragement at all stages of my research work. I would also like to express my deepest appreciation to Associate Prof. Prakash Chandra Bhattarai, PhD, for continuous encouragement and support throughout the study journey. Similarly, I am thankful to Prof. Mahesh Nath Parajuli, PhD, Dean of the School of Education, for his inspiring input to complete the dissertation.

I also express my profound gratitude to respondents for being cooperative and supportive, and for their invaluable contribution. Similarly, special thanks go to Samyog Sah who helped me during the entire data collection process. I would like to express my hearty appreciation to my friend Tara Prasad Kharel for their invaluable motivation and support for achieving this accomplishment. Similarly, I would like to thank Prakash Kumar Paudel and Gyanada Acharya for language edit.

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Anil Kumar Gupta,
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TABLE OF CONTENTS

AN ABSTRACT OF THE DISSERTATION OF	i
ACKNOWLEDGMENTS	iv
TABLE OF CONTENTS.....	vi
LIST OF TABLES	ix
LIST OF FIGURE.....	xi
ABBREVIATIONS	xii
CHAPTER I: INTRODUCTION.....	1
Why this Topic?	1
Enclosing the Topic.....	2
Statement of the Problem	4
Purpose and Research Questions.....	6
Research Hypotheses.....	6
Rationale/Relevance of the Study	6
Scope of the Study.....	7
Organization of the Study	8
Summary of the Chapter	8
CHAPTER II: REVIEW OF LITERATURE	9
History of Accountability.....	9
What is Accountability?	11
Forms of Accountability.....	13
Four Aspects of Accountability: What, Whom, Who and How.....	18
Perspectives on Accountability	20
Performance	25

Accountability and Performance	26
Accountability in Nepal	28
Institutional Frameworks.....	30
Laws, Policies, Directives, and Guidelines	32
Research Gap.....	36
Theoretical Framework	36
Summary of the Chapter	40
CHAPTER III: RESEARCH METHODOLOGY	42
Paradigm and Philosophical Assumptions of the Study	42
Research Design.....	44
Sample Size and Selection Criteria	45
Nature and Source of Data	47
Tools and Procedures of Data Collection.....	47
Data Management, Analysis, and Interpretation.....	48
Ethical Standards.....	52
Reliability and Validity of the Study.....	53
Study Variables	55
Summary of the Chapter	56
CHAPTER IV: BACKGROUND INFORMATIONS OF RESPONDENTS	57
Age and Gender of Respondents.....	57
Respondents and Organizations	58
Education Level of Respondents.....	59
Position of the Respondents	59
Caste/Ethnicity of Respondents	60
Service Year of Respondents	61

CHAPTER V: ACCOUNTABILITY, PERFORMANCE, AND DEMOGRAPHIC	. 63
Accountability and Gender	.....63
Accountability and Age	.....64
Accountability and Education	.....65
Accountability and Organizations	.....66
Accountability and Position	.....68
Accountability and Service Year	.....69
Accountability and Demographics	.....70
Performance and Demographics	.....75
Accountability and Performance	.....81
Discussion	.....85
Summary of the Chapter	.....92
CHAPTER VI: SUMMARY, CONCLUSION, AND IMPLICATION	.....93
Summary	.....93
Conclusions	.....97
Implications	.....98
REFERENCES	.....102
APPENDIX I	.....118
APPENDIX II	.....122
APPENDIX III	.....127

LIST OF TABLES

Table 1 Bureaucratic Accountability Mechanisms	16
Table 2 Posts, Vacant Posts and Rank-less, by Central Level of Organizations	45
Table 3 Normality Test	49
Table: 4 Reliability Test.....	54
Table 5 Study Variables.....	56
Table 6 Age and Gender Distribution of Respondents	57
Table 7 Distribution of Respondents by Organizations	58
Table 8 Distribution of Respondents by Education Level	59
Table 9 Distribution of Respondents by Position	60
Table 10 Distribution of Respondents by Caste/Ethnicity.....	61
Table 11 Distribution of Respondents by Service Year.....	61
Table 12 Level of Accountability by Gender	63
Table 13 Level of Accountability by Age Group	65
Table 14 Level of Accountability by Education	66
Table 15 Level of Accountability by Organizations.....	67
Table 16 Level of Accountability by Position	68
Table 17 Level of Accountability by Service Year	70
Table 18 Correlation, Phi, and Chi-Square for Accountability and Demographics	71
Table 19 Omnibus Tests of Model Coefficients	72
Table 20 Model Summary	73
Table 21 Classification Table ^a	73
Table 22 Variables in the Equation.....	74
Table 23 Correlation, Phi and Chi-Square for Performance and Demographics.....	77

Table 24 Omnibus Tests of Model Coefficients	78
Table 25 Model Summary	79
Table 26 Classification Table ^a	80
Table 27 Variables in the Equation.....	80
Table 28 Correlation, Phi, and Chi-Square for Accountability and Performance	81
Table 29 Omnibus Tests of Model Coefficients	82
Table 30 Model Summary	82
Table 31 Classification Table ^a	84
Table 32 Variables in the Equation.....	85
Table 33 Level of Performance by Gender.....	122
Table 34 Level of Performance by Age Group.....	122
Table 35 Level of Performance by Organizations	123
Table 36 Level of Performance by Position	124
Table 37 Level of Performance by Service Year.....	125
Table 38 Level of Performance by Education	126

LIST OF FIGURE

Figure 1.1: Theoretical Framework of the Study	37
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ABBREVIATIONS

APA	American Psychological Association
BC	Before Christ
CUTS	Consumer Unity and Trust Society
MPhil	Master of Philosophy
NASC	Nepal Administrative Staff College
NPC	National Planning Commission
SE	Standard Error
USAID	United States Agency for International Development

CHAPTER I

INTRODUCTION

Accountability in Nepali Bureaucracy is one of the major concerns among the policy makers in the country. As such, this dissertation aims to contribute to the existing literature by conducting a research titled, "Accountability and Performance of Nepali Bureaucracy: A Survey of the Ministry of Education". This dissertation brings into discussion the practice and exercise of accountability and performance within Nepali bureaucracy. This chapter introduces reasons for choosing this topic, enclosing the topic, statement of the problem, purpose and research questions, research hypotheses, rationale/relevance, scope of the study, organization of the study, and a summary of the chapter.

Why this Topic?

As a researcher, my professional background and current job role is relevant to this dissertation. Working as a training and research officer at Nepal Administrative Staff College (NASC), I have to deal with various issues of accountability and performance of public sector governance. However, I was completely unaware of the term accountability before joining the NASC, and my understanding gradually widened through work experience and participation in various trainings and seminars on issues of public sector governance. I realized that accountability plays a dominant role in achieving good governance in the public sector. I read extensively on the topic and attended different workshops on issues of public sector accountability as well. Nevertheless, this did not quench my thirst to learn more about the subject of accountability. I shared my curiosity with a friend and he suggested that the best way to increase my knowledge was to carry out a Master of Philosophy (MPhil)

dissertation on the topic. Following his suggestion, as well as considering my professional background, I determined to examine practices of accountability and performance in Nepali bureaucracy within the chosen topic.

Enclosing the Topic

Accountability has been extensively accepted as a base of public sector governance all over the world including Nepal. It is an indispensable component in a bureaucratic structure that holds bureaucrats accountable for their conducts, performances, actions, and decisions. Maintaining a competent bureaucracy is vital for every government and in no way can it be denied (Siddiquee, 1999). However, bureaucracy continuously faces fraud, inefficiency, ineffectiveness, corruption, and failure in delivering services in an efficient and effective way (Bajpai, 2014). In this regard, accountability plays a greater role to ensure efficient, effective, competent, prompt, responsive, transparent, and trustworthy bureaucracy.

Bureaucrats are expected and assumed to be accountable for their actions and performance to the public and different organizations. For this reason, bureaucrats are under pressure to justify not only functioning processes and financial deeds, but also improving the performance of their services delivery and results (Wang, 2002). From this, it is clear that bureaucrats have an obligation and responsibility to act in accordance with the rules, regulations, procedures, and standards. This helps to accomplish their duties successfully and support higher levels of performance. Bureaucrats can be held accountable through various means such as constitutions, transparency, public hearing or meeting, performance evaluation, feedback systems, reward or punish systems, codes of conduct, chain of hierarchical command, improving organizational behavior, public or social audit, empowering beneficiaries,

media scrutiny, complaints processes, peer reviews, continuously making improvements through learning, and so on.

A real challenge for creating efficient accountability, is arranging the accountability process differently each time, where different actors' demand distinctive evidences, and apply different measures to judge and produce various kinds of consequences (Salminen & Lehto, 2012). Actors can be accountable through two different processes. In the first process, actors feel the compulsion to inform report, justify, and explain their past and current actions (Bovens, 2007). The second discusses the capacity of the forum to interrogate and impose sanctions on bureaucrats who have strayed from their duties (Bovens, 2007). Through these two processes, it is clear that the authority of the forum can hold an actor accountable to take responsibility, answer queries, justify and explain their actions, deeds, conduct, and performance.

However, this is neglected in most studies and accountability has just been treated as a neutral mechanism for performance management or auditing (Newell & Bellour, 2002). Bearing these relational ideas in mind, I adopted five different dimensions (transparency, liability, control, responsibility, and responsiveness) of accountability suggested by Koppell (2005). Similarly, I drew the four components of performance, namely – executing defined duties, meeting deadlines, effectiveness, and work efficiency, as suggested by Iqbal, Anwar, and Haider (2015). It helped me to examine the determinants of accountability and performance of bureaucrats working in administration and management within the Ministry of Education (hereafter referred to as educational bureaucracy).

Statement of the Problem

Accountability and improved bureaucratic performance have become a central concern in the governmental structure. As such, the Government of Nepal has invested ample attention, time, and money in this regard. Similarly, numerous reform commissions, constitutional bodies, state institutions, laws, policies, directives, and guidelines have been formed over the years. In spite of this, practice and exercise of accountability and performance within Nepali bureaucracy are not reported as expected. It is said that the Nepali bureaucracy has increasingly become dysfunctional, fragmented, poorly organized, and incapable of performing at a level acceptable to the public (Shakya, 2009). They are blamed for being inefficient, buck-passing, delaying matters, having self-seeking behaviors, being unaccountable, corrupt, non-transparent, and irresponsible (Bajpai, 2014; Dangal, 2005). Nepotrimonial relationships often nurture a culture of informal governance, which often undercuts accountability towards the public (Pherali, 2017). Public perception is that no official work can be done without paying bribe (Bhattarai, 2017). Bureaucrats are unable to create a positive impression among citizens whom they serve (Shakya, 2009). Citizens feel and quite often criticize them for being irresponsible and unaccountable. Perhaps, many of us have similar personal experiences that have led us to the same conclusion.

The culture of nepotism and red-tapism is expanding despite various efforts to improve the quality of governance. Chakari (Sycophancy) and Afno Manchhe (one's own people) are rooted in the history of Nepali bureaucracy (Bista, 1991). Nepali bureaucracy is notorious for being too complex, rigid, centralized, and delayed in decision-making and adhering rigidly to rules and regulations (Gautam, 2008). As per Transparency International, Nepal has been placed 139th (out of 176),

116th (out of 171), 126th (out of 175), 130th (out of 167), and 131st (out of 176) in 2012, 2013, 2014, 2015, and 2016 respectively, on the corruption perception index (Adhikari, Gupta, & Shrestha, 2016). This trend of corruption reveals that Nepali bureaucracy is suffering from low level of accountability and performance.

Nepali educational bureaucracy is also not an exception, as discussed in Bajpai (2014), Shakya (2009), Gautam (2008), Dangal (2005), and Bista (1991). It is facing various challenges, even though, every year the Government of Nepal has been spending substantial amounts in the education sector. The failures in accountability are systemic, rather than attributable to individual actors, within the education system (Pherali, 2017). The task of making bureaucracy, including educational bureaucracy, more productive, efficient, cost-effective, service-oriented, trustworthy, transparent, responsive, and initiative-taking has been a challenge (National Planning Commission [NPC], 2002). These challenges can be addressed through effective practice and exercise of accountability; and in the education sector, it is the responsibility of the central, province, and local levels of educational bureaucracy. The central level of educational bureaucracy is the prime decision-making body. It implements all educational plans, policies, and programmes for overall development of education in the country. Its role cannot be ignored to make province and local level of educational bureaucrats more efficient, effective, competent, responsive, transparent, and accountable. In Nepali educational bureaucracy, there is no single study that combines performance and accountability. Hence, I decided to examine the determinants of accountability and performance in the central level organizations of the Ministry of Education.

Purpose and Research Questions

The main purpose of this study is to examine the determinants of accountability and performance of educational bureaucrats working in the central level organizations of the Ministry of Education. To achieve this, I formulated the following research questions:

- i) What is the level of accountability and performance?
- ii) To what extent do accountability and performance differ based on demographics?
- iii) What is the association of accountability with performance and vice versa?

Research Hypotheses

In this section, I present research hypotheses to support the research questions. I formulated these research hypotheses based on the literature on accountability and performance, and based on my research questions. I conducted empirical analysis considering these main research hypotheses: i) Accountability and performance differ by demographic peculiarities and ii) There is a significant association between accountability and performance, however the direction of such association is not clear at this stage.

Rationale/Relevance of the Study

Accountability and performance are central issues in the bureaucratic structure. Every government wants to ensure accountability and high-level of performance in the bureaucracy. Therefore, it is necessary to determine accountability and performance and their relation to bureaucracy in the dynamic socio-political and administrative context. This study identified several facets of accountability and performance that could be useful for the bureaucratic organization, as well as for public sector governance. Further, this will be relevant

to bureaucrats, policy makers and politicians to develop better strategies and initiatives in the days to come. Even more, it may be helpful to revisit policy and governance approaches to improve the accountability and performance in changing socio-political and administrative contexts.

This research study has academic relevance in the education sector and pragmatic relevance in the governance and public administration fields. It also contributes to the policy debates of accountability and performance within the educational bureaucracy structure. Besides, the study contributes to the researchers who are interested in accountability and performance of bureaucrats working in the administration and management of the education sector. It can also be useful to the empirical literature on the debate on accountability and performance relations. It also provides an insight into the possibility of revising an existing theory to a customized one to address emerging accountability and performance dilemmas. The results of this research give new prominence and deeper reflections on the accountability and performance in the educational bureaucracy structure. The knowledge gained during this study could be used to identify key areas of inquiry for a more in-depth study in the future. This study also delivers a good pattern of application of the statistical tools that guarantee the validity, reliability, and robustness of quantitative analysis results. Finally, the findings of my study can be directly useful in the accountability training sessions that contribute to learning in accountability and performance for the bureaucrats.

Scope of the Study

Bureaucrats work in different areas of public sector governance. However, I covered only the bureaucrats who are working in the central level organization of the Ministry of Education. Different authors have provided different dimensions to

examine accountability and performance, as mentioned in the literature review section. I examined the determinants of accountability and performance by adopting a suitable model based on the literature and theoretical framework. Relevant information and primary data on accountability and performance of educational bureaucrats were collected with the help of self-administered structured questionnaire.

Organization of the Study

This dissertation is organized into six chapters. The first chapter is about the introduction including why I chose this topic, enclosing the topic, statement of the problem, purpose and research question, rationale/relevance of the study, scope of the study, organization of the study, and summary of the chapter. Similarly, the second chapter contains a review of the literature, which is focused on theoretical review, policy review, and theoretical framework. Chapter three covers methodology of the study and consists of paradigm and philosophical assumptions followed by research design, sampling and sample size, nature and sources of data, data collection tools and procedures, data management, analysis and interpretation, ethical standards, reliability and validity, and study variables. Chapter four contains data analysis and interpretation of accountability and performance. The next section, chapter five, comprises of statistical analysis and discussion of accountability and performance based on demographic peculiarities. Finally, chapter six covers overall summary, conclusion, and implications of the study.

Summary of the Chapter

In this chapter, the scenario of accountability in Nepal, in the context of the bureaucratic structure, was discussed. Reasons for the research topic, followed by purpose and research questions, rationale/relevance of the study, delimitation of the study, and organization of the study, were also highlighted.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this chapter is to review the literature on accountability and performance, which are related to and have an important link in analyzing and formulating an idea of accountability and performance. For this purpose, the chapter is divided into two sections: scholars' views and theoretical framework. Scholars' concrete ideas, thinking on issues of accountability, performance and the link between accountability and performance are discussed in the first section. The second section includes the theoretical framework that is formulated based on scholars' ideas on accountability and performance.

History of Accountability

The current concept of accountability has a history as old as civilization itself (Gray & Jenkins, 1993). Famous Hindu religious epics, such as the Ramayana and the Mahabharat, also emphasized the idea of accountability. As per these epics, even actions of kings need to be checked with the help of political and administrative regulations. Ramayana says "*Yatha raja tatha praja*" (as the ruler is, so shall be the subjects). This means that rulers should lead by example, since they have intellect and ability, and their actions impact the welfare of the citizens. Similarly, The Mahabharat even approved a protest against a King who failed to perform his duty to protect his subjects. Another text written by the Kautilya, called "Kautilyako Arthashastra", elaborates a system of vigilance and penalties designed to ensure effective performance of appointed officials. Likewise, the concept of Karma in Hinduism implies that each person is responsible for his/her actions. Depending on the moral quality of an action, individuals are rewarded or punished, either in this life or in a

future life after death (Reichenbach, 1988). The dread of immoral karma forces people to be more responsible and accountable for their actions.

Similarly, around 2000 BC, the King of Babylonia named Hammurabi, introduced a legal code that arranged for the accountability check of individuals entrusted with others' resources (Bird, 1973). Further, Bird argued that these individuals had a duty to provide evidence for and account of what they had received. Accountability for the use of state resources, such as wheat and flour, was taken seriously in Egypt's New Kingdom (1552-1069 BC) (Ezzamel, 1997). In democratic Athens (400-500 AD), accountability was a brutal and direct affair. Ten times a year, public officials were put in front of the open public forum, where a vote was made on their continuity in office, and whether there was a complaint against them or not (Roberts, 1982). Athenian generals were in a far more precarious position. They were at greater risk of death from their own people, as a result of being held accountable for their last performance in battle; and they would fall at the hands of their own people, rather than at those of the enemy (Roberts, 1982).

Literally, accountability comes from accounting, meaning bookkeeping (Bovens, 2005). In 1086 AD, the King of England, William I, ordered a record of all the property holders in his realm, to render a count of what they possessed. These possessions were assessed and listed by royal agents. This is also called the English Domesday books. The Domesday books held very accurate accounts of all the possessions of the king. This record wasn't only held for taxation purposes but also for a means to establish the foundations of royal governance. In the early twelfth century, this had evolved into a highly centralized administrative kingship that was ruled through centralized auditing and semi-annual account giving. However, since the reign of William I of England, accountability slowly wrestled free from its

etymological bondage with conventional accounting. In the late twentieth century, the Anglo-Saxon world, witnessed a transformation of the traditional bookkeeping function in public administration, into a much broader form of public accountability. Consequently, accountability no longer conveys a stuffy image of bookkeeping and financial administration in contemporary political discourse. Now, it represents promises of fair and equitable governance. Hence, every country in the world, including Nepal, has adopted central means to promote good governance.

What is Accountability?

Accountability is the central pillar of good governance. It has been frequently used by citizens, politicians, policy makers, practitioners, bureaucrats, and academicians. However, accountability is defined and perceived in various ways in the literature. It has been described as a narrow or broad (Kearns 1996), abstract (Edwards & Hulme, 1996), ever expanding concept (Mulgan, 2000), murky (Behn 2001), complex and dynamic (Ebrahim 2003), golden concept (Bovens, 2005), evocative and evaluative (Bovens , Schillemans, & Hart, 2008), normative (Bovens, 2010), amorphous (Blind, 2011), buzzword or magic concept (Pollitt & Hupe, 2011), multifaceted and complex (Dubnick & Frederickson, 2011; Olsen, 2013), icon of good governance (Ebrahim, 2010, Frølich, 2011, O'Kelly & Dubnick, 2014), icon, hurrah-word and a chameleon (Bovens, Goodin, & Schillemans, 2014). From all of these scholars' views, it is clear that the nature and meaning of accountability varies.

Accountability means the process by which public sector organizations and their officials manage the diverse expectations generated within and outside the organizations (Romzek & Dubnick, 1987). For Koppell (2005), accountability is a combined form of transparency, liability, control, responsibility, and responsiveness. However, in the view of Ackerman (2005), accountability is a proactive process

where public officials inform and justify their plans of action and behavior, and results are sanctioned accordingly. In the same vein of Ackerman, Sirker (2006) defines accountability as an obligation and compulsion of the duty bearer to take account of their actions in both their conduct and performance.

Many scholars have defined accountability as a relationship. According to Mulgan (2003), accountability is the relationship of social interaction and exchange involving complementary rights on the part of the account-holder and obligations on the part of the duty bearer. Bovens (2010), one of the prominent scholars in accountability, presents the most widely accepted definition of accountability. According to him, accountability is the relationship between an actor and a forum. An actor has an obligation to explain and justify his/her conducts and the forum can pose questions and pass judgment, as a result of which, the actor may face consequences. Hence, it can be said that accountability is the relationship between two or more parties where one party is obliged to give an account or justification of his/her conducts to another, and receive consequences accordingly.

Keeping these views in mind allowed me to perceive and realize accountability as an obligation of the office bearer to take responsibility, give answers, justification and explanations for their behavior, actions, conduct and performance. For me, accountability is the combination of transparency, liability, controllability, responsibility, and responsiveness, as suggested by Koppell (2005); and informing or reporting, discussing, debating or justifying, and facing appropriate consequences, as discussed by Bovens (2010).

Forms of Accountability

Accountability is a multidimensional concept and it has different forms, which are as follows:

Political Accountability

Political accountability refers to the elected leaders being answerable to the citizens, and public servants to the elected officials (Blind, 2011). In other words, it is a form of accountability where public duty bearers are answerable to elected representatives and parliament. Similarly, elected representatives and parliament are answerable to the citizens. As per Aktan, Ağcakaya and Dileyici (2006), political accountability can be ensured through effective legislative systems, the existence of a democratic electoral, fixed tenure for elected politicians, re-elected rights and dismissal of elected politicians who have failed under certain conditions (as cited in Demirel, 2014). In the same line, Blind (2011) argued that well-functioning political party systems and a healthy executive-legislature division of labor support to achieve political accountability in the nation, is required. Similarly, the citizens should be empowered to hold elected politicians answerable, by different means such as, social media, newspapers, citizen politician interface, and so on.

Legal Accountability

Legal accountability refers to the ability of the courts to challenge actions taken by public sector organizations through the process of judicial review (Lawton & Rose, 1991; Oliver, 1991). Legal accountability is not only a concern of courts or tribunals, but also internally of political and administrative actors (Wiss & Jantz, 2015). Goetz and Gaventa (2001) argued that legal accountability could be ensured through judiciary that checks whether politicians and officials act within the confines

of their prescribed jurisdictions. It is usually based on specific responsibilities, formally or legally conferred upon the authorities.

Social Accountability

Social accountability is also called demand-led or bottom-up accountability. It is defined as an approach towards building accountability that relies on civic engagement, i.e., in which it is ordinary citizens and civil society organizations who participate directly or indirectly in exacting accountability (World Bank, 2004). Based on the World Bank's definition, it can be argued that social accountability is the form of accountability that builds the capacity of citizens to demand an answer from public authorities. Social accountability can be viewed either as voice-led or control-oriented. Voice-led social accountability ensures citizen participation in policy-making, advocacy and deliberation processes (Malena et al., 2004 cited in Blind, 2011). However, control-oriented social accountability gives the citizens a watchdog role, often in cooperation with other societal actors, such as the media and professional associations (Orlansky & Chucho, 2010). Both aspects of social accountability are intended to improve transparency and access to information by holding the state and its agents accountable through various mechanisms/tools, namely information tools, accountability and integrity tools, and participatory development tools. In Nepali bureaucracy, citizen charter, right to information, civic education, public hearing, public audit, participatory planning, and participatory budgeting are widely practiced for empowering citizens for strengthening democratic governance.

Market-based Accountability

Market-based accountability gained wide currency in public sector governance throughout the world, including in Nepal. It perceives citizens as consumers and they

must be satisfied with public services. It focuses on the responsiveness of service providers to a body of sovereign consumers (Stone, 1995). Therefore, it is based more on an “exit” strategy rather than a “voice” one (Lupson, 2007). For instance, if a patient is not satisfied with the services of hospitals, he/she can easily exercise their right to “exit” by changing hospitals. Hence, this competitive logic pushes hospitals to reform their services so as not to lose their patients.

Bureaucratic Accountability

Bureaucratic accountability is a key feature of representative democratic government (Bovens, 2007). According to Blind (2011), bureaucratic accountability is about rules, regulations, directives, procedures, and norms of hierarchical obligation to answer to one’s superior. Based on Blind’s idea, it can be said that it is hierarchical accountability, where he/she has little discretion. All actions and performances are based on predefined rules, regulations, processes, and hierarchical control. Within bureaucratic accountability, there is a legitimate relationship between a superior and a subordinate, where the subordinate follows orders and is responsible and accountable to senior officers or legislative bodies. Higher authorities may instigate or audit the use of administrative discretion, employing lower bureaucrats (Yilmaz, Beris, & Berthet, 2008). Similarly, Salminen and Lehto (2012) argued that supervisory control is applied intensively to a wide range of agency activities in bureaucratic accountability. Bureaucratic accountability can be ensured through different means such as supervision, inspection, surveillance, monitoring, reporting, standard operating procedure, and so on. Gilbert, Kernaghan, Thynne and Goldring (as cited in Smith, 1991) offer various methods of controlling and categorizing into dimensions, ways by which public authorities can be held accountable (see Table 1).

