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College of Education and Behavioral Sciences Department of Educational Planning and Management

Adaptive Leadership, Organizational Learning, and Organizational Effectiveness at Public Higher Education Institutions of the Amhara National Regional State, Ethiopia

A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy in Educational Policy and Leadership

By
Kefale Solomon Nebiyu

July, 2022 Bahir Dar

Bahir Dar University

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July, 2022

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DECLARATION

This is to certify that the thesis entitled "Adaptive Leadership, Organizational Learning and Organizational Effectiveness at Public Higher Education Institutions of the Amhara National Regional State, Ethiopia", submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy of Educational Policy and Leadership in the Department of Educational Planning and Management of the College of Education and Behavioral Sciences of Bahir Dar University, is a record of original work carried out by me and has never been submitted to this or any other university to get any other degree or certificate. The sources cited, and the assistance and help I received during the course of this investigation have been duly acknowledged.

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Approval of Dissertation for Defense

I hereby certify that I have supervised, read, and evaluated this dissertation entitled "Adaptive Leadership, Organizational Learning and Organizational Effectiveness at Public Higher Education Institutions of the Amhara National Regional State, Ethiopia" prepared by Kefale Solomon Nebiyu under my guidance. I recommend the dissertation be submitted for oral defense.

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Approval of Dissertation for Defense Result

As members of the board of examiners, we examined this dissertation entitled "Adaptive Leadership, Organizational Learning and Organizational Effectiveness at Public HEIs of the Amhara National Regional State, Ethiopia" We here by certify that the dissertation is accepted for fulfilling the requirements for the award of the degree of "Doctor of Philosophy in Education Policy and Leadership."

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Dedication

I would like to dedicate this research study to my supportive family. Without them, this process would have stopped in year one. They were my encourager, friend, guide, and biggest supporter in the good and bad, ups and downs. This work is also dedicated to the changers, the dreamers and doers, the ones who question the status quo, the ones who truly believe that there is always a better way, the ones who can rise out of the vortex. Together these innovators will change the higher education system of the nation.

ABSTRACT

Adaptive leadership practices and its relationship with organizational learning and organizational effectiveness, as well as the prediction of the variables in Ethiopia's Amhara National Regional State public higher education institutions are investigated in this study. The purpose of the study is to examine the practices of adaptive leadership, the current status of organizational learning and organizational effectiveness and the relationship between adaptive leadership and organizational learning and effectiveness of the institutions. The study used mixed method research design. The target population of is made up of three groups: 18 presidents, 440 middlelevel officials, and 5239 academic employees. The sample size was determined to be 630 (ten presidents, 220 middle-level officials, and 400 employees). A questionnaire containing multiitem scales adapted from previously produced models, as well as semi structured interview items, were used to collect primary data. The quantitative data was analyzed using percentages, mean values, one-sample t-test, correlation, and regression analysis while qualitative data was analyzed using thematic analysis. Because of the current uncertain and dynamic challenges that institutions face, the findings demonstrated that leaders practice adaptive leadership at all levels. This reveals that as a result of the leadership practices, organizational learning has been observed in the institutions. In addition, the result indicates that adaptive leadership implemented by leaders facilitated the augmentation of organizational effectiveness in HEIs. The findings also show that the variables have a significant and positive relationship. This implies that the more adaptive leadership is implemented in the institutions, the higher the learning capacity at the individual, group, and organizational levels will be. Additionally, the results show that the practices of adaptive leadership have significant predictive power on organizational learning and effectiveness. Hence, HEI leadership at all levels must understand that adaptive leadership is the solution to the current unforeseen problems and adopt ways to encourage OL in order to fulfill the goals set forth by their institutions.

Keywords: adaptive leadership, higher education, learning organization, organizational effectiveness, organizational learning, public higher education institute

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List of Abbreviations

ANOVA Analysis of Variance
ANRS Amhara National Regional State
CLT Complexity Leadership Theory
DLOQ Dimensions of the Learning Organization Questionnaire
FDRE Federal Democratic Republic of Ethiopia
HEIs Higher Education Institutions
LO Learning Organization
MoSHE Ministry of Science and Higher Education
MVAMissing Values Analysis
OE Organizational Effectiveness
OLOrganizational Learning

Chapter One

Introduction

1.1. Background of the Study

The rise of globalization and the explosion in information technology innovation, according to Rose (2008) have made the global organizational environment more dynamic and competitive. Similarly, Simpkins (2009) stated that the advent of globalization resulted in an explosion in technological innovation, which is one of the primary reasons why traditional leadership styles had to make way for 21st century leadership practices in organizations. Thus, the demands of this new environment will increasingly require organizations to rely on and exploit the knowledge, skills, experience, and creativity of all of their employees and that will require a new approach to organizational leadership (Partida, 2015). Today's leaders therefore, must behave differently as they need to acquire the essential practical skills and knowledge to thrive in the knowledge-driven global economy. A fundamental overhaul of leadership and followership is required since the leadership paradigms that have been successful in the past are insufficient to satisfy the needs of the present. DeRue (2011) argues that by redefining leadership as a complex adaptive process, the complexity and emergent features of leadership in modern organizations are highlighted. As a result, previous solutions are no longer relevant to today's problems (Linsky & Lawrence, 2011). This necessitates that, organizational leaders concentrate on the current world's increasing complexity. These aforementioned circumstances indicate that, the current Higher Education Institution (HEIs) leadership is not immune to the challenges and is also vulnerable to new-age problems.

As the world becomes increasingly interconnected, interdependent, and a global village, higher education is critical for achieving economic success, political stability, and peace, as well as for developing a democratic culture and society (Lowman, 2010). It is well understood that HEIs are both causes of cultural change and are required to constantly refresh themselves in response to societal changes (Burkhardt, 2002). Nowadays, HEIs are in the midst of dynamic

challenges in response to environmental, social, economic, technological, and political transformations all over the world (Temple, 2011). As stated by Temple (2011), leaders of HEIs are under pressure to accommodate the needs of a variety of stakeholders, including governments, students, administrative, and academic employees. In addition, Corlett (2005) described how leaders at HEIs are held to high standards in terms of research, teaching, and community engagement. This indicates that the leaders of HEIs are expected to play a significant role in the development of various techniques and mechanisms for setting different strategies and mechanisms to overcome the unprecedented challenges they face in the current world. Clearly, in the current competitive context, one of the considerable variables in mapping the success or failure of a firm is leadership (Mesterova et al., 2015). As Avolio (2007) asserted, even though leadership is not a magic cure, it played a key role in effecting significant organizational change and improvement in HEIs. In addition, Mumford et, al. (2000) stated that the success of HEIs relies on the skilled performance of their leaders and leadership practices to solve complex and ill-defined organizational problems, to balance the competing demands of the external and internal environments and become successful. Moreover, Fey et al. (2001) stated that choosing a leader with an appropriate leadership style is critical for an institution's effectiveness and success. This indicates that the success or failure of an institution depends on the qualities of the leader and the leadership style practiced.

The need to develop better leadership style is becoming increasingly important in all organizations. It should be noted that the concept of leadership is evolving as society changes. With this in mind, the contemporary environment within which educational leaders particularly operate is dynamic and continues to change in response to uncertain external pressures as well as political and societal changes (Owens & Valesky, 2007). This dynamic environment manifests itself in an ever-increasing demand from stakeholders for improved performance in the operations of educational institutions (Owens, 2004). Therefore, to overcome the challenges and be effective, Heifetz (1994), described that the nature of the present world challenges needs to adopt a leadership approach that allow them to be flexible and responsive to change in relation to the evolving societal and political contexts. This is because given the complexities of both our postmodern world and the global economy, more traditional articulations of leadership that are based in hierarchical forms are becoming less useful (Lichtenstein et al., 2006). Therefore, when

new challenges present themselves or when the description of issues and potential solutions is hazy, adaptive leadership is needed (Bertram et al., 2015).

Adaptive leadership is defined as leadership that involves changing behavior in appropriate ways demanded by the situation at hand, and constitutes leaders that can accurately diagnose the situation and react accordingly (Yukl & Mahsud, 2010). Additionally, adaptive leadership is becoming more and more crucial as organizations and leaders face increasing demands to keep up with fast changes, including rapid technological advancements, increased use of virtual interaction, and globalization of workforces (Rosa, 2013). This indicates that in the effort to move an institution to the next level, the approach can assist educational leaders to overcome adaptive challenges that threaten their effectiveness. Hence, with the increasing pace of change in both the workplace and the world, the need to develop adaptive leadership skills (Heifetz et al., 2009) as a competitive advantage is critical now more than ever before. Therefore, it can be argued that in today's society, change is pervasive and HEIs need strategies to respond to the demands of such change. Compared to others, an adaptive leadership approach allows institutions to consider the changing situations uniquely and select actions based on what is needed currently rather than on past traditions (Heifetz, 1994). Therefore, as Khan (2017) described, adaptive leadership approach is more valuable as a leadership approach in current educational institutions. This is because it embraces complexity and ambiguity in situations, and actively pursues innovative solutions via Organizational Learning (OL), creative problem solving, experiments, and collaboration (Kezar & Holcombe, 2017) that leads to effectiveness and success.

To better describe the need of adaptive leadership in the frequently changing contemporary world, the philosophical approach of the adaptive leadership theory differs from other theories in that the adaptive leader encourages the team to work and adapt to changing environments and conditions, which helps to better describe the need for adaptive leadership in the frequently changing contemporary world (Arthur-Mensah & Zimmerman, 2017). According to Kapoutsis et al. (2019), the leader must guarantee some degree of adaptability. While adaptive leadership cultivates a people-centric approach, traditional leadership approaches emphasized a leader-centric ideology (Arthur-Mensah & Zimmerman, 2017). For instance, transactional leadership focuses on how leaders can motivate employees to achieve company

goals by employing rewards or punishment (Yukl, 2006). Success in transformational leadership depends on both leaders and followers bringing one another up to a higher level of comprehension. A transformational leader never ceases to inspire their followers. Thus, transformational leadership is mainly focused on the leader; with a certain amount of charismatic aura surrounding them, leaders bring about change in the organization. The flaw in both transactional and transformational leadership is that they both place too much emphasis on the characteristics and actions of the individual leaders as a means of bringing about change (Arthur-Mensah & Zimmerman, 2017). Additionally, under servant leadership, the follower is the main focus. To help the followers, the leader disperses knowledge and resources. Leadership will be seen successful if the followers feel empowered. Authentic leadership is founded on moral principles that are value-driven. Avolio and Gardner (2005) identified self-awareness, balanced thinking, an internalized moral perspective, and authenticity in interpersonal interactions as the four defining traits of authentic leaders. Furthermore, the conventional leadership theories do not offer a clear plan of action that reflects the requirements of the modern environment, which is evolving (Arthur-Mensah & Zimmerman, 2017).

Accordingly, in this era of intensified competition and rapid transformation and change, successful institutions are those that can recognize, react to, manage, and prosper in a changing environment (Lowman, 2010). The capacity for change and improvement is linked with learning. To obtain and sustain competitive advantage, organizations must enhance their learning capability and must be able to learn better and faster from their successes and failures, from within and from outside (Marquardt, 1996). Besides, currently learning has been recognized as an important ingredient of organizational change and the ability of individuals and organizations to learn becomes the primary means of winning (Marquardt, 1996). As a result, Learning Organizations (LO) have emerged, founded on the notion that learning and transformation are inextricably linked.

Consequently, in today's changing and dynamic environment, HEIs, like other organizations, must adapt to change or risk being left behind in today's competitive world. There are many driving forces that trigger the need for organizational change such as globalization, the need of stakeholders, advancement of information communication technology, etc. OL is therefore becoming increasingly recognized as a critical requirement for strategic effectiveness

in order for organizational members to manage issues that pose both an internal and external threat (Doz et al., 2001). In a world full of rapid changes, Theron (2002) emphasizes that the survival of organizations depends on how and to what extent they have embraced change and increased their competitiveness. Obviously, this depends on the ability of organizations to learn (Theron, 2002). The ability to learn faster is the only significant feature for sustaining organizational advantage in future and thus, this competitive advantage can be accomplished by employing OL during organizational transformation (Kapp, 1999). OL refers to the learning processes or activities within the organization while the LO is a form of organization. According to Senge (2006) the fundamental meaning of the concept of LO is captured in the definition by which the LO is "an organization that is continually expanding its capacity to create its future" (p. 14). Senge's original concept of the LO was an organization that continuously changes and performs its function by relying on lessons and experiences gained from individuals, values, and other subsystems (Senge, 1990). To put it another way, a LO is one where people are always learning and increasing their skills (Senge, 2006).

Subsequently, in today's changing and dynamic environment, HEIs as to other organizations are required to adapt to changes or else be left out in this competitive world. Brewer and Tierney (2012) suggested that institutions of higher education must adopt innovations to survive in this complex and turbulent environment. Selingo (2013), and Zemsky (2013) posited similar arguments, noting the increased demands on the higher education community. The capacity to respond to these looming challenges is dependent on the strength and adaptability of leaders. There is an urgent need for leaders who do not default to business as usual, but instead adopt and fully embrace creativity and innovation to address emergent challenges (Mrig & Sanaghan, 2017). This reveals that the practice of leadership that tries to adapt the present-day overall challenges, creates an organization which continuously learn and transform itself to further attain the effectiveness of the organization (Jacob & Shari, 2013). Therefore, compared to other models of leadership, adaptive leadership finds Organizational Effectiveness (OE) through attainment of organizational goals via adaptive change intervention (Owens & Valesky, 2007).

These days, organizations in developing nations are clearly attempting to be more competitive in order to be a part of the global economy. Organizations may have a higher chance

of becoming more sustainable and competitive by using adaptive leadership which results in innovation, learning, adaptability and new organizational forms (Uhl-Bien & Marion, 2009). Adaptive leadership, according to Kogut and Zander (1996), facilitates OL, allowing an organization to increase the quality and quantity of its output while acquiring a competitive edge. Jones (2000) emphasizes the importance of OL by defining it as a process by which adaptive leaders attempt to improve organizational members' capabilities in order to better understand and manage an organization and its environment so that they can accept decisions that increase OE on a continuous basis. Thus, academic institutions today, like other organizations in society, cannot overlook the importance of effectiveness. This suggests that leadership approaches that attempt to adapt to today's overall difficulties result in an organization that continuously learns and evolves itself in order to improve their effectiveness.

According to a study conducted by Jacob and Shari (2012) on the performance of academic organizations, institutions must prioritize OE in order to survive and compete. In connection to these, a Brookings Institution study found that adaptability, internal advances in knowledge, innovation, and learning account for 60% of an organization's competitive advantage (Carvenale, 1992). Even though the meaning of effectiveness varies among individuals and organizations, compared to other models of leadership, adaptive leadership finds OE through attainment of organizational goals via adaptive change intervention (Heifetz et al., 2004). The findings of Taylor et al. (2014) indicated that adaptive leadership and OL have positive impacts on an organization's performance. Researchers like Calantone et al. (2002) have addressed the relationship between an institution's OL and its performance, highlighting that learning creates new knowledge which can help institutions to quickly respond to the dynamic changes in the external environment. Škerlavaj and Dimovski (2006) and Farrel (1999) found that OL produces promising results in organizations.

1.2. Statement of the Problem

It is known that higher education is of paramount importance for economic and social development of a nation. The institutions also serve as the major research establishments that generate, adopt and disseminate knowledge. Cognizant of its vital significance for the development of a country, the Government of Ethiopia has been engaged in a highly motivated

effort to reform the country's higher education system so that it contributes to the country's economic development and poverty reduction strategies. Besides, Ethiopian higher education system has changed extensively over the last two decades and the number of public HEIs and their intake capacity of students has increased rapidly (FDRE, 2019).

Besides, the current HEIs operate in a complex environment that includes external influences and demands for change as a result of a variety of factors such as the introduction of new teaching and learning technologies, the need for greater access, globalization, changing student demographics, funding cuts, and other uncertain challenges (Duderstadt, 2009). This is also true in the current environment of Ethiopian public HEIs, where leadership is confronted with a slew of new difficulties and challenges. Ethiopia's higher education system, according to the World Bank's (2020) World Development Report, is inadequately linked to national development requirements and falls short of international criteria, despite making important contributions in several areas. In addition, while the new Federal Democratic Republic (FDRE) higher education proclamation No. 1152/2019 praised the sector's achievements, and pointed out faults in terms of ensuring quality and relevance as well as addressing public demand in the production of essential human resources (FDRE, 2019). Furthermore, Woldegiyorgis (2015) described that the quality and relevance of the education and research activities of the institutions are not up to expected standards and levels. It is expressed that being effective in universities has to do with achieving the vision and mission of becoming academic excellence on the one hand and significantly contributing for the national economy through such engagements as problem solving research and community services on the other (Woldegiyorgis, 2017) in which case universities of the country fail to achieve. This indicates that institutions are not effective in their practices and failed to successfully attain their mission and unable to meet the expectations. There could be lists of factors which contribute for the ineffectiveness of Ethiopian HEIs, but the leadership and leadership styles that are used in the institutions could be the leading ones.

The leadership of Ethiopia's public HEIs is currently dealing with many emergent issues and challenges. According to a report published by the then Ministry of Science and Higher Education (MoSHE), unprecedented challenges face practically all public HEIs in the country (MoSHE, 2018). According to Woldegiyorgis (2017), the main adaptive challenges currently facing Ethiopian public HEIs are workforce diversity management, student unrest and

turbulence, academic staff turnover, lack of adequate budget, advancement of new technology in the teaching-learning process, and other uncertain problems due to prevalent political and social motives. As a result, these difficulties have altered the activities of institutional leaders as well as their effectiveness. The findings of a study conducted at three public universities in Ethiopia by Durie and Beshir (2016) indicate that academic leaders are mainly engaged in routine and lowpriority activities rather than change-oriented activities which could make the institutions competitive in the current dynamic world. Consequently, the proclamation of higher education states that, educational leadership in Ethiopian HEIs is inconsistent, incoherent, and less practice and research-based (FDRE, 2019). Hence, the Ethiopian public HEIs should investigate ways to better adapt to the current uncertain challenges to be effective in attaining their expected objectives. A necessary condition to deal with the current challenges, of course, is to have adaptive leaders who understand the challenges and are able and willing to make significant efforts to constructively deal with the changes to transform and make HEIs responsive. Although the general picture depicts the above-mentioned facts, it could be observed that some institutions perform better than others. It is observed that in institutions where the leaders are working with multiple stakeholders and tried to overcome the current challenges through learning and adaptation, the intensity of the problem is comparatively low and there is better organizational performance (Woldegiyorgis, 2017). This designates that some leaders of the institutions intentionally or unintentionally are practicing a leadership style that could adapt and overcome the challenges faced.

To overcome the challenges and improve the performance of the HEI's, different change and reform mechanisms have been implemented by the government (Woldegiyorgis, 2014). However, significant change initiatives introduced at different times lost without making substantial impacts as intended (Amare & Tadelle, 2013; Geda & Beyera, 2015; Woldegiyorgis, 2014). In addition, the research findings of Woldegiyorgis (2017), indicated that all dimensions of the improvement initiatives were perceived to be very poor and lost without making significant impacts. Getachew and Richard (2006) also claimed that no matter how many initiatives and promises HEIs make, their effectiveness in terms of performance is considerably low.

Considering the factors that directly influence the success of the initiatives in HEI's, Melu (2016) and, Amare and Tadelle (2013) identified the absence of leadership commitment as one critical factor for failure to realize the reforms. In relation to this, Muriisa (2014) noted that "proper leadership in universities remains the missing link for effective and visionary performance.... that universities performance may not improve until leadership is given critical attention" (p.89). As stated by Muriisa (2014) inadequate leadership at the institution level is the one that adversely affects the progress of education because success in any educational institution depends significantly on effective and sound leadership. Hence, HEIs with traditional leadership cultures lead to failure in achieving predefined goals and unable to bring sustainable organizational developments.

Christenson and Eyring (2011) and Zemsky (2013), suggested that institutions of higher education must adopt innovations to survive in this complex and turbulent environment. This indicates that the capacity to respond to the impending challenges of the current world is dependent on the strength and adaptability of leaders. A study conducted by Randall and Coakley (2007) and Glenda et al. (2014) on the application of adaptive leadership in educational institutions indicate that the key elements associated with the adaptive leadership framework are applicable to the context of schools experiencing periods of change. In addition, the findings of Glenda et al. (2014) confirm that, adaptive leadership maximizes the capacity for strategic thinking and for tackling adaptive challenges. Thus, a necessary condition to deal with the current challenges, of course, is to have adaptive leaders who understand the challenges and are able and willing to make significant efforts to constructively deal with the changes to transform HEIs and make them become responsive to their environmental circumstances.

Empirical studies conducted on the effects of adaptive leadership behaviors have been undertaken in the context of adaptive sustainability in complex health environments (Espinosa & Porter, 2011), identification of leadership practices aligned with adaptability (Dinh et al., 2014; Ellis & Herbert, 2011), and adaptive leadership behaviors aligned with cultural change in health organizations (Corazzini et al. 2014), and adaptive strategic practices within complex hospital settings (Junior et al., 2012). Furthermore, according to Thygeson et al. (2010), adaptive leadership can improve medical practice and has the potential to make health care more efficient, patient-centered, and sustainable. Researchers have also looked into the impact of adaptive

leadership on organizational design, structures, and processes in the workplace (Dinh et al., 2014; Hempe, 2013).

As described by Dinh et al. (2014) and Hempe (2013) while most research studies have revealed important discoveries on adaptive leadership in commercial and health care organizations, there has been very little empirical research to date establishing the effectiveness of this leadership method in HEIs (Dugan, 2017; Northouse, 2016). This indicates that there is a gap on the actual practice of adaptive leadership in HEIs that takes into account the complex realities of 21st-century leadership. Likewise, implementing adaptive leadership for the transformation of contemporary HEIs are still an under-researched and under-applied issue of study and application, as lamented by Bryman (2007) and Dugan (2017). Hence, the effects adaptive leadership in HEIs for continuous learning, and effectiveness is an issue that demands further research.

Empirical studies conducted on the relationship between adaptive leadership and OL in public services and health sector (Agostino et al., 2013; Albury, 2005; Damanpour & Schneider, 2009; Uhl-Bien & Marion, 2009). In addition, the relationship between adaptive leadership and OE in health sector (Anderson et al., 2015; Bailey et al., 2012; Corazzani et al., 2015; Thygeson et al., 2010) and in different projects (Blaskovics, 2016; Ebrahimi et al., 2016; Fabricius & Büttgen, 2015; Millar & Lockett, 2014; Smith, 2020) found positive and significant relationship. Although research is ongoing to better understand adaptive leadership in theory and in practice, the healthcare sector has received significantly more attention than public education (Northouse, 2019). Higher education's function is one of growing complexity and ongoing change, similar to health care, making it an equally rich study environment for academic practitioners looking to bridge the gap between adaptive leadership as theory and as practice (Bailey et al., 2012; Davies et al., 2015; Wright et al., 2016). In addition, adaptive leaderships as a specific topic of consideration seems to be absent from the professional dialogue (Ackerman et al., 2018; Drago-Severson et al., 2012; Tian & Huber, 2020). Nevertheless, according to Tian and Huber's (2020) research, the notion of adaptable leadership should be given priority in the academic literature on educational leadership. Adaptive difficulties still remain in higher education, notwithstanding the paucity of scholarly attention. School culture and organizational structures have been negatively impacted by reform demands, national standards campaigns, responses to widespread poverty,

sociopolitical community pressures, and shifting instructor effectiveness policies, among other factors (Ackerman et al., 2018). For instance, the Covid-19 pandemic-related closures of educational institutions offered a brand-new, unforeseen set of challenging challenges that educational leadership had to address. These issues included the need for academic support, social-emotional support, and equitable internet access (Biddle et al., 2020; McGee & Edson, 2014). The gap between adaptive leadership as theory and as reality could be filled by understanding how adaptive work was pressed during a particularly difficult time.