Table 1
Bureaucratic Accountability Mechanisms

Dimension	Internal	External
Formal	Hierarchy	Legislative review
	Rules and Regulations	Advisory committees
	Budgets	Judicial action
	Personnel management	Ombudsman
	Performance evaluation	Review tribunals
	Auditing	Evaluation research
	Programme monitoring	Freedom of information
	Code of conduct	
Informal	Personal ethics	Public comment
	Professionalism	Interest group pressure
	Representative bureaucracy	Peer review
	Commitment	Media scrutiny
	Anticipated reactions from Superiors	Political parties
		Politicians and officials at other levels of government

Sources: Smith (1991)

Professional Accountability

Professional accountability emerged as an application of business principles in the public sector (Ramzek, 2000). It focuses on the evaluation of professionals in the public sector in terms of individual expertise, appreciation and specific duties; it is based on the professionalism of the conducts where technically expert administrators are expected to exercise considerable discretion that must be based on shared professional norms, values, and standards (Dergi, 2014). It depends on the integrity and trustworthiness of the experts.

Operational Accountability

Accountability operates either through higher authority within a direct chain of command or through a parallel institution. Former is known as vertical/hierarchical

and latter is known as horizontal accountability. Vertical accountability refers to the legal structures underlying public sector organizations, conforms to the processes of authorization and its defined mandates (Hodges, 2012). It is directly associated with a chain of command where subordinates usually report to a superior about their actions and performance. Hence, it creates a hierarchical or principal-agent relationship.

This relationship operates either in an upward or downward direction. Upward direction represents a traditional relationship of a subordinate to a superior. Every office and every official is a part of a hierarchy where the lower offices and officials function under the control of higher offices and officials (Weber, 1968). In downward accountability, an official is accountable to those who have no power, or lesser power than account holders, such as beneficiaries, service receivers, and so on. Furthermore, vertical accountability has two different formal and informal mechanisms. The formal includes rules, norms, regulations, procedures, inspections, monitoring, investigations, and so on. On the other hand, Informal mechanism includes public pressure, negative or positive press releases, media coverage, public displays of support or protest movements, interface meetings between citizens and public officials, and petitions (Blind, 2011). Both these mechanisms directly and indirectly oblige the duty bearer to take responsibility, give an answer, justification, and explanation for their behavior, action, conduct and performance.

Horizontal accountability is related to two or more parties that have the same amount of power, such as two government departments that work together as equals (Verschuere et al., 2006). Organizations report to each other rather than their hierarchical principals, such as clients, partners, professional peers or independent boards (Schillemans, 2008). Hence, duty bearers are held accountable to their peers and public administrators altogether are held accountable to the relevant ministers.

Edward (2011) states that horizontal accountability occurs in three different forms. First, two or more government agencies and their ministers are jointly responsible for achieving results or outcomes. Second, two levels of government share common objectives, or collectively are accountable to citizens to achieve certain outcomes. The third is increasingly observed in service delivery arrangements. Horizontal accountability occurs when third parties collaborate or partner with the government in some way to deliver services to citizens. It is important to note that vertical accountability is based on hierarchical relationship that is characterized by a direct possibility to sanction the official in question, whereas horizontal accountability normally takes place in the shadow of hierarchy. Thus, a combination of the upward, downward and horizontal accountability is termed 360° accountability.

Four Aspects of Accountability: What, Whom, Who, and How

Accountability for 'What' is simply known as standards and purpose of accountability. Kearns (1996) and Behn (2001) claim that duty bearers are held accountable for finances, fairness, and performance. It helps to ensure efficiency, effectiveness, result, performance, and value for money in public sector governance. Accountability for finances and fairness make up the conventional forms of accountability. Duty bearers can be held accountable for the improper use of public funds and the unfair and unequal treatment of any citizen (Bovens, 2006). Likewise, Behn (2001) argued accountability for the use/abuse of power is nothing more than accountability for finances and fairness. Further, he argues that accountability has tended to focus on finances and fairness, but that greater emphasis should be given to accountability for performance because the quest for accountability for finances and fairness have consequences for performance.

Accountability for 'Whom' is required for identification of the forum. It is also known as principal and beneficiaries. The forum can be either specific persons (superior, minister, journalist and in case of public accountability, general people) or agencies (parliament, local council, court, the audit office, and civil society). The forum holds the actor accountable for their behavior, actions, and performance. Public authorities have an obligation or responsibility towards the forum for their actions in both their conduct and performance.

Accountability for 'Who' clarifies the concept of actor or agent. Actors or agents can be either an individual (an official or civil servant) or an organization (a public institution or a government agency) that are required to answer and justify their actions and performance. For instance, a teacher has an obligation and responsibility towards students, parents and seniors for their behavior, conduct, and performance.

The 'How' concept of accountability is concerned with the mechanism of accountability through which, public authorities become answerable for their actions and performances. Public authorities can be held accountable through various mechanisms. Theisohn (2006) believes that public authorities can be held accountable through the following types of functions: 1) establishing reliable, legitimate and pro-poor rules of the game; 2) increasing transparency, access to information and awareness; 3) establishing facts, broadening evidence, and increasing objectivity; 4) mandating and maintaining regular monitoring and control; 5) improving access of poor to recourse and arbitration; 6) moving accountability loops closer to the people; 7) strengthening meaningful participation in political processes; 8) strengthening voice and ability to articulate.

Along the same lines, Frink et al. (2008) argue that accountability can be ensured through performance, evaluation, feedback systems, reward systems, and

management by way of objectives, justice protocols, formal policies and practice. Bearing these views in mind, it can be said that accountability of the public sectors can be ensured through various mechanisms. These are: accountability predefined standards, code of conduct, chain of hierarchical command, public/social audit, regulatory bodies, ombudsmen, monitoring, chatter, public hearing, complaints processes, peer reviews, learning from successes and failures, self-regulation, media scrutiny, right to information, legal framework, certification initiatives, communication, commitment, interest group pressure, political parties, personal ethics, integrity, and so on. Through these mechanisms, public authorities can successfully be held accountable for their activities and performances.

Perspectives on Accountability

Romzek and Dubnick (1987) have suggested four forms of accountability viz. bureaucratic, legal, professional, and political, each of which is associated with a different value emphasis and behavior expectations (Romzek & Ingraham, 2000). Similarly, two dimensions of accountability relationship occur in these four forms (Romzek & Dubnick, 1987; Radin & Romzek, 1996; Romzek, 2000; Romzek & Ingraham, 2000). The first dimension is the source of control/expectations and second is the degree of control/autonomy. The source of control/expectations is internal or external and the degree of control/autonomy is either high or low.

Ackerman (2005) presents two different variants of accountability, namely accountability as honesty and accountability as performance. According to him, the honesty version is process-oriented, but negative. Duty bearers are evaluated through time and based on the extent to which they abide by the standard operating principles. On the other hand, performance as accountability is results-driven, and positive. It is an emphasis on the outcomes, which are evaluated at project endings. Considering

these two variants of accountability, it can be said that honesty of accountability is associated with the rule, while performance of accountability is associated with the pro-active public decision-makers who are expected to perform efficiently and effectively.

Ebrahim and Weisband (2007) view accountability differently than Ackerman (2005). According to them, accountability is a combined form of four components viz. transparency that is also mentioned by Koppell (2005), answerability or justification, compliance and enforcement or sanctions. Transparency deals with the collection of information and making it available and accessible for public scrutiny. Moreover, answerability or justification is concerned with providing clear reasoning for actions and decisions. On the other hand, compliance should be ensured via monitoring and evaluation of procedures and outcomes, combined with transparency by reporting findings. Last but not least, enforcement or sanctions deal with shortfalls in compliance, justification or transparency of organizations and of duty bearers. Based on the argument made by Ebrahim and Weisband (2007), it can be reasoned that these four components are the keys through which duty bearers and organizations can be held accountable for their performance, actions, and behaviors.

Bovens, Schillemans and Hart (2008) offer three different normative perspectives – democratic, constitutional and learning – through which accountability can be judged. First, within democratic perspective, accountability measures should effectively link government's actions to the democratic chain of delegation. Second, in the constitutional perspective, it is essential that accountability arrangements prevent or uncover abuses of public authority. Finally, the learning perspective of accountability, also argued by Aucoin and Heintzman (2000), focuses on the learning capacity and effectiveness of the public administration, and encouragement and

promotion of learning, in pursuit of continuous improvement in governance. In this perspective, accountability provides the duty bearer and organizations with feedback-based inducements to increase their effectiveness and efficiency (Bovens, 2007). Accountability is seen as a tool that encourages governments, organizations and individual officials, delivering effectively on their promises, with the help of learning, reflection and feedback mechanisms (Bovens, Schillemans, & Hart, 2008). The central theme is to induce and institutionalize the capacity of public office holders, organizations and the executive branch to learn (Argyris & Schön, 1978) and to improve efficiency and effectiveness in their performance.

Frink et al. (2008) observe accountability from three different micro, macro and meso perspectives. Accountability from micro perspective is an emphasis on holding an individual accountable. The individual accepts responsibility for his/her actions, performance, and behaviors, as argued by Schlenker et al. (1994). On the other hand, the macro perspective of accountability focuses on holding an organization accountable. Here, accountability is about governance, structure and control (Ouchi, 1977). However, the meso perspective of accountability combines both micro and macro perspectives, and links the organization and the individual.

Llyod (2008) sees accountability as hardware and software, which is more or less similar to conduct of accountability and accountability of conduct suggested by Dubnick (1998) and mechanism and virtue aspect of accountability presented by Bovens (2010). Accountability as a hardware, or conduct of accountability, includes structure, procedures and processes within organizations. It is also known as the mechanism of accountability as suggested by Bovens (2010). This view of accountability comes from the British, Australian, Canadian and Continental European scholarly debate (Onzima, 2013). Bovens (2010) argued that mechanism of

accountability is used in a narrower, as well as in a descriptive sense and especially focuses on the relationship between actors and forums. Actors are held accountable by forums in which they are obligated to explain or justify their conduct and performance. The forum can ask questions, pass judgments and impose consequences on the actor. This is what one could also call passive accountability because actors are held to account by a forum, ex-post facto, for their conduct (Bovens, 2010). Therefore, this view of accountability is not an end in itself but is functional for specific relationships between institutions or individuals (Brandsma, 2013). Thus, it can be said that hardware or mechanism aspect of accountability does not focus on the behavior of agents, but the way in which these institutional arrangements operate as a principal-agent nexus.

Accountability as software, or accountability of conduct, focuses on the attitude, perception, mindset, behavior and action of the actor. It is also known as the virtue of accountability, as argued by Bovens (2010). The virtue view of accountability emerged mainly from the American academic and political discourse (Onzima, 2013). Bovens (2010) argues that accountability as a virtue is difficult to define. According to him, there is no consensus about the standards for accountable behavior. It varies depending on institutional context and political perspective. In this sense, accountability is seen as a positive quality in organizations or officials whose actual behavior is the focus of attention. Hence, it leads to legitimacy of an actor.

These two thinking of accountability seem contradictory and different in nature, but they supplement each other. The standard behaviors of the actors are highly emphasized in virtue aspect of accountability. An actor should act in a responsive, responsible, transparent, fair, and equitable way. For this, there should be an institutional arrangement between the actor and forum, by which they can be held

accountable through questions, judgments, and imposition of consequences. This mechanism obliges actors to explain and justify their conduct. As a result, actors successfully accomplish their works in an accountable way.

Yang (2012) presents the most relevant idea of actionable knowledge in accountability to actors. As per Argyris (2003), actionable knowledge is most likely to be helpful to human beings because it prescribes the way they should act. Based on the ideas of Argyris, Yang argues that actors' wise actions incorporate a timely, simplified and accurate understanding of the interrelationships about their behavior. Actionable knowledge must inform the actors what is likely to happen under specified conditions and examine how they reproduce or reshape accountability environments. The knowledge about actionable accountability must be based on three different beliefs, viz. a) accurate empirical understanding of how actors of governance make sense, and order of the accountability pressures they face; b) causal observations of the mechanisms linking accountability structures, individual behaviors and agency outcomes; c) process-based causal observations in a long period of time (Yang, 2012). Based on these three beliefs, duty bearer can develop actionable accountability knowledge. Exercising and practicing such knowledge by duty bearers in their functions and performance can contribute to ensure accountability.

Blagescu and Lloyd (2006) offered four key dimensions that every organization should have for being accountable to its stakeholders: transparency, participation, evaluation, and complaint and response mechanisms. Each of these four dimensions is formulated as a standard for accountable behavior (Lloyd et al., 2007). Transparency represents proactive or reactive disclosure of the information of organizational procedures, structures, and processes in their assessments that must be reliable, accurate, complete, and timely accessible. Participation is accepted as a

central issue in accountability. It actively engages both internal and external stakeholders in the decisions and activities that affect them. Hence, it ensures accountability. Likewise, evaluation focuses on the monitoring and review of organization's progress and results against goals and objectives; feeds learning from this back into the organization on an ongoing basis; and reports on the results of the process. Last but not least, under the complaints and response dimension, organizations develop the channels that assist stakeholders to file complaints on issues of non-compliance, or issues against decisions and actions. Furthermore, whether the complaints are properly reviewed or acted upon should be ensured. Based on these, it is quite clear that organizations must focus on these four key dimensions suggested by the global accountability framework, within policies, procedures, practice, and decision making at all levels of the organization.

Performance

Doubtless, the issue of performance has gained increasing popularity in nations around the world (Ingraham, 2005). Kane (1996) defines performance in terms of results/outcomes. He argues that performance is the record of outcomes achieved in carrying out a specified job aspect during a certain period. Similarly, in the view of Brewer and Selden (2000), performance is defined as whether resources have been used in the intended way in order to achieve efficiency, effectiveness, and fairness. However, O'Toole Jr. and Meier (2011) see performance as the achievements of public programs and organizations in terms of the outputs and outcomes that they produce. For Iqbal, Anwar and Haider (2015), performance includes executing defined duties, meeting deadlines, employee competency, effectiveness, and efficiency in doing work.

Thus, it can be said that work output, timeline, efficiency, and effectiveness are the central terms used in assessing and measuring performance. Executing defined duties within a given timeline is directly and indirectly associated with efficiency and effectiveness. Efficiency usually means input and output relations. Effectiveness refers to a level of service goal achievement (Andrews & Entwistle, 2010). In other words, efficiency is doing things rightly and effectively to accomplish the desired goals (Drucker, 1977). Efficiency is concerned with minimizing costs, and deals with the allocation of resources across alternative uses, while effectiveness assesses the ability of organizations or individuals to attain pre-determined goals and objectives (Keh, Chu, & Xu, 2006). Ozcan (2008) argues that effectiveness can be affected by efficiency and vice versa. For instance, an individual may be efficient in utilizing the inputs, but not effective; he or she can also be effective, but not efficient. Considering these ideas, it can be said that efficiency and effectiveness are not separate but mutually exclusive components, which are influenced when executing defined duties in a given timeline. Considering the literature reviewed, for me, bureaucrats' performance relates to executing defined duties, meeting deadlines and performing effective and efficient work, as suggested by Iqbal, Anwar and Haider (2015).

Accountability and Performance

Accountability and performance is a central agenda of public sector governance throughout the world, including in Nepal. Every government has been putting in more effort to enhance the value of accountability and performance within their organizations. Hwang (2013) claims that accountability and performance are used interchangeably in practice and overlap with each other. For instance, an accountable bureaucrat means there is a higher level of performance; and high level of performance means there is higher level of accountability. Hence, accountability and

performance are complementary instruments to each other (Dubnick, 2005). However, there are also tensions, ambiguities, and contradictions between accountability and performance as a result of being mismatched with each other (Bouckaert & Halligan, 2008). These tensions arose because of two schools of thought regarding accountability and performance.

One school of thought argues that performance promotes accountability, while the other argues that accountability promotes performance. The first argument believes accountability can be ensured through performance. In order to support this argument, Zimmermann and Stevens (2006) claim that performance measurement has been viewed as “the newest method of ensuring accountability” (p. 315). A good set of performance measures build accountability, and this improved accountability generates better productivity in the agency (Ammons, 2007). Pollitt (2011) analytically examines the contested proposition that performance management systems will improve organization accountability to citizens. Therefore, performance management system has been introduced all over the world, including in Nepal, as a major policy tool to enhance accountability in public sector governance.

The second argument believes that performance can be ensured through accountability. It is one of the important means that directly improves the performance of public sector governance. Hence, accountability can be understood as an answer for performance (Romzek & Dubnick, 1998). New Public Management (NPM) strongly advocates that greater accountability of the public sector improves performance and vice versa (Christensen & Laegreid, 1999; Hood, 1995). On the contrary, Romzek and Ingraham (2000) argue that lack of accountability can lead to disasters. Hence, accountability improves performance, particularly outputs and outcomes (Chan & Gao, 2009). Dubnick and Frederickson (2011) believe that

performance can be enhanced through greater accountability. However, Ebrahim (2005) claims that more accountability is better, but having more accountability arrangements in place does not necessarily ensure better performance. According to him, too many accountability arrangements can prevent organizations from achieving their missions. Similarly, Ebrahim and Dubnick (2005) argue that there is an accountability paradox in which more accountability diminishes organizations' performance.

Despite these two schools of thought regarding accountability and performance, we can say that accountability and performance is a mutually exclusive concept. Chan and Gao (2009) claim that a good set of performance measures builds accountability and that improved accountability generates better productivity in the agency. Aucoin and Heintzman (2000) believe that improving accountability arrangements does not necessarily improve performance, however, the proposition that performance can improve in the absence of improved accountability cannot be sustained. Thus, we can say that accountability and performance are two sides of a single coin. Realizing this, the Government of Nepal has formed different constitutional bodies, state institutions, laws, policies, directives and guidelines to ensure a high level of accountability and performance in public sector governance. Bearing such thing in the mind, I examined the determinants of accountability and the performance and association of accountability with performance and vice versa, of educational bureaucrats of Kathmandu Valley.

Accountability in Nepal

The current concept of accountability has a history 'as old as civilization itself (Gray & Jenkins, 1993). However, public accountability in Nepal is comparatively a recent one. Although, historical glimpses reveal that some kings and prime ministers

used to rule as per the wishes of the people and tried to elicit public opinion before any decision was taken (Pradhan, Shrestha, & Joshi, 1995). During the Rana regime, the entire public service system was made strictly accountable to ensure the interest of ruling family (Pradhan, Shrestha, & Joshi, 1995 p. 279). After the advancement of democracy in 1950, different administrative reforms such as Buch Commission 1952; Acharya Commission 1956; Jha Commission 1968, and Thapa Commission 1975, were set up to initiate several reform efforts to ensure that the bureaucracy was responsive to the public needs. During these periods, several modern government bodies such as the Supreme Court, the Auditor General's Office and the Public Service were set up to ensure accountability in the governance system.

During the Panchayat Regime (1960-1990) the public administration was more loyal and respectful towards the Panchayat rather than public service (Ghimire & Ashraf, 2016). After the restoration of democracy in 1990, different government bodies (Commission for the Investigation of Abuse of Authority, National Vigilance Centre, Financial Committee and Public Account Committee) and administrative reforms such as Administrative Reform Commission 1991, Administrative Reform Management Committee 1992, Governance Reform Program 2001, Vision Paper for Civil Service and High-Level Administrative Reform Committee 2014, were set up. The main aim of these government bodies and administrative reforms are to make bureaucracy or public sector governance more dynamic, results-driven, people-oriented, transparent, efficient, effective, competent, prompt, responsive, trustworthy, corruption free, and accountable. The Government of Nepal has adopted, practiced and ensured transparency and accountability in public sector governance through different constitutional bodies, state institutions and by enacting laws, policies, directives, and guidelines as follows:

Institutional Frameworks

Commission for the Investigation of Abuse of Authority (CIAA) is an apex constitutional body established by the Constitution of Nepal 1992 (Part 12, article 97), aimed to control corruption and investigate against any public officials in case of abuse of authority or improper conduct. It has the legal mandate to act as an ombudsman, investigator, and prosecutor as well. It focuses on preventive, promotional, and punitive measures for combating corruption in public sector governance. It can recommend punishment for the accused based on the degree of corruption or the abuse of authority. If the abuse is proved during investigation, a file is registered in court (Pradhan, Shrestha, & Joshi, 1995). Hence, it plays a direct or indirect role to hold public officials accountable for their functions, activities, and performance.

National Vigilance Centre was established as a statutory government body in August 2002 by His Majesty's Government of Nepal, under the direct supervision and control of the Prime Minister. It is constituted under the Corruption Prevention Act, 2002 for preventing corruption and raising public awareness on effective service delivery and mismanagement. It conducts surveillance, surprise audits, and inspections in corruption prone places or works. It collects and updates information from authority's bodies and refers to the concerned organization and CIAA for further investigation and prosecution. The Centre plays a preventive role, primarily by monitoring asset declarations of government officials. Therefore, it makes public sector organization transparent and accountable for their performance by minimizing improper conduct and malpractices.

The Office of the Auditor General was established as per the Constitution of the Kingdom of Nepal, 1958 (Part 13, article 99) for promoting accountability,

transparency, and integrity for the benefit of the people. Prior to the establishment of Office of the Auditor General, the institution named Kumari Chowk Adda used to review the government accounts. It is a constitutional body that plays a key role in improving and assuring clean practices in the working system of the administrative, financial, and managerial system. It has the power to conduct independent, partial or full audit of public resources for promoting and holding public officials accountable for their performance. It has obliged all secretaries of ministries to submit annual financial statements covering all financial activities of ministries and departments. Thus, it holds the public sector governance transparent and accountable.

The Revenue Investigation Department was formed within the Ministry of Finance under the Revenue (Inspection and Control) Act, 1996, for conducting investigations into revenue leakage and malpractice. The potential for leakage of revenue is divided into: export and import sector, clearance of value-added, and income taxes and transactions involving foreign currency. This department controls and investigates revenue leakages and controls economic crimes; and has also made public authorities accountable in terms of economy and revenue.

The National Investigation Department is an intelligence agency established within the Ministry of Home Affairs to collect information related to the country's public security, economic crimes, corruption in government, and domestic and foreign terrorist activities. This department does not directly involve in checking accountability and controlling corruption; however, it provides information for such purposes.

Public Accounts Committee is constituted as per the provisions of the Constitution and the House of Representative Regulations 1998, for overseeing a different aspect of public services and its accountability in those matters. It is a

powerful committee chaired by opposition parties' elected parliamentarian for ensuring public finance accountability in Nepal. It has the legal authority to examine government accounts, public accounts and reports submitted by the Auditor General, and asks questions in relation to irregularities and corruption to reduce misuse and abuse of public funds. Hence, it holds public sector governance accountable and transparent in their performance.

Laws, Policies, Directives, and Guidelines

For making the Civil Service more capable, vigorous, service oriented, responsible, and accountable, the Government of Nepal promulgated The Civil Service Act 1993 and Rules 1993. This act and rule have provided clear provision of constitution and operations such as recruitment, transfer, promotion, salary, allowance, medical expenses, training, study, leave, safeguard of service, retirement, gratuity, pension, appeal, and miscellaneous. It has discussed performance evaluation. Zimmermann and Stevens (2006) argue that performance measurement/evaluation has been viewed as the newest method of ensuring accountability. A good set of performance measures builds accountability and that improved accountability generates better productivity in the agency (Ammons, 2007). Hence, we can say that The Civil Service Act 1993 and Rules 1993 try to ensure accountability through performance evaluation. Similarly, it has also discussed a code of conduct, punishment, and dismissal from services. All these factors play direct or indirect role in holding civil servants accountable.

The Government of Nepal also promulgated the Local Self-Governance Act in 1999 for devolution of power from central to local level. This act suggested six principles; among them, five directly or indirectly discuss the issues of accountability. This act mentions both public as well as hierarchy accountability. In public

accountability, local bodies should be responsible and accountable to the people they serve. This means that local bodies are accountable to those who have no power or less power, such as beneficiaries, service receivers, and so on. In case of hierarchy accountability, the local workforce is accountable to their senior hierarchy of administration. It discusses the chain of command where subordinates usually report to a superior about their actions and performance.

In order to develop local leadership, as per this act, there should be an arrangement of effective mechanism to make the local body accountable to the people in its own areas. It has made provision for the complaint, monitoring, supervision, audit, maintenance of records of books and accounts, and punishment in case of malpractices and improper conduct. Local bodies have the mandate to prepare annual budgets, plans and programmes, and submit a report to concerned authorities within a given time period. Although function, role, responsibilities, and authorities are mentioned, this act does not address answerability, delegation, arbitration, and enforceability, all of which are fundamental aspects of accountability principles. Despite this, the Local Self-Governance Act is a milestone legislation that provides an avenue to hold local level authorities responsive and accountable for their actions, functions, decisions, and performance.

The Prevention of Corruption Act 2002 is a milestone that has offered the legal provisions relating to prevention of corruption with a view to maintaining peace, convenience, financial discipline, morality, and good conduct. This act does not directly discuss accountability but rather emphasizes it via identification of misconduct and punishment. It has made provision for punishment to public officials for accepting goods or service free of cost or at lower prices, taking gift or donation (without prior approval), taking commission, leaking revenue, preparing and

translating false documents, tampering with government documents, damaging government or public documents, giving false particulars and report, engaging in illegal trade or business, claiming false designation, damaging public property, exerting illegal pressures, acquiring property illegally, and so on. Hence, we can say that through this act, the Government of Nepal has tried to make public officials and public-sector organizations responsive, transparent and accountable for their actions and performance.

The Public Procurement Act and Regulation 2007 is a landmark legislation that guides public officials on various issues of procurement. It has made legal provisions to make the procedures, processes, and decisions relating to public procurement of goods and services by state and non-state agencies either through tender or quotation, much more open, transparent, accountable, objective, and reliable. Similarly, it has made legal mandate to prepare procurement plans, cost estimation, goods description, construction works, and services. Hence, it promotes competition, fairness, honesty, reliability, and accountability in public procurement processes. Through this, the Government of Nepal is ensuring public officials and public sector organization remain transparent, open, fair, and accountable in the procurement process.

Realizing information as a tool for democracy and good governance, the Government of Nepal has passed what is called The Right to Information Act 2007. This act has realized information is a fundamental right of citizens. Every public sector organization has to respect and protect the right to information of the citizen. They have to classify and update information, making it simple, clear, complete, and easily accessible to the public. This act has also clearly emphasized that every public sector conduct their functions openly and transparently. It also requires the

arrangement of an information officer for the purposes of disseminating information held in its office. Hence, disclosing information proactively or reactively is seen as a measure of openness that can combat corruption and minimize irregularities or misconduct in public sector organizations. It holds the public sector organizations responsive, transparent, and accountable to citizens.

With the purpose of establishing good governance at all levels, the Government of Nepal has established Good Governance (Management & Operation) Act in 2008. This act ensures the basis of good governance, which includes equity and inclusiveness, rule of law, human rights, people centric governance, corruption free, impartiality and neutrality of the administrative mechanism, access for people to the administrative mechanism and its decisions, transparency, accountability and honesty, economic discipline, and so on. Similarly, this act has also clearly specified the procedures for executing administrative functions and role and responsibility of all actors of governance and development. These actors are ministers, chief secretaries, secretaries, heads of departments and chief office holders. It has made mandatory provision to keep citizen charter, provide mobile services, determine services fees, participation, set up governance reform unit, public hearing, public audit, citizen report card, managing grievances, pursue information technology in practice, set up monitoring and evaluation committee and submission of annual report by the government agencies. This act has ensured transparency and accountability in all operations of budget, decision-making, and service delivery processes. Based on this, we can say that this act is another milestone that intends to strengthen accountability mechanisms for ensuring good governance at all levels.

In spite of these constitutional bodies, state institutions and laws, policies, directives and guidelines, practices and exercise of accountability has not gone as

expected. Consumer Unity and Trust Society [CUTS] (2013) argued that violating rule of law, political transition and lack of political will are some of the reasons for low level of accountability. However, some social accountability tools such as public hearing, public audit, community score card, citizen charter, citizen report card, public expenditure tracking survey, community monitoring, and right to information, and many others are being practiced in Nepal.

Research Gap

In the past two decades, there have been many studies carried out throughout the world regarding accountability, and these have made significant progress in determining the nature, dimensions, methods, techniques, consequences and dilemmas of accountability (Bardach & Lesser, 1996; Behn, 2001; Jos & Tompkins, 2004; Kearns, 1996; Roberts, 2002; Romzek & Dubnick, 1987). However, in the Nepali context, there has not been a study on this topic that has integrated performance and accountability of central level organizations of the Ministry of Education within a single study. Hence, this study sought to extract some potential opportunities as well as possible challenges that are contingent on the association between accountability and performance in central level of education administration.

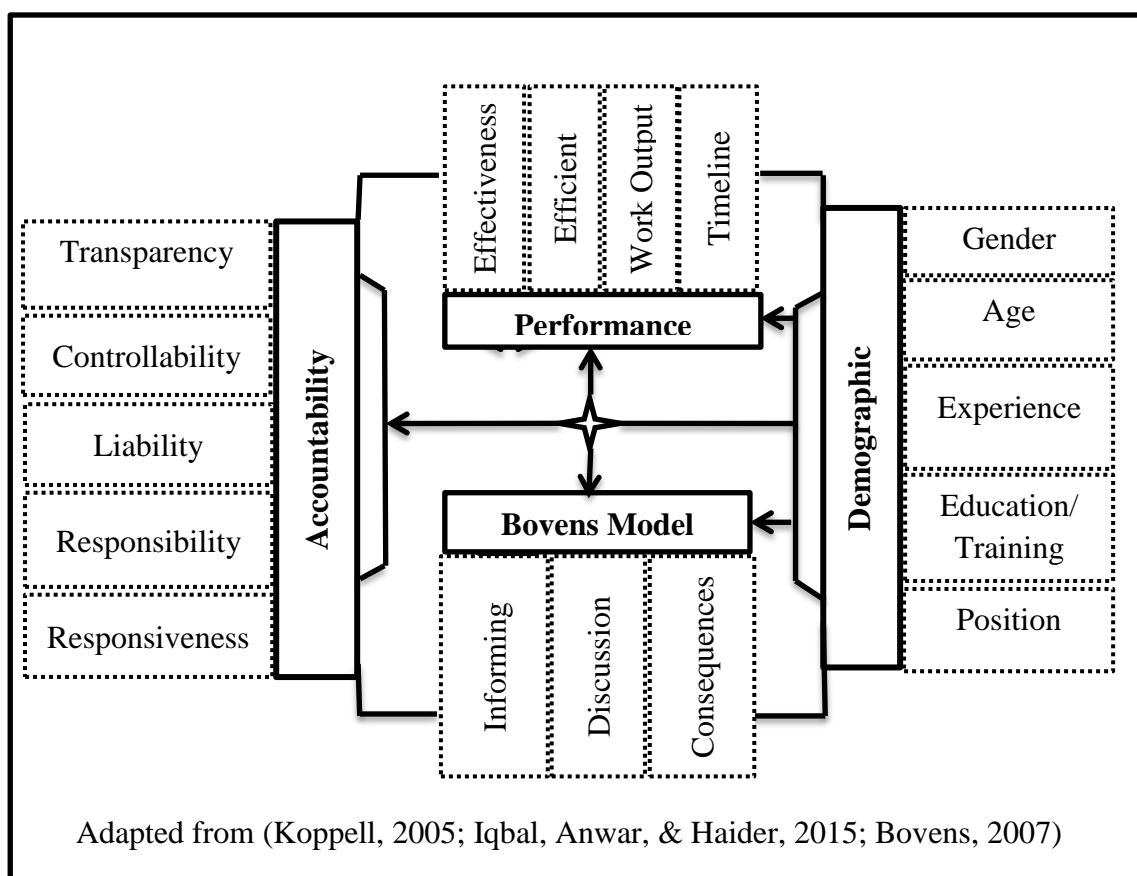
Theoretical Framework

The theoretical framework includes Bovens model (informing or reporting, discussion or justifying, and consequences), demographic (gender, age, service year and education or training), five different typologies of accountability (transparency, controllability, liability, responsibility, and responsiveness) suggested by Koppell (2005) and five components of performance, namely, executing defined duties, meeting deadlines, employee competency, effectiveness, and efficiency in doing

work, as proposed by Iqbal, Anwar, and Haider (2015) (see Figure 1). However, I excluded employee competency because it is a default element of performance.

Accountability and performance are multifaceted, and these can't be measured by observing single variables. Hence, different proxy indicators are used to examine the practice and exercise of accountability and performance of educational bureaucrats. Demographic character of the bureaucrats is a central element that determines the level of accountability, which is expressed by their practice and exercise. Age, gender, service year, and education and training on accountability affect the exercise and practices of accountability. Higher the age and service year of bureaucrats, higher the level of accountability because a mature and experienced actor has sufficient practical knowledge and skills regarding accountability. Similarly, education and training on accountability also help bureaucrats to practice and exercise this in their organizations efficiently because it provides different theoretical and real-life evidences regarding accountability.

Figure 1.1: Theoretical Framework of the Study



Koppell (2005) suggests five different typologies of accountability, which are directly used to examine the scenario of accountability in the Nepali context. As per Koppell (2005), transparency and liability can be thought of as foundations, while the remaining three (controllability, responsibility, and responsiveness) can be thought of as substantive. Transparency is key to the accountability process and makes an actor obligated to provide, explain, and justify information about their activities to the forum. If the actor discloses facts related to performance or activities, then we can say that he/she is transparent, which in turn helps in accountability. Liability is another typology of accountability without which accountability is meaningless (Dayanandan, 2013). Liability deals with consequences (reward and punishment), which are attached to the performance of the actor. In other words, the actor should be held answerable for their actions; they are punished for malfeasance and rewarded for success. If an actor faces consequences for their performance, then we can say that there is accountability.

The third typology of accountability is controllability. It deals with the authority and control of the behavior or action of the actor. This means that an actor is constrained by the orders of forum. If the forum can induce the behavior or action of an actor, the forum controls the actor. As a result, actor is accountable to the forum. If an actor follows through with what its forum has ordered, then there is controllability. This means that there is evidence of accountability.

The fourth typology of accountability that constrains actors by formal and informal professional standards or behavior such as laws, rules, and norms, is labeled responsibility. Such standards may encourage better behavior and set expectations against which the actor can be evaluated (DiIulio 1994; Kearney & Sinha 1988; McKinney, 1981). Friedrich (n.d. cited in Koppell, 2005) argues that an accountable

actor should not simply follow orders, as I mentioned in controllability, but must use their expertise constrained by professional and moral standards. If the actor follows well-established rules, then we can say that he/she is responsible.

The final typology of accountability that satisfies the demands and needs of clients is considered to be responsiveness. In this typology, accountability turns outward rather than upward (Koppell, 2005). That is why it is also called customer-oriented approach and bottom-line vision of accountability. If actor fulfills the demand and need of the forum, then we can say that he/she is a responsive actor. The responsive actor means there is evidence of accountability. These five typologies of accountability are central to determine the performance of educational bureaucrats. Having a higher value of accountability means that there is a higher level of performance. Hence, four components of performance viz. executing defined duties, meeting deadlines, efficiency and effectiveness, are ensured by a higher level of accountability, as mentioned in the accountability and performance section above.

Bovens (2007), in his model of accountability, classified duty bearers and right holders correspondingly as actor and forum. According to him, actors can either be an individual or organization that exercises authority. On the other hand, the forum can either be individual or organizations that holds relevant parties accountable. In the accountability system, there is a nexus between actor and forum as a form of principal-agent relation. The forum is the principal that gives authority to the agent who is held to account for his performance, whereas actor is the agent who has an obligation to explain and justify his/her conducts and performances. Accountability that occurs in this form of nexus is also called passive accountability because actors are held to account by a forum, ex-post facto, for their conduct. According to Bovens (2010), accountability consists of at least three elements or stages.

Firstly, the actor is obliged to inform and report to the forum about his/her conduct and performance by providing various categories of information about performance and outcomes. Often, particularly in the case of failures, this also involves the provision of explanations and justifications. At this stage, the forum is made aware of the behavior of the actor.

Second, there needs to be a possibility for the forum to interrogate the actor and to question the adequacy of the explanation or the legitimacy of the conduct. In the discussion, the forum may ask follow-up questions, or the forum and the actor may exchange divergent points of view. The forum may pass judgment on the conduct of the actor, called the consequences.

It goes to follow that the third element, is that the actor faces consequences. The forum may pass judgment on the conduct of the actor; it may approve an annual account, denounce a policy, or publicly condemn the behavior of an official or an agency. The actor may face consequences in the form of formal or informal sanctions (Mulgan, 2003; Bovens, 2007). These consequences can be highly formalized, such as, fines, disciplinary measures and civil remedies, or even penal sanctions, which can also be based on unwritten rules. Sometimes the negative consequences will only be implicit or informal, such as the very fact of having to render an account in front of television cameras, or the disintegration of public image and career because of the negative publicity generated by the process (March & Olsen, 1995). Considering all these aspects, I analyzed the information through this model.

Summary of the Chapter

In this chapter, the history of accountability was presented in the beginning, followed by the nature, meaning and forms of accountability. Similarly, the perspective of scholars on accountability and performance and its relation was

elaborated in detail, and Nepali accountability policies and institutional arrangement discussed accordingly. Ideas were presented in a theoretical framework, considering the above discussed ideas about accountability and performance.

CHAPTER III

RESEARCH METHODOLOGY

This chapter provides clarification on how the study was conducted and the reasons behind the selection of the methods used. The chapter begins with an explanation of the paradigm and philosophical assumptions, followed by research design, sampling and sample size, nature and sources of data, data collection tools and procedures, data management, analysis and interpretation, ethical standards, reliability and validity, variables of the study, and finally a summary of the chapter.

Paradigm and Philosophical Assumptions of the Study

Research paradigm and philosophical assumptions are the key factors required in every scientific research as a groundwork upon which the whole research is conducted (Akbar, 2011). A paradigm is a set of beliefs, values, techniques, and assumptions that are shared by a community of researchers regarding the nature and conduct of research (Kuhn, 1977). Antwi and Hamza (2015) state that a research paradigm is an approach to thinking about and doing the research. It is intrinsically associated with the concepts of ontology, epistemology, and methodology (Guba & Lincon, 1998). These ontology (what is knowledge), epistemology (how we know it), methodology (the process of studying it), and axiology (what values go into it) assumptions (Creswell, 2003) are also known as the philosophy of the research. It guides the researcher implicitly or explicitly to determine the choice of research methods employed in a study. I employed these four philosophical assumptions of research, that is, ontology, epistemology, methodology, and axiology, further explained as follows:

Ontology

Ontology is a branch of philosophy that addresses the nature/theory of being and reality (Reber, 1995). It explains ‘what’ knowledge is and assumptions about reality (Pathirage, Amaratunga, & Haigh, 2008). Based on research paradigm and approach, there may be single or objective or multiple/subjective reality, that is called positivism or post-positivism and interpretivism, correspondingly. The most prevalent ones in accountability research are positivism and interpretivism (Akbar, 2011). This present study of accountability and performance employs a quantitative approach, which is based on the post-positivist paradigm (Creswell, 2013). The ontological position of my research is post-positivism where I assume there is single or objective reality about accountability and performance. It is measurable and quantifiable, and I am independent of what is being observed and researched.

Epistemology

Epistemology describes how the researcher knows about the reality and assumptions about how knowledge should be acquired and accepted (Pathirage, Amaratunga, & Haigh, 2008). In other words, how we come to know about what exists (Creswell, 2003) is known as epistemology in research. This study is based on post-positivism epistemology where I utilize a deductive approach to test a theory of accountability and performance in Nepali educational bureaucracy. Post-positivists argue that in order to be valid, the practice and exercise of knowledge of accountability and performance in Nepali educational bureaucracy must be based on hypothesis testing. For this, I employed scientific techniques such as sampling, highly structured protocols, and written self-administered structured questionnaires. Similarly, statistical tools were employed to test the association between variables and

to what extent one variable explains another. Thus, I am independent of what is being researched.

Methodology

The methodology is the research strategy that translates ontological and epistemological principles into guidelines that show how research is to be conducted (Sarantakos, 2005). Methodologically, post-positivists argue that researchers should test a theory of accountability and performance in a value-free position and utilize objective measurement in collecting research evidence. Based on this, I can say that the study of accountability and performance in post-positivism research paradigm is based on a quantitative approach (Creswell, 2003) where I employed survey as a methodology or research strategy.

Axiology

Axiology reveals the assumptions about the value system that focuses on whether the reality is value free or value driven (Pathirage, Amaratunga, & Haigh, 2008). Positivism paradigm is based on value free system. Keeping this in mind, in this study, I examined accountability and performance by keeping my value out of the study. For this, I determined all my actions using objective criteria. I selected respondents by applying scientific sampling and collected and analyzed data independently. Hence, it is unbiased because there is no question about axiology in my study.

Research Design

The research design represents the major methodological thrust of the study (Adhikari, 2015). Research design is the plan of action that guides the researcher through the entire process. A research design differs depending upon epistemological and ontological approaches employed (Simkhada, 2007). Similarly, it also depends on

the purpose of the research. Considering all of this, I applied descriptive as well as explanatory research designs. I applied descriptive research design to find out the exact level of accountability and performance of educational bureaucrats. Explanatory research design was used to examine the association between accountability and performance and to what extent accountability explains the performance of educational bureaucrats and vice versa.

Sample Size and Selection Criteria

My target population for the survey was educational bureaucrats working in central level organizations of the Ministry of Education. According to the records of the Ministry of Education dated 2017/08/31, the total number of posts (*Darbandi*) was 592 across different central level organizations (see Table 2).

Table 2

Posts, Vacant Posts and Rank-less, by Central Level of Organizations

Central Level of Organizations	Post (<i>Darbandi</i>)	Vacant Post (<i>Rikta Pad</i>)	Rank-less (<i>Shreni Behin</i>)
Ministry of Education	173	14	37
Department of Education	96	1	16
Education Service Commission	34	-	10
Curriculum Development Center	58	2	12
Examination Controller Office	59	3	10
National Center for Educational Development	74	-	15
Informal Education Center	24	1	5
School Teacher Record	34	-	3
Education Review Office	40	-	4
Total	592	21	112

Note. This information was obtained from Ministry of Education dated 2017/08/31.

In this study, I excluded rank-less employees (*Shreni Behin Karmachari*) and vacant post (*Rikta Pad*) from my sampling frame. Hence, the total number of

educational bureaucrats working in the central level organizations of the Ministry of Education was 459. There are three rationales behind selecting central level organizations of the Ministry of Education. First, the number of educational bureaucrats in central level organizations of the Ministry of Education constitutes a relatively large population. Second, there is a diverse workforce and diverse nature of work. Third, it is the prime decision-making bodies that implement all the plans, policies, and programmes regarding education. The selection of samples from the population without using any appropriate sampling technique cannot represent the population perfectly. Hence, for the selection of educational bureaucrats, I used probabilistic sampling technique. This technique ensures the external validity in my study. The question can be raised about the appropriate size of the sample. To address this, Yamane (1967) proposed the most popular and widely accepted formula to select a representative sample from the population. Symbolically:

$$n = \frac{N}{1 + N * e^2}$$

Where,

n = sample size

N = total number of population

e = standard error (sometimes also called interval/margin of errors or level of significance/precision)

Based on Yamane's formula, I determined the actual sample size. As per the Ministry of Education's record dated 2017/08/31, the total number of working educational bureaucrats was 459. I assumed 95% confidence level and maximum 5% interval/margin of errors. The 95% confidence level of my study indicates that when the population is repeatedly sampled, 95 out of 100 times would have true population

value. As per the formula, 213 samples are required to represent the population perfectly. The calculation procedure is as follows:

$$n = \frac{459}{1 + 459 * (0.05)^2}$$

$$n = \frac{459}{1 + 459 * 0.0025}$$

$$n = \frac{459}{1 + 1.1475}$$

$$n = 213$$

Hence, the sample size of my study is 213 individual educational bureaucrats, which are the unit of analysis of my study.

Nature and Source of Data

In this study, I used primary as well as secondary data. I generated primary data through the self-administered structured questionnaire and secondary data was obtained from journal articles, annual reports, and books.

Tools and Procedures of Data Collection

I employed survey method to collect the required data and information. For this, I designed self-administered structured questionnaire as a means of data collection. I classified the questionnaire into three sections. The first section covers demographic information such as age, gender, education or training, service year, education, religion, caste or ethnicity, types of agency, and so on. The second section entails information of accountability based on transparency, controllability, liability, responsibility, and responsiveness as suggested by Koppell (2005). Finally, the third sector contains information regarding performance that consist of executing defined duties, meeting deadlines, effectiveness, and efficiency in doing work as proposed by Iqbal, Anwar, and Haider (2015).

I constructed a questionnaire based on the issues raised in the literature about accountability and performance (see Appendix 1). I finalized this questionnaire after having series of meetings with peers, examiners, and subject experts in the field of accountability and performance. I considered all suggestions and constructive feedback given by peers, examiners, and subject experts to improve the quality of the questionnaire. After this, I translated the questionnaire into the Nepali language and conducted a pre-test to check reliability of the questionnaire. While revising the questionnaire based on the pre-test, I analyzed each item by determining difficulty level. I also ensured relatively high response rate. Finally, I collected the data by using the pre-tested questionnaire with educational bureaucrats during their office hours (10:00am – 4:00pm). Before data collection, I obtained oral consent from all respondents. I also made it clear that they could withdraw their consent or discontinue participation at any time without any negative effect on our relations. Similarly, I explained that they could skip any question if they did not want to answer, or also that they could stop at any time.

Data Management, Analysis, and Interpretation

I involved myself in data examination and cleaning process before entering it into the software. During this process, I scrutinized, coded (code book) and recoded, and entered data into Statistical Package for the Social Sciences software program to obtain the required information. Before proceeding for analysis, I checked normality of data. For this, I employed both graphics as well as numeric techniques. Within the graphic technique, I used the histogram and normal probability plot. Similarly, in numeric technique, I employed the value of Skewness, Kurtosis, z-score, Kolmogorov-Smirnov test, and Shapiro-Wilk test (see Table 3).

Table 3

Normality Test

P•	Skewness			Kurtosis			Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	S	S.E	Zs	S	S.E	Zk	S	df	Sig	S	df	Sig
-2.278	-1.871	-1.701	-1.455	-1.750	-1.480	-1.974	-2.341	-0.581	-0.290	-1.442		
0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167		
-13.65	-11.21	-10.19	-8.72	-10.48	-8.87	-11.83	-14.02	-3.48	-1.74	-8.64		
12.19	8.313	4.806	5.489	5.583	5.710	8.501	10.182	0.225	-0.051	3.346		
0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332		
36.73	25.04	14.48	16.54	16.82	17.19	25.61	30.67	0.68	-0.16	10.08		
0.190	0.275	0.388	0.361	0.358	0.114	0.165	0.199	0.103	0.096	0.159		
213	213	213	213	213	213	213	213	213	213	213		
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
0.783	0.748	0.649	0.644	0.651	0.918	0.829	0.770	0.963	0.988	0.872		
213	213	213	213	213	213	213	213	213	213	213		
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.059	0.000		

a. Lilliefors Significance Correction ; N=213; S°= Statistic; S.E.*= Std. Error; df^= Degree of Freedom
Zs.**= Z Skewness (Z Skewness= Skewness-0/ SE Skewness); Zk.**= Z Kurtosis (Z Kurtosis=Kurtosis-0/SE
Kurtosis); Note: T*= Transparency; C°= Controllability; L+= Liability; R^= Responsibility; R^^= Responsiveness;
A^= Accountability; ED^=Execution of Duty; T°= Timeline; E.*=Efficiency; E.**=Effectiveness; P•=Performance

For normal distribution of data, the statistic value of Skewness and Kurtosis should be within ranges from the +2 to -2 (Garson, 2012). The Skewness statistics of all the construct of accountability and performance was found to occur between +2 to -2, except for performance. However, the statistics of Kurtosis was found to range greater than +2 to -2, except for controllability and liability. Statistics of Skewness

and Kurtosis seem contradictory to each other because statistics of Skewness follows a normal distribution while Kurtosis statistics does not, as per Garson (2012).

To confirm this, I adopted the Z-score. The simple rule of thumb for calculation of Z score is dividing statistic of Skewness and Kurtosis by its standard error (Ghasemi & Zahediasl, 2012). The result greater than ± 1.96 suggests that data are not normal with respect to statistics (Rose, Spinks and Canhoto, 2015). Bearing this in mind, I calculated Z-score of Skewness and Kurtosis that shows greater than ± 1.96 limits, except for controllability (Skewness and Kurtosis both) and liability (Kurtosis). Therefore, it suggested the data to be an extreme departure from normality. Further, I also used Kolmogorov-Smirnov test and Shapiro-Wilk test. As per these tests, for normality, P-value should be greater than 0.05 (Garson, 2012). However, in my data set P-value of all the constructs of accountability and performance were less than 0.05. Hence, I concluded that data is not normally distributed, which is also confirmed by visual inspection of the histogram and Probability Plot (see Appendix III). To transfer the data to normality, I calculated square root, logarithmic, exponential, and two-step approach for transforming continuous variables to normal, as suggested by different authors, including Garson (2012) and Templeton (2011). However, the data did not produce normality. As a result, I decided to use a non-parametric test that does not require normality.

Following this, I analyzed the data by using descriptive and inferential statistics to get rigorous results. In descriptive statistics, I calculated frequency, percentages, crosstab mean, median, and standard deviation. In inferential statistics, I used Phi, Rank-correlation, Chi-square, and Logistic regression. Phi is a nonparametric test that checks strength and direction of the relationship between two variables, as the Pearson correlation coefficient. Similarly, I used Spearman rank

correlation. It is a non-parametric test that is used to measure the degree of association between two variables based on rank data (Zaid, 2015). It does not require any assumptions about the distribution of the data and minimizes the effect of an extreme score (Field, 2013). The value of Spearman rho is called the correlation coefficient, which varies between -1 and +1. The former indicates a perfect negative relationship while the latter indicates a perfect positive relationship. Spearman's rho has descriptive and inferential features as well. The descriptive feature describes the nature of the relationship between the two variables while the inferential feature tests the significance of the relationship between the variables. Considering such facts in mind, I used Spearman's rho as both descriptive and inferential features. When conducting the descriptive tests, I assessed the nature of the relationship between accountability and performance by demographic variables of educational bureaucrats; and while conducting inferential tests, there was significant relation or not. Similarly, I used Chi-Square test to test the association and independence between two variables (Field, 2013). It describes how a variable is connected or independent from another with or without being statistically significant. I used it to assess association and interdependence between accountability and performance by demographic variables of educational bureaucrats.

Additionally, I used logistic regression – a form of regression known as “logistic” or sometimes “logit” (natural logarithm of an odds ratio) regression. It is used to analyze the relationship between a single predictor, or several predictors and an outcome that is dichotomous in nature (Reeda & Wu, 2013). Binary logistic regression and multinomial logistic regression are two models of logistic regression that have been widely used. In this study, I used binary logistic regression. Binary logistic regression is typically used when the dependent variable is dichotomous and

the independent variables are either continuous or categorical or both (Park, 2013). There are five reasons behind using this. First, it does not require an assumption about the distributions of the data. Second, my observation is independent. Third, my dependent variable is dichotomous or binary. Fourth, I wanted to estimate the probability of the event occurring and variation in dependent variable. Fifth, my sample size for analysis is 213, which is not less than 100 (Long, 1997; Pampel, 2000). As per Long (1997); Pampel (2000) sample sizes less than 100 are misleading. Thus, logistic regression turned out to be most appropriate for me.