Furthermore, the majority of research on adaptive leadership, OL and OE in the education sector has been undertaken in developed countries such as United States (Zagorsek et al., 2004), Spain (García-Morales et al., 2012), Australia (Hempe, 2013). However, research on the issue involving developing nations and Ethiopian public HEIs is limited. Finally, to the best of the researcher's knowledge, no empirical research on this topic has been conducted in Ethiopian public higher education context. As a result, a study is needed to gain a better knowledge of the existing status, relationship, and prediction of adaptive leadership and its dimensions on OL, and OE at public universities in Ethiopia's Amhara National Regional State (ANRS). Hence, in addressing the aforementioned needs and importance of the study, the themes of the study are made to focus on the following guiding questions:

- 1. To what extent is adaptive leadership practiced by the leaders of public HEIs located in the ANRS?
- 2. To what extent have the HEIs under study achieved OL capacity?
- 3. To what extent has OE been attained by the HEIs under consideration?
- 4. How significant is the relationship between practices of adaptive leadership and OL at the HEI under study?
- 5. Which adaptive-leadership dimension significantly predicts OL?
- 6. Is there significant relationship between adaptive leadership practices and OE at the HEI understudy?
- 7. Which dimension of adaptive leadership best predicts OE?

1.3. Objectives of the Study

The general objective of this research is to examine the practices, status, and relationships among adaptive leadership, OL and OE in the context of Ethiopian public HEIs. Furthermore, the study tries to address gaps in knowledge and contribute to a better understanding and practice of the constructs/concepts.

Specific objectives

- To know the current status and the practices of adaptive leadership, OL and OE in public HEIs.
- To assess the relationship of adaptive leadership practices with OL and OE.
- To identify the dimension of adaptive leadership which better predict the level of OL.
- To identify dimension of adaptive leadership which better guide towards the effectiveness of HEIs.

1.4. Significance of the Study

Overall, this research is supposed to contribute to the existing body of knowledge and practices pertaining to the leadership practices in higher education and its effect on OL and OE. Accordingly, the research is supposed to be of great importance for higher education leadership, professional literature and participants of the study.

The details of how each of these benefits are accrued from this research are presented as follows

- For the Ministry of Education: This research could inform the Ministry officials to
 reconsider what works in the current public higher education leadership context and what is
 not by indicating the gaps in the existing practices of leadership and their consequences on
 the achievement of organizational goals expected from the government.
- 2. **For practitioners:** This study may also inform the leadership in the current public HEIs and other concerned stakeholders by indicating the gaps in the knowledge and existing practices of leadership and introducing a leadership model that can lift up institutional effectiveness.
- 3. **For professional literature:** This study might have significance in the field of leadership studies and higher education effectiveness for several reasons.

- This study will specifically focus on researching how OL and OE can be achieved through practicing a leadership style that can give practical solutions to the current uncertain challenges.
- This study might have significance for adaptive leadership theoretically. Since applying
 the insights of adaptive leadership theory to leadership studies is a relatively new
 endeavor, this study will be useful in combination with other organizational outcomes to
 further develop the theory.
- The results of this study would also extend current research beyond the business sector
 and could prove extremely valuable to higher education leaders as practitioners
 continually faced with persistent social, technological, economic and political problems
 in their institutions.
- Moreover, the study might trigger critical dialogues and scholarly debates among scholars of educational leadership on the style of leadership that could be effective on the current global uncertainty to create effective and learning HEIs.
- 4. **For Participants:** The study is also believed to address the concerns of the staff members by prudently pinpointing the unfriendly practices, irregularities and weaknesses of the leadership practices and reveal it for future considerations.

1.5. Scope of the Study

A given study could be delimited conceptually, geographically or demographically in the interest of resources and manageability. The empirical scope of this study was delimited to an analysis of adaptive leadership, OL and OE of public HEIs (universities) found in Amhara National Regional State, Ethiopia. This includes understanding how far the adaptive leadership is practiced, the current status of OL and OE, the relationship between the adaptive leadership style and OL as well as its relationship with OE of the institutions. The study has also made an effort to examine the context of adaptive leadership dimensions prediction on OL and OE. Therefore, the practices of adaptive leadership and the level of prediction of its dimensions on OL and OE are aggregate effects of many components in HEIs; the study involved leaders at various levels, including academic staff, and the perspectives and insights of these stakeholders were taken into account. Additionally, for manageability, the study randomly selected six HEIs from each generation of universities, as it is mentioned in the sample process

(i.e., Ethiopian case of categorizing universities based on the date of establishment from oldest to newest). This made it easier to study and detect how well leaders can change, as well as where OL and OE stand among both new and established HEIs.

1.6. Limitations of the Study

The study's findings may help the leaders of the HEIs under investigation and other interested parties understand the current state of adaptive leadership practices and how it relates to OL and OE. Like previous research studies, this one has some limitations. The fundamental shortcoming of this study is the lack of adequate supporting literature from other comparable local research findings, carried out to compare the results in order to see the connections between theory and practice and other scholars' perspectives on the topic. In addition, as the sample was restricted to universities, this research may only have a limited applicability to other educational institutions. Future research should therefore make an effort to gather more exact data in order to evaluate adaptive leadership practices and its effects on various organizational outcomes. The researcher believes that this study should be strengthened in order to address how empirically adaptive leadership might increase the effectiveness and learning capacity of HEIs. Further study is therefore necessary to comprehend the effects of adaptive leadership on the outcome variables of the higher education sector (public and private) and the country's educational system by using large sample sizes and various OL and OE models.

1.7. Conceptual Framework

A conceptual framework, according to Kombo and Tromp (2006), is a research instrument designed to help a researcher acquire awareness and comprehension of the situation under investigation and to express this. Because there are no studies conducted on the practices and relationship among the variables in Ethiopian HEIs context, this conceptual framework is used to link the relationships between the constructs. Thus, the conceptual framework for this study is developed based on the theoretical and research findings in the areas of adaptive leadership, OL and OE. This framework is developed from the study done by Heifetz and Linsky (2002), Uhl-Bien et al., (2007), Northouse (2016) and Northouse (2019) on adaptive leadership, Marsick and Watkins (2003) model of OL and Cameron's (1978) model of OE. Therefore, this study focuses on adaptive leadership as originally proposed and taught by Heifetz (1994) and

expanded upon with subsequent coauthors (Heifetz & Laurie, 1999; Heifetz & Linksy, 2002; Hiefetz et al., 2009; Northouse, 2016). In addition to Heifetz and his colleagues' contributions, Uhl-Bien et al. (2007) positioned the adaptive leadership theory as a subcategory under the Complexity Leadership Theory (CLT). As stated by Uhl-Bien et al. (2007) the CLT framework views leadership within the context of the twenty-first century organization, where "knowledge is a core commodity and the rapid production of knowledge and innovation is critical to organizational survival" (p. 299). The challenges of this knowledge era require a leadership model that encourages learning, innovation, and flexibility (Heifetz & Linsky, 2002; Uhl-Bien et al., 2007). Within the CLT, adaptive leadership reflects a collaborative change process that focuses on the cooperative efforts of individuals within an organization versus relying solely on a person to fulfill a managerial role (Uhl-Bien et al., 2007). Heifetz's (1994) adaptive leadership framework rests upon the diagnostic distinction between technical problems and adaptive challenges, and suggests that most leadership failures are diagnostic ones where known solutions for technical problems are applied by authorities and experts to misdiagnosed adaptive challenges. Heifetz's (1994) added that adaptive challenges are challenges that are not entirely understood and for which no known solution exists. The work of leadership, then, is mobilizing constituents connected to the challenge to more fully understand its complexity and take and seek multiple perspectives that might generate diagnostic learning (Heifetz & Linksy, 2002; Heifetz et al., 2004). Therefore, adaptive leadership is required to meet adaptive challenges because it motivates people to overcome obstacles and pursue continuous learning in organizations (Rowley & Sherman, 2003).

The concept of OL is most often attributed to the contributions of Senge (1990) which identifies five main features: personal mastery (commitment of an individual to learning); team learning (learning in a group); mental models (assumptions/beliefs held by individual and organizations); shared vision (common identity); and systems thinking (system as a whole and not as components). The theoretical framework for this study is an integrated perspective to assess OL culture developed by Marsick and Watkins (2003). They demonstrated how organizations could be assessed for their learning culture based on seven distinct but interrelated action imperatives. They are: (a) Create continuous learning opportunities, (b) Promote inquiry and dialogue, (c) Encourage collaboration and team learning, (d) Empower people toward a

collective vision, (e) Connect the organization to its environment, (f) Establish systems to capture and share learning, (g) Provide strategic leadership for learning. Of the seven variables listed above, the first four analyze the learning characteristics of the organization at people/individual level and the last three at structural level. Moreover, according to Watkins and Marsick (1993, 1996), there are three levels of OL: The first is the individual level, which is consisted of two dimensions: continuous learning and dialogue and inquiry. The second is the team or group level, which is reflected by collective learning and collaboration. The third is the organizational level, which has four dimensions of OL: embedded systems, system connections, empowerment, and provide leadership for learning. These three levels can be further considered to belong to one of the two components of Watkins and Marsick's model of an OL; people and structure. As Yang (2004) described, in order to move towards the desired goal or outcome, an organization has to work both with people at the individual and group level, as well as create facilitative structures to support and capture learning. Ulh-Bien et al. (2007) describes adaptive leadership as adaptive, creative, and learning actions that emerge from the interactions of complex adaptive systems as they strive to adjust to tension. Each of these descriptions share the common feature of OL as a core component of adaptive leadership (Ulh-Bien et al., 2007). By engaging customers and continuously learning about and adjusting to the unpredictable environment, adaptive leadership involves empowering and enabling followers to rapidly and reliably create feasible value. In light of this Highsmith (2014) stated that adaptive leadership confidently is about learning, adapting, collaboration, and more. It is known that learning is one such vehicle that can either make an organization successful or lead it towards failure. Hayes (2002) is of the view that learning at the organizational level should be incorporated at each level that would enhance OE.

OE has long been the subject of numerous studies through different models. For the purpose of this study, Cameron's (1978) model of OE is applied as a theoretical background. Literature review shows that this model more than others has been considered by researchers in this field (e.g., Akhtar et al., 2017; Hertelendy, 2010; Kwan & Walker, 2003; Lejeune & Vas, 2009; Song et al., 2009). Cameron's selection of these dimensions is based on the careful study of the criteria, institutions and constituencies, and an in-depth analysis (Siddiqui, 2010). Cameron's (1978) model emphasized that evaluating the effectiveness of an organization is not

difficult as various approaches are available but the selection of right approach is of utmost importance. He proposed four approaches for measuring OE. First approach is how well an organization is accomplishing its objectives. Second approach is systems approach which emphasizes on the extent to which organizations acquire its needed resources. Third approach is focused on the effectiveness of internal processes. Fourth approach is based on how effectively organizations respond to the demands and expectations of its strategic constituencies (Cameron, 1978). Essentially, his review of OE models and exploratory fieldwork research suggested effectiveness was perceived as successful transactions encompassing resource inputs, process and outcomes. Specifically, the scales are: (1) Student educational satisfaction, (2) Student academic development, (3) Student career development, (4) Student personal development, (5) Faculty and administrator employment satisfaction, (6) Professional development and quality of the faculty, (7) Systems openness and community interaction, (8) Ability to acquire resources, (9) Organizational health (Cameron, 1981). Given the dynamism that is required by the leader and followers to solve complex changes and challenges, the adaptive leadership theory was expected to be an appropriate framework leaders can use to increase organizational success rates (Ebrahimi et al., 2016). According to the framework, organizational leaders can utilize adaptive leadership to overcome obstacles in unexpected conditions, ongoing competition, and technological developments so that their businesses can remain sustainable (Nelson & Squires, 2017). This approach emphasizes the importance of learning and adaptation to a complex and rapidly changing environment and creates the organizational conditions to achieve agreed goals (Fabricius & Büttgen, 2015).

In summary, the conceptual framework for this study was adaptive leadership theory (Northouse, 2019). According to the theory, organizational leaders who face challenges in unpredictable conditions, persistent competition from rivals, and technology changes can use adaptive leadership to navigate these hurdles so that their firms can remain sustainable (Glover et al., 2002; Nelson & Squires, 2017). Additionally, this framework suggests leaders can use adaptive work to better position HEIs as complex adaptive systems. The theory also helps these leaders to confront internal and external issues that affect the organization. Therefore, the purpose of adaptive leadership is to eliminate the technical approach to solve adaptive challenges. Eliminating the use of technical approaches to solve adaptive challenges allows

organizational leaders to utilize people as the core strategy to solve complex problems (Rowland, 2017). Therefore, the complex adaptive challenges facing higher education require solutions through adaptive leadership, which inspire abilities to innovate, and pursue continuous OL in HEIs. OL represents a special model of organizational culture promoted by the attention given to the change and the way in which it occurs (Cox et al., 2006), the flexibility and openness to new ways of work, depending on the goals of the organization and of its performance targets (Marsick & Watkins, 2003). Hence, an organization's current status must be examined and diagnosed in order to serve as the foundation for any future transformation (Marsick & Watkins, 2003). Marsick and Watkins (2003) model of OL was applied to assess the organizational ability to adapt to change and the OL capacity and culture of HEIs under study by measuring employees' perceptions. Additionally, adaptive leadership views the usage of organizational members as the main engine behind organizational success. Nelson and Squires (2017) proposed that leaders must make use of human capital by adopting a leadership style that promotes teamwork in order for the adaptive leadership framework to be effective. Given the dynamism required by the leader and employees to address complex changes and obstacles, it was believed that the adaptive leadership theory would be an effective tool for leaders to use to increase OE rates. Hence, Cameron's (1978) model of OE was applied in this study to examine OE status and its relationship with adaptive leadership in HEIs.

Figure 1.

Conceptual framework of the study

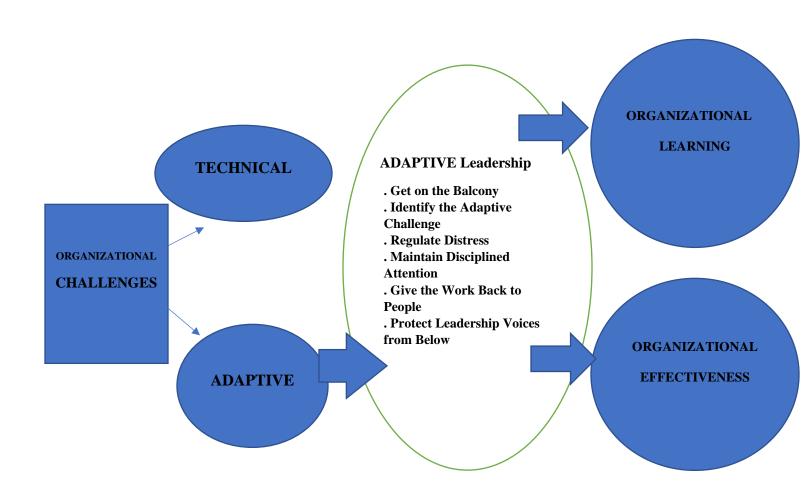


Fig. 1. A Conceptual model of the study adopted from Northouse (2016) Adaptive Leadership dimensions, Dimensions of OL developed by Marsick and Watkins, (2003), and Organizational Effectiveness dimensions of Cameron's (1978).

1.8. Operational Definition of Terms

Adaptive challenges/problems: challenges that are not well-defined, which are complex and require multiple perspectives and dialogue. (Heifetz et al., 2004).

Adaptive leadership: the practice of mobilizing people to tackle tough challenges and thrive" (Heifetz, 1994).

Higher education: education in the arts and sciences offered to undergraduates and graduate students who attend degree programs through any of the delivery.

Learning organizations: organizations where people continually expand their capacity to create the results, they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together (Senge, 1990).

Organizational effectiveness: organization's ability to adapt to a rapidly changing environment and achieve its goals through satisfaction of organizational members and their commitment to the organization.

Organizational learning: a process of coordinated system changes, with mechanisms built in for individuals and groups to access, build and use organizational memory, structure and culture to develop long-term organizational capacity (Marsick &Watkins, 2003).

Public higher education institution: an institution whose budget is allocated by the Federal or State Government.

Technical challenges: challenges that can be diagnosed and solved, generally within a short time frame, by applying established know-how and procedures. Technical problems are amenable to authoritative expertise and management of routine process (Heifetz et al., 2004).

Thrive: the ability to survive through the dynamics of change, while also adopting new behaviors, practices, and skills that allow to meet the challenges of future change.

1.9. Organization of the Study

This thesis is organized under five chapters. Accordingly, the first chapter deals with the background of the study, statement of the problem, theoretical and conceptual framework of the study, the objectives and significance, as well as scope and limitations of the study. The second chapter covers pertinent theoretical and empirical literature, in the area of higher education adaptive leadership with particular emphasis on OL and OE. The third chapter presents details about the research methodology and design. Thus, specific information and procedures about the samples and sampling techniques, data sources and data gathering instruments as well as data analysis techniques are presented under this section. The fourth chapter is dedicated to data analysis where both qualitative and quantitative data are presented, analyzed, and discussed. Finally, the fifth chapter presents the summary of major findings, conclusion and recommendations.

Chapter Two

Literature Review

2.1. Introduction

Organizations of the 21st century face a complex, competitive environment that is largely led by globalization and technological revolution (Drucker, 2012). Thus, if organizations want to survive, they must implement methods such as knowledge establishment, improvement, and change in their existing organizational structure by resonating with new technology and adopting flexible leadership styles embraced by crucial decision makers (Fitzgerald, 2014). Accordingly, due to the current challenges, organizations nowadays are ready for a new way of thinking about leadership. Leaders are reaching out to understand how they can make sense of a world where so many traditional rules and ideas have been challenged so fundamentally, which makes them question the basis of their core values (Fitzgerald, 2014). The topic of leadership is one that is not only popular today but is also relevant to the many challenges being faced in organizations and the world. Indeed, leaders themselves struggle with these same issues and wonder how they fit into a system where answers do not come easily. In order to understand leadership and determine the best leadership pattern, numerous studies have been carried out and different theories have been developed by academicians.

Both scholars and practitioners want to know what type of leadership is the most effective and how such an approach can be implemented. Leadership studies have often been too simplistic in their approach, assuming that the actions and attitudes of leaders bring the rise or fall of organizations. As Yukl (2006) pointed out, much of the current leadership research simply has focused on leaders themselves, specifically their actions, roles, attitudes, and characteristics. While leader actions and attitudes are important, a more realistic view of the world must see that what occurs within organizations and beyond is much too complex to make such simple judgments (Yukl, 2006). Therefore, leadership in organizations appears to be a significant mechanism that could manage hardships of the information age.

Leithwood (2007) described that leadership plays a vital role in facilitating the development of effective and innovative educational systems that promote quality teaching and learning. The

current educational leaders are operating in a dynamic environment where there is a need to continuous change in response to societal changes and external pressures. It is also described that, educational institutions are becoming increasingly complex (Hargreaves, 2009; Hoy & Miskel, 2005; Marzano et al., 2005; Owens, 2004; Sackney & Walker, 2006; Trombly, 2014). Owens (2004) contended that, educational organizations today are confronted by demands for near-constant change in dealing with problems that are highly complex, often ill-understood, ambiguous and with outcomes that are uncertain. Therefore, to be competitive and successfully tackle the complex challenges they encounter, educational institutions must be active, adaptable, and responsive (Sackney & Walker, 2006). Hence, given the complex environment of educational institutions, a more robust model of leadership would be a useful tool to assist leaders of these institutions to navigate the dynamic landscape. In offering a solution to this challenge, Dunn (2020) highlights that adaptive leadership is one potential approach for educational institutions leaders and holds a positive association with organizational change in the course of uncertainty. As stated by Khan (2017) and, Parker and Ahire (2019) adaptive leadership become more suitable choice for educational institutions to use. In addition, Squires (2015) noted that the complex challenges facing higher education require solutions generated by multiple stakeholders through collaborative processes. Hence, the evidence from all of the aforementioned descriptions points to adaptive leadership as an explanation of the changes HEIs should make in order to thrive in the new technological era and to embrace the change that it permits, and it implies that adapting, learning, and collaborating are all components of it.

2.1.1. The Concept of Adaptive Leadership

The adaptive leadership theory is still in its infancy and considered by many researchers to be contradictory to the premise of traditional leadership theories (Allio, 2013; Latham, 2014). Development of the adaptive leadership framework emerged largely from the work of Heifetz and his associates (Heifetz, 1994; Heifetz & Laurie, 1997; Heifetz & Linsky, 2002; Heifetz & Sinder, 1988; Heifetz et al., 2009). From the beginning, they set out to create a different approach to leadership. Rather than seeing the leader as a savior who solves problems for people, they conceptualized the leader as one who plays the role of mobilizing people to tackle tough problems. Heifetz and his colleagues suggest that "adaptive leadership is the practice of mobilizing people to tackle tough challenges and thrive" (Heifetz et al., 2009, p. 14). Thus,

adaptive leaders challenge followers to face difficult challenges, providing them with the space or opportunity they need to learn new ways of dealing with the inevitable changes in assumptions, perceptions, beliefs, attitudes, and behaviors that they are likely to encounter in addressing real problems (Northouse, 2016). Adaptive leaders engage in activities that mobilize, motivate, organize, orient, and focus the attention of others (Heifetz, 1994). In addition, this approach to leadership is about helping others to explore and change their values (Northouse, 2016). Thus, the goal of adaptive leadership is to encourage people to change and learn new ways of living so that they may do well and grow (Northouse, 2016). In short, adaptive leadership is the behavior of leaders and the actions they take to encourage others to address and resolve changes that are central in their lives. This indicates that, it is a unique kind of leadership that focuses on the dynamics of mobilizing people to address change.

Adaptive leadership is uniquely different from traditional leadership theories. Traditional leadership theories suggest employment of specific behaviors, traits, and other attributes associated with a single theory (Allio, 2013). In contrast, adaptive leadership suggests that a leader should be adaptable based on changing situations and events, and requires utilizing multiple behaviors and attributes that are elements of more than one traditional leadership theory (Allio, 2013). Those commonly practiced leadership theories such as transactional, transformational and other traditional leadership theories developed over the decades differ from adaptive leadership theory in that the adaptive leadership approach recognizes a need for requirements beyond the limitations established for individual traditional leadership theories (Heifetz, 1994). In addition, traditional theories impose pre-set practices without options to deviate. The great man theory for example implied that only certain born leaders could be leaders, whereas adaptive leadership suggested that anyone from any background can be a leader (Allio, 2013). The transactional type of follower is a thing of the past and today's followers require leaders who view followers as participants in organizational planning and outcomes (Bligh, 2011). Torres and Reeves (2014) suggested that leaders who continue to practice traditional leadership are less successful because they do not envision follower input and needs, and lack self-confidence and the ability or desire to adapt. Adaptive leaders should understand and be capable of addressing follower's different needs, perceptions, skills, and approachability (Bligh, 2011). The complexities of continuous change, transparency, and a more educated and

involved base of followers has eliminated the effectiveness of traditional leadership practices (Apenko & Chernobaeva, 2016). Practitioners of adaptive leadership do not follow traditional routine, but rather develop their own methods and behaviors to quickly adapt to maintain a continual flow of operational efficiency and follower interaction (Brothers & Schnurman-Crook,2015; Zimmerly, 2016). According to Trivellas and Dargenidou (2009) adaptive leadership focuses on the leader's positive aspects of **transformative** change and creating innovative approaches to problems rooted in the status quo. This implies that adaptive leaders are suited to drive creative approaches in the increasingly complex environment.