The Logistic Regression Equation: $\text{Ln} [P/(1-P)] = \alpha + \beta X + \epsilon$. Where, P is the probability that an event Y occurs; (1-P) is the probability that an event does not occur; α = the constant of the equation; β = the coefficient of the predictor variables; $P/(1-P)$ is the "Odds Ratio"; $\text{Ln} [p/(1-p)]$ is the log odds ratio, or "logit". In this study, P is the probability of being accountable and performer and βX is the demographics of educational bureaucrats. We can write the model in terms of odds as: $P/(1-P) = \text{Exp}(\alpha + \beta X)$. Probability of the outcome (e.g. being accountable and performer) occurring is $P = \text{Exp}(\alpha + \beta X) / (1 + \text{Exp}(\alpha + \beta X))$. Conversely, the probability of the outcome not occurring (e.g. not being accountable and performer) is $1-P = 1 / [1 + \text{Exp}(\alpha + \beta X)]$. The slope represents change in the average value of accountability and performance, from one unit of change in demographic variable of educational bureaucrats.

Ethical Standards

Ethical standard is the set of guiding principles for a researcher that states the role, responsibilities, obligations, and compulsions of researcher to those involved in the research process. This means that a researcher has the responsibility of protecting research participants and the promotion of integrity of the research and ensures

reliability and validity (Creswell, 2009). Denzin and Lincon (2000) argue that research ethics is often much more about institutional and professional regulations and codes of conduct. Considering these I followed and maintained the ethical norms during the entire process of the research; I attempted to take a number of ethical issues and plans prior to carrying out research activities. Identification was included in the survey purely for the purpose of coding. I maintained the confidentiality and anonymity of all respondents. I informed educational bureaucrats about their voluntary participation in the research, and did not force them to participate in the research. Similarly, I provided assurance that information gathered is strictly confidential and will be used for research purpose only, and that privacy would be maintained and information related to any particular educational bureaucrat would not be exposed.

Reliability and Validity of the Study

Reliability and validity are fundamental issues in research. However, the application is relatively complex. In this study, I adopted different types of reliability and validity, as follows:

Reliability of the Study

Reliability relates to the consistency of a measure. In other words, reliability is the extent to which a research instrument consistently gives the same results if it is used in the same situation on repeated occasions. Reliability is considered using item-to-total correlation, split-half reliability, Kuder-Richardson coefficient, and Cronbach's α (Heale & Twycross, 2015). The most commonly used test to determine the internal consistency of an instrument is called Cronbach's α . In this study, I used Cronbach's α as it requires single test administration and provides the unique quantitative estimation of reliability (Bhattarai, 2015). The Cronbach's α result is a

number between 0 and 1. An acceptable reliability score is one that is 0.7 and higher (Lobiondo & Haber, 2013). Table 4 shows the acceptable reliability scores of accountability and performance, among other variables. Reliability score of accountability is higher than that of performance. By indicators, the highest reliability score is observed for responsibility, and lowest for transparency.

Table 4

Reliability Test

Variables	Cronbach's Alpha	N of Items
Transparency	0.708	3
Controllability	0.812	8
Liability	0.709	4
Responsibility	0.827	5
Responsiveness	0.755	6
Accountability	0.876	26
Performance*	0.851	5

**Performance includes executing defined duties, meeting deadlines, effectiveness, and efficiency in doing work*

Validity of the Study

Validity is defined as the extent to measure what it intended to measure (Creswell, 2003). There are various types of validity that are used in research. In this research, I have used content, construct, external, and internal validity. The first category, content validity, looks at whether the instrument adequately covers all the content that it should with respect to the variable (Heale & Twycross, 2015). In order to maintain content validity, I covered a wide range of topics as far as possible. During the process of item writing and selection, I covered major ideas of accountability and performance to ensure content validity.

Construct validity refers to whether you can draw inferences about test scores related to the concept being studied (Heale & Twycross, 2015). I ensured construct

validity by designing different constructs related to accountability and performance, and trying to interconnect statement of the problem, objective, research question, and the hypothesis of the study. Similarly, external validity is concerned about generalization (Trochim, 2006). To maintain this, I employed probabilistic sampling techniques. Finally, internal validity confirms causes-effect relations (Trochim, 2006). This means to what extent one variable explains another variable. For this, I applied sophisticated statistical techniques to check the hypotheses.

Study Variables

I selected variables for my study based on available literature and research questions to examine the accountability and performance of educational bureaucrats. I used demographic features of respondents as independent variables to examine accountability and performance of educational bureaucrats by demography of respondents. Similarly, I used accountability as both dependent and independent variables. I considered accountability and performance as dependent variables when examining the differences of accountability by demographics of respondents. What is the relationship between accountability and performance and does accountability really matter in the performance of educational bureaucrats? To answer this, I took accountability as an independent variable for my study. The study variables are presented in Table 5.

Table 5
Study Variables

S.N.	Variables		Indicators
	Independent	Dependent	
1.	Demographic		Gender, age, education, training, office, position, and total service year.
2.	Accountability	Accountability	Transprancy, controlability, liability, responsibility, and responsiveness.
3		Performance	Execution of defined duty, timeline, effectiveness, and efficiency.

Summary of the Chapter

This study was carried out based on quantitative approach using the surveyed data. The data were collected through self-administered structured questionnaires. The target population was bureaucrats of Kathmandu valley who are working in the education sector. Altogether, 213 samples were determined by using Yamane (1967) formula. Data was analyzed using descriptive, as well as inferential statistical tools. Likewise, reliability and validity, ethical concerns, and study variables were ensured during the study.

CHAPTER IV
BACKGROUND INFORMATION OF RESPONDENTS

In this chapter, background information of educational bureaucrats are discussed, as follows:

Age and Gender of Respondents

The percentage, mean and median distribution of respondents by gender and ten-year age groups is presented in Table 6. It is clear that higher percentage of respondents fall in the age groups 31-40 and 41-50. It can also be noted that male respondents are higher than females in all age groups, except for the 21-30 age group. This could be the effect of glass ceiling in Nepali bureaucracy. The mean age is 42.23 years, with 22 years being the lowest and 57, the highest age. By gender, higher mean age is observed for male than female (see Table 6).

Table 6
Age and Gender Distribution of Respondents

Age Group	Male		Female		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
21-30	11	7.1	13	22.4	24	11.3
31-40	54	34.8	20	34.5	74	34.7
41-50	52	33.5	22	37.9	74	34.7
51-58	38	24.5	3	5.2	41	19.2
Total	155	100	58	100	213	100
Statistic	Male		Female		Total	
Mean	43.55		38.71		42.23	
Median	44		40		42	
Minimum	22		22		22	
Maximum	57		57		57	
Std. Deviation	8.19106		8.62068		8.56653	

Source: (Author's calculation based on field survey, 2017)

Respondents and Organizations

The percentage distribution of the respondents by organization is presented in Table 7. The total number of respondents for this study was obtained from nine key central level of educational bureaucracy of Kathmandu Valley. The data shows that 28% respondents were from the Ministry of Education, followed by Examination Controller Office (16.4%), Department of Education (14.1%), National Center for Educational Development (11.7%), Curriculum Development Center (9.4%), Teacher Service Commission (6.6%), Education Review Office (5.6%), School Teacher Record Office (4.2%), and Informal Education Center (3.8%). By gender, male respondents were higher in all organizations (see Table 7).

Table 7

Distribution of Respondents by Organizations

Organizations	Male		Female		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Examination Controller Office	29	18.7	6	10.3	35	16.4
Teacher Service Commission	7	4.5	7	12.1	14	6.6
National Center for Educational Development	18	11.6	7	12.1	25	11.7
Informal Education Center	4	2.6	4	6.9	8	3.8
Curriculum Development Center	12	7.7	8	13.8	20	9.4
School Teacher Record Office	8	5.2	1	1.7	9	4.2
Education Review Office	11	7.1	1	1.7	12	5.6
Department of Education	23	14.8	7	12.1	30	14.1
Ministry of Education	43	27.7	17	29.3	60	28.2
Total	155	100	58	100	213	100

Source: (Author's calculation based on field survey, 2017)

Education Level of Respondents

Education is one of the fundamental means for accountability and performance in general. As such, I asked my respondents about their education level, and the data is presented in Table 8. An overwhelming majority of respondents (78.9%) have completed a Master Degree, followed by Bachelor Degree (13.1%), MPhil (5.6%) and Intermediate (2.3%). By gender, more or less both male and female have the same level of education (see Table 8). Most of the respondents, who have completed a Master Degree, were found to have specialized in Public Administration.

Table 8

Distribution of Respondents by Education Level

Level of Education	Male		Female		Total	
	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
Intermediate	5	3.2	-	-	5	2.3
Bachelor	19	12.3	9	15.5	28	13.1
Master	122	78.7	46	79.3	168	78.9
MPhil+	9	5.8	3	5.2	12	5.6
Total	155	100	58	100	213	100

Source: (Author's calculation based on field survey, 2017)

Position of the Respondents

Bureaucrats are classified into two broad groups, namely, gazetted and non-gazetted. In gazetted, there are four different positions – special class, first class, second class and third class. In non-gazetted, there are two different positions – non-gazetted first and second. I believed that accountability and performance differ by position. For this, I asked my respondents about their positions, which is presented in Table 9. About two in one respondents are class three officers, followed by class two (29.1%), non-gazetted first (17.4%), non-gazetted second (11.3%) and first class (2.8%). By gender, male respondents are higher in all positions than female (see Table 9).

Table 9
Distribution of Respondents by Position

Position	Male		Female		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
First Class	6	3.9	-	-	6	2.8
Second Class	55	35.5	7	12.1	62	29.1
Third Class	57	36.8	27	46.6	84	39.4
Non-gazetted First	23	14.8	14	24.1	37	17.4
Non-gazetted Second	14	9	10	17.2	24	11.3
Total	155	100	58	100	213	100

Source: (Author's calculation based on field survey, 2017)

Caste/Ethnicity of Respondents

In the past, Nepali bureaucracy was dominated by Brahmins, Chhetri and Newars; these three castes constituted 36% of total population in 1991, but occupied 89.2% of positions in the bureaucracy (United States Agency for International Development [USAID], 2007). However, in the present context, the workforce of Nepali bureaucracy is diverse in terms of caste or ethnicity. This is the effect of reservation policy taken by the Government of Nepal. To this end, I collected information from my respondents about their caste/ethnicity, and the data is presented in Table 10. An overwhelming majority of respondents reported they were Brahmin, Chhetri (85%), followed by Adhibashi/Janjati (9.4%), Terai origin (3.3%), and Dalit (2.3%). There may be various reasons for higher representation of Brahmin /Chhetri in the bureaucracy. One of the reasons is that there was domination of Brahmin and Chhetri in administration in past, as argued by Yadav (2007).

Table 10

Distribution of Respondents by Caste/Ethnicity

Caste/Ethnicity	Male		Female		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Brahmin/Chettri	133	85.8	48	82.8	181	85
Adhibashi/Janjati	14	9	6	10.3	20	9.4
Dalit	3	1.9	2	3.4	5	2.3
Terai Origin	5	3.2	2	3.4	7	3.3
Total	155	100	58	100	213	100

Source: (Author's calculation based on field survey, 2017)

Service Year of Respondents

Service year is considered as one of the important components of accountability and performance, and the results are presented below.

Table 11

Distribution of Respondents by Service Year

Service Year	Male		Female		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Less than 5	23	14.8	19	32.8	42	19.7
6-10	16	10.3	17	29.3	33	15.5
11-15	25	16.1	2	3.4	27	12.7
16-20	30	19.4	11	19	41	19.2
20+	61	39.4	9	15.5	70	32.9
Total	155	100	58	100	213	100

Statistic	Male	Female	Total
Mean	17.11	10.7	15.4
Median	19	8.5000	16
Minimum	1	1	1
Maximum	38	24	38
Std. Deviation	8.88978	7.63529	9.01382

Source: (Author's calculation based on field survey, 2017)

Percentage, mean, and median distribution of respondents by service year and gender is presented in Table 11. About one in four respondents had 20 years or more of service years, followed by less than 5 years (19.7%), 16-20 years (19.2%), 6-10 years (15.5%), and 11-15 years (12.7%). The mean service year of respondents was 15.4, with 1 year being the lowest and 38 years, the highest. By gender, higher mean service year was observed for male than female (see Table 11).

CHAPTER V

ACCOUNTABILITY, PERFORMANCE, AND DEMOGRAPHIC

In this section, accountability and performance of educational bureaucrats is discussed by their demographic characteristics.

Accountability and Gender

To examine the level of accountability of educational bureaucrats, I adopted five typologies (transparency, liability, control, responsibility, and responsiveness) of accountability, as suggested by Koppell (2005). Based on these typologies, I calculated the level of accountability by using median and mean, which is presented in Table 12.

Table 12

Level of Accountability by Gender

Gender	Statistic	T*	C°	L+	R^	R^^	A ^a
Male	Mean	4.2000	3.4702	3.6194	4.4994	4.4839	4.0092
	Median	4.3333	3.5000	3.7500	4.8000	4.5000	4.0769
	Std. Deviation	0.6844	0.6493	0.7757	0.5598	0.4915	0.4245
Female	Mean	4.1437	3.6358	3.8405	4.5103	4.4885	4.0908
	Median	4.1667	3.6250	4.0000	4.7000	4.6667	4.1923
	Std. Deviation	0.6984	0.6253	0.9149	0.6682	0.6219	0.5142
Total	Mean	4.1847	3.5153	3.6796	4.5023	4.4851	4.0314
	Median	4.3333	3.5000	3.7500	4.8000	4.5000	4.0769
	Std. Deviation	0.6870	0.6457	0.8197	0.5897	0.5287	0.4509

Source: Author's calculation based on field survey, 2017

Note: T*= Transparency; C°= Controllability; L+= Liability; R^= Responsibility; R^^= Responsiveness; and A^a= Accountability. Minimum value 1 and Maximum 5

The median value of accountability is 4, which indicates that there is a higher level of accountability of educational bureaucrats. By gender, female educational bureaucrats have a slightly higher level of accountability than male. If data is

segregated by accountability typologies, the value of responsibility is higher than other typologies. Except for controllability and liability, all components have more than 4 median values. This means that there is no strong internal and external control mechanism to hold educational bureaucrats accountable. Similarly, it also indicates that there is no provision or a very weak provision of reward and punishment in educational bureaucracy. By gender, female educational bureaucrats were found to have slightly higher controllability, liability, and responsiveness than males. However, male educational bureaucrats had slightly higher transparency and responsibility than female educational bureaucrats. This indicates that accountability and its typologies differ by gender of educational bureaucrats.

Accountability and Age

I believed that accountability and its typologies also differ by age of educational bureaucrats. To confirm this, I calculated a crosstab, which is presented in Table 13. The data shows that all age groups have more or less similar levels of accountability. If data are segregated by accountability typologies, the median value of transparency was higher in all age groups except 31-40. Age group 21-30 and 31-40 had a higher level of controllability than 41-50 and 51-58. However, this scenario is completely different in case of responsiveness. Age group 21-30 and 31-40 had a lower level of responsiveness than 41-50 and 51-58. In case of liability, age group 21-30 had higher liability median value than others, while a higher median value of responsibility was observed in the age group 31-40, than in the others. This evidence clearly indicates that typologies of accountability differ by age of educational bureaucrats.

Table 13

Level of Accountability by Age Group

Age Group	Statistic	T*	C°	L+	R^	R^^	A ^a
21-30	Mean	4.1528	3.6771	3.8750	4.3833	4.3403	4.0513
	Median	4.3333	3.6250	3.8750	4.7000	4.5000	4.0769
	Std. Deviation	0.5471	0.6934	0.8565	0.6239	0.6341	0.4649
31-40	Mean	4.0676	3.5557	3.6554	4.4838	4.4167	4.0073
	Median	4.0000	3.6250	3.7500	4.8000	4.5000	4.0769
	Std. Deviation	0.8705	0.5892	0.9129	0.7431	0.6095	0.5176
41-50	Mean	4.2658	3.4983	3.6588	4.5378	4.5788	4.0608
	Median	4.3333	3.5000	3.5000	4.6000	4.6667	4.0385
	Std. Deviation	0.5262	0.6686	0.7078	0.4428	0.3971	0.3736
51-58	Mean	4.2683	3.3780	3.6463	4.5415	4.5244	4.0103
	Median	4.3333	3.5000	3.7500	4.6000	4.6667	4.1154
	Std. Deviation	0.6290	0.6670	0.8234	0.4904	0.4952	0.4541

Source: Author's calculation based on field survey, 2017

Note: T*= Transparency; C°= Controllability; L+= Liability; R^= Responsibility; R^^= Responsiveness; and A^a= Accountability. Minimum value 1 and Maximum 5

Accountability and Education

It is very hard to say that level of accountability and its typologies differ by level of education of educational bureaucrats. To check this, I calculated a crosstab, which is presented in Table 14. It is clear from the table that the level of accountability of educational bureaucrats increased by their level of education. By accountability typologies, median value of transparency and responsiveness follow same as accountability. Similarly, controllability and liability also follow same as transparency and responsiveness, except in Master degree category. From this evidence, it can be said that there is a positive relationship between the level of education and level of accountability and its typologies (except responsibility). However, this case is completely different in regards to responsibility. Level of responsibility decreased by increasing level of higher education, except for Master

degree respondents. Thus, it was found that accountability and its typologies differed by education level of educational bureaucrats.

Table 14

Level of Accountability by Education

Education	Statistic	T*	C°	L+	R^	R^^	A ^a
+2	Mean	4.0667	3.3250	4.0500	4.5200	4.4667	4.0154
	Median	4.0000	3.6250	4.0000	4.8000	4.3333	3.9231
	Std. Deviation	0.6411	1.1812	0.5700	0.4816	0.5577	0.4415
Bachelor	Mean	4.1190	3.6830	3.9554	4.3143	4.3333	4.0467
	Median	4.3333	3.7500	4.0000	4.3000	4.3333	4.0385
	Std. Deviation	0.5824	0.4349	0.4464	0.5509	0.5270	0.3310
Master	Mean	4.2103	3.4650	3.6012	4.5083	4.4871	4.0085
	Median	4.3333	3.5000	3.7500	4.7000	4.6667	4.0769
	Std. Deviation	0.6418	0.6490	0.8751	0.6053	0.5355	0.4739
MPhil	Mean	4.0278	3.9063	3.9792	4.8500	4.8194	4.3237
	Median	4.5000	4.0000	3.8750	5.0000	4.8333	4.2885
	Std. Deviation	1.3443	0.6126	0.5163	0.2969	0.2405	0.2590

Source: Author's calculation based on field survey, 2017

Note: T*= Transparency; C°= Controllability; L+= Liability; R^= Responsibility; R^^= Responsiveness; and A^a= Accountability. Minimum value 1 and Maximum 5

Accountability and Organizations

Even though all organizations had a higher level of accountability, the level of accountability and its typologies were different by organizations (Table 15). Higher median value of accountability was observed in Informal Education Center, followed by Department of Education, Teacher Service Commission, Ministry of Education, National Center for Educational Development, Education Review Office, Curriculum Development Center, and School Teacher Record Office. Highest median value of transparency was observed in Department of Education. The median value of controllability, liability, responsibility, and responsiveness was found to be higher in Informal Education Center than in the others (see Table 15).

Table 15
Level of Accountability by Organizations

Organizations	Statistic	T*	C°	L+	R^	R^^	A ^a
ECO	Mean	4.1619	3.3607	3.7500	4.4914	4.4810	3.9890
	Median	4.0000	3.5000	3.7500	4.6000	4.6667	4.0000
	Std. Deviation	0.8906	0.7668	0.9587	0.7151	0.7205	0.6361
TSC	Mean	4.2143	3.6518	3.8750	4.5286	4.4405	4.1016
	Median	4.1667	3.6875	4.0000	4.4000	4.5000	4.1538
	Std. Deviation	0.4822	0.5329	0.6559	0.4479	0.5213	0.3351
NCED	Mean	4.1600	3.4050	3.4900	4.1760	4.1333	3.8215
	Median	4.3333	3.3750	3.5000	4.2000	4.1667	3.9615
	Std. Deviation	0.7522	0.6147	1.0544	0.9098	0.5951	0.5374
IEC	Mean	4.3333	4.5000	4.1875	5.0000	4.8333	4.6058
	Median	4.3333	4.5625	4.2500	5.0000	4.8333	4.6923
	Std. Deviation	0.3563	0.2834	0.6911	0.0000	0.1259	0.1870
CDC	Mean	4.0000	3.3500	3.4250	4.5000	4.5250	3.9288
	Median	4.3333	3.1250	3.5000	4.5000	4.6667	3.9423
	Std. Deviation	0.8165	0.7636	0.8814	0.4565	0.4368	0.4576
STRO	Mean	3.8519	3.6250	3.8333	3.8222	3.9815	3.8034
	Median	3.6667	3.5000	4.0000	3.6000	3.8333	3.6923
	Std. Deviation	0.2939	0.3247	0.3750	0.3929	0.4890	0.2809
ERO	Mean	3.8889	3.3125	3.3958	4.6333	4.5833	3.9391
	Median	4.0000	3.2500	3.6250	4.8000	4.7500	3.9423
	Std. Deviation	1.0476	0.7566	0.5785	0.4334	0.4466	0.3865
DOE	Mean	4.5111	3.5375	4.0000	4.6733	4.4722	4.1551
	Median	4.6667	3.5625	4.0000	4.8000	4.5000	4.1923
	Std. Deviation	0.2998	0.4393	0.4254	0.3580	0.3664	0.1993
MOEST	Mean	4.1889	3.5563	3.5625	4.5633	4.6472	4.0756
	Median	4.3333	3.5625	3.6250	4.7000	4.8333	4.0769
	Std. Deviation	0.6024	0.5941	0.8305	0.4650	0.4060	0.3700

Source: Author's calculation based on field survey, 2017

Note: T*= Transparency; C°= Controllability; L+= Liability; R^= Responsibility; R^^= Responsiveness; and A^a= Accountability. ECO= Examination Controller Office; TSC= Teacher Service Commission; NCED= National Center for Educational Development; IEC= Informal Education Center; CDC= Curriculum Development Center; STRO= School Teacher Record Office; ERO= Education Review Office; DOE= Department of Education; MOEST= Ministry of Education. Minimum value 1 and Maximum 5

Accountability and Position

The role of position in accountability cannot be ignored. Bearing this in mind,

I calculated a crosstab, which is presented in Table 16.

Table 16

Level of Accountability by Position

Position	Statistic	T*	C°	L+	R^	R^^	A ^a
First Class	Mean	4.7222	3.4792	3.5000	4.3667	4.5278	4.0385
	Median	4.6667	3.3750	3.5000	4.3000	4.6667	3.9231
	Std. Deviation	0.2509	0.6245	0.2738	0.4274	0.4399	0.3096
Second Class	Mean	4.2204	3.4516	3.6129	4.4516	4.5000	3.9994
	Median	4.3333	3.5000	3.5000	4.5000	4.5833	4.0769
	Std. Deviation	0.7063	0.5968	0.8068	0.5004	0.4466	0.4177
Third Class	Mean	4.1111	3.5714	3.7619	4.5071	4.3671	4.0266
	Median	4.0000	3.6250	4.0000	4.8000	4.4167	4.1346
	Std. Deviation	0.6510	0.6345	0.8176	0.6023	0.4698	0.4375
Non-gazetted First	Mean	4.2973	3.4764	3.7703	4.4757	4.4775	4.0395
	Median	4.3333	3.5000	4.0000	4.8000	4.6667	4.0769
	Std. Deviation	0.7485	0.7417	0.8506	0.7921	0.7639	0.6101
Non-gazetted Second	Mean	4.0417	3.5521	3.4688	4.6917	4.8611	4.1170
	Median	4.3333	3.5000	3.7500	4.8000	5.0000	4.0577
	Std. Deviation	0.6832	0.6875	0.8947	0.3999	0.3095	0.3264
Officer	Mean	4.1798	3.5189	3.6908	4.4789	4.4276	4.0159
	Median	4.3333	3.6250	3.7500	4.6000	4.5000	4.0769
	Std. Deviation	0.6720	0.6177	0.7998	0.5548	0.4614	0.4231
Non-officer	Mean	4.1967	3.5061	3.6516	4.5607	4.6284	4.0700
	Median	4.3333	3.5000	3.7500	4.8000	5.0000	4.0769
	Std. Deviation	0.7287	0.7160	0.8735	0.6701	0.6500	0.5154

Source: Author's calculation based on field survey, 2017

Note: T*= Transparency; C°= Controllability; L+= Liability; R^= Responsibility; R^^= Responsiveness; and A^a= Accountability. Officer (1st Class+2nd Class+3rd Class); Non-officer (1st Non-gazetted +2nd Non gazetted); Minimum value 1 and Maximum

All positions were found to have more or less similar levels of accountability.

Higher median value of accountability was observed for class three and was found to

gradually decrease by increasing position. Similar levels of accountability were also observed for non-gazetted first and non-gazetted second. Further, I classified position in two broad categories including gazetted and non-gazetted educational bureaucrats. It is interesting to note that similar median value of accountability was observed for gazetted and non-gazetted. By typologies, the higher median value of transparency and responsiveness was observed for class first and was found to gradually decrease up to class three. However, higher median value of controllability, liability, and responsibility was seen for class three and found to gradually decrease with increase in position. Gazetted educational bureaucrats had a lower median value responsiveness and responsibility than non-gazetted (see Table 16). From this, it can be said that accountability and its typologies differ by the position of educational bureaucrats.

Accountability and Service Year

Similar to age, I also believed that accountability and its typologies differed by service year of educational bureaucrats. To support this argument, I calculated another crosstab, which is presented in Table 17. All service years of educational bureaucrats were found to have more or less similar levels of accountability. The median value of accountability was 4 in all service years, except 11-15 year (median value 3.9), which indicates there is a higher level of accountability of educational bureaucrats. If data is segregated by accountability typologies, the median value of transparency, controllability, liability, responsibility, and responsiveness are higher in all service years except 11-15. Higher median value of controllability was observed for service years less than 5 years, while higher liability value was observed for 6-10 service years. Higher median value of responsibility was observed for 6-10 and 11-15 service years, and this scenario is slightly different for responsiveness. Service years 6-10 and

20+ had higher responsibility values. Thus, it can be noted that accountability and its typologies differed by service year of educational bureaucrats.

Table 17

Level of Accountability by Service Year

Service Year	Statistic	T*	C ^o	L+	R [^]	R ^{^^}	A ^a
	Mean	4.0556	3.7470	3.6964	4.4952	4.4762	4.0870
Less than 5	Median	4.3333	3.8125	3.8750	4.6000	4.5833	4.1731
	Std. Deviation	0.7788	0.6256	0.8912	0.5155	0.5239	0.4165
	Mean	4.3232	3.5682	3.8636	4.4788	4.4545	4.0804
6-10	Median	4.3333	3.6250	4.0000	4.8000	4.6667	4.0769
	Std. Deviation	0.6946	0.7762	0.7733	0.7983	0.7560	0.6248
	Mean	4.1975	3.3565	3.3889	4.4074	4.3025	3.8789
11-15	Median	4.0000	3.3750	3.5000	4.8000	4.1667	3.9615
	Std. Deviation	0.6554	0.4711	0.9155	0.8726	0.5866	0.4778
	Mean	3.9593	3.5091	3.6646	4.5171	4.4634	3.9991
16-20	Median	4.0000	3.6250	3.7500	4.4000	4.5000	4.0000
	Std. Deviation	0.7423	0.5925	0.7858	0.4774	0.4526	0.3939
	Mean	4.3238	3.4161	3.7036	4.5457	4.5881	4.0527
20+	Median	4.3333	3.5000	3.7500	4.6000	4.6667	4.1154
	Std. Deviation	0.5617	0.6541	0.7688	0.4359	0.3969	0.3891

Source: Author's calculation based on field survey, 2017

Note: T*= Transparency; C^o= Controllability; L+= Liability; R[^]= Responsibility; R^{^^}= Responsiveness; and A^a= Accountability. Minimum value 1 and Maximum 5

Accountability and Demographics

I analyzed the question regarding whether accountability of educational bureaucrats is linked with their demographic characters or not. The Spearman's Correlation Coefficient value of accountability and demographics of educational bureaucrats ranged from 0.004 to 0.119, and Phi Correlation Coefficient value ranged from 0.130 to 0.230 (see Table 18).

Table 18

Correlation, Phi, and Chi-Square for Accountability and Demographics

Demographics	Accountability						
	Correlations (Spearman's rho)		Phi		Chi-Square		
	Correlation Coefficient	Sig. (2-tailed)	Value	Approx. Sig.	Value	df	Asymp. Sig. (2-tailed)
Gender	0.119	0.084	0.130	0.165	3.610 ^a	2	0.165
Age	0.004	0.959	0.157	0.511	5.262 ^b	6	0.511
Education	0.112	0.102	0.137	0.675	4.014 ^c	6	0.675
Position	0.081	0.240	0.185	0.502	7.322 ^d	8	0.502
Service Year	-0.048	0.490	0.230	0.186	11.279 ^e	8	0.186

N = 213; a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 27; b. 8 cells (66.7%) have expected count less than 5. The minimum expected count is 11; c. 8 cells (66.7%) have expected count less than 5. The minimum expected count is 02; d. 9 cells (60.0%) have expected count less than 5. The minimum expected count is 03; e. 10 cells (66.7%) have expected count less than 5. The minimum expected count is 13.

The value of Spearman's rho clearly indicated a very weak positive (except service year, $r = -0.048$) association between accountability and demographics of educational bureaucrats. Notice that this correlation is marked as not significant because the value of significance was reported to be greater than 0.05 (at the 95% level of confidence) in both tests, which was also confirmed by significance value of Chi-Square. This result suggests that there is no statistically significant difference between accountability and demographic characters of educational bureaucrats. Hence, this study fails to reject the null hypothesis. That is why, I can say that accountability and demographic variables of educational bureaucrats are independent.

The omnibus Tests of Model Coefficients shows Chi-Square, which has 1 degree of freedom for all demographic variables. The value of chi-square ranges from 0.058 to 1.138 with 0.286 to 0.808 level of significance (see Table 19). Therefore, the model has a very poor fit, with it containing only the constant, indicating that the demographic (predictors) do not have a significant effect on accountability

(prediction). Hence, I decided to look closely at the predictors and from later tables to determine significant predictors.

Table 19

Omnibus Tests of Model Coefficients

Demographics	Step 1	Chi-square	Df	Sig.
Gender	Step	0.695	1	0.405
	Block	0.695	1	0.405
	Model	0.695	1	0.405
Age	Step	0.059	1	0.808
	Block	0.059	1	0.808
	Model	0.059	1	0.808
Education	Step	0.442	1	0.506
	Block	0.442	1	0.506
	Model	0.442	1	0.506
Position	Step	0.058	1	0.810
	Block	0.058	1	0.810
	Model	0.058	1	0.810
Service Year	Step	1.138	1	0.286
	Block	1.138	1	0.286
	Model	1.138	1	0.286

In linear regression, R squared value gives an indication of how much variation in the dependent variable is explained by independent variables. In my case, values of Nagelkerke R Square ranged from 0.001 to 0.021, indicating no relationship between demographics (predictors) and accountability (prediction). From this, I can conclude that demographics explain roughly 0.1% to 2.1% of the variation in accountability (see Table 20).

Table 20

Model Summary

Demographic	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Gender	60.888 ^a	0.003	0.013
Age	61.524 ^b	0.000	0.001
Education	61.141 ^a	0.002	0.008
Position	61.525 ^b	0.000	0.001
Service Year	60.444 ^b	0.005	0.021

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

b. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

The classification table tells us how many of the cases where the observed values of the dependent variable were 1 or 0, respectively, have been correctly predicted (Burns & Burns, 2008).

Table 21

Classification Table^a

Observed	Predicted			Percentage Correct
	Accountability			
	0.00	1.00		
Accountability	0.00	0	7	0.0
	1.00	0	206	100.0
Overall Percentage				96.7

a. The cut value is .500

In the Classification table, the columns are the two predicted values of the dependent, while the rows are the two observed (actual) values of the dependent. In a perfect model, all cases will be on the diagonal, and the overall percent correct will be 100% (Burns & Burns, 2008). Given the base rates of the two decision options (206/213 = 96.7% are accountable, 3.3 are not) and no other information, the best strategy is to predict, for every case, that bureaucrats are accountable. Using that strategy, I would be correct 96.7% of the time.

Table 22

Variables in the Equation

Demographics	β	S.E.	Wald	df	Sig.	Exp(β)
Gender ^a	-0.831	1.091	0.580	1	0.446	0.436
Constant	4.043	1.009	16.064	1	0.000	57.000
Age ^b	-0.011	0.045	0.059	1	0.809	0.989
Constant	3.851	1.991	3.741	1	0.053	47.041
Education ^c	-0.538	0.837	0.413	1	0.520	0.584
Constant	4.964	2.538	3.826	1	0.050	143.128
Position ^d	-0.091	0.374	0.059	1	0.809	0.913
Constant	3.753	1.595	5.537	1	0.019	42.642
Service Year ^e	0.048	0.046	1.071	1	0.301	1.049
Constant	2.733	0.672	16.546	1	0.000	15.386

a. Variable(s) entered on step 1: Gender. b. Variable(s) entered on step 1: Age. c. Variable(s) entered on step 1: Education. d. Variable(s) entered on step 1: Position. e. Variable(s) entered on step 1: Service Year.

Variables in the equation table are at the heart of answering how demographics are associated with accountability. This table provides the regression coefficient beta (β), the Wald statistic (to test the statistical significance) and the all-important Odds Ratio [Exp (β)] for each variable category. The simplest way to assess Wald is to take the significance values, and if less than 0.05, reject the null hypothesis, as the variable makes a significant contribution (Burns & Burns, 2008). In this case, I note that demographics do not significantly contribute to accountability because significant values of all demographic variables are more than 0.05. The Exp (β) column in the table presents the extent to which raising the corresponding measure by one unit influences the odds ratio (Burns & Burns, 2008). We can interpret Exp (β) in terms of the change in odds. The Exp (β) value of demographic variables ranged from 0.436 to 1.049. This indicates that if demographic is raised by one unit, the odds ratio is 0.436 to 1.049 times as large. Also, it shows that the coefficient ranged from

and is 0.436 to 1.049 times more likely to be accountable bureaucrats than being not accountable.

It is important to note that Odds Ratio greater than 1 means that as the predictor increases, the odds of the outcome occurring increase and vice versa. Hence, Odds Ratio greater than 1 for service year indicates that by increasing service year by one, the odd of the accountability increases by 1.049. However, in case of gender, age, education, and position, this scenario is different. Odds Ratio less than 1 means that as the predictor (gender, age, education, and position) increases, the odds of the outcome (accountability) decreases, which is also confirmed by the coefficients for the model that is contained in the column headed β . Based on these results, I can conclude that demographics have very less effect on accountability.

Performance and Demographics

Performance is multi-faced and cannot be measured by observing a single indicator. Realizing this, I adopted four indicators of performance namely, executing defined duties, meeting deadlines, effectiveness, and efficiency in doing work, as proposed by Iqbal, Anwar, and Haider (2015). Based on these indicators, I disclosed the performance of educational bureaucrats, which is presented in Appendix II.

The median value of performance more than 4 indicates that there is a higher level of performance of educational bureaucrats. Almost all organizations have more or less same level of performance except for the School Teacher Record Office. School Teacher Record Office has higher level of performance; however, when compared with other organizations, it has a slightly lower level of performance than the others. By gender, male and female both have the same levels of performance even though female workers are relatively more productive, as per Kotur and Anbazhagan (2014). This might be because male and female educational bureaucrats

are given equal opportunities to work in their organizations. In case of age of the employee, Kotur and Anbazhagan (2014) argue that employees in the medium range of age perform better compared to those on the extremes. However, this study shows the opposite result. Age groups 51-58 and 21-30 had a slightly higher level of performance than age groups 30-40 and 40-50.

Education is an important factor that impacts employee performance (Kaifi & Mujtaba, 2010). Performance exhibited by the employees varies according to their educational qualifications (Kotur & Anbazhagan, 2014), something that was also observed in this study. A higher level of performance was observed for +2 and MPhil+ than Bachelor and Master degrees. Non-gazetted educational bureaucrats had highest level of performance than gazetted educational bureaucrats. The class first and class three educational bureaucrats had a slightly higher level of performance than class two. Performance of the employees is dependent on their work experience (Kotur & Anbazhagan, 2014). Further, the scholars argue that the performance of the employees gradually increases with their experience. However, it starts getting low after 20 years of working experience. On the contrary, this study showed a different result. Service years between 11-15 and 16-20 had a slightly lower level of performance than 5 years and more than 20 years.

In terms of performance indicators, the highest level of median value was observed for all indicators. By gender, age, education and service year, the same level of median value was observed across all indicators, except for effectiveness. By gender, male educational bureaucrats were found to have the highest level of effectiveness than female. Age groups 20-40 and 31-40 had a lower level of effectiveness than others. MPhil and +2 had a higher level of effectiveness than Bachelor and Master Degrees. Service year less 6-10 years had the highest level of

effectiveness than the others. By position, non-gazetted educational bureaucrats had the highest level of effectiveness than gazetted ones. The median value of efficiency differed by position. Slightly lower levels of efficiency values were observed for class first educational bureaucrats than for class two and class three bureaucrats. It is thus clear that performance of educational bureaucrats differed by demographics.

It is not clear at this stage whether performance and demographics of educational bureaucrats are significantly associated or independent to each other. To determine this, I used Phi, correlations (Spearman's rho) and Chi-Square test. The Spearman's Correlation Coefficient value of performance and demographics of educational bureaucrats ranged from -0.003 to 0.237 and Phi Correlation Coefficient value ranged from 0.300 to 0.616 (see Table 23).

Table 23

Correlation, Phi, and Chi-Square for Performance and Demographics

Demographics	Performance						
	Correlations (Spearman's rho)		Phi		Chi-Square		
	Correlation Coefficient	Sig. (2-tailed)	Value	Approx. Sig.	Value	df	Asymp. Sig. (2-tailed)
Gender	0.021	0.757	0.300	0.038	19.152 ^a	10	0.038
Age	0.096	0.163	0.454	0.049	43.878 ^b	30	0.049
Education	0.109	0.113	0.369	0.519	28.983 ^c	30	0.519
Position	0.237**	0.000	0.616	0.000	80.734 ^d	40	0.000
Service Year	-0.003	0.970	0.527	0.027	59.047 ^e	40	0.027

N= 213; **. Correlation is significant at the 0.01 level (2-tailed). a. 9 cells (40.9%) have expected count less than 5. The minimum expected count is .27; b. 29 cells (65.9%) have expected count less than 5. The minimum expected count is 11.; c. 36 cells (81.8%) have expected count less than 5. The minimum expected count is 02; d. 40 cells (72.7%) have expected count less than 5. The minimum expected count is 03; e. 43 cells (78.2%) have expected count less than 5. The minimum expected count is 13.

As such, there is very weak positive (except service year, $r = -0.003$) association between performance and demographics of educational bureaucrats. It can also be

noted that correlation is evident as not significant because the value of significance reported was greater than 0.05 (at the 95% level of confidence) in both tests, which is also confirmed by significance value of Chi-Square, except for the position of educational bureaucrats. This suggests that no significant difference exists between accountability and demographics of educational bureaucrats, except for position. Therefore, this study supports the null hypothesis except in the case of position of educational bureaucrats. These statistics helped me to conclude that performance and demographic variables of educational bureaucrats are independent except in the case of position.

Table 24

Omnibus Tests of Model Coefficients

Demographics	Step 1	Chi-square	Df	Sig.
Gender	Step	2.270	1	0.132
	Block	2.270	1	0.132
	Model	2.270	1	0.132
Age	Step	2.780	1	0.095
	Block	2.780	1	0.095
	Model	2.780	1	0.095
Education	Step	1.584	1	0.208
	Block	1.584	1	0.208
	Model	1.584	1	0.208
Position	Step	3.874	1	0.049
	Block	3.874	1	0.049
	Model	3.874	1	0.049
Service Year	Step	0.439	1	0.508
	Block	0.439	1	0.508
	Model	0.439	1	0.508

The omnibus Tests of Model Coefficients shows Chi-Square, which has one degree of freedom for all demographic variables. The value of chi-square ranges from

0.0439 to 3.874 with 0.049 to 0.286 levels of significance (see Table 24). This suggests that no significant difference exists between accountability and demographics of educational bureaucrats, except for position. Hence, this model has a very poor fit, with it containing only the constant, indicating that demographics (except position) do not have a significant effect on performance. To confirm this, I decided to look more closely at the predictors from later tables to determine significant predictors.

The values of Nagelkerke R-Square ranges from 0.006 to 0.049, indicating a very weak relationship between demographics and performance. From this, I can conclude that demographics explain roughly 0.6% to 4.9% of the variation in performance (see Table 25).

Table 25

Model Summary

Demographic	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Gender	95.625 ^a	0.011	0.029
Age	95.115 ^a	0.013	0.035
Education	96.311 ^a	0.007	0.020
Position	94.021 ^a	0.018	0.049
Service Year	97.456 ^b	0.002	0.006

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

b. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

The numbers in the classification table tell us the base rates of the two decision options (200/213 = 93.9% are a performer, 6.1 are not) and no other information; the best strategy is to predict, for every case, that bureaucrats are good performers. Using that strategy, I would be correct 93.9% of the time (see Table 26).

Table 26

Classification Table^a

Observed	Predicted			Percentage Correct
	Performance			
	0.00	1.00		
Performance	0.00	0	13	0.0
	1.00	0	200	100.0
Overall Percentage				93.9

a. The cut value is .500

The Wald test value of more than 0.05 indicates that demographics of educational bureaucrats do not significantly contribute to their performance.

Table 27

Variables in the Equation

Demographics	β	S.E.	Wald	df	Sig.	Exp(β)
Gender ^a	0.892	0.579	2.371	1	0.124	2.440
Constant	2.159	0.431	25.086	1	0.000	8.667
Age ^b	0.056	0.034	2.697	1	0.101	1.058
Constant	0.472	1.347	0.123	1	0.726	1.604
Education ^c	0.621	0.469	1.759	1	0.185	1.862
Constant	0.994	1.303	0.582	1	0.445	2.703
Position ^d	0.614	0.332	3.422	1	0.064	1.847
Constant	0.403	1.219	0.109	1	0.741	1.496
Service Year ^e	0.021	0.033	0.431	1	0.512	1.022
Constant	2.421	0.535	20.457	1	0.000	11.256

a. Variable(s) entered on step 1: Gender. b. Variable(s) entered on step 1: Age. c. Variable(s) entered on step 1: Education. d. Variable(s) entered on step 1: Position. e. Variable(s) entered on step 1: Service Year.

The Exp (β) value of demographics ranges from 1.022 to 2.440 (see Table 27).

This value indicates that when demographics is raised by one unit, the odds ratio is 1.022 to 2.440 times as large, and holding other things the same maintains the model.

It also shows that demographics is 1.022 to 2.440 times more likely to make a well performing bureaucrat. Odds Ratio greater than 1 for all demographic variables

indicates that increases of one in demographics increases performance by 1.022 to

2.440. Based on these evidence, I can conclude that demographics has very weak effect on the performance of educational bureaucrats.

Accountability and Performance

Accountability and performance are the pivotal issues of bureaucracy throughout the world, including in Nepal. Greater accountability of bureaucrats improves the performance and vice versa. That is why Dubnick (2005) argue that accountability and performance are instrumental to each other. To examine this, I applied Phi, correlations (Spearman's rho), and Chi-Square test.

Table 28

Correlation, Phi, and Chi-Square for Accountability and Performance

	Performance						
	Correlations (Spearman's rho)		Phi		Chi-Square		
	Correlation Coefficient	Sig. (2-tailed)	Value	Approx. Sig.	Value	df	Asymp. Sig. (2-tailed)
Accountability	0.438**	0.000	0.767	0.000	250.926 ^a	20	0.000

N= 213; **. Correlation is significant at the 0.01 level (2-tailed). a. 26 cells (78.8%) have expected count less than 5. The minimum expected count is .00.

The Spearman's Correlation Coefficient value of accountability and performance is 0.0438 and Phi Correlation Coefficient value ranges from 0.767. From this, it can be said that there is a moderate positive association between accountability and performance of educational bureaucrats. Also, it was detected that correlation is apparent as significant at the 95% confidence level, which is also guaranteed by significance value of Chi-Square (see Table 28). This result suggests that there is a significant association between accountability and performance of educational bureaucrats. Therefore, this study rejects the null hypothesis and concludes that accountability and performance of educational bureaucrats are associated and mutually exclusive.

The omnibus Tests of Model Coefficients shows Chi-Square, which has 1 degree of freedom for both accountability and performance. The value of chi-square for accountability and performance is 14.381 with a 0.000 level of significance (see Table 29). Even though this model has a poor fit, it indicates that accountability has a significant effect on performance and vice versa.

Table 29

Omnibus Tests of Model Coefficients

Variables	Step 1	Chi-square	Df	Sig.
	Step	14.381	1	0.000
Accountability	Block	14.381	1	0.000
	Model	14.381	1	0.000
	Step	14.381	1	0.000
Performance	Block	14.381	1	0.000
	Model	14.381	1	0.000
	Step	14.381	1	0.000

The value of Nagelkerke's R^2 is 0.117 and 0.260 for accountability and performance, respectively. This indicates that there is a relationship between accountability and performance and vice versa. From this, I can conclude that accountability explains about 11.7% of the variation in performance, whereas performance explains 26% of the variation in accountability. Hence, it can be said that accountability and performance mutually reinforce each other.

Table 30

Model Summary

Demographic	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Accountability	83.513 ^a	0.065	0.177
Performance	47.201 ^b	0.065	0.260

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

b. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

The numbers in the classification table (taken accountability as dependent and performance as an independent variable) gives us two decision options, namely being accountable ($206/213 = 96.7\%$) and not being accountable ($100-96.7 = 3\%$). Using this tactic, I would be correct 96.7% of the time. However, this situation differs when I take performance as a dependent variable and accountability as an independent variable. The classification table shows that this rule allows to correctly classifying $197 / 200 = 98.5\%$ of the performance where the predicted event is observed. This is known as the sensitivity of prediction, the percentage of occurrences correctly predicted (Wuensch, 2014). I also observed that this rule allows to correctly classifying $4 / 13 = 30.8\%$ of the performance where the predicted event (performance) is not observed. This is known as the specificity of prediction, the percentage of non-occurrence correctly predicted (Wuensch, 2014). Overall, my prediction correct is 201 out of 213 times, which is 99.4% success rate. I also focused on error rates in classification, which is also known as a false positive. It predicts the performance of educational bureaucrats would occur when, in fact, it did not (Wuensch, 2014). My decision rule predicted performance 206 times. The prediction is wrong 9 times, for a false positive rate of $9 / 206 = 4.4\%$. A false negative would be predicting that the performance would not occur when, in fact, it did occur. My decision rule predicted a decision not to be a performer 7 times. Therefore, the prediction is wrong 3 times where false negative rate of $3/7= 42.9\%$.

Table 31

Classification Table ^a

Observed	Predicted			Percentage Correct
	Accountability			
	0.00	1.00		
Accountability*	0.00	0	7	0.0
	1.00	0	206	100.0
Overall Percentage				96.7

Observed	Predicted			Percentage Correct
	Performance			
	0.00	1.00		
Performance [^]	0.00	4	9	30.8
	1.00	3	197	98.5
Overall Percentage				94.4

*a. The cut value is .500. * Value is generated by keeping accountability as dependent variable and performance as independent variable. ^Value is generated by keeping accountability as an independent variable and performance as a dependent variable.*

The significant value of the Wald test less than 0.05 indicates that accountability significantly contributes to performance and vice versa. The Exp (β) value of accountability and performance is 29.185. This value indicates that when accountability is raised by one unit, the odds ratio is 29.185 times as large, and vice versa. It also signifies that accountability is 29.185 times more likely to make well performing bureaucrats than lesser performing bureaucrats, and vice versa. Therefore, I can conclude that accountability has an effect on performance and vice versa.

Table 32

Variables in the Equation

Demographics	β	S.E.	Wald	df	Sig.	Exp(β)
Accountability ^a	3.374	0.836	16.271	1	0.000	29.185
Constant	-0.288	0.764	0.142	1	0.706	0.750
Performance ^b	3.374	0.836	16.271	1	0.000	29.185
Constant	0.811	0.601	1.821	1	0.177	2.250

a. Variable(s) entered on step 1: accountability. b. Variable(s) entered on step 1: Performance.

Discussion

Accountability in individual staff is considered as a key element to improve the government's delivery to the people. Hence, it is a sign of good governance. Good governance can be achieved in bureaucracy, including in educational bureaucracy, through accountability. As per results of the present study, educational bureaucrats who are working in the central level organizations of the Ministry of Education seem to be accountable. This might be an effect of constitutional bodies, state institutions, laws, policies, directives and guidelines that were formed for enhancing level of accountability. They are obligated to explain, answer, justify, and defend their actions and performance. Generally, people believe that the level of accountability varies according to demographic variables. In this study, descriptive statistics also supports the argument. However, inferential statistics did not produce a significant effect. From this, I can say that accountability and demographics of educational bureaucrats are independent. Accountability of educational bureaucrats is dependent on transparency, liability, controllability, responsibility, and responsiveness. Transparency and liability can be considered as foundations, whereas the rest (controllability, responsibility and responsiveness) can be taken as substantives (Koppell, 2005).

Transparency

In the present context, transparency is considered as a key tool of good governance and a prerequisite to any democratic regime (Mabillard & Zumofen, 2016). Transparency means the free flow of information and its availability to all those who are connected with the decisions (Saremi & Mohammadi, 2015). It is a dominant force in the bureaucratic structure that helps to counter corruption, improve governance and promote accountability. The results of the study show that the central levels of educational bureaucrats seem to be transparent. They are disclosing and disseminating information to respective forums proactively through the website, press release, annual report, and so on, and reactively through spokesperson and information officers. Hence, educational bureaucrats are informing and reporting to the forum about their conduct and performance, as argued by Bovens (2010).

Similarly, I believed disclosure of complete and reliable information, whether proactively or reactively, is necessary but not a sufficient condition for accountability. Information must be accessible for the forum, which is vital for accountability (Birkinshaw, 2006). This is because information available to the forum is an essential first step leading to increased accountability. Hence, information should be accessible to all forums. Educational bureaucrats are making information accessible to relevant forums upon request, as well as, proactively. Therefore, transparency generates accountability (Fox, 2007) in Nepali educational bureaucracy. Along the same lines as Fox, Meijer (2014) argues that transparency can facilitate and strengthen horizontal and vertical accountability. This is because a more informed forum can play a meaningful role in dialogue with their actors. Thus, it is seen as a measure of openness that combats corruption and minimizes irregularities or misconduct by actors. This might be an effect of The Right to Information Act 2007. This act

recognizes information as a fundamental democratic right of the citizen. Every public-sector organization has to respect and protect the right to information of the citizen.