Adaptive leadership is based on the premise that leadership is more of a process rather than a personal capability (Heifetz et al., 2004). Hence, adaptive leadership embraces complexity and ambiguity in situations, and actively pursues innovative solutions via OL, creative problem solving, experiments, and collaboration (Kezar & Holcombe, 2017). Through adaptive leadership leaders and followers will focus on the specific problems at hand and work collectively to fine-tune the process of solution. This can be accomplished by revising the way in which the problem is approached and handled. Therefore, leaders that apply adaptive leadership theory go beyond simply addressing issues and creating solutions (Nelson & Squires, 2017) but they creatively predict issues and identify their root causes increase their skills at judging to make good miscellany which risks are worth taking and which should be avoided at all costs (Choflet et al., 2021). These allow them to develop the essential adaptive skills needed to ensure their organization has the best leadership possible. Besides that, adaptive leaders can also focus on making key decisions and think reflectively and rationally (Grissom & Condon, 2021).

According to Northouse (2016), "the process of adaptive leadership incorporates ideas from four different viewpoints: the systems, biological, service orientation and psychotherapy perspectives" 21 (p. 258). First, adaptive leadership takes a systems perspective, in that this approach assumes that many problems people face is actually embedded in complicated interactive systems. Problems are viewed as complex with many facets, dynamic in that they can evolve and change, and connected to others in a web of relationships. Second, the biological perspective to adaptive leadership recognizes that people develop and evolve as a result of having to adapt to both their internal cues/state and external environments. The ability to adapt allows people to thrive in new circumstances. Third, adaptive leadership assumes a service

orientation. Similar to a physician, an adaptive leader uses his or her expertise or authority to serve the people by diagnosing their problems and prescribing possible solutions. Fourth, this approach incorporates the psychotherapy perspective to explain how people accomplish adaptive work. Adaptive leaders understand that people need a supportive environment and adapt more successfully when they face difficult problems directly, learn to distinguish between fantasy and reality, resolve internal conflicts, and learn new attitudes and behaviors. Taken together, these four viewpoints help explain and characterize the nature of adaptive leadership.

2.1.2. Models of Adaptive Leadership

A comprehensive understanding of the different dimensions of adaptive leadership underscores the importance of leadership in a situation where both the problem and the solution are unclear and new learning is required by all the participants to cooperatively experiment with ideas to come up with effective solutions (Drago-Severson et al., 2012). As a result, followers feel a sense of empowerment and engagement in the process (Gill, 2002; Northouse, 2016), which is critically important when overcoming the uncertainty and unpredictability of organizational change. Although adaptive leadership is in the early stages of theoretical development, the initial writings about this approach provide a basis for formulating different models of the adaptive leadership process by different authors. One of the adaptive leadership models Bligh (2011) developed tries to enhance adaptive leadership by helping to mobilize followers under the direction of leaders. The idea encourages leaders and followers to tackle their problems and options for decision-making through a win-win procedure where leaders and followers can learn, experiment, and adapt to new techniques for working together and attaining constructive outcomes (Bligh, 2011). The other model of adaptive leadership explores three key activities: (a) examining events and patterns surrounding individuals in both a personal and organizational context, (b) translating what individuals are observing by developing numerous theories about what is taking place, and (c) creating interventions centered on the observations to address the adaptive challenge one has identified (Highsmith, 2014). These three model components offer leaders the opportunity to determine and evaluate situations through repeated improvement of observations, interpretations, and interventions (Highsmith, 2014). By engaging in such a process, the adaptive leader can define the problem and engage accordingly. In light of the aforementioned authors, Khan (2017) created a model of adaptive leadership with four

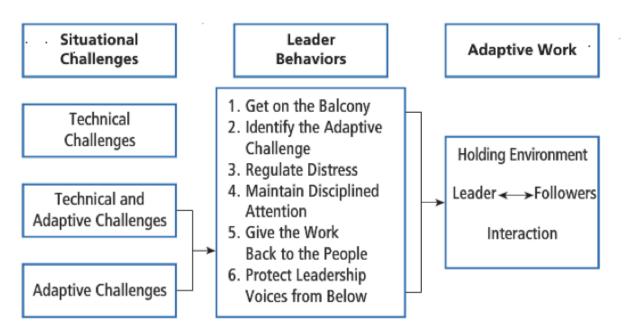
components, namely: navigating the environment, leading with empathy, learning via selfcorrection and reflection, and developing win-win solutions. This indicates that leaders can better prepare for an unexpected environment by considering these four dimensions. Furthermore, Khan (2017) described that by navigating the environment an adaptive leader should manage the context, cultivate a diversity of perspectives, allow leadership to be shared and to emerge from the given context and constantly question the world around him/herself. When leading with empathy adaptive leaders see the world through the eyes of others, create a shared sense of purpose, and reward accomplishment with autonomy. Through learning through self-correction and reflection adaptive leaders enable individuals and teams to learn through experimentation and increase the agility with which the organization is able to correct itself. By creating win-win solutions an adaptive leader values platform for cooperation and builds on them. For leaders, the imperative becomes developing the right skills and competencies to lead change. To that end, practitioners can offer training and learning initiatives where leaders are made aware of the benefits and implications of adaptive leadership and the kinds of skills required to partner with others in doing adaptive work. A unique feature of the adaptive leadership process is the creation of a holding environment thereby generating new ideas and solutions that help followers adapt to complex change. This collaborative process offers learning opportunities to all stakeholders leading to enhanced outcomes. From an organizational development perspective, leaders can help shape organizational culture through an understanding of adaptive leadership.

Furthermore, the model of Arthur-Mensah and Zimmerman (2017) adaptive leadership theory fosters inclusiveness between the leaders and the team members. The model is centered on encouraging both the leader and followers to adapt to changes, challenges, and issues confronting the organization (Doyle, 2017). Besides, according to Doyle (2017) the core of adaptive leadership is the people-centric model, which encourages leaders to address complex and challenging issues by involving stakeholders. It expresses that adaptive leader encourage adaptive work while adopting and conforming to new values and attitudes arrangements (Doyle, 2017) which leads to the development of an adaptive culture. Millar and Lockett (2014) remarked that an adaptive culture may influence positive social change within a society or organization.

Moreover, in addition to above models/dimensions of adaptive leadership, the recent model of Northouse (2019), considers the approach as a complex process of multiple dimensions that includes situational challenges, leadership behaviors and adaptive work. Based on this proposition this model provides a basis for clarifying the process of adaptive leadership as well as generating empirical research to validate and refine the concepts and principles described by the model (Northouse, 2019).

Figure 2

Model of Adaptive Leadership



Model of Adaptive Leadership. Adapted from Northouse (2019)

The dimensions of adaptive leadership based on the writings of Northouse (2016) are described as:

2.1.2.1. *Situational Challenges*: Three different situational challenges must be handled by leaders in order to practice effective leadership. There are challenges or problems that are primarily technical in nature, challenges that have both a technical and an adaptive dimension, and challenges that are primarily adaptive in nature. Not all situational challenges are adaptive challenges. While addressing technical challenges is important, adaptive leadership is concerned with helping people address adaptive challenges (Northouse, 2016).

Technical challenges: Technical challenges are those that can be solved using preexisting understanding, past training, and current resources or processes (Ackerman et al., 2018). These challenges require a simple and straight solution for handling the problem and they are changes that align with current beliefs and values (Daly & Chrispeels, 2008). This means that technical challenges are predictable, properly defined and carry programmed solutions. They are problems that can be solved by experts. For technical challenges, people look to the leader for a solution, and they accept the leader's authority to resolve the problem. In such a situation there is no need for adaptive leadership.

Technical and Adaptive challenges: Some challenges have both a technical and an adaptive dimension. In this case, the challenges are clearly defined but do not have distinct straightforward solutions within the existing organizational system (Heifetz, 1994). The responsibility of tackling this type of challenges is shared between the leader and the people. The leader may act as a resource for others and provide support, but the people need to do the work—they need to learn to change and adapt.

Adaptive challenges: Adaptive challenges are those which established responses can no longer remedy the problem, therefore requiring new learning, new mindsets, and new dispositions for people throughout the organization (Ackerman et al., 2018). Adaptive challenges demand moving into an unidentified space by distributing the organizational balance where leaders release the potential of people and the systems to adapt and adjust successfully according to the fluctuating environment (Holcombe & Kezar, 2017). In addition, Adaptive challenges require time and may call for organizational culture improvements that require greater focus and a high level of willingness to work on changes (Rapanta et al., 2021). They are changes that align with current beliefs and values (Daly & Chrispeels, 2008). Unlike technical leadership, adaptive leadership is typically associated with changing values and norms (Daly & Chrispeels, 2008; Nicolaides & McCallum, 2013). Adaptive leadership closes a gap between the current reality and the beliefs that are held within the organization (Daly & Chrispeels, 2008). Hence, these challenges require adaptive leadership.

2.1.2.2. *Leader Behaviors*: The leader behaviors in the model are divided into six leader behaviors, or activities, which play a pivotal role in the process of adaptive leadership. Based on Northouse (2019) these behaviors are general prescriptions for leaders when helping others confront difficult challenges and the inevitable changes that accompany them. While the model of adaptive leadership is composed of many leader behaviors and activities, there is no particular order to the prescribed behaviors. Adaptive leadership incorporates many of these behaviors simultaneously, and interdependently, with some of them more important at the beginning of the process and others at the end. Although there is a general order as to which leader behavior comes first in the adaptive leadership process, many of these behaviors overlap with each other and should be demonstrated by leaders at the same time (Northouse, 2016). Taken together, these leader behaviors suggest a kind of procedure for being an adaptive leader.

i. Get on the Balcony

A prerequisite for the other adaptive leader behaviors, getting on the balcony is a metaphor for stepping out of the fray and finding perspective in the midst of a challenging situation. Being on the balcony enables the leader to see the big picture—what is really happening. Leaders seeking to solve adaptive issues are encouraged to balance action with perspective taking, move from the dance floor to the balcony and reframe the problem into one that generates inquiry and collective problem solving rather than blaming and shaming (Nicolaides & McCallum, 2013). They are concerned with where people are at within the change process. Successful adaptive leaders are able to listen to others and understand the hidden meanings in what is being conveyed (Fowler, 2013). Leaders are able to see the bigger picture of what is happening in order to take a more strategic approach (Campbell-Evans, 2014).

ii. Identify Adaptive challenges

In addition to getting on the balcony and observing the dynamics of the complex situations people face, leaders must analyze and diagnose these challenges. Central to this process is differentiating between technical and adaptive challenges. Failures in leadership often occur because leaders fail to diagnose challenges correctly. The adaptive leadership process suggests that leaders are most effective using adaptive leadership behaviors for adaptive challenges and technical leadership for technical challenges. According to Arthur-Mensah and Zimmerman (2017), leaders need to distinguish between technical and nontechnical problems in order to recognize adaptive challenges. The team's leader must decide how to handle the adaptive

challenge once an issue has been identified (Doyle, 2017). Some managers prefer to concentrate on using tools and procedures to address every organizational problem (Arthur-Mensah & Zimmerman, 2017; Doyle, 2017). Relationship-building, taking ownership of one's actions, and exhibiting inventiveness are non-technical qualities that have a favorable impact on an organization's success (Tabassi et al., 2017). Hence, identifying adaptive challenges means leaders need to focus their attention on problems they cannot solve themselves and that demand collaboration between the leader and followers.

iii. Regulate Distress

A third behavior, or activity, important for adaptive leaders is to regulate distress. To regulate distress the leader must provide an environment where all members may express themselves as agents of change without worrying about criticism or retaliation in order to control anxiety (Doyle, 2017). The relationship between team performance and organizational success is based on the leader and followers' active participation (Aga et al., 2016; Doyle, 2017). The leader must manage the interpersonal dynamics by fostering better social interactions, delineating roles, and resolving any interpersonal conflicts that may arise in order to foster a culture where team members can express themselves (Aga et al., 2016). Doyle (2017) also stated that while posing challenging questions, the team leader must handle potential disagreements and unease. These difficult questions will take the team members out of their comfort zones, and if not managed properly by the leader, the distress level among team members will increase (Tabassi et al., 2017). The model suggests three ways that leaders can maintain productive levels of stress: (a) create a holding environment; (b) provide direction, protection, orientation, conflict management, and productive norms; and (c) regulate personal distress (Northouse, 2016).

Creating a holding environment: refers to establishing an atmosphere in which people can feel safe tackling difficult problems, but not so much so that they can avoid the problem. To regulate distress, leaders must create an environment that all members are able to express themselves as drivers for change without fear of judgment or retribution (Doyle, 2017). A holding environment is a structural, procedural, or virtual space formed by cohesive relationships between people. It can be physical space, a shared language, common history, a deep trust in an institution and its authority, or a clear set of rules and processes that allow groups to function with safety. To create an environment where members can express themselves, the leaders must control the

interpersonal relationships by improving the social relations, clarifying roles, and solving interpersonal problems that the organization may encounter (Aga et al., 2016). Thornberg et al. (2017) described the holding environment as the social construct that influences the behaviors, beliefs, and attitudes of the team members, and encourages team members to work cohesively. The leader is responsible for keeping the members focused by creating a holding environment. Therefore, within the holding environment, adaptive leaders use authority to help people attend to the issues, to act as a reality test regarding information, to orchestrate conflicting perspectives, and to facilitate decision making (Doyle, 2017). Creating a holding environment also allows a leader to regulate the pressures people face when confronting adaptive challenges.

Providing direction, protection, orientation, conflict management, and productive norms: these are specific ways leaders can use their formal and informal authority to help people manage the uncertainty and distress that accompany adaptive work (Heifetz & Laurie, 1997).

- *Providing direction* involves helping to identify the adaptive challenges that others face and then framing these so they can be addressed. In difficult situations it is not uncommon for people to be unclear or confused about their goals. Sometimes the goal is unknown, sometimes it is obscure, and at other times it is entangled with competing goals. By providing direction, the leader helps people feel a sense of clarity, order, and certainty, reducing the stress people feel in uncertain situations (Heifetz & Laurie, 1997).
- *Protection* refers to a leader's responsibility to manage the rate of adaptive change. It includes monitoring whether the change is too much or too fast for people. Furthermore, it requires monitoring external pressures people are experiencing and keeping these within a range they can tolerate (Heifetz & Laurie, 1997).
- *Orientation* is the responsibility a leader has to orient people to new roles and responsibilities that may accompany adaptive change. When a change requires adopting new values and acting in accordance with those values, people may need to adopt entirely new roles within the organization. Orientation is the process of helping people to find their identity within a changing system (Heifetz & Laurie, 1997).
- *Conflict management* refers to the leader's responsibility to handle conflict effectively.

 Conflict is inevitable in groups and organizations during adaptive challenges and presents an opportunity for people to learn and grow. Although conflict can be uncomfortable, it is not

unhealthy, nor is it necessarily bad. The question is not how can people avoid conflict and eliminate change but rather how can people manage conflict and produce positive change? (Heifetz & Laurie, 1997).

• Establishing productive norms is a responsibility of the adaptive leader. Norms are the rules of behavior that are established and shared by group members and are not easily changed. When norms are constructive, they have a positive influence on the progress of the group. However, when norms are unproductive and debilitating, they can impede the group (Heifetz & Laurie, 1997). A leader should pay close attention to norms and challenge those that need to be changed and reinforce those that maximize the group's effectiveness and ability to adapt to change.

Collectively, the five prescribed behaviors above provide a general blueprint for how adaptive leaders can mitigate the frustrations people feel during adaptive change. While not inclusive, they highlight some of the many important ways leaders can help people during the change process.

Regulating personal distress is also a way leaders can maintain a productive level of stress during adaptive change. As we discussed previously, change and growth within an organization do not occur without uncertainty and stress. Because stress is inherent in change, adaptive leaders need to withstand the pressures from those who want to avoid change and keep things the same. While moderate amounts of tension are normal and necessary during change, too much or too little tension is unproductive. Leaders need to keep people focused on the hard work they need to do and the tension that accompanies that, while at the same time being sensitive to the very real frustrations and pain that people feel when doing adaptive work.

As stated by Northouse (2016), to help others through the adaptive process, adaptive leaders need to make sure they have their own action together. They must be strong and steady because people look to and depend on them for support in situations that can be very trying and painful. This implies that adaptive leaders need to be role models and exhibit confidence and the emotional capacity to handle conflict. In addition, adaptive leaders need to be willing to experience the frustrations and pain that people feel during change but not to the extent that they lose their own sense of who they are as leaders (Northouse, 2016).

iv. Maintain Disciplined Attention

This means that the leader needs to encourage people to focus on the tough work they need to do. Leaders demonstrate maintaining disciplined attention when they ensure that the team members concentrate on the task at hand and, provide some level of structure to the working and operation of the organization (Lee et al., 2017). The success of the organization depends on the leader making sure that followers concentrate on the current work. According to Aga et al. (2016), the leader must make sure the team members are focused on the organization's goals. Due to varying social origins, followers may have various goals (Hoch & Dulebohn, 2017). For instance, a follower's moral code or societal values may be threatened by the organization, which could have a negative impact on the development of the organization. These are real concerns that call for leadership sensitivity (Lee et al., 2017). In certain situations, that follower's actions may affect how fully the other followers participate. Social inequalities may force executives who improperly manage these issues to act contrary to the declared organizational goals (Hoch & Dulebohn, 2017). The leader is in charge of maintaining the group's focus through fostering positive interpersonal relationships. According to Thornberg et al. (2017), the relational environment is a social construct that affects the team members' behaviors, beliefs, and attitudes and promotes teamwork. Therefore, organizational success can be ensured by the leader's intense concentration and the followers' favorable relationship dynamics.

v. Give the Work Back to the people

Giving work back to the people is a reference to the requirement that the leader do so (Arthur-Mensah & Zimmerman, 2017; Doyle, 2017). Employee empowerment, according to Arthur-Mensah and Zimmerman (2017), will enable workers to come up with original and imaginative solutions to problems. Effective leadership techniques and empowered employees, according to Ceri-Booms et al. (2017) and Hoch and Dulebohn (2017), will result in a higher degree of effort and out-of-reach goals for organizational objectives. Hoch and Dulebohn (2017) suggested that effective leadership tactics involve motivating, increasing followers' degrees of autonomy, and encouraging the development of their skills and talents. This type of empowerment is centered on encouraging the building of intellectual capacity, sharing the level

of autonomy and responsibility, and heightening the awareness of what they can do (Ceri-Booms et al., 2017). This means leaders need to be aware of and monitor the impact they have on others.

vi. Protect Leadership Voices from Below

This action serves to preserve the voices of the organization's members who might feel marginalized during the process and refrain from expressing significant opinions or making suggestions that would facilitate the change process (Epitropaki et al., 2017). A paradigm change in leadership has been identified, moving from role-based to interpersonal influences, according to Cullen-Lester et al. (2017) and Epitropaki et al. (2017). This change in leadership style might be described as allowing leaders to encourage followers to express their opinions (Epitropaki et al., 2017). This type of leadership style, according to Cullen-Lester et al. (2017), is relational and multilevel, and extends beyond a person's knowledge and skills to include social connections and group networking to enhance collaborative performance. The relational and multilevel approach encourages interaction between the leader and team members and fosters freedom of expression. Therefore, to give voice to others requires that a leader relinquish some control, giving other individual members more control. This is why it is a challenging process.

2.1.2.3. Adaptive Work: Adaptive leadership requires all individuals involved in the change process to see themselves as stakeholders, thereby compelling them to work towards positive change, also known as adaptive work (Heifetz & Laurie, 1997). As described by Northouse (2016), adaptive work is the process toward which adaptive leaders direct their work. Adaptive work develops from the communication process that occurs between the leader and followers but is primarily the work of followers. Adaptive work requires leaders to define a challenge that is often unclear and then support the system as they work within a zone of tension to solve the challenge (Campbell-Evans, 2014). Leaders need to be able to distinguish between technical and adaptive challenges knowing that often they present themselves together rather than separately (Drago-Severson et al., 2012). Good leaders and great leaders can be distinguished by their capacity to make this judgment and then appropriately respond to the opportunity and challenge (Raney, 2014). Organizations' capacity for adaptation is what allows them to adjust and endure. This ability has been enhanced by intentional leadership (Eicholz, 2014). Through adaptive leadership, which is described as the activity of mobilizing adaptive work; leaders not only share responsibility but also facilitate management of change through independent judgment,

development of leadership capacities and institutionalization of reflection, and continual learning (Heifetz et al., 2009).

In adaptive leadership, leaders do not use their authority to control others; rather, leaders interact with people to help them do adaptive work. The term followers is used in the model simply to distinguish the specific individuals who are doing adaptive work. The prime focus of adaptive leadership process is to engage followers in doing adaptive work. This unique emphasis, on mobilizing followers to confront adaptive challenges, makes adaptive leadership very different from other traditional leadership approaches that focus on leader traits, skills, behaviors, and authenticity (Heifetz et al., 2009). It centers on the adaptations required of people in response to changing environments and how leaders can support them during these changes. External change and pressure are the impetus toward organizational adaptation (Seah et al., 2014; Uhl-Bien & Marion, 2009). Seah et al. (2014) believed that the outcomes of organizational adaptation are efficiency, learning orientation, and increased output. Organizations that foster adaptive cultures often gain competitive advantage. Adaptive leaders contribute to the success of organizational outcomes by leading during organizational change and encouraging members to discover creative and innovative solutions (Arthur-Mensah & Zimmerman, 2017). Thus, developing leaders to exercise adaptability (De Rue, 2011; Glover et al., 2002; Randall & Coakley, 2007) and use of the most efficient and effective development techniques should be of interest to organizations (Avolio, 2016; Day et al., 2014). Accordingly, adaptive work involves components of both leadership and creativity (Burke et al., 2006). Hence, adaptive leadership theory offers a framework for understanding this intersection of leadership and creativity through the adaptive function (Uhl-Bien & Marion, 2009).

2.2. Organizational Learning

It is known that the present world is confronted by many unexpected challenges. It is also clear that these new challenges and problems won't be able to be solved using the same structures, mindsets, or knowledge that had worked for organizations in the past. The challenges have created ever more change, chaos, and complexity which have transformed the lives of people and the world of work. Organizations are forced to continually adapt and change if they seek to survive in this new environment. In this ever-changing climate, the organizations that succeed are those who can continuously transform and adapt to the new circumstances, i.e., those

who can adopt characteristics of a LO; this is equally true for higher education (López et al., 2006; Senge, 1990). Today, there are a growing number of academicians who are becoming increasingly aware that the knowledge, the strategies, the leadership, and the technology of yesterday will not lead to success in tomorrow's world. It has become obvious that organizations have to increase their capacity to learn if they are to function successfully in an environment that includes rapid technological changes, massive societal change, and increasing competition (Lloréns et al., 2005).

Accordingly, to obtain and sustain competitive advantage in this new world, organizations realize that they have to transform the way they work and, even more importantly, transform the way they learn. They will need to develop a higher form of learning capability, to be able to learn better and faster from their successes and failures from within and from outside their organizations (Yeo, 2005). They would need to continuously transform themselves into organizations where everyone, groups and individuals, would considerably increase their adaptive and productive capabilities. Yeo (2005) further stated that, only if organizations increased their capacity to learn they would be able to avoid the fate of failure. As stated by Senge (1990), for any organization to perform, to deal with the multiplicity of ongoing problems and issues, to adapt to environmental changes, to survive and prosper, it must learn. Therefore, learning is at the heart of company management and has become the essence of productive activity, being a need more than a choice in today's conditions (Lloréns et al., 2005).

Additionally, today's organizational and social environments are creating new uncertainties besides the existing ones, and greater the uncertainties organizations face, greater the need for learning within organizations in all levels in order to cope with diverse arena of uncertainty. This implies that, in any organization, learning should be engrained as part of an organizational philosophy and core organizational value and culture. It is only by so doing that organizations will be able to face the current and tomorrow's challenges when it actually comes. The transformation of enterprises and organizations into LO's has been proposed as a key strategy for improving their effectiveness and efficiency. While the principle of LO has been applied extensively in the corporate environment, it is a relatively new concept in higher education (Pantouvakis & Mpogiatzidis, 2013).

2.2.1. The concept of Organizational Learning and Learning Organization

21st century competitive business world, building new competencies and capabilities has become more important, putting learning at the center of operations (Rijal, 2016). According to Rijal (2016), this has resulted in the development of new organizational forms known as LO, which are more adaptive and flexible and harness individual learning to improve organizational performance and boost OL (Rijal, 2016). In today's dynamic world, management research has widely recommended OL as a source of competitive advantage. The term OL is frequently mistaken with the term LO.

Various scholars have summarized their findings on OL and created concepts regarding their applications in organizations. As Harrison (2000) points out, it is assumed that the terms LO and OL are synonymous but they are not. According to Harrison, (2000) OL is about how people learn in organizations and the LO concept is about what organizations should do to facilitate the learning of their members. Yeo (2005) summarized research on OL for the period 1990-2004 and concluded that all definitions of OL have a common theme in the sense that OL is seen as a driver of competitive advantage which can be translated to performance. Yeo (2005) defines a LO as a characteristic type of organization (what) while OL refers to the process of learning (how). Jensen and Rasmussen (2004) provide a definition by referring to OL which takes place at a macro scale as the LO in comparison to persons changing from one knowledge state to another on a micro-level. In broader perspective, he states that OL in essence deals with the process of change and transformation. This change and transformation have to do with the expansions of people's values and beliefs about what is possible and how things work (Jensen & Rasmussen, 2004).

There also exists a distinction between the two areas by means of what they provide for organizations. A work by Ortenblad (2001) on the differences between the two concepts provides a similar perspective, adding to the debate the basic distinction as the character of content. Thus, Ortenblad (2001) posits that the character of content in OL focuses on processes, whereas LO is a form of organization. Besides the different descriptions, Yeo (2005) is credited in helping to clarify the difference in the two concepts by stating "OL is used to refer to the process of learning while the idea of LO refers to a type of organization rather than a process" (p. 369). Therefore, in the current environment where organizations and work environments are changing

more rapidly than ever before, organizations must have the ability to adapt to the change and cope with new challenges. Hence, with the emphasis on establishing the competitive learning culture, OL may well be a remedy that should be pursued by leaders to enhance their organizational capacity and competitiveness that are required to survive.

2.2.2. Models/Dimensions of Organizational Learning

According to Kofman and Senge (1993), the LO is viewed as a place where vision, patience, and courage are required and each individual in the organization is accepted as a legitimate being. Garvin (1993) described LO as an organization whose skill has developed in acquiring and transferring knowledge. Pedler et al. (1991) suggested the LO concept and defined it as "an organization which facilitates the learning of all of its members and continuously transforms itself" (p. 2). Within this definition, learning and working are synonymous in the LO. Marsick and Watkins (2003) suggested that OL concepts have influenced the conceptual development of LO, which these authors defined as a living organism that uses learning to improve organizational performance. Based on these perspectives, organizational researchers have focused their work on conceptualization of the LO, identifying characteristics of such institutions, their capacity to learn, adapt, and change. Thus, a number of approaches to defining the construct have emerged. In order to define the construct of the LO, Marsick and Watkins (2003) provide an integrative concept of the LO based on several approaches, including systems thinking -- organizational generativity (Senge, 1990), learning perspective -- comprehensive aspects of learning (Pedler et al., 1991), and strategic perspective -- managerial practices (Garvin, 1993; Goh, 1998). To attain these objectives and define the constructs, a number of models or approaches have been developed. The models can be grouped into the following four perspectives.

2.2.2.1. Systems Thinking Perspective: Senge (1990) defines the LO as an organization that possesses not only an adaptive capacity but also "generativity"—that is, the ability to create alternative futures. Senge (1990) identifies the five disciplines that a LO should possess: team learning—emphasis on the learning activities of the group rather than on the development of team process; shared vision—ability to unearth shared "pictures of the future" that foster genuine commitment and enrollment rather than compliance; mental models—deeply held internal

images of how the world works; personal mastery—continually clarifying and deepening personal vision, focusing energies, developing patience, and seeing reality objectively; and system thinking—ability to see interrelationships rather than linear cause-effect chains. By positing the five disciplines, Senge (1990) essentially links individual learning to OL stating that an organization only learns through the learning of its individual members. According to the basic premise of Senge's (1990) theory, in any LO its main actors (i.e., its senior managers) must master five disciplines or competencies. The competency of "personal mastery," Senge's (1990) first key competency, relates to an individual's ability to manage his or her own learning - that is, to be able to continually improve his or her ability to achieve new objectives. The second competency, "insight into mental models," refers to the ability to question mental images or representations (e.g., prejudices or stereotypes) that individuals make of themselves and the world around them. When mental models are developed and learnt throughout the organization, one of the outcomes is a higher level of knowledge sharing and knowledge creation (Senge, 2006; Watkins & Marsick, 1993). Such is the case, for example, when organizational members acquire strong team-work skills and behaviors, mutual help and knowledge sharing improves (Siemsen et al., 2007). The third competency concerns an individual's ability to develop a common vision for the group so as to help others to act on the basis of the organization's goals and values. "Shared vision" helps instill a common goal, create an overarching objective, and engender a new way of acting by maintaining an active learning process. Building shared vision is important for bringing people together and to foster a commitment to a shared future because shared vision provides members of an organization with a direction by which they can navigate (Griego et al., 2000), and a focus for learning for its employees (Senge, 1990). The fourth competency, "team learning" tends to increase the likelihood that learning will be diffused throughout the entire organization via both individuals and groups. Considerable research suggests that organizational benefits of team learning include increased workplace productivity, improvements to service quality, a reduced management structure, low level of absenteeism, and reduced employee turnover (Park et al., 2005). Further, team learning positively relates to team performance (Chan et al., 2003). In addition, appropriate working/learning environment would moderate the association between the discipline of team learning and its outcomes. People in the organization will aspire to conduct a good job if they are provided with the right support (Jackson, 2003). Such an environment generates time and resources for people to learn at work.

It is where people value the learning among team members (Marsick and Watkins, 2003). Lastly, the fifth competency, "systems thinking," refers to an individual's ability to see phenomena in the context of overall systems, to study cause-and-effect relationships rather than individual events, and to observe processes of change. Systems thinking produces major impacts on organizational learning and change (Fullan, 2004; Senge, 2000). That can be the reason why Kumar et al. (2005) emphasize that an individual must utilize systems thinking to become a decision-maker. This implies that "Systems thinking" conditions underpin the other four. In summary, although individual learning of these five competencies does not guarantee OL, without individual learning, OL is impossible. In conformity with Senge's view, the extent to which each of these five competencies is evident in an organization indicates the organization's ability to qualify as a LO and constitutes a measure of its potential for OL (Senge, 1990).

2.2.2.2. Learning Perspective: Pedler et al. (1991) defines the LO as "an organization that facilitates the learning of all of its members and continuously transforms itself in order to meet its strategic goals" (p. 1). Pedler et al. (1991) identified eleven areas through which this occurs: a learning approach to strategy, participative policymaking, informing, formative accounting and control, internal exchange, reward flexibility, enabling structures, boundary workers as environmental scanners, intercompany learning, learning climate, and self-development for everyone. This learning perspective provides comprehensive aspects of learning at all organizational levels. The traditional elements of management are incorporated to support learning. Although this approach has the merit of comprehensiveness, it fails to provide a parsimonious framework of the construct (Garvin, 1993). Furthermore, Garvin (1993) stated that the eleven identified areas are conceptually overlapping, and thus the non-distinctive components of the concept make it less useful in guiding instrument development. The learning perspective authors, like Senge, have an instrument used primarily as a consultative aid rather than a research tool (Garvin, 1993).

2.2.2.3. Strategic Perspective: According to the strategic approach to the LO, a LO requires an understanding of the strategic internal drivers necessary for building learning capability (Garvin, 1993). Garvin (1993) defines a LO as "an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights" (p. 80). Having synthesized the description of management practices and policies

related to this construct in the literature, Goh (1998) contends that LOs have five core strategic building blocks: clarity and support for mission and vision, shared leadership and involvement, a culture that encourages experimentation, the ability to transfer knowledge across organizational boundaries, and teamwork and cooperation. Further, Goh (1998) described that the strategic building blocks require two main supporting foundations. The first is an effective organization design that is aligned with and supports these building blocks. The other consists of the appropriate employee skills and competencies needed for the tasks and roles described in these strategic building blocks. According to Goh (1998) the strategic perspective of the LO posits that certain managerial practices or strategic building blocks are prerequisites for becoming a LO. These strategic building blocks can serve as practical guidelines for operational and managerial practice, and along with the two supporting foundations they can also provide advice for management and organizational consultants. However, as commented by Marsick and Watkins (1999), the strategic perspective emphasizes the macro level and thus neglects some of the commonly identified elements of a LO, such as individual or continuous learning. Furthermore, the proposed five strategic building blocks are not conceptually parallel because some of them refer to the organization's ability (that is, transfer of knowledge) whereas the others reflect organizational culture, that is, experimentation, teamwork, and cooperation (Marsick & Watkins, 1999).

2.2.2.4. Integrative Perspective: Watkins and Marsick (1993, 1996) provide an integrative model of a LO. Marsick and Watkins (1999) originally defined the LO as one that is characterized by continuous learning for continuous improvement, and by the capacity to transform itself. Their proposed LO model integrates two main organizational components: people and structure. These two constituents are also viewed as interactive components of organizational change and development. The first component represents people who make an organization, and the second component represents the structures and culture created by the social institution of the organization. Theories of learning organization have insisted that working with people at the individual and group levels is the first matter that an organization needs to do (Marsick & Watkins, 2003). People also need to be equipped to take learning initiatives. In other words, first individuals learn as individuals, but in organizational change they align together, they learn as teams, clusters, networks, and larger units. It was also considered

that the structural-level learning activity could serve as a clarifying function by filtering and integrating individual and group learning into the organization's mission or ultimate performance outcomes (Marsick & Watkins, 2003). Although people start modifying their own as a consequence of their learning, organization must generate supportive structures to contribute and gain learning in order to progress toward their mission.

Watkins and Marsick (1993, 1996) identified seven distinct but interrelated dimensions of a LO at individual, team, and organizational levels (see Table 1 below). The first dimension, continuous learning, represents an organization's effort to create continuous learning opportunities for all of its members. The second dimension, inquiry and dialogue, refers to an organization's effort in creating a culture of questioning, feedback, and experimentation. The third dimension, team learning, reflects the spirit of collaboration and the collaborative skills that undergird the effective use of teams. The fourth dimension, empowerment, signifies an organization's process to create and share a collective vision and get feedback from its members about the gap between the current status and the new vision. The fifth dimension, embedded system, indicates efforts to establish systems to capture and share learning. The sixth dimension, system connection, reflects global thinking and actions to connect the organization to its internal and external environment. The seventh dimension, strategic leadership, shows the extent to which leaders think strategically about how to use learning to create change and to move the organization in new directions or new markets (Watkins & Marsick, 1996).

Table 1

Dimensions of Organizational Learning

	Component	Definition
1	Create continuous learning	Learning is designed into work so that people learn on the job
	opportunities	Opportunities are provided for ongoing education and growth
2	Promote inquiry and	people gain productive reasoning skills to express their views,
	dialogue	and the capacity to listen and inquire into the views of others;
		the culture supports questioning, feedback and
		experimentation
3	Encourage collaboration and	Work is designed to use groups to access different modes of
	team learning	thinking;
		groups are expected to learn together and work together
		collaboration is valued by the culture and rewarded
4	Establish system to capture	Both high and low technology systems to share learning are
	and share Learning	created and integrated with work, access is provided and systems
		are maintained
5	Empower people towards a	People are involved in setting, owning and implementing a joint
	collective vision	vision,
		responsibility is distributed close to decision making to motivate
		people to learn that for which they are accountable
6	Connect the organization to	People are helped to see the impact of their work on the entire
	its environment	enterprise,
		People scan environment and use information to adjust work
		practices; organization is linked to community
7	Strategic leadership to	Leaders model, champion and support learning; leadership uses
	support learning	learning strategically for organizational results

Adapted from Marsick and Watkins (2003)

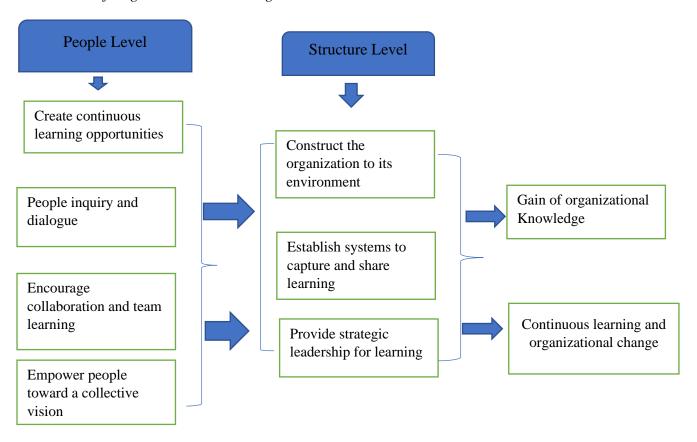
As discussed above, there are a multitude of definitions of what constitutes a LO, but there are also a few major convergent factors among them. Continuous learning and improvement have been put forward as important themes, and Garvin (1993) propose the importance of creation, acquisition, and transfer of knowledge. Senge (1990) and Molainen

(2005) mention individual, team, and OL anchored in concrete values, visions, and goals, as well as change and transformation. Armstrong and Foley (2003) refer, in turn, to the appropriate processes and cultural and structural facets that support learning and development. In line with these themes, there is a growing understanding that the dimensions of a LO encompass some basic elements of leadership, strategy, participative policymaking, continuous learning, dialogue and inquiry, team learning, empowerment, and facilitating processes and structures (Holt et al., 2000). Theories of LO have insisted that working with people at the individual and group levels is the first matter that an organization needs to do (Örtenblad, 2002). People also need to be equipped to take learning initiatives. In other words, first individuals learn as individuals, but in organizational change they align together, they learn as teams, clusters, networks, and larger units. It was also considered that the structural-level learning activity could serve as a clarifying function by filtering and integrating individual and group learning into the organization's mission or ultimate performance outcomes (Örtenblad, 2002). Although people start developing their knowledge as a consequence of their learning, organizations must generate supportive structures to contribute and gain learning in order to progress toward their mission.

In summary, although there are different perspectives to a LO, some common characteristics can be identified. First, all perspectives to the construct of a LO assume that organizations are organic entities like individuals and have the capacity to learn. More and more organizational researchers realize that an organization's learning capability will be the only sustainable competitive advantage in the future. Second, there is a difference between two related yet distinct constructs—the LO and OL. The construct of the LO normally refers to organizations that have displayed these continuous learning and adaptive characteristics, or have worked to instill them. OL, in contrast, denotes collective learning experiences used to acquire knowledge and develop skills. Third, the characteristics of a LO should be reflected at different organizational levels—generally, individual, team or group, and structural or system levels. In general, the above models have been used by different scholars to measure the level of LOs. Compared to others, the one developed recently which perceives the LO as one with the capacity to integrate people and structures in order to move toward continuous learning and change is the integrative approach (see figure 3 below). Therefore, the approach developed by Marsick and

Watkins (2003) is used to identify whether the HEIs in this study are LOs or not and the existence of OL.

Figure 3 *Dimensions of Organizational Learning and Outcomes*



Theoretical framework of OL culture adapted from Marsick and Watkins, (2003)

The framework has several distinctive characteristics (Marsick &Watkins, 2003); First, it has a clear and inclusive definition of the construct of the LO. It defines the construct from an organizational culture perspective and thus provides adequate measurement domains for scale construction. Second, it includes dimensions of a LO at all levels. Tsang (1997) reviewed several assessment tools of LO and suggested that the framework created by Watkins and Marsick (1996) was among the few that covered all learning levels (that is, individual, team, and organizational) and system areas. Third, this model not only identifies main dimensions of the LO in the literature but also integrates them in a theoretical framework by specifying their relationships. Such a theoretical framework not only provides useful guidelines for instrument development and validation but also suggests further organizational studies. Last, it defines the

proposed seven dimensions of a LO from the perspective of action imperatives and thus has practical implications. This action perspective of the LO both provides a consistent cultural perspective on the construct and suggests several observable actions that can be taken to build a LO. In the process of instrument development, it is essential to construct a set of observable variables to form measures for latent variables or theoretical constructs. In their recent study, Marsick and Watkins (2003) define LO as one that is characterized by continuous learning for continuous improvement, and by the capacity to transform itself'. In addition, they provide a four-level LO model, where learning is mainly in and within these four levels - individuals, teams, organization, and global. Their model 'LO action imperatives' proposes that links within these four levels lead to a continuous learning and transformation in the organization.

The model of Marsick and Watkins (2003) is the complete model of learning since most learning approaches didn't concern to all elements of individual's learning process, team-based learning, the influence of the organization and their relationship with the environment simultaneously. The model integrates individual and team learning with that of the organization, and illustrates the relationship of each of these components with each other and with the environment. As stated by Marsick and Watkins (2003), no OL can take place without individual learning and learning from the developments in the environment. The organization has the power to encourage or discourage individual learning, and to learn from or to ignore developments in its environment (Marsick & Watkins, 2003). Similarly, the individual and team may feel empowered or discouraged to learn based on the signals received from the organization. The individual and team may also choose to learn from, or ignore developments in the environment. In relation to the processes of learning at each level Marsick and Watkins (2003), describes the level of learning at the individual, team, group and organizational level.

The individual level: Learning at the individual level entails getting a person cumulative or new ideas and information belonging to his environment, understanding them, interpreting and experimenting them and then, adjusting his behavior in terms of obtained results using conceptual and cognitive processes. According to Su et al. (2010) specialization and distribution of knowledge among organizational members create barriers for them to effectively identify, retrieve and transfer knowledge when in need. The organization has a few options for dealing with this individual. One, it can choose to support him/her and put processes in place to capture

and distribute this individual's knowledge and experience inside the Individual/Team Organization. Two, it disregards the individual's efforts, fails to support his or her learning initiative, and/or fails to make use of the individual's talents, knowledge, and expertise.

The group level: When individuals share and interact with other individuals what they have learnt at the individual level, it becomes group level learning. Here, individuals share their learning with other individuals, interprets together, and obtain a group assumption. In addition, the significance of learning groups, informal relations and professional communities is vivid. The strength of these informal communities of practice is self-perpetuating. since they produce knowledge, they support and renew themselves. These relations, much more than the formal management structures look essential to how people learn about new concepts, instruct one another in trying them out and share experimental tips and lessons all the time. However, as stated by Pavitt, (1991), the individuals and teams cannot function without any relations; neither can they function in an environment that prevents creativity and learning. The organization must offer the infrastructure and resources that would foster the knowledge worker and the team.

Organizational level: When groups come together to share their knowledge they have acquired through the process of communication, these learning are now transformed into an acceptable instruction for all organizational members and will be made assessable to everyone who needs them (Amir-Kabiri, 2006). There are three main factors that trigger the study of OL using the organization as a unit of analysis. First, is the organizational knowledge memory, which defines the major processes it uses to acquire knowledge (Amir-Kabiri, 2006). Secondly, in the aspect of technological development, emphasis should be placed on core competences of individuals and groups (Pavitt, 1991). Finally, there should be routines which operationalize the organization memories and knowledge bases (Pavitt, 1991).

In the studies of Maria and Rebecca (2002) the environment is added as an additional level of learning. The environment is taken because for a meaningful learning to take place whether at the individual, team or organizational level, there must be an awareness of the developments in the environment. For example, individuals and teams need to be aware of how technological advances affect their lives and what they need to do to keep pace with the change. Likewise, in the area of international collaboration and communication, knowledge is the

leverage (Maria & Rebecca, 2002). Understanding and responding to this environment means collaborating and working with other government agencies, non-governmental organizations, and academics and researchers. It also means forming alliances with institutions in other countries in order to build a stronger, more effective responses to the challenges that the environment possess.

Many organizations have set their sights toward becoming LOs. According to Marquardt et al. (2004), one of the critical success factors of modern organizations, is the commitment to becoming a LO. However, scholars also have struggled with the identification and assessment of the factors that comprise and differentiate LOs from other firms. One of the best known of these efforts is the Dimensions of the Learning Organization Questionnaire (DLOQ), which was developed by Watkins, Yang, and Marsick (1997) and Yang, Watkins, and Marsick (1998, 2003). It is a practical and validated tool for effectively measuring the learning culture as a supportive system of the OL process. Marsick and Watkins (2003) have developed the DLOQ which is a scale that assesses the organizational ability to adapt to change by measuring employees' perceptions. Inherent to the framing of the DLOQ is the multidimensionality (seven dimensions in all) of the central construct, including leadership for learning, system connection, embedded system, continuous learning, dialogue and inquiry, empowerment, and team learning.

Marsick and Watkins (2003) model of an effective LO is considered one that has the ability to unite people and organizational structures in order to contribute continuous learning and encourage organizational changes. Marsick and Watkins (2003) in their theoretical framework of DLOQ integrate both conceptions LO and OL. The model of the LO, which in turn serves as the basis for the DLOQ, grew out of the conception of OL. It is built on the idea that change must occur at every level of learning—from individual to group to organizational to environmental—and that these changes must become new practices and routines that enable and support the ability to use learning to improve performance. DLOQ contains the seven dimensions that characterize OL. In short, it is considered that continuous learning, system connection, and embedded systems are directly tied to the contextual mechanism that results in OL, whereas conversation and inquiry, team learning, empowerment, and strategic leadership are more related to the OL process. Moreover, the DLOQ is designed to measure learning culture in organizations and intends to capture the employee's perception regarding the seven dimensions in order to help

the organization get a clearer picture on where they are versus where they need to be (Marsick & Watkins, 2003). The seven dimensions are of the positive nature and cultural aspects of a supportive OL processes (Marsick & Watkins, 2003). As was found in their studies the DLOQ measures respondents' perceptions of their OL culture and the potential for better understanding of employees' individual reactions to the OL environment, as well as detailed functional practices and outcomes related to the DLOQ framework (Marsick & Watkins, 2003). Thus, it is found that compared to other learning theories and models, Marsick and Watkins' model has a simultaneously consideration to both LO and OL. Therefore, in this research study the significance of Marsick and Watkins (2003) model heightened by the results have been perceived as appropriate in the current context of HEIs.