Liability

Transparency is necessary but far from sufficient to produce accountability (Fox, 2007). Along with transparency, liability is required. Accountability, eventually, can be understood as liability (Boos, Guenter, Grote, & Kinder, 2012). Thus, accountability without liability is meaningless (Dayanandan, 2013). That might be the reason that Koppell (2005) argues that liability can be taken as a foundation of accountability. As per Bovens (2010), the actor should face consequences. Hence, answerability without consequences falls short of accountability (Fox, 2007). Actors are held liable for their activities, punished for malfeasance and rewarded for successes (Koppell, 2005). Therefore, reward and punishment system is associated with accountability (Ministry of Education, 2009). The Government of Nepal has formed different laws, policies, code of conduct, constitutional bodies, and state institutions for ensuring liability of the actor. However, results of the study show that there is a weak mechanism of reward and punishment within educational bureaucracy. The Civil Service Act 1993 and Regulation 1993 has clearly mentioned that bureaucrats should be punished and dismissed from services for their misconduct. However, in practice there is no strong punishment and reward mechanism for bad and good performance. This might be an effect of sycophancy and patron-client relation in Nepali bureaucracy.

Controllability

Control is too strong a term for the accountability relationship when the bureaucracy has become an important component of good governance as the administrative state developed (Hwang, 2018). Hence, accountability is not only

related to transparency and liability, but also related to controllability. Controllability refers to the existence of mechanisms to sanction actions and decisions that run counter to given mandates and procedures (Lawson & Rakner, 2005). It deals with the authority and controls the forum over the behavior or action of the actor. This means that the actor is controlled by the orders of the forum. Controllability adds transparency, credibility, and reliability in the process of accountability (Dergisi, 2014). This mechanism discourages actors to misuse authority, power, position and resources. Actors should not be held accountable for actions over which they have no control (Grote 2009; Merchant & Otley, 2007). Hence, there should be external and internal control systems to ensure accountability. However, evidence shows that there is a weak internal and external controllability mechanism in Nepali educational bureaucracy. It indicates that there is no strong system of directing, regulating, supervising, monitoring, advising, inspecting, evaluating and monitoring of external agencies. However, there is a hierarchical control in Nepali bureaucracy. Subordinates usually report to and follow commands of superiors, as argued by Weber (1968). Actions of educational bureaucrats are closely controlled by superiors. Hence, there is formal and unambiguous hierarchy control in Nepali educational bureaucracy. From this, it can be said that performance and actions of bureaucrats is controlled by the superior who has different sources, forms, and degrees of power.

Responsibility

Accountability is understood as a synonym of responsibility (O'Kelly & Dubnick, 2014). Responsibility refers to the obligation of an actor to perform tasks in alignment with the roles assigned (Boss, Guenter, Grote, & Kinder, 2012). It is one of the important substantives for accountability. Behavior and performance of actor is constrained by formal and informal professional standards. Such standards may

encourage better behavior and set expectations against which the actor can be evaluated (DiIulio 1994; Kearney & Sinha 1988; McKinney, 1981). Friedrich (n.d. cited in Koppell, 2005) argues that accountable actors should not simply follow orders, but should use their expertise constrained by professional and moral standards. Responsibilities might stem from formal or informal rules, compliance with standards or procedures, professional norms or from the organizational work process (Boos & Grote, 2012). Every bureaucratic organization has certain rules and regulations that must be followed by bureaucrats to be accountable. That is why Weber (1968) argued that bureaucrats should exercise authority delegated to him/her in accordance with formal and predefined rules. Central levels of educational bureaucrats seem more responsible. It clearly indicates that they are following predefined rules, regulations, and processes to accomplish duties. Therefore, many of us feel and perceive that bureaucracy is rule and process-oriented. All the activities and performance are directly guided by rules and regulation, as argued by Weber (1968). Hence, central level of educational bureaucrats is bounded by the rules, which contribute to ensure accountability in Nepali educational bureaucracy.

Responsiveness

Responsiveness satisfies the demand and need of citizens. That is why Koppell (2005) argues that responsiveness emphasizes on outward rather than upward linkages. It is also called customer-oriented approach and bottom-line vision of accountability. An actor has an obligation to fulfill the demand and need of the forum. A responsive actor should have informing, listening, and responding qualities (Glaser, 2007; Jenkins, 2007; Peters, 2007). The result of the study shows that educational bureaucrats are responsive. This indicates that they are informing citizens about procedures of service as per the demand. Similarly, they listen to all the needs,

demands, and concerns of citizens, as well as show sincere interest in solving public problems within the promised time. As such, I can say that educational bureaucrats are responsive, which contributes to ensure accountability in educational bureaucracy.

Performance

Performance of bureaucrats is perceived as a central agenda in the bureaucratic structure. It is perceived in terms of results or outcomes. Performance is the record of outcomes achieved in carrying out a specified job aspect during a specified period (Kane, 1996). Performance includes executing defined duties, meeting deadlines, employee competency, effectiveness, and efficiency in doing work (Iqbal, Anwar, & Haider, 2015). From this, it can be said that work output, timeline efficiency, and effectiveness are the central terms used in assessing the performance. The result of the study shows that educational bureaucrats have a higher level of performance. As per them, most of the time, they are executing their defined duties within the right time. They are fully devoted to achieving organizational goals and standards. This might be an effect of performance management system in Nepali bureaucracy. It is also important to note that transparency, liability, responsibility, responsiveness, and controllability mechanisms also support to upgrade bureaucrats' performance. Generally, people believe that level of performance differs by demographic background, which is also confirmed by the descriptive statistics in this study. However, inferential statistics did not produce significant effects, except for position. This indicates that demographics of educational bureaucrats do not significantly contribute to their performance. From this, I can say that performance and demographic of educational bureaucrats are independent to each other, except for position.

Accountability and Performance

There is a debate in academia about whether accountability increases performance or performance increases accountability. The scholar such as Hwang (2013) argues that accountability and performance are used interchangeably in practice and blur into each other. A good set of performance measures build accountability and improved accountability generates better productivity in the agency (Chan & Gao, 2009). Aucoin and Heintzman (2000) claim that improving accountability arrangements does not necessarily improve performance; however, the proposition that performance can improve in the absence of improved accountability cannot be sustained. As per results of the present study, there is a moderate positive association between accountability and performance of educational bureaucrats. It is also important to note that accountability does have a significant effect on performance and vice versa. Accountability explains for roughly 11.7% of the variation in performance, while performance explains roughly 26% of the variation in accountability. It is clearly seen that performance has a double effect on accountability. In this scenario, Zimmermann and Stevens (2006) claim that performance measurement is the newest method of ensuring accountability. Based on this, I can say that it could be the effect of performance management system in educational bureaucracy. Although accountability has lower effects on performance, they are interlinked; both are reinforcing each other. That is why Dubnick (2005) argued that accountability and performance improvement is instrumental to each other. Therefore, it can be said that accountability and performance mutually reinforce each other, even though there are tensions, ambiguities, and contradictions between them.

Summary of the Chapter

This chapter consisted of four sections. The first and second sections discussed accountability and performance in relation to demographic characteristics of educational bureaucrats correspondingly. The last two sections presented accountability and performance relations, as well as discussion of the results.

CHAPTER VI

SUMMARY, CONCLUSION, AND IMPLICATION

Summary

The study contributes to the literature by analyzing the accountability and performance of educational bureaucrats at the central level organizations of the Ministry of Education. The data for this study were collected from 213 bureaucrats who were working in central level organizations of the Ministry of Education. Self-administered questionnaires were used for the survey. Data were analyzed by using descriptive and inferential statistics with the help of SPSS software. In descriptive statistics, frequency, percentages, crosstab, mean, median and standard deviation were calculated to examine the data properties. Phi and Chi-square were used before conducting logistic regression analysis; Spearman's rho correlation was also used as both descriptive (nature of the relationship) and inferential (significant relation). The major findings of the study are summarized below.

Demographics of Respondents

A total of 28% of respondents were from the Ministry of Education, followed by Examination Controller Office (16.4%), Department of Education (14.1%), National Center for Educational Development (11.7%), Curriculum Development Center (9.4%), Teacher Service Commission (6.6%), Education Review Office (5.6%), School Teacher Record Office (4.2%), and Informal Education Center (3.8%). Male respondents were found to be higher than female in all age groups, except in the 21-30 age group. The mean age was 42.23 years, with 22 years as lowest and 57 years as highest age. By gender, higher mean age was observed for male than female. An overwhelming majority of respondents had completed a Master degree, followed by

Bachelor degree, MPhil, and intermediate. About two in one respondents were class three officers, followed by class two, non-gazetted first, gazetted second, and the first class. The higher number of respondents was observed for Brahmins/Chettri and lowest for Dalit. The mean service year of respondents was 15.4 years, with 1 year as the lowest and 38 years as the highest service year. By gender, higher mean service year was observed for male than female bureaucrats.

Accountability

Accountability was measured based on the five typologies: transparency, liability, control, responsibility, and responsiveness (Koppell, 2005). Higher level of accountability was observed for educational bureaucrats. By gender, female educational bureaucrats had a slightly higher level of accountability than male. In terms of education, level of accountability increased with higher level of education. All age groups and organizations had the same level of accountability in general. By position, a higher level of accountability was observed for the third class officer and it gradually decreased by increasing position. All service years of educational bureaucrats had almost similar levels of accountability. The median value of accountability was four across all service years, except for 11-15 years.

The accountability typologies, except for controllability and liability, all the indicators had more than four median values. Female educational bureaucrats were found to have slightly higher controllability, liability and responsiveness than male bureaucrats. It is interesting to note that there was a positive relationship between the level of education and accountability typologies, except for responsibility. Level of responsibility was found to decrease with increase in level of education, except in the case of Master degree. By age group, the median value of transparency was higher in all age groups except 31-40. Age groups 21-30 and 31-40 had higher levels of

controllability than 41-50 and 51-58. However, this scenario was completely different in case of responsiveness. Age groups 21-30 and 31-40 had a lower level of responsiveness than 41-50 and 51-58. By position, higher level of transparency and responsiveness was observed for class first, which gradually decreased up to class three. However, a higher level of construability, liability and responsibility was observed for class three and this gradually decreased with increasing position. In regards to service year, there was higher level of transparency, controllability, liability, responsibility, and responsiveness across all service years except for 11-15. Higher level of controllability was observed for service year less than 5 years, while higher liability value was observed for 6-10 service years.

Even though, level of accountability of educational bureaucrats differed by their demographics, inferential statistics showed that accountability and demographics of educational bureaucrats were independent because correlation was marked as not significant; the value of significance reported was greater than 0.05, which was also confirmed by significance value of Chi-Square. Demographics of educational bureaucrats explained roughly 0.1% to 2.1% of the variation in the accountability, as per the values of Nagelkerke R-Square.

Performance

Performance was measured based on the four indicators viz. executing defined duties, meeting deadlines, effectiveness, and efficiency in doing work, as proposed by Iqbal, Anwar and Haider (2015). The higher level of performance was observed for educational bureaucrats. By gender, male and female both had the same level of performance. Almost all organizations had more or less same levels of performance. Age groups 51-58 and 21-30 had slightly higher levels of performance than 30-40 and 40-50. Higher level of performance was observed for +2 and MPhil+ than Bachelor

and Master Degrees. Non-gazetted educational bureaucrats had slightly higher level of performance than gazetted educational bureaucrats. The class first and class three educational bureaucrats had slightly higher levels of performance than class two. By service year, 11-15 and 16-20 had slightly lower levels of performance than 5 years and more than 20 years.

The highest level of median value was observed for all indicators. The same level of median value was observed for indicators related to gender, age, education and service year, except for effectiveness. By gender, male educational bureaucrats had the highest level of effectiveness than female. Age groups 20-40 and 31-40 had a lower level of effectiveness than others. MPhil and +2 had higher level of effectiveness than Bachelor and Master Degree. Service year less than 6-10 years had highest levels of effectiveness than others. The level of efficiency differed by position. Slightly lower level of efficiency value was observed for class first educational bureaucrats than class two and class three. Therefore, the descriptive results of the study confirm the performance of educational bureaucrats to vary. However, inferential statistics show that performance and demographics of educational bureaucrats were independent except in the case of position because correlation was evident as not significant; the value of significance reported was greater than 0.05, which is also validated by significance value of Chi-Square, except for position of educational bureaucrats. Demographics of educational bureaucrats explain 0.6% to 4.9% of the variation in the performance as per the values of Nagelkerke R-Square.

Accountability and Performance

There is a debate among scholars and policy makers about accountability and performance all over the world and Nepal is not an exception. Moderate positive

association between accountability and performance of educational bureaucrats was observed. Correlation was apparent as significant at the 95% level of confidence, which was also guaranteed by significance value of Chi-Square. The value of Nagelkerke's R^2 was 0.117 and 0.260 for accountability and performance, respectively. Accountability explains for about 11.7% of the variation in performance, whereas performance explains for about 26% of the variation in accountability of the educational bureaucrats. In this regard, it can be said that accountability and performance mutually reinforce each other. Hence, accountability and performance of educational bureaucrats were associated and mutually exclusive.

Conclusions

Accountability is an important apparatus for ensuring the quality of the bureaucrats and maintaining good governance in the delivery system. It encourages bureaucrats to take account of their action and performance. In favor of this background, the Government of Nepal has formed different constitutional bodies, state institutions and laws, policies, directives, guidelines, and implemented different tools such as public hearing, public audit, citizen charter, right to information, codes of conduct, performance evaluation and feedback systems, chain of hierarchical command, supervision, inspections, surveillance, monitoring, and reporting to confirm accountability within Nepali bureaucracy. Therefore, educational bureaucrats who are working in central level organizations of Ministry of Education seem to be accountable. Accountability cannot be simply achieved. Different factors such as transparency, liability, controllability, responsibility, and responsiveness play vibrant roles. Liability and controllability in educational bureaucracy was not more satisfactory than transparency, responsibility, and responsiveness. Regarding

association of accountability and demographics of educational bureaucrats, this study concludes that they are independent.

Performance is one of the central issues in Nepali bureaucracy. The Government of Nepal has given more attention, time and effort, and invested to ensuring a higher level of performance in Nepali bureaucracy. Nepali educational bureaucracy is not an exception from this. Educational bureaucrats who are working in central level organizations of the Ministry of Education have a higher level of performance. Performance of educational bureaucrats differs by their demographics but did not produce significant effects except for position. Hence, it can be concluded that performance and demographics of educational bureaucrats are independent except in the case of position. In terms of accountability and performance relation, this study determines accountability and performance are significantly associated. Therefore, it can be concluded that accountability and performance of educational bureaucrats are associated and mutually exclusive.

Implications

This study makes several noteworthy implications as follows:

Empirical Implications

So far, bureaucracy studies in Nepal concentrate on the issue of motivation, performance management, public service delivery, job satisfaction and social accountability. However, this study was conducted in relation to accountability and performance within the educational sector. Most importantly, this is the first study that examines accountability and performance by demographics in the central level of educational bureaucracy. Further, this study extends the literature by providing rich insights that improve the understanding of the nature of accountability and performance.

Policy Implications

This study contributes to policy makers by increasing their understanding of various insights into accountability and performance in Nepali bureaucracy. It helps policy makers to ensure strong external and internal controlling mechanisms as well as punishment and reward system with the objective of encouraging quality performance, professionalism, and neutralism in bureaucracy. It may be helpful to revisit policy and governance approaches to improve transparency, liability, responsibility, responsiveness, and performance in changed socio-political and administrative contexts.

Implications for Further Research

There are extensive areas available for future research as sequel studies. It may complement and help in understanding more about accountability and performance in Nepali bureaucracy. This research gives some perspectives on accountability and performance that may be used as a guideline for accountability and performance research in the future. Some of the potential areas, which could not be covered by the present study, but could be more useful for future researchers, are suggested as follows:

- This study is delimited to 213 respondents from central level organizations of the Ministry of Education and failed to cover citizens. Thus, the importance of citizens towards the accountability and performance of educational bureaucrats is realized. For future research, it would be interesting to study the perspectives of citizens towards accountability and performance of bureaucrats in Nepali bureaucracy for comparative study.

- This study is also delimited to central level of organizations of the Ministry of Education. Therefore, these types of research could be conducted in local level bureaucracy for comparative study.
- The role of politicians and the political system cannot be ignored to enhance accountability and performance within the bureaucratic system. The relationship between politicians and bureaucrats in accountability and performance can be studied. This research does not focus on the political system because, during the period of this research, Nepal was experiencing political transition, making it even more difficult to set up interviews with this group. Hence, future research could be undertaken to study how politicians and bureaucrat's relation can affect accountability and performance in Nepali bureaucracy.
- In the context of accountability, there are major controllability and liability issues in bureaucracy. Therefore, this study recommends further investigations focusing on the connection between controllability and liability in accountability in Nepali bureaucracy.
- This study only focused on educational bureaucracy. However, private and other public sectors' accountability is also important for accountability mechanisms of the country. Future research could be carried out to compare with private and other public sectors' accountability and performance.
- This study is based on a quantitative approach, which cannot explore hidden agendas/issues of accountability and performance. Thus, these kinds of studies could also be done, by merging quantitative and qualitative approaches, in a single study, to disclose different issues of accountability and performance.

- This study is based on transparency, liability, controllability, responsibility, and responsiveness in relation to accountability. Hence, further research may also be done to explore the alignment between who, what and how of accountability, and how these three dimensions are linked in practice.
- This study examines accountability for performance. It failed to cover accountability for finance and fairness. Thus, further research may also be undertaken in regards to accountability for finance and fairness.

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APPENDIX I



Kathmandu University

School of Education

SURVEY QUESTIONNAIRE

Informed Consent

Hello! My name isand I am from Kathmandu University School of Education. I am conducting a survey entitled "*Accountability and Performance of Nepali Bureaucracy: A Survey of the Ministry of Education* " as part of MPhil dissertation. I would very much appreciate your participation in this survey. This survey won't take you long; it commonly takes between 15 - 20 minutes to complete. In this survey, your involvement is voluntary and you have the right to withdraw your consent or discontinue participation at any time without any negative effect on your relations with us. All of your answers will be confidential and will not be shared with anyone other than research members. Further, it is mentioned that information provided by you will exclusively be used for the research purpose only. Thank you!

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Signature of interviewer: ----- Date: -----

Respondent agrees to be interviewed . . . 1 Continue

Respondent does not agree to be interviewed . . . 2 End

SECTION 1: GENERAL BACKGROUND

S.N:	Questions	Options/Descriptions	Coding	Remarks
101	Name of the respondent (optional)	.....	
102	Organization	.....	
103	Gender	Male Female Others.....	1 2	
104	Age (Completed years)	.....	
105	Education level (Completed Degree)	.....	
106	Position	Secretary Joint secretary Under secretary Officer Non-Gazatted First Class Non-Gazatted Second Class	1 2 3 4 5 6	
107	Service year (in current position )	.....	
108	Service year (in this organization)	.....	
109	Total service year	.....	
110	Religion	Hindu Buddhist Christian Muslim If other please specify	1 2 3 4	
111	Caste/Ethnicity	Brahmin Chettri Janjati/Adhiwasjhi Madheshi Muslim Dalit If other please specify	1 2 3 4 5 6	

In this section, we kindly request you to circle the choice which represents your views and experience. The response are in a five-point rating scale ranging from 1 to 5.

SECTION 2 : ACCOUNTABILITY

S.N: Transparency [Not at all (1), Rarely (2), Sometime (3), Occasionally (4) and Regularly (5)]						
201	How timely do you disclose correct information of your functions and performances?	1	2	3	4	5
202	How timely do you provide correct information of your functions and performances when asked?	1	2	3	4	5
203	How regularly do you update the public about information of your functions and performance through different means (e.g. website, press release and so on)?	1	2	3	4	5
S.N: Controllability[Not at all (1), Rarely (2), Sometime (3), Occasionally (4) and Regularly (5)]						
301	How regularly does your supervisor provide you work related commands and orders?	1	2	3	4	5
302	How regularly do you brief of your functions and performances to supervisor?	1	2	3	4	5
303	How often does your supervisor provide feedback and suggestions for your functions and performances?	1	2	3	4	5
304	How often does your supervisor monitor you physically?	1	2	3	4	5
305	How often does your supervisor evaluate your functions and performances?	1	2	3	4	5
306	How often do external agencies scrutinize your functions and performances?	1	2	3	4	5
308	How often does media evaluate your functions and performances?	1	2	3	4	5
309	How often do you carry public audit on your functions and performances?	1	2	3	4	5
S.N: Liability [Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4) and Strongly Agree (5)]						
401	How much do you agree that your organization rewards you for your good functions and performances?	1	2	3	4	5
402	Does reward system enhance your functions and performances?	1	2	3	4	5
403	How much do you agree that your organization punishes you for your unsatisfactory functions and performances?	1	2	3	4	5
404	How much do you agree that punishment system supports you for good functions and performances?	1	2	3	4	5
S.N: Responsibility[Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4) and Strongly Agree (5)]						
501	I have formal and clear roles and responsibilities as per	1	2	3	4	5

	codify law and regulations.					
502	I follow my organization standards, codes, principles, policies and guidelines.	1	2	3	4	5
503	I regularly maintain my work schedule in time.	1	2	3	4	5
504	I take responsibility of my action, decision, performance and errors.	1	2	3	4	5
505	I am responsible for my duties and assign tasks.	1	2	3	4	5
<i>S.N: Responsiveness [Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4) and Strongly Agree (5)]</i>						
601	I inform public about the required procedure of service.	1	2	3	4	5
602	I ensure public to understand the information about service.	1	2	3	4	5
603	I listen to the need, demand, and concerns of public without any biasness.	1	2	3	4	5
604	I show sincere interest to solve service related problems on time.	1	2	3	4	5
605	I am always willing to help public sensibly.	1	2	3	4	5
606	I am never too busy to respond to public request.	1	2	3	4	5

SECTION 3: PERFORMANCE [Execution of duty, Timeline, Effectiveness, Efficiency]

<i>S.N: Performance [Not at all (1), Rarely (2), Sometime (3), Occasionally (4) and Regularly (5)]</i>						
701	How often do you execute your defined duties?	1	2	3	4	5
702	How often do you perform your defined duties in time?	1	2	3	4	5
703	How often do you provide services to people as per organization standards?	1	2	3	4	5
704	How often do you meet the stated mandates of your job performances?	1	2	3	4	5
705	How often do you maximize output of your performance with given resources?	1	2	3	4	5

APPENDIX II

Performance and Gender

Table 33

Level of Performance by Gender

Gender	Statistic	ED*	T [^]	E+	E ^a	P ^{^^}
Male	Mean	4.5419	4.5419	4.6194	4.6290	4.5923
	Median	5.0000	5.0000	5.0000	5.0000	4.6000
	Std. Deviation	0.5610	0.5126	0.5378	0.4693	0.4095
Female	Mean	4.5517	4.5862	4.5000	4.4569	4.5103
	Median	5.0000	5.0000	5.0000	4.5000	4.6000
	Std. Deviation	0.7762	0.7017	0.7779	0.7509	0.6598
Total	Mean	4.5446	4.5540	4.5869	4.5822	4.5700
	Median	5.0000	5.0000	5.0000	5.0000	4.6000
	Std. Deviation	0.6250	0.5689	0.6129	0.5634	0.4901

Source: (Author's calculation based on field survey, 2017)

Note: ED*= Execution of Duty; T[^]= Timeline; E= Efficiency; E^a= Effectiveness; P^{^^}= Performance
Minimum value 1 and Maximum 5

Performance and Age

Table 34

Level of Performance by Age Group

Age Group	Statistic	ED*	T [^]	E+	E ^a	P ^{^^}
21-30	Mean	4.4167	4.6667	4.8333	4.3125	4.5083
	Median	5.0000	5.0000	5.0000	4.5000	4.7000
	Std. Deviation	0.7755	0.4815	0.3806	0.7634	0.5307
31-40	Mean	4.5270	4.5405	4.5270	4.4527	4.5000
	Median	5.0000	5.0000	5.0000	4.5000	4.6000
	Std. Deviation	0.7443	0.6659	0.7065	0.6419	0.5997
41-50	Mean	4.5811	4.5270	4.5946	4.7230	4.6297
	Median	5.0000	5.0000	5.0000	5.0000	4.6000
	Std. Deviation	0.4967	0.5026	0.5949	0.4149	0.3769
51-58	Mean	4.5854	4.5610	4.5366	4.7195	4.6244
	Median	5.0000	5.0000	5.0000	5.0000	4.8000
	Std. Deviation	0.4987	0.5499	0.5521	0.3880	0.4176

Source: (Author's calculation based on field survey, 2017)

Note: ED*= Execution of Duty; T[^]= Timeline; E= Efficiency; E^a= Effectiveness; P^{^^}= Performance
Minimum value 1 and Maximum 5.

Performance and Organization

Table 35

Level of Performance by Organizations

Organizations	Statistic	ED*	T [^]	E+	E ^a	P ^{^^}
ECO	Mean	4.5429	4.4000	4.4286	4.6571	4.5371
	Median	5.0000	5.0000	5.0000	5.0000	4.8000
	Std. Deviation	0.7800	0.8116	0.8147	0.7150	0.7272
TSC	Mean	4.7143	4.5714	4.4286	4.7143	4.6286
	Median	5.0000	5.0000	4.5000	5.0000	4.8000
	Std. Deviation	0.4688	0.5135	0.6462	0.3779	0.3667
NCED	Mean	4.1600	4.5600	4.6000	4.4000	4.4240
	Median	4.0000	5.0000	5.0000	4.5000	4.6000
	Std. Deviation	0.9434	0.5831	0.7071	0.6770	0.5925
IEC	Mean	4.5000	4.5000	4.7500	4.5000	4.5500
	Median	4.5000	4.5000	5.0000	4.5000	4.6000
	Std. Deviation	0.5345	0.5345	0.4629	0.0000	0.2777
CDC	Mean	4.5000	4.6000	4.5500	4.5750	4.5600
	Median	4.5000	5.0000	5.0000	5.0000	4.6000
	Std. Deviation	0.5129	0.5026	0.6863	0.5199	0.4523
STR	Mean	4.2222	4.2222	4.3333	4.1111	4.2000
	Median	4.0000	4.0000	4.0000	4.0000	4.0000
	Std. Deviation	0.4409	0.4409	0.5000	0.7406	0.5099
ERO	Mean	4.9167	4.8333	4.7500	4.6250	4.7500
	Median	5.0000	5.0000	5.0000	4.7500	4.8000
	Std. Deviation	0.2886	0.3892	0.4522	0.4330	0.2844
DOE	Mean	4.6667	4.5000	4.5667	4.5167	4.5533
	Median	5.0000	4.5000	5.0000	4.5000	4.6000
	Std. Deviation	0.4794	0.5085	0.5040	0.4251	0.3626
MOE	Mean	4.6000	4.6500	4.7167	4.6917	4.6700
	Median	5.0000	5.0000	5.0000	5.0000	4.8000
	Std. Deviation	0.4940	0.4809	0.4903	0.5215	0.3841

Source: (Author's calculation based on field survey, 2017)

Note= CO= Examination Controller Office; TSC= Teacher Service Commission; NCED= National Center for Educational Development; IEC= Informal education Center; CDC= Curriculum Development Center; STR= School Teacher Record; ERO= Education Review Office; DOE= Department of Education; MOE= Ministry of Education.