2.3. Organizational Effectiveness

OE has been one of the most extensively researched issues since the early development of organizational theory (Rojas, 2000). Despite some consensus, there is still significant lack of agreement on the definition and operationalization of this concept (Cameron, 1986). Some of commonly agreed definitions state OE as organization's ability to access and optimal utilization of resources and consequently achieve its aims (Yukl, 2008). According to Yukl (2008) an organization that meets its core business strategies, goals and objectives is effective. OE therefore, points towards effective, prudent and strategic use of all the organizational resources, which include human, financial and technological resources for creating competitive advantage (Daft, 2010). Highly effective organizations exhibit strengths across the leadership, decision making and structure, people, work processes and systems, and culture. Yukl (2008) asserts that an organization's effectiveness is its capability to meet its set vision and mission given the resources in its possession. Cameron (1986) explained that OE will occur with the interplay of seven basic forces; direction, efficiency, proficiency, innovation, concentration, cooperation/culture and competition/politics is managed effectively. Oke et al. (2009) described that OE captures organizational performance plus the myriad internal performance outcomes normally associated with more efficient or effective operations and other external measures that relate to considerations that are broader than those simply associated with economic valuation. Cameron (1978) pointed out that OE is the proficiency of the organization at having access to the essential resources. However, McCann (2004) noted it as the criterion of the organization's

successful fulfillment of their purposes through core strategies. From the definition of OE mentioned above, it can be concluded that OE is the concept of how effective an organization is in achieving its objectives, goals or outcomes the organization intends to produce.

In line with the above definitions, OE can be conceptually defined as: the extent to which an organization as a social system, given certain resources and means, fulfills its objectives without weakening its means and resources and without placing undue strain upon its members. This conception of effectiveness considers the following general criteria: *organizational productivity*, *organizational flexibility* in the form of successful adjustment to internal organizational changes and successful adaptation to externally induced change; and *absence of intra organizational strain*, or tension and conflict between' organizational subgroups. These three criteria relate to the means end dimension of organizations and potentially apply to nearly all organizations (Sullivan & Wilds, 2001).

According to Psacharopoulos and Loxley (1985) effectiveness of and educational organization is commonly expressed in terms of internal and external effectiveness. Internal Effectiveness refers to when outputs are measured in purely educational values such as test scores, dropout rates, policy deliberations, etc.... are generally restricted to alternative uses of resources within the educational sector (Psacharopoulos & Loxley, 1985). The authors added that, the inputs of education include both material and non-material resources, with the latter term used to encompass pedagogical practices and the organizational structure of schools and school systems, as well as such items as teacher time and ability. External effectiveness has to do with the relationship between non-monetary inputs and monetary outputs. In education, this could refer to the degree to which certain pedagogical practices or school tracks affect student post-graduate salaries, other things being equal. Studies contrasting the earnings of technicalvocational track graduates with the earnings of students graduating from academic tracks are examples (Psacharopoulos & Loxley, 1985). The authors also stated that, by measuring outputs in monetary values, it is possible to compare educational programs directly to other potential uses of society's resources. However, by itself, this type of analysis does not provide much policy guidance because the resources required to achieve the gain are not specified. Such analyses are usually conducted as a first step to a "cost-benefit' analysis.

2.3.1. Approaches to Organizational Effectiveness

The debates and lack of agreement on an appropriate definition or conceptual status of OE between the advocates of diverse methods of assessing OE has resulted in developing several approaches. In the literature, there is no one single model of OE to fit all organizations. According to Balduck and Buelens (2008) the issue of effectiveness in organizations revolves around: the system resource approach, the goal approach, the strategic constituency approach and the internal process approach. Sullivan and Wilds (2001) based on the works of different authors in addition to the above most popular and common approaches of evaluating OE included the competing values approach. It should be acknowledged that each approach is independent and that there are limitations with all approaches described. But these approaches are effective and efficient which are contingent upon the type of situation to arise.

2.3.1.1. Goal-Attainment Approach: The goal-attainment approach to effectiveness has been the most widely discussed approach in the evaluation of OE (Molnar & Rogers, 1976). Its focus is on the output to figure out the essential operating objectives and finally product quality (Schermerhorn et al., 2004). This approach assumes that organizations are deliberate, rational, goal-seeking entities and are created to achieve one or more specified goals. This approach views effectiveness in terms of its internal organizational objectives and performance. Consequently, an organization's effectiveness is appraised in terms of the accomplishment of ends rather than means (Perrow, 1970). Some researchers insist that goals are indispensable to the understanding of organizations; while others question whether goals perform any function other than to justify past actions. Scott (1987) tentatively defines goals as conceptions of desired ends- conditions that participants attempt to effect through their performance of task activities.

There are some basic assumptions for the goal approach. One of them is that there should be a general agreement on the specific goals and the people involved should feel committed to fulfilling them. The next assumption is that the number of goals is limited and achieving them requires certain indispensable resources (Robbins, 2003). As described by Altschuld and Zheng (1995), the weakened significance of the goal-based approach for the evaluation of the effectiveness of research organizations and academic establishments is depicted in the accurate

and clear measurement of the results. However, it is not usually applicable for the educational research organizations specifically in conditions where they are responsible to the goals and there must be justifications for their large-scale social functions (Altschuld & Zheng, 1995). Moreover, any research possesses an exploratory nature and for the job of inquiry, freedom is essential. These are the facts which must not be restricted by narrow goals. In this case, the goal-oriented approach will be only partly suitable. This indicates that the approach has several limitations. What an organization states as its official goals do not always reflect the organizations actual goals (Kahn, 1977). Hence, an organizations official goals are generally influenced by its standards of social desirability. Kahn (1977) suggest that goals are dynamic, therefore they are likely to change over time, primarily because of the political make-up of an organization.

2.3.1.2. Systems Resource Approach: The systems resource approach to effectiveness views the organization as an open system. Whereby the organization acquires inputs, engages in transformation processes, and generates outputs. It has been argued that defining the effectiveness of an organization solely in terms of the goals achieved is only a partial measure of effectiveness (Molnar & Rogers, 1976). It explains the effectiveness from the point of view of the ability to obtain necessary resources from the environments outside the organization (Schermerhorn et al., 2004). The application of system resource can be effective if a vivid relation exists between the resources which an organization receives and the goods or services it produces (Cameron, 1981). This approach invites managers to consider the organization not only as a whole but as a part of a larger group as well. The dominating attitude is that any part of the activities of an organization has an effect on all other parts (Mullins, 2008).

A systems approach to OE assumes that the organization is composed of interrelated subsystems (Schermerhorn et al., 2004). If any of these sub-systems performs inadequately, it will affect the performance of the whole system. Consequently, effective organizations are those that receive greater resource inputs from their environment. The organizations survival is dependent upon having good relations with its constituencies, as they have the power to disrupt the operation of the organization. For the organization to survive it is necessary that it acquires a steady flow of resources from its environment as they are consumed (Schermerhorn et al., 2004). Failure to acquire these resources may result in the organization tending toward a state of

maximum entropy. The systems advocates do not negate the importance of specific goals as a determinant of OE (Yutchman & Seashore, 1967). Rather, they question the validity of the goals selected and the measures used for assessing the progress toward these goals.

The systems resource approach to OE does not ignore end goals; but views them as one element of a set of complex criteria, that will increase the long-term survival of the organization (Yutchman & Seashore, 1967). In essence, the systems approach focuses not so much on specific ends, but on the means needed for achieving these ends. Yutchman and Seashore (1967) suggest that there are five advantages of the system resource approach: (a) the organization is the frame of reference; (b) relations between organizations are a component of its definition; (c) the general framework can be used in different types of organizations; (d) variability of measurement techniques in comparative evaluation is allowed; and (e) guidelines for selecting empirical measures of effectiveness are provided. The limitations of this approach relate to its measurement of means. Robbins (1990) suggests that the critics of systems resource approach, suggest that its fundamental limitation is that it focuses on the means necessary to achieve effectiveness rather than OE itself.

2.3.1.3. The Process Approach: This approach pays attention to the transformation process and is dedicated to seeing to what extent the resources are officially used to give services or produce goods (Schermerhorn et al., 2004). By effectiveness (Schermerhorn et al., 2004) it is meant that the organization is internally healthy and efficient and the internal processes and procedures in that place are quite well-oiled. In an effective organization, there is no trace of stress and strain. The members are completely part of the system and the system itself works smoothly. The relationship between the members is based on trust, honesty, and good will. Finally, the flow of information is on a horizontal and vertical basis (Cameron, 1981).

According to this model, organizations that can offer a harmonious and efficient internal environment are viewed as effective operations. However, the shortcomings of this model lie not only in the one-sided view of effectiveness (as important aspects such as resources, outputs and satisfaction of clienteles or participants are ignored), but also in identifying the valued internal processes and in developing methods to assess them. Factors such as trust, integrated systems,

and smooth functioning are viewed as more precise measures of OE compared to, for example, the goal attainment approach (Cameron, 1981).

The process model emphasizes the internal logic and consistency among the throughput processes of the organization since they convert an organization's inputs into desired outputs (Pfeffer, 1977; Chelladurai, 1987). The basic hypothesis of this approach is that there is a clear linkage between the internal processes (such as decision making and staffing) and desired outputs. Notwithstanding the above concerns, another problem that is common to the goal attainment, systems resource, and internal process model of effectiveness is their failure to consider the political nature of organizations. Organizations, such as HEIs, are political entities, whereby multiple constituencies (volunteers, coaches, paid administrative staff, state representatives, etc.) function together to realize organizational goals and seek satisfaction for their needs or expectations. In these terms the multiple constituency models can provide a more representative picture of the effectiveness of such organizations. This is because in reality strategic constituent groups determine the way organizations are functioning and what is to be perceived as effective or ineffective (Chelladurai, 1987).

Furthermore, Chelladurai (1987) presented the input-throughput-output cycle which was based on an open system view of organizations. This framework integrated several models of effectiveness: the goal, system resources and process model which their focus was respectively on the output, input and throughput sectors of an organization (Chelladurai, 1987). Connolly et al. (1980) argued that the previous models, the goal approach and the systems approach, are inadequate because they only use a single set of evaluative criteria. In general, the trend of this approach in HEIs is to fulfil the objectives by providing timely and sufficient information to the students, and the academicians. The collection of information and communication management is of major importance here (Kleijnen et al., 2009).

2.3.1.4. Strategic Constituencies Approach: Tsui and Milkovich (1987) states that the strategic constituencies approach of OE proposes that an effective organization is one that satisfies the demands of those constituencies (parties, actors, or other institutions - both internal and external to the organization that exert a hold on it) in its environment from whom it requires support for its continued existence. Under this approach, the organization is assumed to

be an association of political arenas, where vested interests compete for control over resources. Consequently, it is assumed that the organization has a number of constituencies, with different degrees of power, each trying to satisfy its demands (Tsui & Milkovich, 1987). The approach seeks to satisfy only those in the environment who can threaten the organization's survival (Robbins, 1990). Therefore, effectiveness is defined in terms of the degree to which the needs and expectations of the strategic constituencies are met by the organization (Robbins, 1990).

The strategic constituency approach deals with the effect of the organization on the main stakeholders and their interests (Schermerhorn et al., 2004). Based on this approach, effectiveness refers to the minimal satisfaction of all of the strategic constituencies of the organization. Strategic constituency involves all the people that are somehow connected to the organization. These people may have different roles such as the users of the services or products of the organization, the resource providers, the facilitators of the organization's output, the main supporters and the dependents of the organization (Cameron, 1981). Moreover, it is assumed that the organization pursues specific goals which are representations of particular interest groups that control the resources necessary for the organization to survive. It is argued by Quinn and Rohrbaugh (1983) that by implementing this approach, the impact that strategic constituents have on the organization's operations may be minimized. The task of separating the strategic constituencies from their environment within which they operate is a difficult and problematic task. As the environment rapidly changes, what was a critical goal today may not be so tomorrow (Cameron & Whetton, 1983). Likewise, Hitt (1988) suggests that different constituents are likely to rate an organization in different ways. Separate constituents may develop vastly different ratings of an organization's effectiveness. These constituents may use different criteria or weight the same criteria differently (Hitt, 1988). Although, to overcome this difficulty Hitt (1988) suggests that constituents' ratings must be weighted according to their importance to the organization.

Robbins (1990) noted that in academic and research environments in which it is not quite easy to define the cost-benefit relations, it is sensible to make use of the strategic constituency approach. This approach assumes an exhaustive attitude toward effectiveness and evaluates the factors both in the environment and within the organization (Robbins, 1990). In this outlook, the concept of social responsibility is taken into consideration. This notion is of crucial importance

for academic and research institutions which are financially supported by national money. Policy makers continuously pay attention to social responsibility because the resources which are available for research and development have been growing smaller and smaller at all levels of organizations (Cameron, 1981). Therefore, in order to evaluate how answerable an organization is to the society, there raises the question of accountability of research activities and outcomes in relation to public expectations.

2.3.1.5. Competing Values Approach: The competing values approach assumes that there is "no best" criteria that is valued and used in assessing OE (Quinn & Rohrbaugh 1981). This approach assumes that people within the organization have diverging goals and therefore cannot arrive at a consensus on which goals take precedence over others (Robbins, 1990). Typically, this is because goals may be based on personal values, preferences, and interests (Robbins, 1990). The competing values approach assumes that these diverse preferences can be consolidated and organized in to a holistic OE approach. Quinn and Rohrbaugh (1981) identified certain variables that could be coupled together to create three basic sets of competing values. These are Flexibility versus control, People versus the organization and means versus ends. The competing values approach has been used to identify changes in criteria of effectiveness over the organizational life cycle stages (Quinn & Cameron, 1982). This approach uses both means and ends and therefore overcomes the limitations associated with both the goal-attainment and system resource approaches. Moreover, this approach includes the strategic constituencies approach, yet, it does not overcome the limitations associated with it.

In general, each of these approaches provides useful guidelines for systematically assessing the effectiveness of organizations. The goal model, for example, is especially useful when organizational goals are clear, consensual, and measurable. The system resource model is most useful when there is a clear connection between resources received by the organization and what it produces (an organization that simply gathers resources and stores them is not effective). The process model is most appropriate when the internal processes and procedures of an organization are closely associated with what the organization produces, or with its primary task. The strategic constituencies approach is most appropriate when external constituencies have a powerful influence on the organization's operations or when an organization's behavior is largely reactive to strategic

constituency demands. Besides these common approaches, the legitimacy model, and the ineffectiveness model are involved, dealing with some dimensions of the general issue of OE (Altschuld & Zheng, 1995).

2.3.2. Measuring Organizational Effectiveness in HEI's

OE as a determinant of successful organization is a common goal for all organizations particularly in this current age of dramatic change and high competition. As in other organizations, measurement of effectiveness in public organizations can be carried out using the effectiveness models despite with ambiguous, diverse, and sometimes contradictory goals of each model. Harmon and Mayer (1986) provided consistent notion describing that effectiveness is the extent of achievement or success in implementing what are decided.

Various models and criteria have been proposed to measure OE. Each model or method has its own advantages or disadvantages. Therefore, deciding an appropriate method or model for measuring OE becomes very difficult in such a situation. Many distinct effectiveness models and techniques have evolved throughout time, according to Cameron's (1978) description, but few studies on OE in higher education settings have been conducted. Similarly, Karagoz and Oz (2008) noted a lack of studies in this area. However, numerous indicators have been used to evaluate OE in higher education, most of which have similar viewpoints. Some of them include the following authors:

2.3.2.1. Antia and Cuthbert (1976)

Based on Antia and Cuthbert's (1976) qualitative model, there are nine critical success factors in an institutional performance. These parameters have a tight relationship with each other; that is, if achievement is not granted due to one parameter, it could, later, negatively affect the total functioning. The nine factors are as follows: 1) social tune, 2) cost effectiveness, 3) course development, 4) corporate reputation, 5) investment in human capital, 6) physical facilities development, 7) student relations, 8) the quality of employee relations, and 9) public responsibility. Based on this model, measuring the effectiveness of an institution is a multi-dimensional issue. OE can be appropriately evaluated from different points of view such as role effectiveness, efficiency, and potential capability for the future activities. Nine critical success

factors need to be spotted and comparatively emphasized by any institution. Achievement in these areas is the sign of survival and growth.

2.3.2.2. Kleeman and Richardson (1985)

Employing a group of measures Kleeman and Richardson (1985) studied students' perceptions of effectiveness following certain survey procedures. The instrument integrated ten factors or activity domain categories into the list of 54 activity statements. According to Kleeman and Richardson (1985), effectiveness in organization at higher levels of education is classified into ten categories: (a) programs and services for students, (b) attention to women and minorities, (c) quality of teaching and research, (d) publication of knowledge and research, (e) workshops and counseling to broaden access, (f) sports, (g) focus on cultural activities, (h) programs for graduates, (i) leasing facilities, and (j) enhancement of standards. At the end of this research, Kleeman and Richardson (1985) concluded that students believe that such notions as the improvement of the services and programs for students, the efficiency of education and research and finally the offering of programs for graduates are of such high quality that they should be seriously developed at universities.

2.3.2.3.Pounder (1999)

In his model, Pounder (1999) introduced nine aspects for the evaluation of OE in Hong Kong academic institutions. These dimensions are: productivity-efficiency, quality, cohesion, adaptability-readiness, information management-communication, growth, planning-goal setting, human resource development, and stability-control. According to Pounder (1999), the result of the study indicated improvement in the scales for reliable and valid self-rating in such dimensions as planning-goal setting, information management-communication, cohesion and productivity-efficiency. He also believed that these four dimensions of effectiveness can possibly be the main aspects of an OE model for Hong Kong's higher education. This is because there is a high degree of participation and good progress in the scale development procedure.

2.3.2.4. An, Yom and Ruggiero (2011)

An et al. (2011) assessed OE in terms of two dimensions: job satisfaction, and organizational involvement. The hypothesis for their study was that OE in acute care settings is

influenced by organizational culture and nurses' perceptions of work life quality. The findings indicate that organizational culture, work life quality, and OE all had strong connections. In addition, OE will surely improve if the organizational culture and nurses' quality of life are preserved. In summary, the results of their study in the health sector indicated that quality of career and intact organizational culture will certainly bring boosted OE.

2.3.2.5. Cameron (1978)

Initially Cameron's (1978) model was devised for the evaluation of OE in higher education. Literature review shows that this model more than others has been considered by researchers in this field (Gigliotti, 1987; Hertelendy, 2010; Kwan & Walker, 2003; Lejeune & Vas, 2009; Smart, 2003; Vinitwatanakhun, 1998). Based on Cameron's (1981) article, OE is multi-field; that is to say, the system resource model is very closely related to the external adaptation field at the HEIs. There seems to exist some similarity between the process approach and the moral field. The goal model is also similar to the academic field. Since OE is a multidimensional field, it cannot be measured by a single model and so all the variables should be taken into consideration (Cameron, 1978). In addition, it is essential to take all the contextual factors into account before any OE criteria are selected. Due to the diversity of cultures across countries and even within the country, it is possible that one factor can work in one place, but it may fail in another. In Cameron's (1978) proposal for the OE of higher education, there are nine dimensions to secure the members' perceptions about the efficacy of their institutions on these aspects. Cameron's selection of these dimensions is based on the careful study of the criteria, institutions and constituencies, and an in-depth analysis (Siddiqui, 2010). The Cameron (1978) nine dimensions are: -

- 1. *Student educational satisfaction*. It deals with the satisfaction of students with their educational experiences at the place where they are studying.
- 2. *Student academic development*. This dimension discusses the rate and extent of achievement, growth, and progress which the students have managed to gain at the institute. It also deals with opportunities for academic development which is given to them by the institution.

- 3. *Student career development*. It indicates the range of the students' occupational and vocational progress as well as the opportunities which are given to them by the institutions.
- 4. *Student personal development*. It refers to the extent of the students' progress in non-career, non-academic areas; in fact, they are on the social, cultural, and emotional basis. The opportunities which are offered by the institutions are also within this dimension.
- 5. Faculty and administrator employment satisfaction. This refers to the satisfaction that the administrators and the faculty members have with their jobs.
- 6. *Professional development and quality of the faculty*. This dimension talks about the range of work achievement and improvement of the faculty members as well as the extent of motives toward work progress which the organization provides.
- 7. *System openness and community interaction*. It displays the attention which is given to interaction with the external environment of the institution, the adaptation to it and the service given in that place.
- 8. *Ability to acquire resources*. This refers to the range of resources the organization can earn from the outside. They can include faculty members and students with high-quality, political recognition and financial aid.
- 9. *Organizational health*. It refers to the level of smooth functioning of the institution from the viewpoint of its processes and operations such as good-will and liveliness of the institution.

Furthermore, based the above dimensions Cameron (1981), developed four main categories of OE which are,

- (a) *The academic field* which is concerned with the students' academic progress, professional development and the productivity of the lecturers as well as the potential to obtain resources.
- (b) *The moral field* which deals with the student's educational satisfaction, the organizational health and the faculty and administrator employment satisfaction.

- (c) *The external adaptation field* which deals with the student's career progress and system openness and community interaction.
- (d) *The extracurricular field* discusses the single dimension of student's personal development. Later, Cameron incorporated the student's personal progress dimension into the academic field and deleted the last field.

The above explanation of different models indicates that OE has long been the subject of numerous studies through different models. Nevertheless, a comparative result between some models of OE in higher education shows some overlapping (Karagoz & Oz, 2008). For instance, there are some common features between Cameron's (1978) model and Antia and Cuthbert's (1976) model. Moreover, Kleeman and Richardson (1985) described some similarity between their model and Cameron's (1978) model (Karagoz & Oz, 2008). However, the trace of some of Cameron's nine dimensions can be observed in two other models developed by Pounder (1999) and An et al. (2011). This suggests the comprehensiveness of Cameron's model for the assessment of OE in HEIs. Based on this model, it should be taken into consideration that there is not one single suitable model for the assessment of OE. Even though the organizations fulfill the criteria of each approach, they may be judged ineffective. This can reflect the ability of Cameron's multi-dimensional model for a deeper study of OE in higher education. As a result of the foregoing facts, Cameron's (1978) model was used in this study to measure OE of HEIs.

2.4. Adaptive Leadership, Organizational Learning and Organizational Effectiveness in HEIs

HEIs are large, complex, adaptive social systems like all other human organizations. Over the last decade, higher education around the world is facing a number of challenges and potential threats to effective learning and teaching support. Turbulence, conflict, change, surprise, challenge, and possibility are all words that describe today's world and that evoke countless emotions ranging from fear and anxiety to excitement, enthusiasm, and hope (Lowman, 2010). Given the dynamic and non-linear nature of such systems, scholars have argued that HEIs need change management that focuses on emergent, flexible, and adaptable change rather than on the planned change (By, 2005; Dumas & Beinecke, 2018). That is to say, HEIs need to be prepared for unanticipated consequences of innovations internally and fast-

changing environment externally. Accordingly, leaders in HEIs are challenged to meet the interests of a range of different stakeholders, such as governments, students, administrative as well as academic staff, or industry partners (Corlett, 2005). In addition, they are held to high standards with regard to excellence in research, teaching, and service (Corlett, 2005). Moreover, the leadership spans across multiple levels, including individuals, teams, and the entire organization (Bolden et al.,2009). These and other factors have led to the conclusion that "leadership in the corporate arena, however complex that might be, is substantially less complex than leading in academia" (Lowman, 2010, p. 241).

Over the past decade, higher education in Ethiopia has grown in number. In relation to the growth lots of changes and challenges are observed; students are changing, their learning styles as well as their demands are changing. At the same time, much more has been expected of institutions in terms of their wider engagement locally, regionally, nationally and globally (Woldegiyorgis, 2017). In addition, new technologies, quality of learning and teaching, student employability, quality of research, and management are the most burning challenges which call for leadership solutions that could be tested both inside and outside of higher education (Woldegiyorgis, 2017). Hence, given this current era of significant change in higher education, there is growing attention to the importance of understanding the leadership required to guide institutions successfully, and a growing concern that existing approaches to leadership are ineffective (Kabeba, 2015). In addition, Kabeba (2015) asserted that current and future university leaders need to address the unintended outcomes associated with the expectations of stakeholders and future demands associated with the 21st century. Common leadership styles, existing information systems, and traditional approaches may be insufficient to address unintended outcomes (Uhl-Bien & Marion, 2009). Therefore, reliance on the more traditional leadership models, which tend to be based on the actions, communication and style of an individual, is not the best method to enact sustained change in HEIs. Thus, maneuvering such complexity and change requires a new form of leadership strategy that is adaptive, flexible, supportive and responsive to change (Uhl-Bien & Marion, 2009).

Adaptive leadership consistently emerges as a key factor for organizations that were better able to learn, innovate, perform, and adapt to the types of external challenges that institutions now face. Many studies are in agreement that the rapid social, political, economic,

and technological shifts that are taking place are producing greater complexity and an increase in instability, which place major constraints on conventional top-down constructs of leadership (Uhl-Bien et al., 2007). Mirroring trends in the broader leadership literature (Berger, 2012; Lichtenstein & Plowman, 2009; Uhl-Bien & Marion, 2009) scholars of higher education leadership are increasingly applying new leadership paradigms to uncover how these dynamics shape leadership work, and conclude there is a need for more leaders who can construct evolving, expansive, and multifaceted understandings of their work and contexts (Cutright, 2001; Eriksen, 2008). Therefore, institutions of higher education in order to survive must find leaders who can bring necessary change. In relation to this, Owens and Valesky (2007) argue that adaptive leadership approaches should be considered within HEIs to be more adaptable and competitive in the current world. This is because it is an interactive process whereby knowledge, action preferences, and behaviors change which in turn stimulates increased adaptability in the system (Lichtenstein et al., 2006). According to Randall and Coakley (2007) adaptive leadership should compel all stakeholders involved to work towards a solution through debate and creative thinking, identifying the rewards, opportunities, and challenges they will face. In a separate line of research, Randall and Coakley (2007) also looked at higher education leadership from a practitioner perspective. They proposed the adoption of the adaptive leadership framework to elucidate the process by which HEIs leaders navigate the governance system and induce changes.

2.4.1. Adaptive Leadership and Organizational Learning in HEIs

As leadership theory evolved through the 20th century and into the 21st, the concept of learning played an increasingly prominent role; as the world grew more complex, so did the need for learning to be integrated into leadership. In the late 20th century, learning—at the individual and organizational level—became one of the major foci of leadership research and influenced a variety of theoretical views (Kezar et al., 2006). The concept of learning has a central role in adaptive and complexity leadership theories. Leaders play a central role in all phases of the OL i.e., obtaining the necessary sources to realize learning, creating the shared understandings, integrating new knowledge to the existing one, disseminating within the organization and ensuring institutionalization, etc. (Berson et al., 2006). However, different leadership styles have different effects on the realization of learning.

Leadership that is increasingly embedded within the organizational fabric, to effectively thrive in change, must be skillful at building organizational capacity through continuous learning and effectiveness. As stated by Uhl-Bien et al. (2007) adaptive leadership emerges through the interactions of individuals, and suggests that the role of leadership is to create optimal organizational situations that foster effectiveness, flexibility, and OL. As stated by Berson et al. (2006), in the processes of OL, the leader has a crucial role of building an effective learning culture and sustaining it. Davenport and Prusak (1998) have proposed very clear and specific recommendations regarding the role of leaders on OL. For example, leaders advocate the importance of learning and knowledge, design, implement and oversee the learning infrastructure of an organization, give direction to the development of learning and knowledge strategy focusing on the organization's resources and thus contribute to the development of learning skills (Davenport & Prusak, 1998) which are mainly the roles of adaptive leaders. In addition, Uhl-Bien et al. (2007) views leadership within the context of the twenty-first century organization, where "knowledge is a core commodity and the rapid production of knowledge and innovation is critical to organizational survival" (p. 299). Hence, the challenges of this knowledge era require a leadership model that encourages learning, innovation, and flexibility (Uhl-Bien et al., 2007). It is becoming increasingly important for organizations to adopt the learning orientation as it could help contribute to organizational success. However, as the capability to learn does not naturally and readily occur within organizations, it is imperative that organizations ensure that resources allocated and efforts made to instill learning within organizations. Accordingly, it is vital that HEIs, parallel to other organizations, become LO's to ensure that organizational objectives are attained. Although HEIs have missions that promote learning, ironically, these organizations seldom use learning as a means to improve the institution as a whole (Kezar et al., 2006).

Researchers have highlighted that committed leadership is necessary for sustaining change in LO's (Watkins & Marsick, 1993). Likewise, Garcia-Morales et al. (2012) have also highlighted that leadership has a substantial influence on organizational performance through OL. This could be achieved if there has to be a committed leadership that can systematically acquire and embed new learning for continuous growth and sustainability. This becomes even crucial for universities which are the hubs of accumulated knowledge in the form of human

assets. Thus, universities if they truly want to become LO's need to support and encourage learning at all levels and also should have the capacity to utilize that learning to be more effective. However, for leaders struggling to keep their organizations learning, innovative, and competitive, the situation today is marked most of all by uncertainty and unpredictability. Changing from a traditional organization to a LO aims to transform traditional organization into a more responsive and effective organization that is able to withstand and survive the environmental pressure and hence improve its performance in the face of the turbulent environment. LO hence requires a leader who brings out the best in the followers, leadership that is more adaptive and flexible. Senge (1990) identified three leadership roles that are important for building a LO. "Leaders as designers", "leaders as teachers", and the "leaders as stewards". These roles require new skills: the ability to build shared vision, to bring to the surface and challenge prevailing mental models, and to foster more systemic patterns of thinking. In short, leaders in LOs are responsible for building organizations where people are continually expanding their capabilities to shape their future – that is, leaders are responsible for learning (Senge, 1990).

As stated by Yukl and Mahsud (2010), the challenge facing leaders today is to make the effort needed to learn some of the new skill and techniques, and to put in processes that engage their workforce in programs of continuous capability development. This is because, learning should be integrated into the doing, as part and parcel of everyday work so that the organization becomes a LO (Senge, 1990). Leadership that is increasingly embedded within the organizational fabric, to effectively thrive in change, must be adept at building organizational capacity through continuous learning and innovation (Uhl-Bien et al., 2007).

Learning plays an important role in adaptive leadership theory, because of the critical inquiry of adaptive challenges. Adaptive challenges require adaptive leadership, which inspire abilities to innovate, embrace risks, navigate resistance, and pursue continuous learning (Mrig & Sanaghan, 2017; Rowland, 2017). The emphasis switches from leadership as control or influence toward a leader's aims to leadership as establishing an atmosphere in which learning occurs, information accumulates, and is shared at a minimal cost, according to empirical studies (Uhl-Bien et al., 2007). Thus, rather than leading merely for efficiency and control (Jones, 2000) explained that the competitive nature of most environments is requiring organizations to shift to more flexible forms that allow for adaptability, knowledge, and learning. The extent to which a

leader makes appropriate changes in strategies and tactics is an indicator of flexible and adaptive leadership (Yukl & Mahsud, 2010). In addition, organizational researchers realize that an organization's learning capability and its adaptation capability will be the only sustainable competitive advantage in the future. A study conducted by Hargadon and Bechky, (2006) described that currently higher education faces an adaptive challenge, and answers lie in the collective learning of higher education members. To heighten this learning, higher education leaders can encourage the free flow of information as well as high levels of interaction among organizational members with disparate views in which the resulting friction and exchange have the potential to generate insight, fresh ideas, and innovative adaptations (Hargadon & Bechky, 2006). Thus, OL is able to create new solutions within a changing environment (Uhl-Bien & Marion, 2009). This is very much related to Yukl's (2009) reflection on ways adaptive leadership can enhance OL. More and more organizational researchers realize that an organization's learning capability and its leadership adaptation capability will be the only sustainable competitive advantage in the future. Yukl (2010) asserts that leaders should recognize their responsibility for helping subordinates develop and use the skills and behaviors required for flexible and adaptive leadership.

2.4.2. Adaptive Leadership and Organizational Effectiveness in HEIs

Effective leaders achieve organizational success bringing the right people and technology together to offer a product or service successfully (Brass & Krackhardt, 1999). This means that leaders affect and direct all resources and processes that exist in an organization. The primary responsibility of leaders is to articulate the organization's mission, vision, strategy, and goals clearly and precisely, ensure their dissemination within the organization, convince and direct subordinates towards the organizational goals (Berson & Avolio, 2004). In addition to this, leaders have been also crucial in ensuring the sustainability of organizational success. It is agreed by different scholars that leadership requires to bring all resources of organization together accordingly (particularly human resources), create the necessary conditions that will ensure progress for these resources in an aim and vision and thus ensure organizational success (Burke et al., 2006; Caudell, 1994; Oke et al., 2009). Therefore, leadership, providing direct and indirect outcomes and outputs, is closely related to the success of the organization.

OE has been a critical concern as to how organizations and social groups obtain results related to mission and social purposes. It's important to note that, these days governments across the globe have become increasingly determined to make higher education more responsive and accountable to their stakeholders. Thus, the quest for effectiveness is a pressing concern to the current world universities (Kwan & Walker, 2003). Effective leaders can be considered the most important factor in achieving OE. Lee (2013) noted that through commitment, leaders of educational institutions could exert a specific and significant effect on the effectiveness of organizations. Wu (as cited in Lee, 2013) aimed to defined effectiveness as the ability of school leaders to achieve predetermined goals with certain levels of performance. The relationship between leadership and effectiveness is supported with academic researches carried out in this field and is expressed that the correct leadership style can improve OE (Antonakis & House, 2004; Northouse, 1997). As stated by Highsmith (2014) adaptive leadership is the work of energizing, empowering, and enabling teams to rapidly and reliably deliver business value by engaging customers and continuously learning and adapting to a volatile environment. It is also agreed that unless leaders are able to develop abilities that enable them to lead adaptively in complex and rapidly changing situations, their organizations will be unable to effectively meet the challenges dictated by the modern world.

Higher education basically is viewed as an existing and growing organization not only momentarily established but also sustainably for long-term period (Psarras, 2006). Competition is frequently taking place in universities, dealing with number of prospective students, quality of programs, number of research publications and community services as well as cooperation with other institutions (Kabeba, 2015). This issue brings the question of effectiveness to these institutions. In addition, HEIs are increasingly discovering that they need to become more alert to cope with the complexity of their operating environments and the quickening pace of change in the form of heightened expectations, demands for greater accountability, and growing competition (Kabeba, 2015). The adaptive leadership framework provides a useful means for postsecondary education senior administration to navigate the uncertain climate in which institutions have to operate (Jacob & Shari, 2013). The framework can also assist educational leaders to overcome adaptive challenges that threaten their existence through continuous improvement initiatives where multidisciplinary teams are used to solve unique organizational

problems in an effort to move the institution to the next level (DeMatthews & Edwards, 2014). At its most basic level then, adaptive leadership involves a leadership response that enables an organization to cope successfully with ever-shifting internal and external environmental demands. During continuous periods of change, adaptive leaders must be open to signals from their environments to be able to make fundamental and continuous changes in their organizations (DeMatthews & Edwards, 2014). Kouzes and Posner (2002) support the idea of adaptive leadership that in the recently dynamic environment, only adaptive individuals and organizations may develop and be successful. This implies that adaptive leadership is critical upon the effectiveness of an institution and provides guidance for leaders to compete.

According to Torres and Reeves (2011) as changes in today's environment occur, leaders are forced to reconsider strategies, organization, and leadership. Therefore, there are two crucial factors of adaptive leadership and adaptive work theory which are capable of impacting implementation of management of change. First, leaders must understand that adaptive leadership is an approach to making progress and seeking solutions on a collective level, to maximize the chances of success and minimize the chances of being taken out of action (Heifetz et al., 2009). Second, adaptive leadership orchestrates giving people more responsibility. Hence, the principal function of adaptive leadership is to direct challenges and to seek innovation, and to provide opportunity for growth, development, and prosperity not only within an organization but also among followers (Sherron, 2000).

Unpredictability is a major driver for adaptive leaders and affords them the opportunity to define performance outcomes, organize work, plan goals, and use resources appropriately (Sherron, 2000). Adaptive leadership uses knowledge and abilities to resolve problems that are comparable or different from the context in which the knowledge was first encountered. In comparison, Torres and Reeves's (2011) study of the traditional work of leaders found that making decisions, reviewing and coordinating the work of others, collecting and disseminating information, subtracts rather than adds value to effectiveness if key elements of adaptive leadership are not taken under consideration. Therefore, by applying the basic rules of adaptive leadership, leaders can inspire followers to grow and create continuous learning, influence, and motivation. This implies that leaders must employ an adaptive leadership framework to create innovative organizations that are able to respond and adapt to complex change (Raney, 2014).

2.5. Summary of Literature Review

In the process of realizing organizational objectives and goals, leadership play pivotal roles. The uncertainty of organizational environments in all sectors has created the need for leadership throughout all levels of organizational structure to adapt independently and collectively to ensure goals are achieved (Torres & Reeves, 2013). Of various leadership theories, a leadership with increased focus on human resources growth and development has become demanding for the 21st century organizations. Today's organizational leaders including leaders of educational institutions are faced with challenges that require leadership that is capable of tackling and solving complex problems and issues, with collective, collaborative, timely effective, and innovative solutions. This set of challenges requires leadership that spans the spectrum of leadership theories, traits, and stylistic approaches that is very adaptive, yet direct in nature. This type of leadership is defined as 'adaptive leadership' and is a style of leadership that is developing in to a new theory of its own, evolving from situational, transformational, contingency, and complexity theories, as described by Uhl-Bien et al. (2007), being further refined by leadership theorists such as Yukl (2010) and Nelson and Squires (2017) who have expressed adaptive leadership approaches in to the practicality of today's workplace.

Adaptive leadership is becoming increasingly important as fast changes put increasing demands on organizations and leaders to keep up, such as rapid technological advances, increased use of virtual interaction, globalization of work-forces and even, so called social acceleration (Rosa, 2013). It is defined as leadership that involves changing behavior in appropriate ways demanded by the situation at hand, and constitutes leaders that can accurately diagnose the situation and react accordingly (Yukl & Mahsud, 2010). Furthermore, adaptive leaders have the ability to effectively identify and respond to challenges as technical, adaptive, or mixed. Technical challenges are those that can be solved using preexisting understanding, past training, and current resources or processes, while adaptive challenges are those in which established responses can no longer remedy the problem, therefore requiring new learning, new mindsets, and new dispositions for people throughout the organization (Ackerman et al., 2018).

HEIs are complex adaptive systems comprised of independent agents combining in diverse organizational relationships and networks. Given the dynamic and non-linear nature of such systems, scholars have argued that HEIs need change management that focuses on

emergent, flexible, and adaptable change rather than on the planned change (By, 2005; Dumas & Beinecke, 2018). That is to say, HEIs need to be prepared for unanticipated consequences of innovations internally and fast-changing environment externally. Adaptive leaders are suited to drive creative approaches in the increasingly complex environment. Leaders at all levels can enhance the determinants of organization performance, which include efficiency and process reliability, innovation and adaptation. Moreover, leaders and leadership in higher education is required to deal with all three components of an academic institutions, such as research, teaching and community service, where all these have their own demands and issues, and for that matter, it is necessary for leaders and the institutions to be continuously striving for improvement and dealing change. Linda and Lori (2007) argue that the theory of adaptive leadership should be applied to the current issues within higher education, where institutions refine their services and policies to become more attractive to non-traditional students. They argue that institutions must learn to be more adaptable and competitive to stay alive. The leaders are well positioned to create cultural norms, tangible plans and expectations in which continuous improvement and transformative change will occur. They set up the systematic mechanisms and use them for such as monitoring progress, impacts and lessons learned, creating OL to drive outcomes.

Scholars have developed different criteria or dimensions to evaluate the applicability of adaptive leadership theory in different organizational contexts. Despite, different dimensions employed, scholars have come to the conclusion that the principles of adaptive leadership are applicable to social organizations including government, non-government, business and nonbusiness, health, education and religious organizations. Adaptive leadership also serves as a cornerstone for increased organizational performances by disregarding traditional hierarchical leadership structures; and applying upside down or heterarchical leadership structures and approaches. Even though the definition of success varies among individuals and organizations, the adaptive leader finds success through having reached organizational goals via adaptive change intervention. Adaptive leaders' foremost objective is to thrive on progress and management of change, which initiates on the grounds of capabilities and adaptability in performing at expected levels by integrating change to their leadership approach at any given moment to fit unique contexts (McCall & Hollenbeck, 2002).

Chapter Three

Research Methodology

3.1. Research Paradigm

All researches are based on some underlying philosophical assumptions about what constitutes valid research and which research method is appropriate for the development of knowledge in a given study (Goldkuhl, 2012). It is also stated by Morgan (2014) that, the selection of research methodology depends on the paradigm that guides the research endeavor. Hence, this study is guided by the pragmatic epistemology knowledge paradigm as its philosophical foundation. A major underpinning of pragmatist epistemology is that knowledge is always based on experience (Goldkuhl, 2012). As a research paradigm, pragmatism orients itself toward solving practical problems in the real world (Morgan, 2014). Pragmatist epistemology does not view knowledge as reality, rather, it is constructed with a purpose to better manage one's existence and to take part in the world (Goldkuhl, 2012). Johnson et al. (2007) approves that pragmatism is an advanced philosophy that provides the epistemology and the logic for combining the quantitative and qualitative approaches and methods. Moreover, Creswell (2012) has mentioned that pragmatism is the philosophy that permits mixing paradigms, assumptions, approaches and methods of data collection and analysis. This demonstrates that, the research paradigm supports the simultaneous use of qualitative and quantitative methods of inquiry to generate evidence to support best practice.

Therefore, this study employed mixed methods research with a pragmatist view to provide evidence that embraces and addresses the multiple practice and perceptions of practitioners better than either qualitative or quantitative research approaches in isolation. As indicated by Biddle & Schafft (2015) pragmatism sees the combination of qualitative and quantitative research approaches as an eligible way to answer research questions. Pragmatism is considered by many researchers as the most common philosophical support for the mixed research approach (Biddle & Schafft, 2015; Dieronitou, 2014; Hall, 2013; Hathcoat & Meixner, 2017; Feilzer, 2010). In addition, pragmatism has gained considerable support as a stance for

mixed methods researchers (Feilzer, 2010; Maxcy, 2003; Morgan, 2014). This is because, it is oriented toward solving practical problems in the real world (Feilzer, 2010).

3.2. Research Design

This study employed mixed methods research design involving descriptive survey and correlational research approaches. Although traditionally research methods have been classified distinctively as either qualitative or quantitative, from an epistemological point of view, qualitative and quantitative approaches are not necessarily part of different paradigms (Best & Kahn, 2004). On both epistemological and technical reasons, it may be reasonable to apply mixed methods within the same study because the distinctions between qualitative methods and quantitative methods are claimed to be inadequate and misleading (Burrell & Morgan, 1979). As described by Creswell and Plano (2011) more researchers are mixing methods and there has been increased support for the use of mixed methods design to enhance the validity of research findings. Moreover, from the practical vantage point of view Creswell (2012) advises that, the biases inherent in any single method could neutralize or cancel the biases in other method. Therefore, it is safe and wise to use mixed method than purely quantitative and qualitative approach. The method is selected with the assumption that it enhances the possibility of obtaining more dependable results than could a purely quantitative and qualitative method do. In addition, mixed method is selected due to the nature of the problem and the variables treated therein for which it is hardly possible to obtain adequate and dependable data and reach on justifiable conclusion by using a mere quantitative or qualitative method.

Furthermore, in the mixed methods research, a researcher uses a mix of quantitative and qualitative approaches (designs and methods) in a study which could be done either concurrently when conducting both parts at the same time or sequentially when conducting one part first and the other second (Antwi & Hamza, 2015; Johnson & Christensen, 2012; Ma, 2012; Molina-Azorin, 2016). Various typologies of mixed methods designs have been proposed by different authors. From those typologies concurrent nested design was selected and employed in this study. It is said that, in a concurrent particularly nested design, the data collection and data analysis of both components occurs (almost) simultaneously and independently (Creswell, 2012). In concurrent nested designs, both qualitative and quantitative data are collected during the same

stage, although one form of data is given more weight over the other (Creswell, 2012). This indicates that, in a concurrent nested design study, one of the methods dominates whilst the other one is embedded, or nested, within the predominant method.

The mixed methods researcher in employing concurrent nested design gives priority to the major form of data collection (e.g., often QUAN) and secondary status to the supportive form (e.g., often qual) of data collection in which the secondary form is used in the mixed methods study to support and provide additional information to the primary form (Creswell, 2012). In the notion of Morse (1991) concurrence is indicated by a "+" between components (e.g., QUAN + qual.). The use of capital letters for one component and lower-case letters for another component in the same design suggest that one component is primary and the other is secondary or supplemental (Morse & Niehaus, 2009). Therefore, the sequence and weight of the quantitative and qualitative methods used in the study was QUAN + qual type whereby both quantitative and qualitative data are collected simultaneously but with more emphasis for the quantitative data. Morse and Niehaus (2009) stated that, QUAN + qual study is a deductive-simultaneous design where, the core component is quantitative and the supplemental component is qualitative. Thus, the reason for collecting the qualitative data in this study is to augment or support the quantitative form of data. This indicates that, most of the information in this study was obtained using quantitative approach while the qualitative data is embedded and plays a supportive role.

Subsequently, in the process of data analysis integrating the results is an important decision in the design of mixed methods research (Morse & Niehaus, 2009). Therefore, in this study at some point in writing down the results of the first component, the results of the second component are added and integrated. This means analyzing the data separately and then a joint display of the quantitative and qualitative findings with an integrative statement was used to facilitate the process.

3.3. Sources of Data

Both primary and secondary sources of data were collected for this study. The primary sources of the study include higher officials at the top and middle level leadership positions (Presidents, Directors, and Deans). This is due to the officials' extensive knowledge of the entire organizational decision-making process, as well as the institutions' management and strategic

challenges. Academic staff members were also included as primary sources because it is believed that they had necessary information on their immediate supervisors' leadership practices, as well as activities related to learning as individuals, groups, and organizational levels, as well as the achievement of institutionally expected objectives. The secondary data was obtained from documents such as strategic and operational plans, quarterly and annual reports, and monitoring and evaluation feedbacks.

3.4. Target Population

Currently there are 10 federal public universities in Amhara region which are classified in four strata of generation based on their age or period of establishment. The established stratum was used in the selection of sample universities for this research. To make the study manageable and because of financial constraints, six universities (60%) of the total from each generation/ stratum was selected as sample of the study using stratified random sampling (from two first generation universities one, from three second generation two, from two third generation one, and three fourth generation two, totally six universities). Therefore, the universities selected for this study are Bahir Dar, Debre Birhan, Debre Tabor, Injibara, Mekdela Amba and Wollo.

The total population of the study include 18 presidents and vice presidents, 440 officials at the middle level leadership positions (directors both in the academic and administrative sections and college deans) and all (5239) local permanent academic staff members currently on duty in the public universities under study (see Table 2 below).