Note: ED*= Execution of Duty; T[^]= Timeline; E= Efficiency; E^a= Effectiveness; P^{^^}= Performance Minimum value 1 and Maximum 5.

Performance and Position

Table 36

Level of Performance by Position

Position	Statistic	ED*	T [^]	E+	E ^a	P ^{^^}
First Class	Mean	4.3333	4.5000	4.1667	4.7500	4.5000
	Median	5.0000	4.5000	4.5000	4.7500	4.7000
	Std. Deviation	1.0328	0.5477	0.9831	0.2738	0.5621
Second Class	Mean	4.4677	4.4677	4.5806	4.5726	4.5323
	Median	4.0000	4.0000	5.0000	4.5000	4.4000
	Std. Deviation	0.5030	0.5346	0.5595	0.5109	0.4096
Third Class	Mean	4.5238	4.4643	4.4881	4.4643	4.4810
	Median	5.0000	4.0000	5.0000	4.5000	4.6000
	Std. Deviation	0.6300	0.5251	0.5486	0.5639	0.4457
Non-gazetted First	Mean	4.5946	4.7297	4.7027	4.6622	4.6703
	Median	5.0000	5.0000	5.0000	5.0000	5.0000
	Std. Deviation	0.7979	0.7321	0.8118	0.7364	0.7168
Non-gazetted Second	Mean	4.7917	4.8333	4.8750	4.8542	4.8417
	Median	5.0000	5.0000	5.0000	5.0000	5.0000
	Std. Deviation	0.4148	0.3806	0.3378	0.2750	0.2282
Officer	Mean	4.4934	4.4671	4.5132	4.5197	4.5026
	Median	5.0000	4.0000	5.0000	4.5000	4.6000
	Std. Deviation	0.5979	0.5263	0.5752	0.5363	0.4336
Non-officer	Mean	4.6721	4.7705	4.7705	4.7377	4.7377
	Median	5.0000	5.0000	5.0000	5.0000	5.0000
	Std. Deviation	0.6763	0.6162	0.6681	0.6028	0.5791

Source: (Author's calculation based on field survey, 2017)

Note: Officer (1st Class+2nd Class+3rd Class); Non-officer (1st Non-Gazetted +2nd Non Gazetted)

ED*= Execution of Duty; T[^]= Timeline; E= Efficiency; E^a= Effectiveness; P^{^^}= Performance

Minimum value 1 and Maximum 5

Performance and Service Year

Table 37

Level of Performance by Service Year

Service Year	Statistic	ED*	T [^]	E+	E ^a	P ^{^^}
Less than 5	Mean	4.6429	4.7619	4.7857	4.5476	4.6571
	Median	5.0000	5.0000	5.0000	4.7500	4.8000
	Std. Deviation	0.5328	0.4310	0.4153	0.5823	0.4150
6-10	Mean	4.5152	4.4242	4.5455	4.5152	4.5030
	Median	5.0000	5.0000	5.0000	5.0000	4.8000
	Std. Deviation	0.7953	0.7917	0.7941	0.8051	0.7451
11-15	Mean	4.2963	4.4074	4.3333	4.3889	4.3630
	Median	5.0000	4.0000	4.0000	4.5000	4.6000
	Std. Deviation	0.9120	0.5723	0.6793	0.5604	0.5115
16-20	Mean	4.6829	4.5610	4.6341	4.5488	4.5951
	Median	5.0000	5.0000	5.0000	4.5000	4.6000
	Std. Deviation	0.4711	0.5024	0.4876	0.5454	0.3936
20+	Mean	4.5143	4.5429	4.5571	4.7286	4.6143
	Median	5.0000	5.0000	5.0000	5.0000	4.8000
	Std. Deviation	0.5034	0.5298	0.6286	0.3776	0.4047
Total	Mean	4.5446	4.5540	4.5869	4.5822	4.5700
	Median	5.0000	5.0000	5.0000	5.0000	4.6000
	Std. Deviation	0.6250	0.5689	0.6129	0.5634	0.4901

Source: (Author's calculation based on field survey, 2017)

Note: ED*= Execution of Duty; T[^]= Timeline; E= Efficiency; E^a= Effectiveness; P^{^^}= Performance
Minimum value 1 and Maximum 5

Performance and Education

Table 38

Level of Performance by Education

Education	Statistic	ED*	T [^]	E+	E ^a	P ^{^^}
+2	Mean	4.6000	4.8000	4.8000	4.8000	4.7600
	Median	5.0000	5.0000	5.0000	5.0000	5.0000
	Std. Deviation	0.547	0.447	0.447	0.447	0.433
Bachelor	Mean	4.4286	4.4643	4.4643	4.4643	4.4571
	Median	4.0000	4.0000	5.0000	4.7500	4.6000
	Std. Deviation	0.5727	0.5078	0.6372	0.6225	0.4864
Master	Mean	4.5357	4.5298	4.5893	4.5863	4.5655
	Median	5.0000	5.0000	5.0000	4.5000	4.6000
	Std. Deviation	0.6464	0.5885	0.6222	0.5660	0.5019
MPhil	Mean	4.9167	5.0000	4.7500	4.7083	4.8167
	Median	5.0000	5.0000	5.0000	5.0000	4.9000
	Std. Deviation	0.2886	0.0000	0.4522	0.3964	0.1992

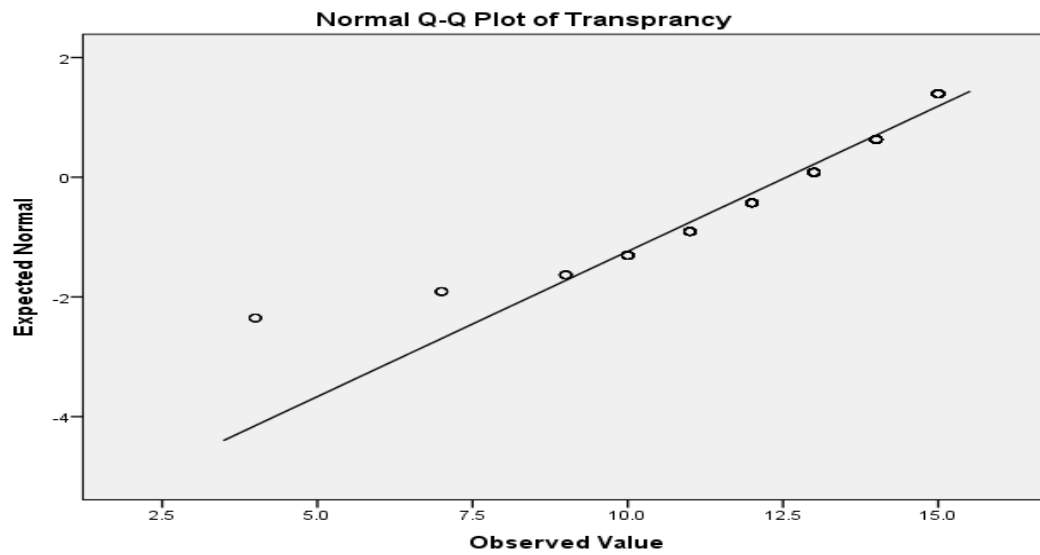
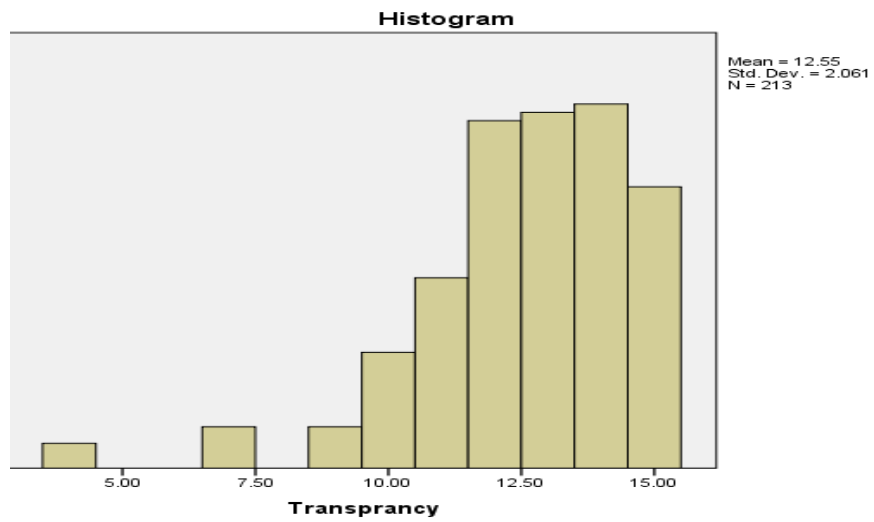
Source: (Author's calculation based on field survey, 2017)

Note: ED*= Execution of Duty; T[^]= Timeline; E= Efficiency; E^a= Effectiveness; P^{^^}= Performance
Minimum value 1 and Maximum 5

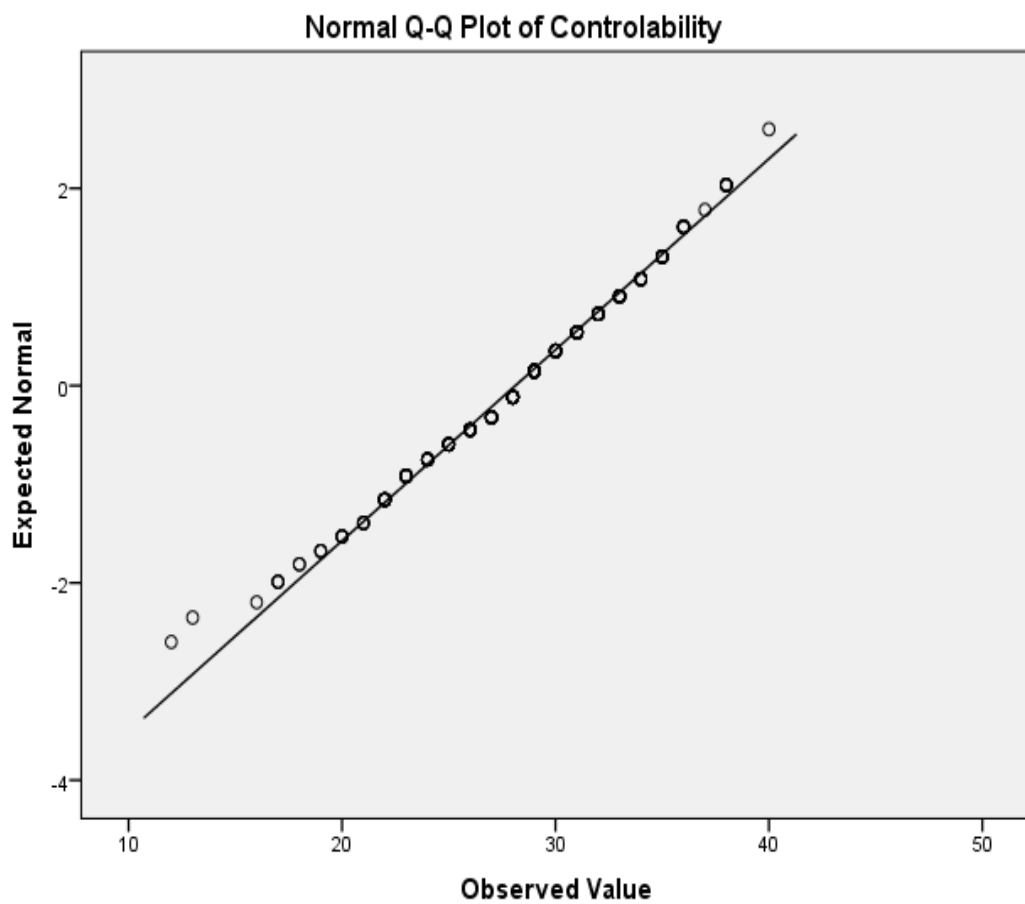
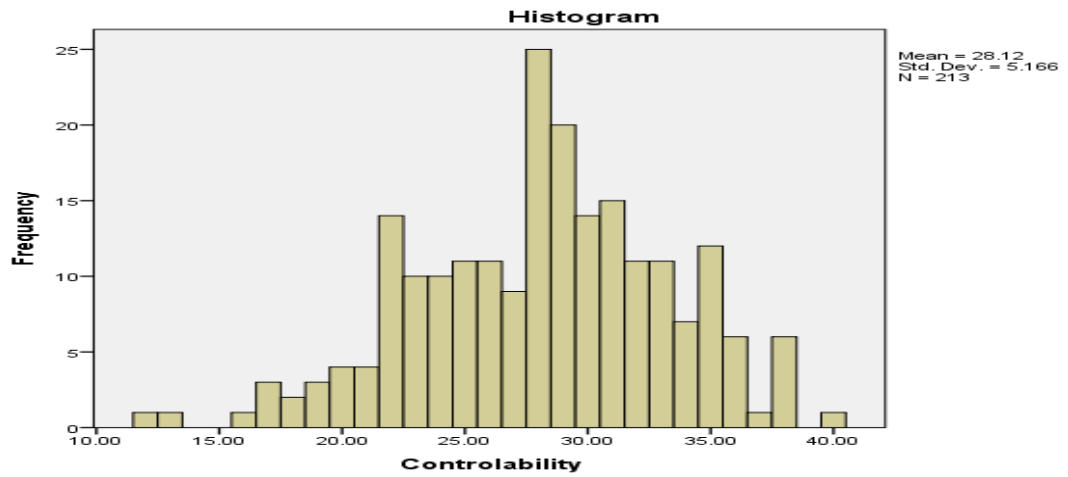
APPENDIX III

Normal Distribution

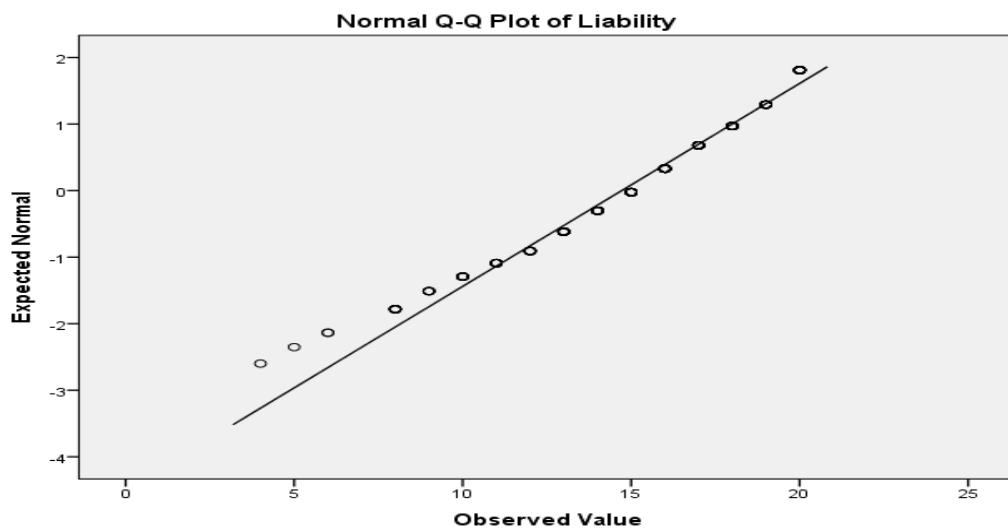
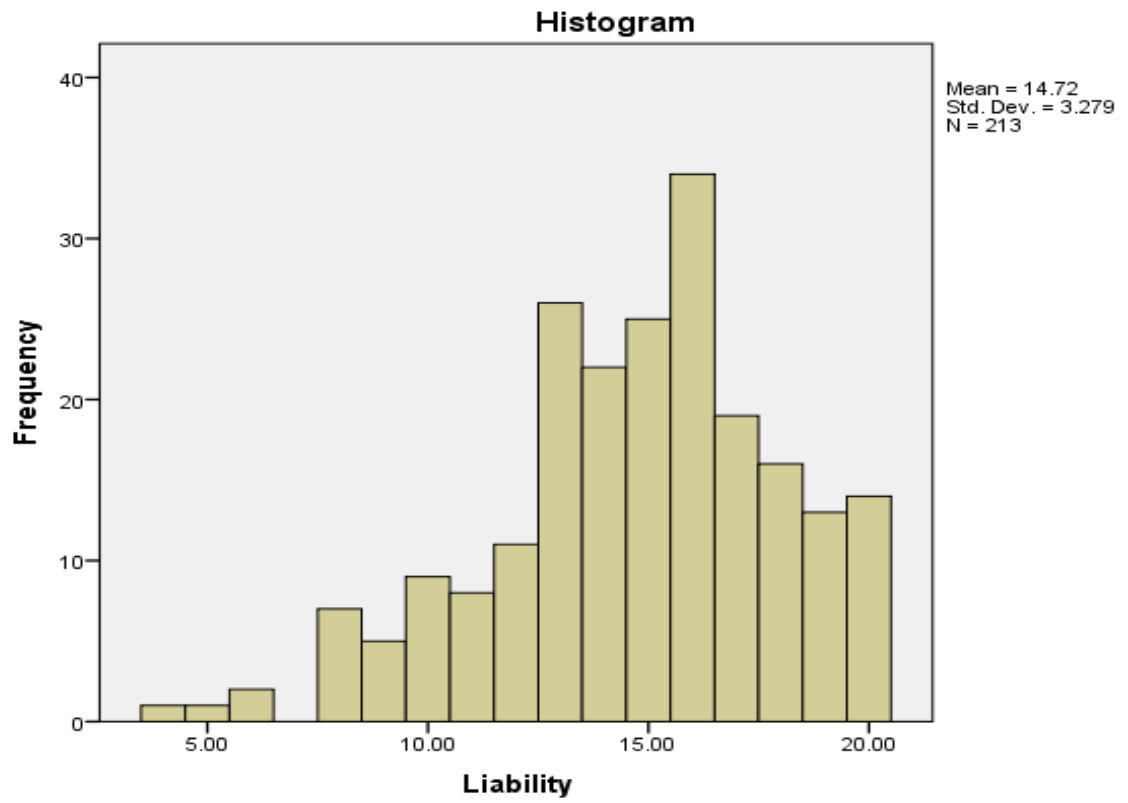
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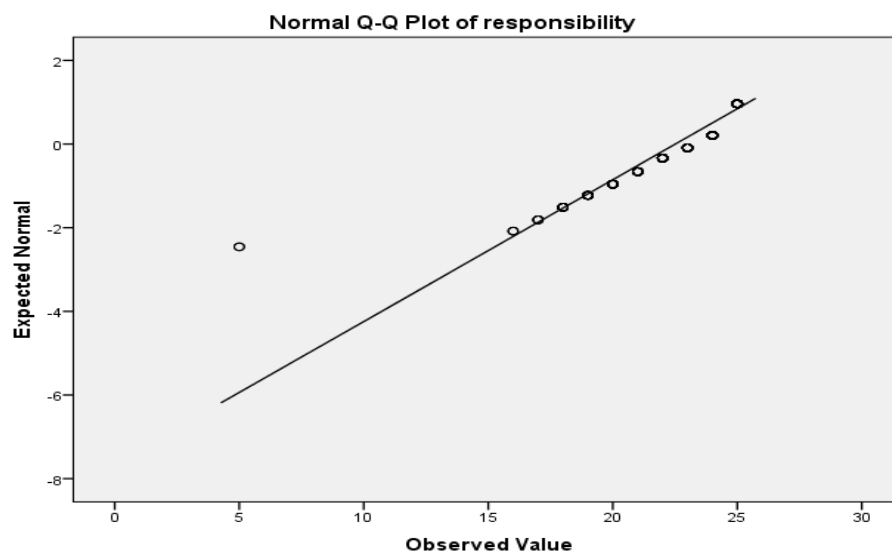
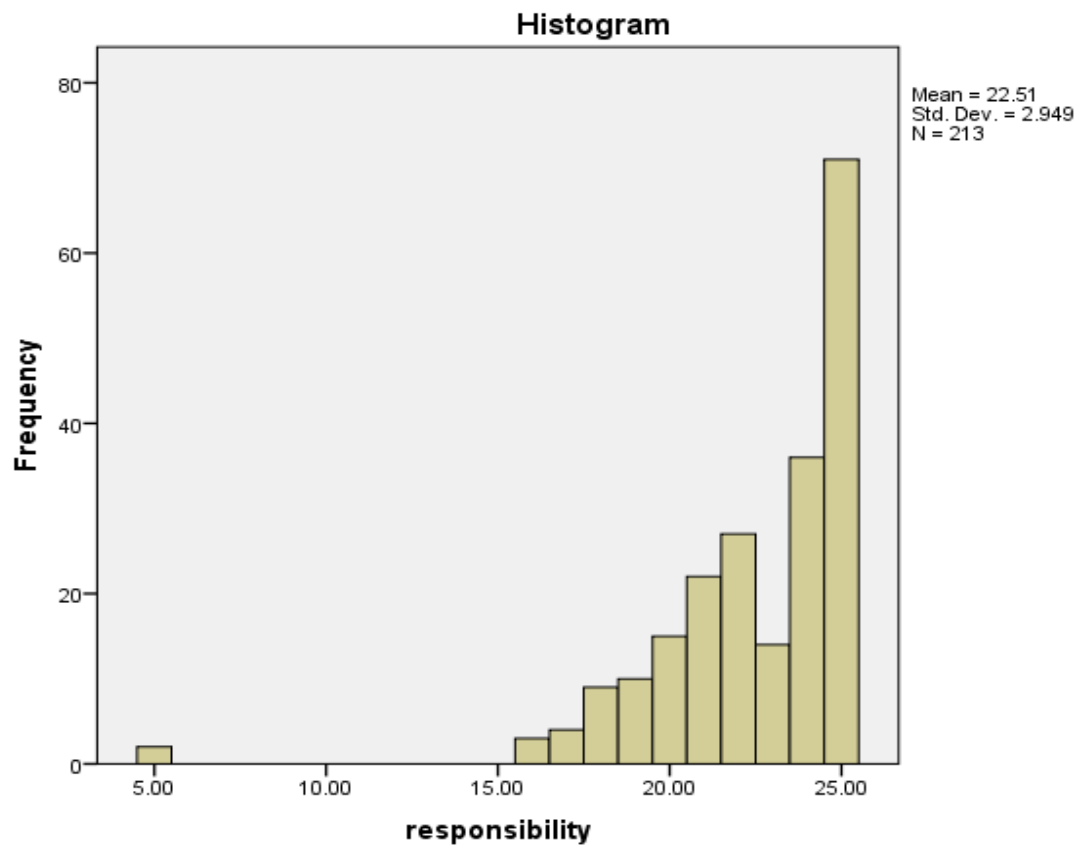
Controllability