3.5. Samples, Sample Size and Sampling Technique

To get appropriate and valuable information for the study from decision making parties 10 presidents and vice presidents (55%), and 220 (50%) of middle level officials were taken as sample respondents of the study (see Table 2 below). Concerning the selection of local permanent academic staff members, the sample size was determined through maintaining a sample size formula. There are numerous approaches, incorporating a number of different formulas, for calculating the sample size. The sample size for this study was determined using Yamane (1967) which provides a simplified formula to calculate sample sizes. The formula was used to calculate the sample size with 95% confidence level and P =0 .5 are assumed.

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

where 'n' is the sample size,

'N' is the population size, and

'e' is Margin of error (e = 0.05)

Therefore, the sample size of the study from the total academic staff members was determined as 400.

$$n = \frac{5239}{1 + 5239 (.05)^2} = \frac{5239}{5240 (.0025)} = \frac{5239}{13.1} = 399.92 (400)$$

Table 2Total Population and Sample Size of the Study

No	Name of University	Total No. of Dean & Directors	Total No. of staff members	Sample No. of Director respondents	Sample No. of Deans respondents	Total No. of Dean & Director sample respondents	Total No. of staff sample respondents
1	Bahir Dar	128	2400	49	15	64	183
2	Debre Birhan	76	765	28	10	38	58
3	Debre Tabor	54	507	21	6	27	39
4	Injibara	38	241	15	4	19	19
5	Mekdela Amba	40	220	16	4	20	17
6	Wollo	104	1106	42	10	52	84
	Total	440	5239	171	49	220	400

After determining the total sample size from each university (see Table 2), sample respondents in their corresponding institutions were assigned proportional to the size of the total population of staff members in their respective colleges and departments. It is known that with

proportionate stratification, the sample size of each stratum is proportionate to the population size of the stratum. Therefore, strata sample sizes were determined by the following equation:

$$nh = \left(\frac{Nh}{N}\right) \times n$$

Where n_h is the sample size for stratum h,

 N_h is the population size for stratum h,

N is total population size,

and n is total sample size (Lenth, 2001).

Lastly, based on the allocated number of respondents in colleges, each individual respondent was assigned through simple random sampling by using lottery method. Furthermore, the selection of sample presidents/vice presidents was done through availability sampling.

In summary, to select sample participants for quantitative data, multi-stage proportional stratified random sampling method was used.

The Sampling process was done through the following steps;

- 1. Selecting sample six HEIs using simple random sampling method. (In the Amhara Regional State there are ten (10) public HEIs).
- 2. Creating strata based on their role: academic staffs, middle level leaders (Deans and Directors)
- 3. Determining the sample size from the strata based on the total population (Using sample size formula)
- 4. assigning sample respondents to each university colleges and departments proportionally to the population of each unit. (Using formula)
- 5. Selecting sample participants proportionally from each college and units using simple random sampling lottery method. (The population and the samples size of the study are presented in Table 2).

3.6. Instruments of Data Collection

Two types of instruments were used to collect data i.e., questionnaire and semi structured interview. Data were collected from directors, deans and sample academic staff members; totally 620 respondents, through a standardized questionnaire items which were applied by adapting the items in the context of Ethiopian higher education.

3.6.1. Questionnaire

A questionnaire was used with multi-item scales which was adapted and used from previously developed models of adaptive leadership, OL and OE studies in the literature. It was designed to collect data from directors, deans, and sample academic staff members. The questionnaire consists of adaptive leadership, OL, OE and demographic sections prepared in English language. First, adaptive leadership scales were adapted from the study of Northouse (2016) questionnaire comprising six dimensions and 28 items. The constructs were measured by using 6-point Likert scales ranging from (1) almost never, to (6) almost always. Second OL items scales were adapted from the study of Marsick and Watkins (2003) DLOQ, which comprises seven dimensions and 21 items. The items were measured on a 6-point Likert scale (1) almost never, to (6) almost always. Finally, OE questionnaire items were taken from Cameron's (1978) model of OE with its nine dimensions. The items were measured using 6-point Likert scales ranging from always true (6) to never true (1).

3.6.2. Semi structured interview

Semi structured interview was also applied to presidents/vice presidents of sample universities to get information on the extent of adaptive leadership practices, the status of OL and OE in their respective institutions. An interview protocol according to Hays and Singh (2011) was developed and utilized to guide the interview process and discussion with the participants. Before conducting the interview, consent form with the interviewees was filled. The interviews audio was recorded on a tape recorder based on the permission of the interviewees.

3.6.3. Documents

In addition to the questionnaire, and semi structured interview, pertinent documents were used to obtain information. Accordingly, sample universities plans, reports and other pertinent archives were reviewed and used for the analysis of OE.

3.7. Pilot test, Validity and Reliability of the Instruments

3.7.1. Pilot test

A pilot study can be defined as a small-scale study that helps to examine the practicality and feasibility of the methods to be used in a subsequent larger and more comprehensive investigation (Thabane et al., 2010). Kraemer et al. (2006) also stated that piloting a study instrument on a smaller scale can help to identify unforeseen problems that could compromise the quality or flow of the study. Hence, pilot test for this study was conducted in order to detect any difficulties that respondents were likely to face when responding to the items of the instruments. The instruments of data collection for this study were questionnaire and semi structured interview. Thus, a questionnaire which is adapted in the context of Ethiopian higher education context was adopted from prior developed models of adaptive leadership, OL and OE studies and from literature. Therefore, to ascertain the validity and reliability of the instrument item scales in the context of public universities under study, content validity check, and Cronbach alpha test were performed respectively.

3.7.2. Validity of the Instrument

According to Oluwatayo (2012) validity is the degree to which the sample of test items represents the content the test is designed to measure. Content validity test employed in this study was established by expert judgment validation method of Oluwatayo (2012) and Lawshe's (1975) content validity check model. Thus, the research instrument was subjected to expert judgment validation by Wollo university educational leadership department's six professionals /panellists/. The experts accessed the content validity to see whether the instrument measures what it is intended to measure according to the study's basic questions and objectives. The feedback that was received have been used to improve the instrument by making appropriate corrections and adjustments in the final draft in order to increase the level of validity.

Furthermore, based on the opinion of subject experts, the rating scales which was set to measure adaptive leadership, OL and OE with agree disagree continuum were changed to a 6 point "Almost Never"/ "Almost Always" continuum for adaptive leadership and OL and a 6-point Likert scale ranging from "Always true" to "Never true" continuum for OE. In addition,

directions to respond to items on biographic data was improved and additional biographic question items were incorporated. Directions to respond to items on each construct are also made separately to clarify instructions for respondents. Moreover, one item from OE dimensions which is about employment opportunity of graduates, is eliminated from the instrument, because some respondents may not have access to such information. Apart from this, language correction, including making changes in wording, and removing repetitive and unnecessary words was done under the instructions of language experts.

Moreover, Lawshe's (1975) content validity check model was also used to see how far each item is pertinent to measure the major constructs; adaptive leadership, OL and OE. Thus, the draft questionnaire was distributed to the professionals/panellists/ to rate each item on a three-point scale as 1= not useful, 2= useful but not essential and 3=essential (Lawshe, 1975). Then, in order to calculate the Content Validity Ratio (CVR) the rating was calculated using a formula;

$$CVR = \frac{ne - \left(\frac{N}{2}\right)}{\frac{N}{2}}$$

where *ne*: is the number of panellists (professionals) who rated an item as essential, and *N* is the total number of panellists.

The guideline for the valid value of CVR for the evaluated item to be retained indicates that the minimum value of CVR, should be .05, and the CVR is somewhere between zero and .99 (Lawshe, 1975). Therefore, the average value of the CVR was computed for the whole item and found to be 0.9, which implies that it is possible to use the questionnaire for the desired purpose.

3.7.3. Reliability of the Instrument

Testing for reliability is important as it refers to the consistency across the parts of a measuring instrument (Huck, 2007). A scale is said to have high internal consistency reliability if the items of a scale hang together and measure the same construct (Huck, 2007; Robinson, 2009). The most commonly used internal consistency measure is the Cronbach Alpha coefficient. It is viewed as the most appropriate measure of reliability when making use of Likert scales (Whitley, 2002; Robinson, 2009). Hence, the questionnaire items of DLOQ are

applied by many studies, such as: Yang et al. (2004) and Akhtar et al. (2017) and has been found valid and reliable in different developed countries context. The reliability of Cameron's OE questionnaire also has been reported by several researchers. For example, Kwan and Walker (2003) reported Cronbach's alpha from 0.66 to 0.85 and Lejeune and Vas (2009) calculated the Cronbach's alpha from 0.65 to 0.87 for each of the nine dimensions. Moreover, Ashraf and Kadir (2012) reported reliability alpha from 0.76 to 0.87 for seven dimensions of OE instrument in HEIs in Hong Kong. Though there are high value of reliability of DLOQ and Cameron's OE questionnaire in different studies, it does not confirm reliability in the context of Ethiopian higher education.

Therefore, the reliability of the questionnaire items on the three constructs was checked using Cronbach's alpha (r) based on the pilot test that was conducted with 50 randomly selected staff members of Woldiya university who are working on different leadership positions and was not part of the study. After calculating the responses of the pilot group, the Cronbach's Alpha coefficient for adaptive leadership questionnaire items was r = 0.782, for OL r = 0.794 and for OE r = 0.801. Reliability tests resulting in an alpha of 0.7 and above are generally accepted as having high reliability (Rovai et al., 2014). Therefore, the internal consistency of each construct indicates a high value which suggests that the questionnaire is reliable and could be used to obtain pertinent data for the intended purpose. Finally, based on the analysis of the reliability test, vague items were re-visited and the final tool was prepared to be used for the research.

In addition to the questionnaire, semi structured interview protocol was developed as an instrument, to collect information on the extent of adaptive leadership practices, and the status of OL and OE in the sample universities. Initially, the questions were adapted and modified from the literature review of the variables of the study. The validity of the instrument was tested via triangulation and expert check by six specialists in order to reduce personal biases and overcome the constraints of the question items. As a result, the interview questions were given to a panel of specialists to verify the instrument's content validity. Attempt was also made to obtain as comprehensive information as possible through triangulation from different informants. Thus, based on the panel experts' and other informants' comments and suggestions, interview questions were rearranged. At this point of the process, few amendments were made on the questions in terms of its language and sentence structure. Unclear questions were rephrased in

order to give clear understanding to the interviewees and at the same time elicit more information regarding this study. Finally, the interview items were improved by making sure that each item is strongly related to the basic questions.

3.8. Procedures of Data collection

To start with the quantitative data gathering process using questionnaires, data collectors from each sample university were selected and assigned. The selected collectors were approached and orientation about the purpose of the study, the contents of the questionnaire and challenges that they will face in approaching the respondents in the time of data collection were given. Before distributing the questionnaire, respondents were informed about the general objective of the study and related issues. Finally, the data collectors requested respondents to fill out the questionnaire and distributed the questionnaire to the selected sample respondents according to the prepared list, all under the supervision of the researcher.

In relation to the semi structured interview, since the informants are officials, schedule that doesn't affect their regular office work was arranged. The interview sessions were conducted in English language with the selected participants using a semi structured interview guide. In the process of the interview sessions, sometimes the conversations were done in Amharic language when confusions are observed and when respondents need to use the language to describe their ideas and feelings comfortably and easily. During each interview session, each question item was followed by certain probing questions to get more clarification on a given issue. Time for each interview session was decided beforehand. The interview sessions were conducted in a place where the participants feel appropriate. Moreover, the interview sessions were recorded based on the secured consent from the respondents of the study.

3.9. Methods of Data Analysis

Data obtained through questionnaire was analyzed using descriptive statistics (means, frequency, and percentages) and inferential statistics (One-sample t-test, Pearson correlation coefficient, and linear regression) using SPSS 23. The descriptive statistics was used to describe the background information of study respondents. Thus, percentage was utilized to analyze and determine individual characteristics (sex, service year in their respective university, their

occupational status and educational qualification) of the respondents. For the inferential statists one-sample t-test was used to determine the extent and practical implementation of adaptive leadership and the status of OL and OE in HEIs under study (Q1, Q2 and Q3). Pearson correlation coefficient was another inferential statistics employed to examine the relationship or association between adaptive leadership and the outcome variables (Q4 and Q5). Furthermore, to test the effects of adaptive leadership on the outcome variables, linear regression analysis was executed using composite variable of adaptive leadership, OL and OE. In addition, the prediction level of each individual dimensions of adaptive leadership on OL and OE was also tested through linear regression (Q6 and Q7).

The Likert scales for each question ranging from 1 to 6 were established the cut points according to the following method while computing the means and one sample t-test to examine the extent, status, and practices of the variables. Accordingly, values less than 3.00 are considered low, 3.01 to 4.00 are considered moderate, and 4.01 and beyond are considered high. Furthermore, thematic qualitative analysis was used to assess data collected through semi structured interviews. The qualitative data was meticulously transcribed and evaluated in order to classify them into categories based on themes, concepts, and other common characteristics. Themes that emerged from the participants' responses were then analyzed.

Before conducting the actual statistical tests, data screening for any irregularity based on the assumptions of correlation and regression tests was checked. These include checking missing values, outliers, normality, linearity, and homoscedasticity. To identify whether there are missing values or not SPSS MVA (Missing Values Analysis) was done. As stated by Tabachnick and Fidell (2013) SPSS MVA is specifically designed to highlight patterns of missing values as well as to replace them in the data set and done only for variables with at least 5 percent of data missing. The result of the analysis shows that there were 3 missing values on adaptive leadership, 5 on OL and 6 on OE. Therefore, because the missing values are fewer than 5% of the cases and the pattern of missing values is scattered randomly, the data are included in the study. Next to performing MVA the data was examined for linearity by P-P plots. The data examined by P-P plots for linearity illustrated a normal P-P plots of adaptive leadership and OL with a slight deviation from the normal P-P plot line for OE (see Appendix D, E and F). Thus, data was verified by the normal P-P plot line for the study.

The normality of data was checked using statistics and graphs. Statistically the skewness and kurtosis result shows that all variables are normal because the values are below +/- 1 (see Appendix G). Normality check through graph was done by histogram and scatter plots methods. When examining with scatter plots the value of all variables lie on almost a straight line. The same result is also gained through other graphic methods. In addition, the scatterplot of ZRESID vs ZPRED show almost a random pattern which indicates homoscedasticity. In Checking univariate outliers, the Z score of all variables was done statistically. As stated by Tabachnick and Fidell (2013), any z-score above 3.29 or below -3.29 is considered as an outlier case. Hence, the result shows that, two cases of OL with a value of 3.44 were observed classifying the values as outliers. The presence of these outliers was considered as minimal and nearer to the assigned value and would not significantly bias results. Therefore, they are included in the study. In summary, based on the above different results, assumptions for the tests were substantially met. After the assumptions are evaluated and met, mean, one sample t test, correlation and regression tests were performed among the independent variable (adaptive leadership) and dependent variables (OL and OE).

Consequently, before analyzing the qualitative data the first step was transcribing the audio files of the interviews conducted. The transcripts were read and re-read to get general understanding of the interviews and to identify categories and units of meanings. Then data were organized into categories on the basis of themes, concepts or similar features. Accordingly, similar categories were grouped together and arranged into themes. Themes were reduced by grouping related categories that show interrelationships. Themes relating to the research questions were developed based on semi structured interview items and participants responses. At this stage it was observed that, most of the themes that emerged from the interviews coincided with the literature. Thus, the major themes; currently practiced leadership styles, the major driving forces in practicing the leadership styles, the common characteristics of adaptive leadership dimensions, appropriateness of the leadership style being used in universities, the current status of OL, its contribution to organizational development, the effectiveness of the institutions, and major areas of effectiveness were organized. Moreover, in the process of data analysis, constant comparisons and where appropriate directly using the verbatim of the respondents and in some cases summarized expressions of ideas were presented followed by the

interpretation of the researcher. In analyzing data, the participants of the semi structured interview are annotated as "P" stretching from P1 to P10.

3.10. Ethical Considerations

Prior to data collection, institutional consent was communicated to the presidents of the universities to obtain research permit and approval from each sample university. To meet the ethical standard of a scientific work, attempt was made by the researcher to explain the purpose of the research, and ask the participants to provide their consents to participate in the study. Hence, informed consent was obtained from the participants before they respond to the questionnaire and semi structured interview. Accordingly, only those participants who provide their full consents were made to participate in this study. In addition, the participants were assured from the very outset that their responses will be kept confidential and the information that they provide in the questionnaire and interview is only for research purpose. In addition, information was also given to the participants that they are protected by maintaining their privacy, confidentiality and anonymity. Specifically, the participants were informed that their participation is purely voluntary and they are free to withdraw at any time in the course of the study.

Chapter Four

Data Presentation, Analysis and Discussion

4.1. Introduction

This chapter mainly focuses on the data presentation, analysis and discussion of results based on the data obtained from the respondents using questionnaire and interview. The purpose of this study was to examine the practices, status and relationships between adaptive leadership and OL, and adaptive leadership and OE in the context of Ethiopian public HEIs. To achieve this purpose, a questionnaire was distributed to 620 sample respondents, through careful observation of the researcher following the procedures of data collection discussed in chapter three. However, 27 questionnaires were not returned and seven more were discarded for they were incomplete. After undertaking the necessary data cleaning process, the researcher found a total of 593 copies duly filled and returned questionnaires which are usable for the data analysis with 95.6 % return rate. In addition, qualitative data were collected through conducting semi structured interview sessions with 10 presidents and/or vice presidents of HEIs under study. Furthermore, in dealing with the quantitative and qualitative data analysis, the information obtained through both ways for a single variable were analyzed separately on the issues treated, as informed by the nested mixed design (Creswell, 2012). This is because on certain issues, data were collected both quantitatively as well as qualitatively; one complementing the other, while for some other issues data were obtained only through quantitative method. Therefore, data concerned about the same issue are merged or integrated at the discussion stage. Thus, in the following part of the study the results of data analysis and its subsequent discussion are presented in accordance with the stated research questions.

4.2. Demographic Characteristics of Respondents

This section presents information about the demographic characteristics of the respondents in terms of sex, educatinal background, occupational status and service year in the university. The result of the data analysis is depicted in table 3 below.

 Table 3

 Demographic Characteristics of Respondents

No.		Item	Frequency	Percent
		Male	513	86.5
		Female	80	13.5
1	Sex	Total	593	100
2		BA	82	13.8
		MA	446	75.2
	Education Level	PhD	65	11
		Total	593	100
		Below 5 years	271	45.7
		5 to 10 years	232	39.1
3	Service year in the	Above 10 years	90	15.2
	university	Total	593	100
		Leader only	69	11.7
		Instructor only	398	67.1
4	Occupational status	Leader and Instructor	126	21.2
		Total	593	100

Source: *Computed from the questionnaire*

With regard to the sex composition of the respondents, the result in Table 3 above shows that the great majority of them (86.5 %) were males, whereas the remaining 13.5 % were females. It was also necessary for the study to determine the educational levels of the respondents as it could help to determine the level of understanding of the respondents about the practiced leadership style and evaluate its effect on perceived status of OL and OE in the institutions. As per the above table the majority of the participants are with MA/MSC (75.2%) level, followed by BA/BSC holders (13.8%) and the rest (11%) are with PhD level of educational background. This implies that the respondents have appropriate educational background to easily respond about the practices of the current leadership style and its effect as well as the status of OL and OE in the HEIs. In relation to the respondents' length of service years in the universities, 45.7% of the respondents worked below five years which are mainly from the new universities followed by 39.1% of the respondents serving from 5 to 10 years and the rest 15.2% above 10 years of service. This indicates that majority (54.3%) of the respondents

have served more than five years which can entail that they could have better knowledge about their organization's leadership practices and its effect on the outcome variables.

On the other hand, 67.1% of the respondents reported that they are working as instructors, 21.2% are serving both as leaders and instructors and the rest who are working only on leadership position include 11.7%. Thus, 32.9% of the respondents are working in different leadership positions of their respective HEIs while the majority are working as instructors only. These findings show that sample instructors as followers of their immediate leaders, and respondents in various middle-level leadership positions, have a variety of perspectives on the extent of adaptive leadership practices and the state of OL and OE in their respective institutions.

4.3. Findings Related to the Main Constructs of the Study

This section is mainly concerned with the presentation of the results of the study in line with the basic research questions.

4.3.1. The Extent of Adaptive Leadership Practices

One of the main focus areas of the research is understanding the extent to which the adaptive leadership is being practiced in the target universities. The results of this have been summarized under Table 4 below.

Table 4Status of Adaptive Leadership Practice (One sample t test, n = 593))

Variable and its Dimensions	t	Mean	df	Mean	Std	Sig. (2-
				difference	deviation	tailed)
Adaptive leadership	120.86	4.20	592	1.20613	.24300	.000
Get on the Balcony	65.62	4.25	592	1.25228	.46474	.000
Identify Adaptive Challenges	58.62	4.46	592	1.45936	.60626	.000
Regulate Distress	56.46	4.24	592	1.24115	.53530	.000
Maintain Disciplined Attention	50.46	4.55	592	1.54874	.74738	.000
Give the work back to the people	38.89	3.91	592	.90641	.56753	.000
Protect leadership voices from	32.21	4.02	592	1.01644	.76852	.000
below						

The analysis of data gained through the questionnaire on the first research question ascertain that there exist adaptive leadership practices in the institutions with an aggregate mean value of 4.20. The result of one sample t test also illustrates a value of t=120.86 with p<0.05 significant level indicating that there is no significant difference between the mean and population mean. This value indicates that respondents perceive that adaptive leadership is practiced by the leadership of the institutions under study. Considering the mean and t value in relation to the dimensions of adaptive leadership, all dimensions are significant with p<0.05 and the highest mean value is observed on the dimension which indicates that the leaders "maintain disciplined attention" with a mean value of 4.55 and t=50.46 which indicates that the leaders as adaptive leaders are giving much attention to encourage followers remain committed to the work, fosters dialogue to address conflicts and refocuses employees attention on the change process. The result is followed by the dimension which designates that, leaders "identify adaptive challenges" with a mean value of 4.46 and t=58.62. This indicates that the leaders are trying to differentiate between adaptive and technical challenges and how to properly address each in order to work with, and learn from, various stakeholders to iteratively develop fundamental changes to the status quo.

The other dimensions which are labeled as "get on the balcony" and "regulate distress" account for (4.25 mean and t=65.62) and (4.24 mean, 56.46 t value) respectively. This shows that the leaders play a role in assessing the existing situation by viewing patterns from a distance to develop a perspective of the environment without engaging directly with the action. In addition, it indicates that, leaders are working in creating a holding environment and conflict management to regulate personal distress which are developed because of adaptive challenges facing the institutions. Compared to others the dimensions with minimum values are "protect leadership voices from below" and "give the work back to the people" with 4.02, and 3.91 mean values and 32.21 and 38.89 t values respectively. These values designate that, leaders of the HEIs under study moderately listen and stay receptive to the views of those without authority and try to empower people to think for themselves to solve their own problems. In general, the above results on the extent of adaptive leadership practices imply that, even if different mean values are observed in each dimension, the overall result reveals that adaptive leadership is practiced by the leaders of the universities under study at different levels.

In addition to the above results, the analysis of qualitative data gathered through structured interview from sample respondents in relation to the first research question which refers to the extent of adaptive leadership practices in HEIs was conducted. The first question of the semi structured interview was intended to determine what knowledge, if any, participants had about their level of leadership knowledge, and what were they practicing as a leader in their institutions. At the start of each interview session, the terms traditional and non-traditional leadership theories and their similarities and differences were explained to participants of the study. The range of leadership experience for participants was 2 to 8 years and averaged 6 years. An assumption could be made that given a span of 6 years, leaders would have practiced some form of traditional leadership theory, however, the majority of these participants stated they always, or most frequently practiced non-traditional leadership.