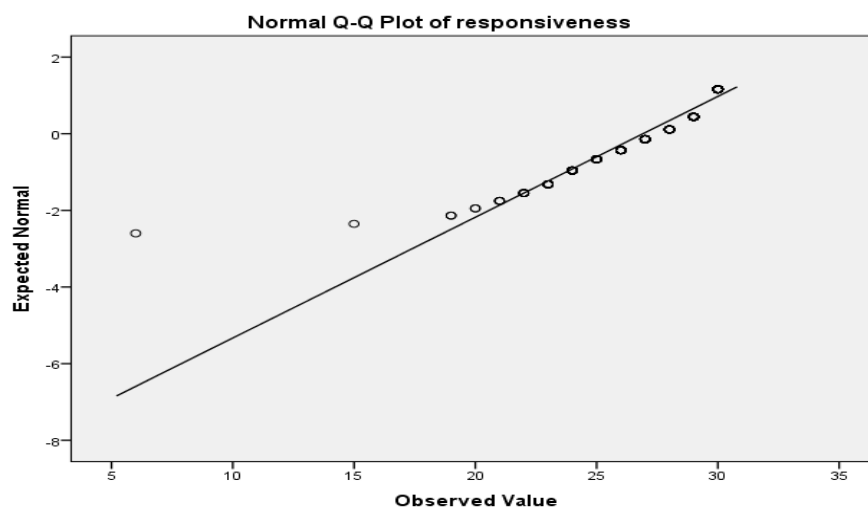
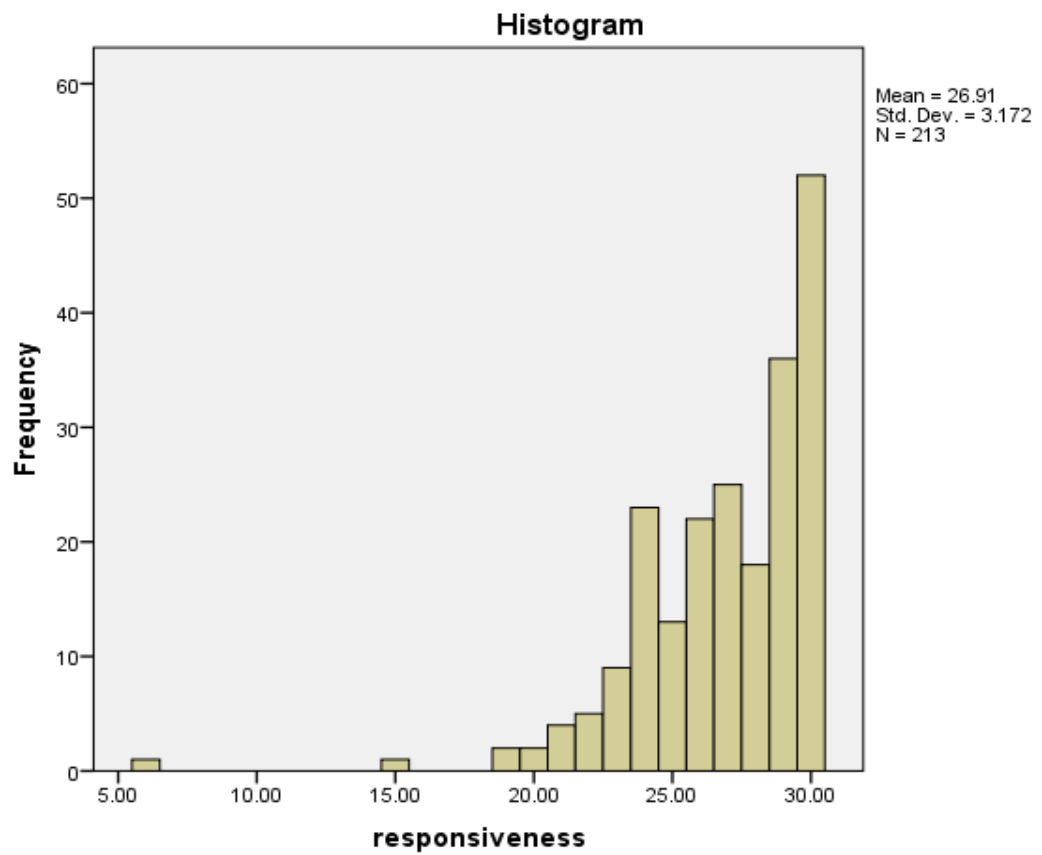
Liability



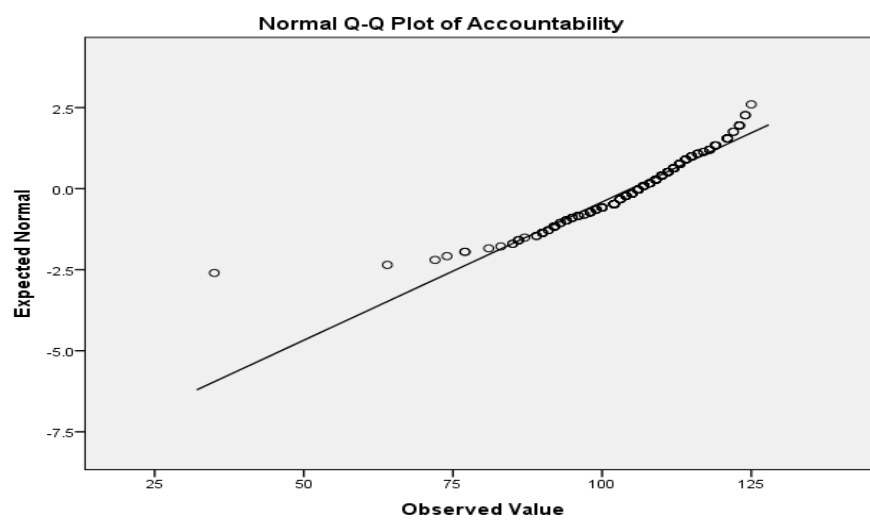
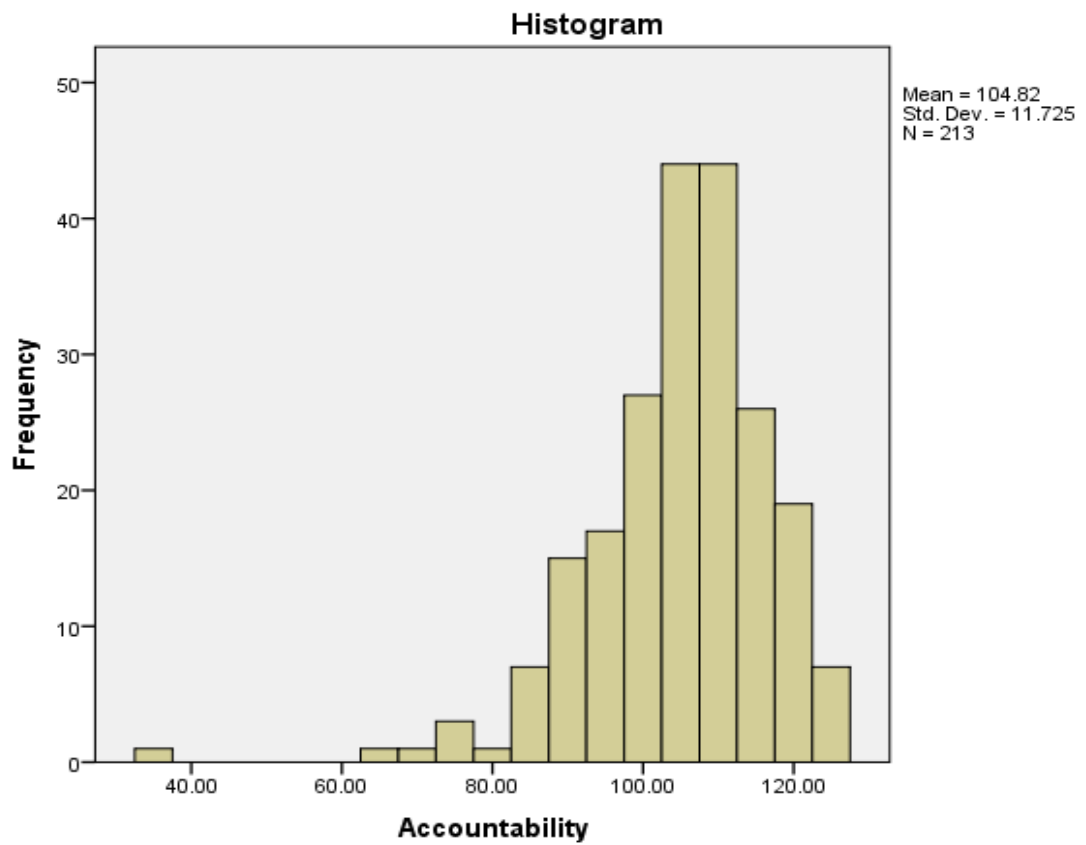
Responsibility



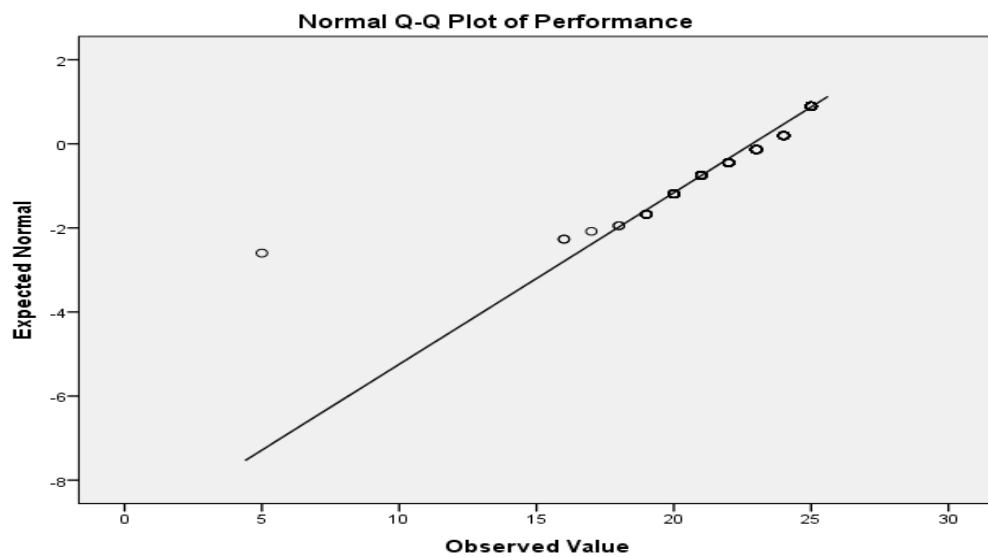
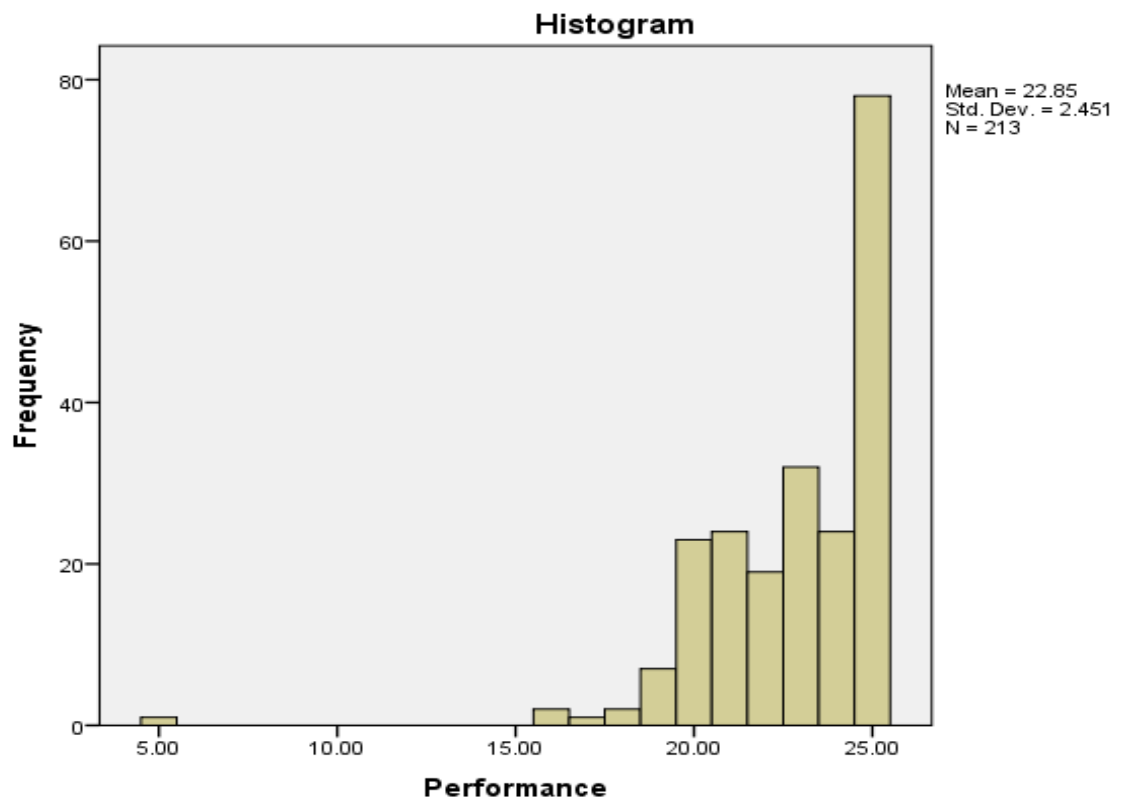
Responsiveness

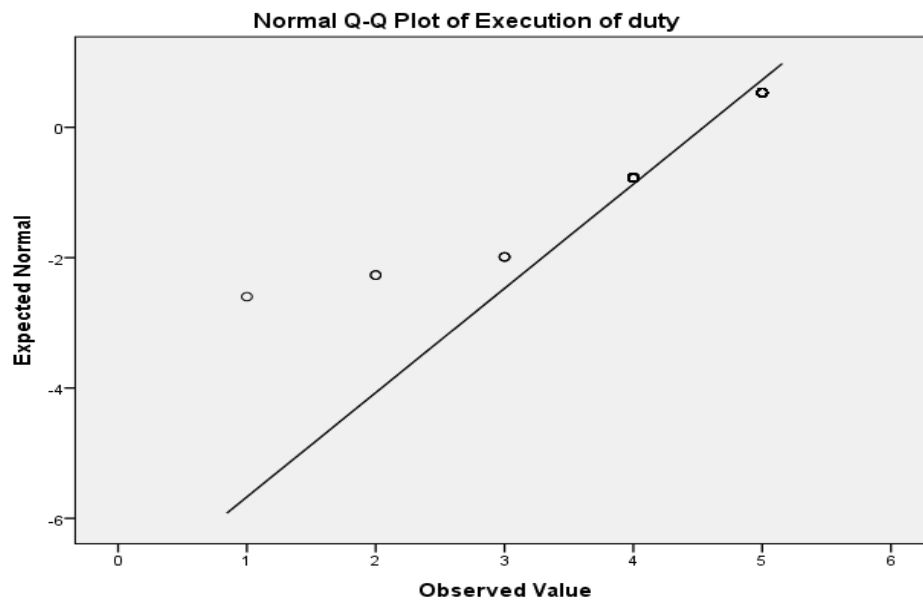
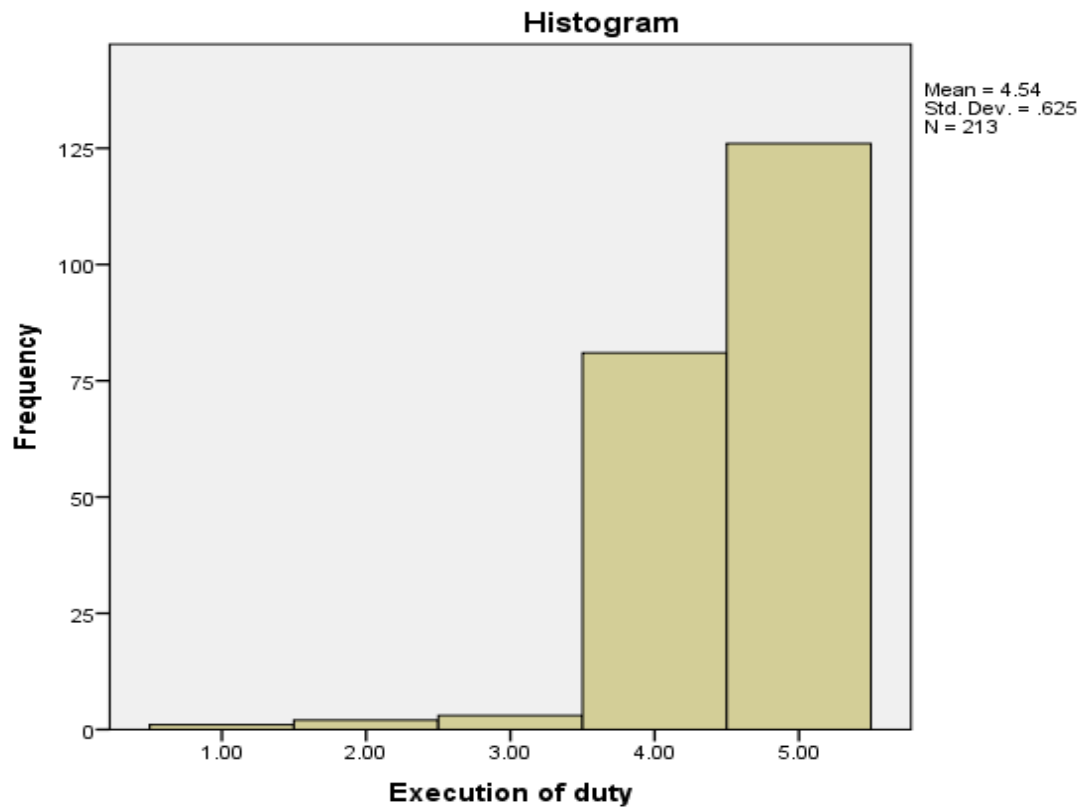


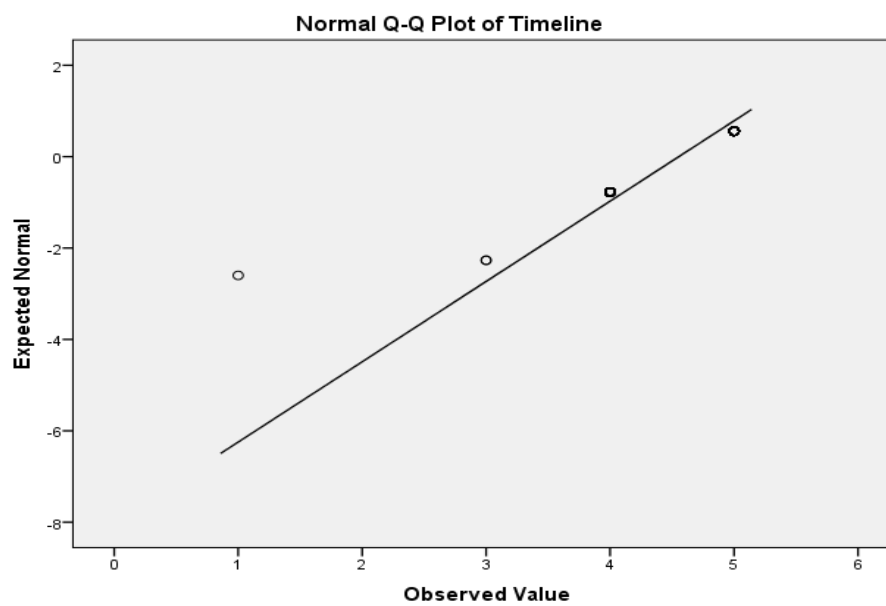
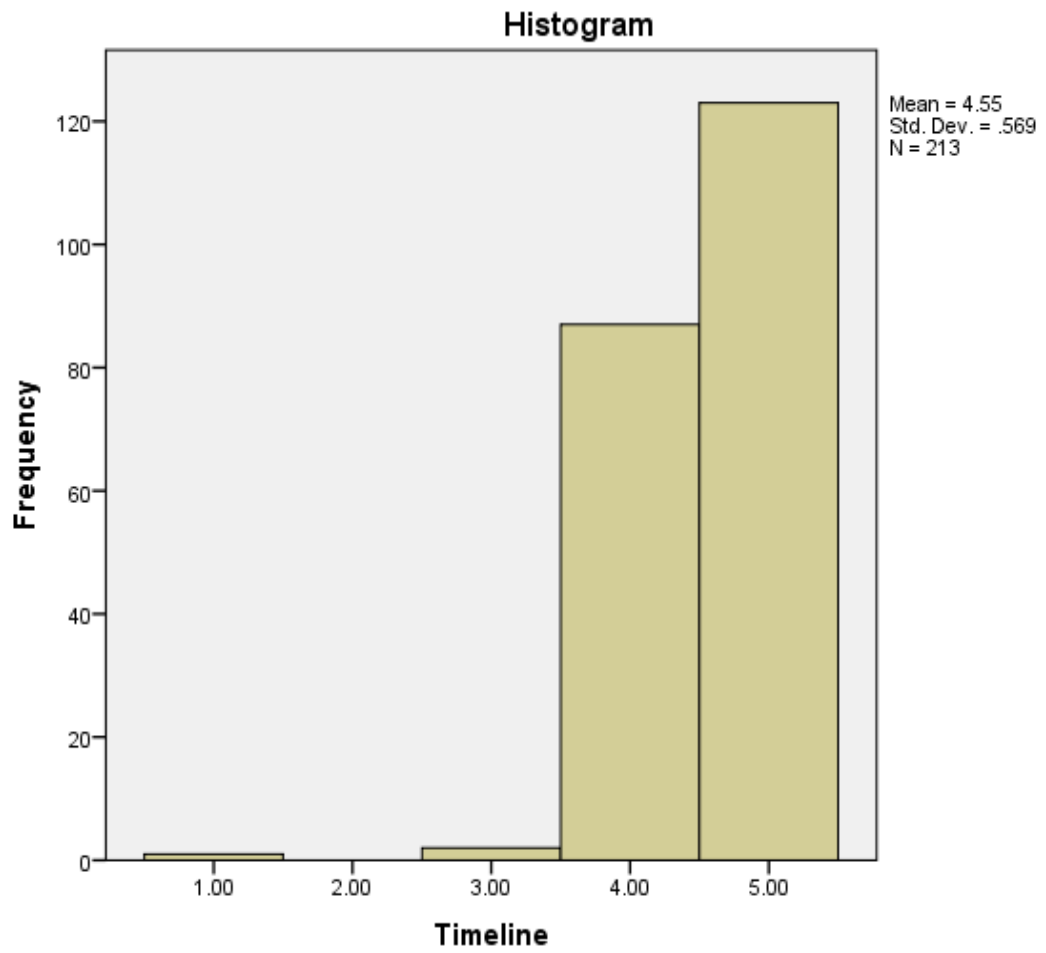
Accountability

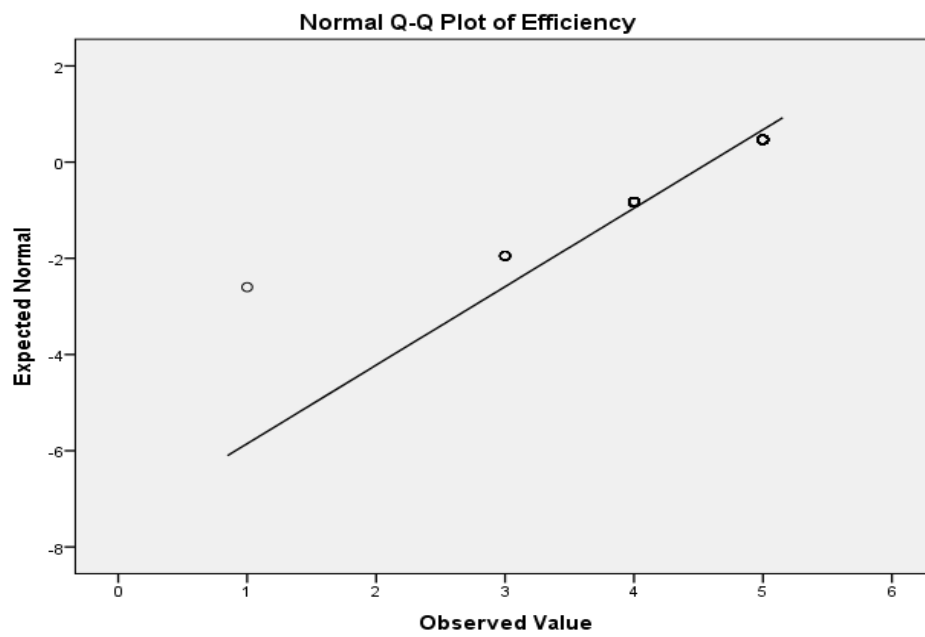
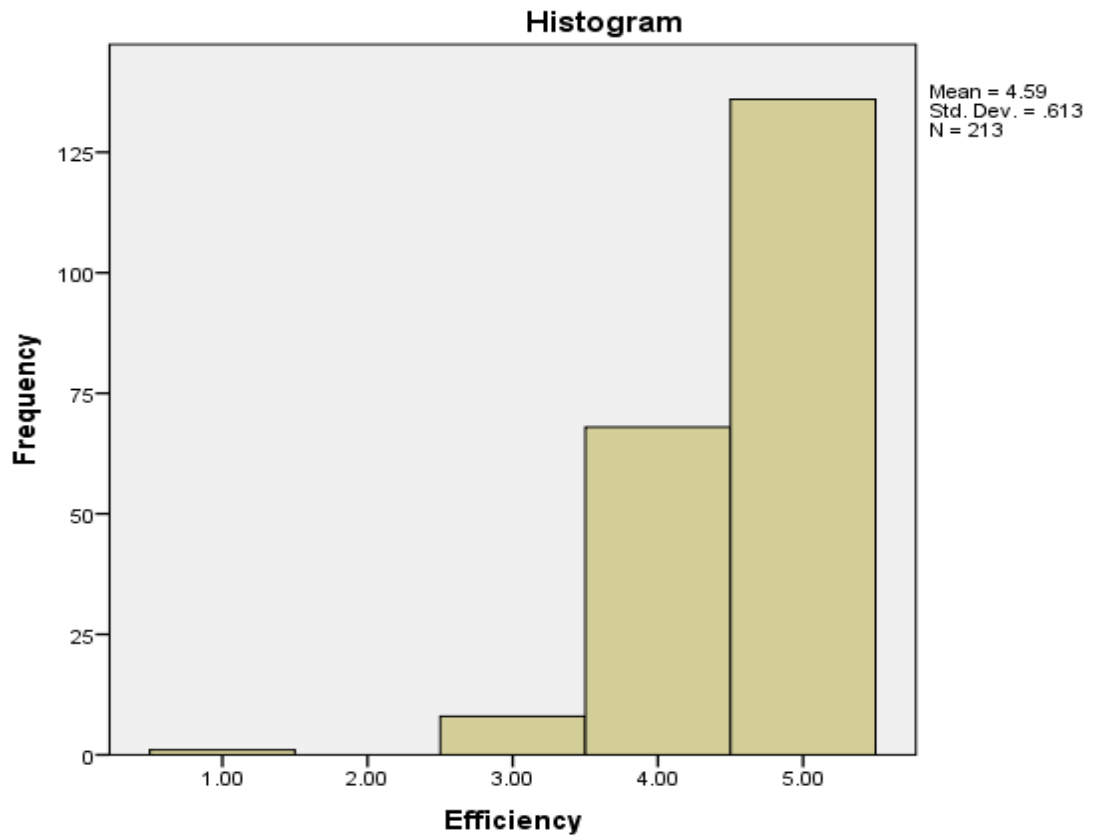


Performance



Execution of Duties

Timeline

Efficiency

Effectiveness