A review of the interviews data suggested that all the participants are practitioners of varying leadership theories and do not rely on, or practice, one standalone leadership theory. There are numerous elements, traits, and concepts that the participants possess, utilize, or feel are important aspects for their leadership. However, adaptability and change were identified by most participants as an important skill for effective leaders. During the interview it was surprising and interesting that responses to the question "What type of leadership style do you practice?" all participants, except P4, responded as non-traditional practitioners and much of their explanations by definition would be considered behaviors associated across adaptive leadership. P4 is a president with 5 years tenure considered himself a transformational leader. Given his experience, academic position, and answers to this and other questions, his responses were interesting. While P4 considered himself as a transformational leader, his discussion for this question and other questions during the interview suggested that he was a practitioner of adaptive leadership. There was clearly a difference of opinion or definition as to what an adaptive leader is, and P4's responses would suggest that he is a non-traditional leader.

When participants were asked if they think that today's leaders have transitioned from traditional leadership, their responses were similar in that they themselves and some others are non-traditional, however there are other leaders who have not or will not change. An interesting point was that participants perceived continued practice of traditional leadership as a negative, as stated by P10:

"The world has changed a lot and leaders have to change with that world. the answer is some organizations are better than others, some people are better than others at adjusting to the change, but the change is happening whether you like it or not. So, if you're going to be successful you better adjust".

The view of the participant was echoed by a quote from P1:

"I think that the majority of leaders are still practicing traditional leadership and they're not going to go to nontraditional leadership practices because it's not easy to grasp and it doesn't feel comfortable. But there is a need of following the nontraditional one to overcome the dynamic challenges we face today".

A common theme with participants was their acknowledgement that adaptability, or ability and willingness to the current unpredictable scenarios was identified as a necessary attribute for a leader to be successful in a constantly changing environment. In relation to this P2 stated "...change is happening whether you like it or not. So, if you're going to be successful you better have to adjust yourself to the current dynamic world". An interesting point was made by two vice president participants P9 and P6 in their belief that; change was not just something that happens, but that it is a duty of leaders to drive change. Thus, adaptability and change were identified by most participants as an important skill for effective leaders.

In the interview discussion with P6, the respondent described that:

"...the university's leadership does not clearly communicated leaders to act accordingly to the current need. There is a gap and limitation to practice what you described as adaptive leadership to cope up with the change process. There is also fear, attitudinal problems and lack of commitment to practice adaptive leadership with self-initiative and dedication."

These may be resulted in due to absence of clear direction and communication where the change leads and determines the fate of the institution in the future. In relation to the distress and confusion of employees during the process of adaptability and change, one of the participants P4 argued that "bridging the distance between the leaders and the university's academic and support

staff have been the best way of lessening tension and improving service delivery at the institution." In addition, one participant P-6 shared this same opinion describing that the university leaders "were now set to adapt and empower employees to think for themselves to solve their own problems and to build trust among all internal stakeholders. I believe this will help to improve the work climate at the institution." All in all, while the institutions faced several challenges, efforts have equally been made to counter these challenges. In relation to the other theme concerned with the current HEIs environment and the capacity of leaders in identifying the current challenges facing the HEIs and the solutions, P2 stated that, "...we are working in safe environment peacefully, because of the capacity of the leadership to identify serious challenges faced due to political and ethnic contexts and finding solutions with the participation of stakeholders." This idea is also supported by respondent P3 who described that; "...in this university for any challenge that occur and the solutions delivered, the leaders at all levels consider the participation of staff and students. Decisions are made with the interest, knowledge and participation of staff members and students". P5 also stated that,

"The institution has protected itself from unreasonable external destructive forces through the hard work of the leadership, achievable academic goals are set for students, educational integrity of the programs is maintained and the leadership is friendly, supportive, open and collegial and there is safe working environment."

The response of interviewee P1 is also evidenced as, "I have observed that the university can be expressed as peaceful compared to others. This is mainly because of the collaborative effort of the leadership with students, employees, the community and other stakeholders."

In connection to regulating distress and conflict that arise in the implementation and adaptation of change initiatives, and leader follower relationship, listening and communication was mentioned frequently during interviews and viewed as one of more important skills for a current HEI leader. In relation to this P5 stated:

"I think the most important thing that a leader should be able to do is communicate leadership, and not only should the leader have good verbal communication skills, but a leader should also be able to write well. Accuracy, brevity, and clarity, go a long way with getting the right message."

They also noted how failure of effective communications could diminish certain workplace tensions, anxieties or fears related to implementing change initiatives. Even though, majority of the interviewees describe positive thoughts in relation to the current leadership practices, there are few respondents who disagree with the above ideas on the current status of leader follower relationship. Specifically, an interviewee vice president P8 described that;

"There is lack of teamwork, and shared purpose; lack of proper use of communication channels which are all responsible for the failure to bring harmony between employees at the university." P5 also remarked that "there are problems which cannot be ignored. Therefore, there is a need of developing a sense of trust, confidence, enthusiasm between employees and leaders which should be the concern for the future".

Moreover, although most of the respondents express that knowingly or unknowingly the leadership of the universities are practicing adaptive leadership to overcome the current challenges, some respondents express that some leaders are still practicing the traditional leadership activities which is described by P9 as; "most leaders focused on routine activities. Such leadership style and practice has adversely affected the relationship of leaders and employees in the institution." Respondent P11 also added; "the leadership culture of the institution is not employee oriented. Social relation and interaction of leader-employee is not created in the expected level. The fact also has effect in employees' relation within and across different sections of the institution."

The above results of the quantitative and qualitative data analysis indicate that, even if the respondents do not specify that they are practicing adaptive leadership deliberately, the activities that are done to identify adaptive challenges, to find solutions with the collaboration of multiple stakeholders, empowerment of employees to find solutions to challenges and provision of a safe environment designates that respondents perceive that there are adaptive leadership practices in the universities under study. Therefore, based on the quantitative and qualitative analysis of data it can be concluded that, currently in the HEIs under study, the leadership at

different levels is practicing adaptive leadership model which is appropriate to the current political and social contexts of the nation.

4.3.2. The Practices and Status of Organizational Learning

The second research question tries to measure the perception level of sample respondents in relation to the current practices and status of OL in their institutions. The following table illustrates the significant level and results of the results of mean and one sample t test.

Table 5Status of OL practices (One sample t test, n=593)

Variable and its Dimensions	t	Mean	df	Mean	Std	Sig. (2-
				difference	deviation	tailed)
Organizational Learning	178.166	4.26	592	.17234	.17234	.000
Continuous learning	49.210	4.67	592	1.66892	.82586	.000
Dialogue and inquiry	5.309	3.12	592	.12366	.56725	.000
Team learning and collaboration	41.143	4.30	592	1.30017	.76953	.000
Empower people	13.449	3.35	592	.34851	.63105	.000
Embedded systems	37.719	4.31	592	1.31535	.84920	.000
Systems connections	49.376	4.41	592	1.41315	.69695	.000
Strategic leadership for learning	37.150	4.21	592	1.21473	.79624	.000

As indicated in Table 5 above, based on sample respondents' responses on the items related to OL, the results of the analysis designate that, respondents perceive the institutions as a LO with an aggregate mean value of 4.26. This result is supported by the one sample test which illustrates a value of t = 178.166 with p < 0.01 significant level which indicates that respondents perceive the institutions as LOs. The existence of this perception indicates that, the employees and institutions experience the numerous benefits associated with LOs.

Furthermore, in evaluating the extent of OL dimensions, as indicated in table 5 above, the highest occurrence is observed in "continuous learning" dimension with a mean value of 4.67, t = 49.210, and p<.01 significant level, followed by "systems connections" with 4.41 mean, 49.376 t value with p<.01 significant level. The results indicate that the institutions are learning

continuously and transform themselves, and they are linked to the communities. It is also encouraging for universities leadership to know that their staff frequently help each other learn, which fosters a culture of team work and selflessness. The other dimensions with almost similar result are "embedded systems" and "team learning and collaboration" with 4.31 and 4.30 mean values, 37.719 and 41.143 t values with both p<.01 significant level respectively. These specify that the institutions have implanted systems to capture and share learning as well as groups in the institutions are expected to learn and work together. The dimension which is concerned with "providing strategic leadership for learning" also resulted in a higher mean value of 4.21 and t =37.150 with p<.01 sig. level which designates that leadership of the institutions support learning and use learning strategically for organizational results. The dimensions of OL which are perceived to occur with moderate values are "empowering people" and "promoting dialogue and inquiry", with mean value of 3.35 and 3.12, t = 13.449 and 5.309 with p<.01 significant level. Hence, in the institutions under study, responsibility among employees which is distributed close to decision making so that people are motivated to learn, gaining productive reasoning skills to express their views and the capacity to listen and inquire into the views of others is observed at a moderate level.

Moreover, data analysis was made on the status of the three levels of learning i.e., individual, group and organizational, to identify and determine the level institutions better created and developed a LO culture.

Table 6Levels of learning (One-sample t test, n=593)

Level	N	Mean	SD	t	df	Sig. (2-
						tailed)
Individual	593	3.8963	.52452	41.612	592	.000
Group	593	4.3078	.74008	43.030	592	.000
Organizational	593	3.9921	.61287	39.421	592	.000

SD= Standard Deviation, df= degree of freedom

Thus, as shown in table 6 above, respondents perceived higher learning culture in the institutions at the group level with values (Mean = 4.31, SD = 0.74, t=43.030 with p <.01). The organizational level learning culture is seen at the second level, with a moderate value which is a bit above the individual level (Mean = 3.99, SD = 0.61, t=39.421 with p<.01). The individual level learning had values that were lower than those of the other levels with a moderate value (Mean = 3.89, SD = 0.52, t=41.612, p<.01). These results show that respondents believed that group level learning is perceived at a higher level than organizational and individual levels of organizational learning in the HEIs under consideration.

The analysis of qualitative data gained through interview also supports the results discussed above. Considering the level of OL in the HEIs, the respondents of the interview sessions describe the status of their institutions in different learning perspectives. In relation to the current overall status of OL, almost all respondents expressed their feelings by stating the nature of HEIs as learning and knowledge centers. For example, P4 expressed that; "since the major objective of universities is teaching learning and research activities, learning in this organization is unquestionable. Every staff member personally, at departmental level in teams and groups, and at the institution level, learning is a day-to-day activity." P6 noted that; "in this day and age with the sort of technology and things like that, the staff who have been here all these years are still learning on a month-to-month and year-to-year basis as well." In addition, P7 stated that; "everyone in the institution is responsible for their own learning." She talked about teachers deciding that they needed professional development to be better teachers. She said, "As a learning organization, our professional development and learning as adults is based on what the students have to learn and the knowledge and skill needed at this level. It is all connected." P4 added that; "everyone is participating in learning, from the students to the staff members." P5 also said that; "when staff members want to learn and improve their educational level, the university motivates and allows them further education. For employees and teams to learn some better ways of doing things, they go out to other institutions for experience sharing." P8 said, "We believe that everyone, teachers, administrators, and students, must be learners."

In the analysis of a theme which was identified on dimensions of OL, respondents expressed experiences of OL and its status in their respective universities. Hence, respondent P10 stated that, "in my institution there is an experience in developing and enabling learning

where employees are expected to learn on the job; an expectation by the leadership of the institution that competency would pick up in the long term." Another respondent P8 expressed that; "we have developed an approach to train others as cooperative learning which could be the best way to learn at different sections of the institution." The above ideas were supported by P7 who noted that; "the natural pairing of continuous improvement with continuous learning is important and it was important that individual staff members were aware of their individual importance to institutional improvement initiatives."

In relation to the status of the level of learning in the institutions, respondents reflect their experiences with a diminished emphasis on the individual and institutional levels of OL, which indicates that the majority of participants' responses were related to unit or departmental learning experiences. With respect to individual learning experiences, participants sometimes described improvement in terms of prior experiences. This could indicate that many of the required skills and knowledge they previously acquired were directly transferable to the new improvement initiatives. In addition, participants were frequently hesitant when describing their personal learning experiences during improvement initiatives. Moreover, in relation to the level of OL practices, interview respondents felt that the development of individual learning capacity was an antecedent to the development of OL. In addition, almost all study participants talked about how they managed and promoted individual and group learning as essential resources to improvement. In conclusion, the analysis of qualitative data reveals that organizational effort or system for LO culture are observed in the institutions, which enables sharing of information and knowledge across and between departmental and organizational levels. The systems in the institutions have provided and fosters an open and supportive learning environment where formal and informal exchanges of information and knowledge occur.

4.3.3. The status of organizational effectiveness in HEIs

The third research question tries to measure the perception level of sample respondents in relation to the extent of OE of their institutions. The following table illustrates the significant level and results of one sample t test.

Table 7

Status of organizational effectiveness (One sample t-test, n=593)

Variable/ Dimensions	t	Mean	df	Mean	Std	Sig. (2-
				difference	deviation	tailed)
Organizational Effectiveness	110.043	4.89	592	1.88889	.41800	.000
Student educational satisfaction	45.047	4.78	592	1.75014	.68330	.000
Student academic development	56.344	5.11	592	2.01096	.63831	.000
Student career development	25.183	4.24	592	1.31197	1.01342	.000
Student personal development	43.606	4.67	592	1.56661	.63609	.000
Faculty and administrator	39.588	4.44	592	1.32715	.67314	.000
employment satisfaction						
Professional development and	53.965	4.86	592	2.26391	.67746	.000
quality of the faculty						
System openness and community	57.235	5.08	592	2.77150	.62269	.000
interaction						
Ability to acquire resources	52.680	5.00	592	2.26981	.63863	.000
Organizational health	56.642	5.05	592	2.27010	.57894	.000

As indicated in the Table 7 above based on sample respondents' responses on the items related to OE, the results of the analysis designate that, respondents perceive the institutions as effective, with an aggregate mean value of 4.89. This result is supported by the one sample t test value which illustrates a value of t = 110.04 with p < 0.01 significant level. The value also indicates that respondents perceive the HEIs under the study as effective institutions. Moreover, in evaluating the level of OE dimensions, the highest value is observed in "student academic development" dimension with a mean value of 5.11, t = 56.34, and p<.01, followed by "system" openness and community interaction", "organizational health", and "ability to acquire resources" with 5.08, 5.05, 5.00 mean, and t values of 57.235, 56.64, 52.68 respectively with an overall p<.01 significant level. These results specify that the institutions are effective in the rate and extent of achievement, growth, and progress of their students, in the attention given to interaction and adaptation with the external environment, and the service given to the community. In addition, the HEIs under study can also be considered as effective on the range of resources they earn from outside sources and on their level of smooth functioning from the viewpoint of processes and operations such as good-will and liveliness. Dimensions which are "professional development and quality of the faculty" with 4.86 mean and 53.97 t value, "student educational

satisfaction" with mean 4.78, t value of 45.05 both with p< 0.01 significant level also indicate the effectiveness of the institutions. This suggests that, the range of work achievement and improvement of the faculty members as well as the extent of motives toward work progress the institutions provide, and the satisfaction of students with their educational experiences at the place where they are studying is also successful. Compared to other dimensions, the one with the lowest mean value is "student career development" with 4.24 mean, 25.18 t value with p< 0.01 significant level. This implies that the institutions compared to other dimensions, are working less in students' occupational and vocational progress.

To further evaluate the fields OE in which HEIs under study are better effective, one sample t test was conducted between the main fields of OE which were developed by Cameron (1981) i.e., academic field, moral field, and external adaptation field.

Table 8Perceived statuses of the main fields of OE (One sample t test, n = 593)

Level	N	Mean	SD	t		Sig. (2- tailed)
External	593	4.9642	.83869	57.030	592	.000
Moral	593	4.7825	.75748	57.303	592	.000
Academi	593	5.0417	.87070	57.103	592	.000
С						

According to Table 8 above, the findings show that respondents believed HEIs were more effective in the academic field than in the other two OE fields, with values (Mean = 5.04, SD = 0.87, t=57.10, p<0.01). Effectiveness in the realm of external adaptation follows this conclusion, with values of (Mean = 4.96, SD = 0.84, t=57.03, and p<0.01). Respondents believed that the study's institutions were also effective in the moral field of effectiveness with values (Mean = 4.78, SD = 0.75, t=57.30, p<0.01). These results prove that, the HEIs under study are better effective in academic dimensions which are mainly concerned with student academic development, professional development and quality of faculty and ability to acquire resources.

The result is followed by the external adaptation field which is concerned with student career development and system openness and community interaction. However, the moral field in which the activities are related with student personal development, student educational satisfaction, faculty and administrator employment satisfaction and organizational health though the result looks low compared to others, the institutions are also effective with a remarkable mean value. Thus, it can be expressed that, respondents perceived OE in HEIs takes place at all dimensions.

Considering the qualitative analysis of data on the status of OE, the results indicate that respondents perceive their institutions as effective. This was mainly described by almost all participants referring the quarter and annual reports of their respective institutions. For example, P3, P6, P9 and P10 argued that, "my university has been expressed as effective in the reports of the university and separately by different sections and annual performance evaluation meetings based on the achievement of organizational goals planned in the academic year." P2 and P5 also mentioned that; "The major source of information to state that the university is effective is, the annual performance report. Therefore, even if there could be some gaps, in general the institution has attained more than 90% of the intended goals." The results indicate that the participants of the interviews recognize that the universities under study could be taken as effective with some gaps.

Furthermore, in relation to the dimensions of OE, almost all of the participants recognized the value of positive stakeholders' engagement as a means to secure OE. P3, P4, and P7 viewed formal stakeholders' engagement as necessary because it allows all contributors to know and appreciate their respective roles and functions that they will perform. P3 remarked; "it is necessary to engage as many agencies or individuals as possible. So, to attain goals, the institution has engaged the community, government sectors, private sector, security forces, political entities, the ministry, regulatory agencies, etc." P7 made similar comments of extending that stakeholders' engagement to the end users so they feel included in the decision process. P7 remarked; "We have held a variety of public meetings as a result of various problems and other regional, national, and worldwide difficulties. At these events, we invite the public to share their thoughts on the issues and provide solutions."

The results of the analysis done based on the dimensions of OE, it is expressed by respondents P5, P10 and P11 as;

"In the university achievable academic goals are set for students which are properly measured in each semester, educational integrity of the programs is maintained and the leadership is supportive, open and collegial and there is safe working environment which led us for a better performance each year."

In addition, P1 and P2 stated that, "effectiveness is measured targeting the intended goals in our basic mission which are teaching learning, research and community services. When we measure our achievement according the objectives it can be expressed that we are effective in all those activities." Respondents P8 and P6 also stated the effectiveness of their institutions, they added that there are areas where gaps are observed through describing;

"The good thing that should be mentioned in this case is that we participate in every decision that is related to students' academic affairs and interaction of the surrounding community which makes us successful. In general, the university can be expressed as effective, but there are some problems in the services provided and in the teaching learning process."

In relation to the areas which are mentioned as problems in bringing effectiveness, respondents P4 and P9 also admit that there are some problems "...in graduates career development, in promoting satisfaction levels of students and staff, and developing a sense of trust, confidence, enthusiasm between staff members which needs concern for the future". Another interviewee P2 described the problems which hinder the overall effectiveness as "there is lack of teamwork, and shared purpose; and lack of proper use of communication channels which are all responsible for the failure to bring harmony between employees and the overall organizational health at the university."

The above results indicate that, the institutions under study can be expressed as better effective in student academic development, their system openness and community interaction, and the ability to acquire additional resources, which are key functions of HEIs. In the areas of students educational and faculty and employee satisfaction and their overall organizational health it is

indicated that institutions under study could be expressed moderately effective. Therefore, based on the quantitative and qualitative data analysis above it can be concluded that the institutions under the study can be perceived as effective. However, this does not mean that there are no problems in the status because as it is described above, there are observed gaps which might stifle OE if they are not taken properly and immediate solutions are not provided.

Furthermore, data on the effectiveness of HEIs were acquired from selected document observations utilizing checklists. In this regard, in addition to the main working document for HEIs (senate legislation), the researcher has seen several related documents being used to streamline academic and administrative tasks such as the current strategic and the previous four years operational plans and quarterly and annual reports from the HEIs colleges and departments. The researcher has learned from the documents that plans, performance measurement and evaluation reports were created by each department and sent to the planning directorate, which is in charge of organizing the institutional plans and reports for HEIs. The past four years official plans and reports of the HEIs under review unequivocally show that the BSC tool is being aggressively applied in an effort to control performance both at the individual and organizational levels. The integrated application of BSC for the complete accomplishment of higher-level organizational objectives has garnered the government's attention more recently. All HEIs are required to create their own integrated strategic and operational plans using the BSC tool. The researcher has discovered that using the tool to plan in an integrated way required significant skill gaps. Most of the time, lower levels of offices and individual employees were not informed of corporate goals and performance targets. We must keep in mind that the core principle of BSC is to build an organization that is focused on strategic objectives and to match each employee's daily actions within the firm with that strategic purpose. Moreover, HEIs under study often have a set of annual institutional goals that are focused on student learning, research and community services, and faculty professional development, according to information gleaned from document reviews. Overall, according to the performance reports, HEIs operate successfully, with a performance level of more than 92% in all aspects of their objectives. This suggests that the HEIs believed their efforts to be successful. The report includes major strong points, weaknesses, and deviations, as well as recommendations for resolving the deviations. Furthermore, evidence from document analysis showed that monitoring and assessment techniques were intended more

for administrative duties and organizational objectives than for diagnosing or enhancing educational practices.

4.3.4. Relationship between adaptive leadership practices and organizational learning

To ascertain the degree of relationship between adaptive leadership practices and OL, Pearson correlation analysis was performed taking adaptive leadership as the independent variable and OL as a dependent variable. The result is shown in Table 9 below.

Correlation coefficient of Adaptive Leadership and Organizational Learning

_		Adaptive Leadership (AL)	Organizational Learning (OL)
A T	Pearson Correlation	1	.819**
AL	Sig. (2-tailed)		.000
	N	593	593
	Pearson	.819**	1
O.I.	Correlation		
OL	Sig. (2-tailed)	.000	
	N	593	593

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Table 9

As depicted in Table 9 above, the result of the correlation analysis indicates that there is significant relationship (r= 0.819, P<0.01). Thus, the r value specifies a high degree positive significant correlation of adaptive leadership with OL.

Furthermore, the correlation test performed to ascertain the relationship between adaptive leadership dimensions and OL (see Appendix H) indicates that the dimension "protect leadership voices from below" dimension scored no significant relationship with significant level p > .05. The dimension which states "give the work back to the people" shows significant relationship with p<.05 sig. level. The rest four dimensions (get on the balcony, identify adaptive challenges, regulate distress, maintain disciplined attention) have significant relationship with p<.01 value.

Compared to others, the highest value is observed on the dimension "maintaining disciplined attention" with a moderate relationship of r=0.39 value (see Appendix H). Therefore, the results indicate that when individual dimensions of adaptive leadership are tested for their effect on OL, give the work back to the people, get on the balcony, identify adaptive challenges, regulate distress, and maintain disciplined attention were having moderate positive influence while, the dimension protect leadership voices from below was found to be nonsignificant in relation to OL.

Once the relationship was established, linear regression analysis using composite variable of adaptive leadership and OL was performed.

Model Summary (Adaptive Leadership and Organizational learning)

Model	R	R Square		Std. Error of the Estimate
1	.819 ^a	.671	.671	.32208

a. Predictors: (Constant), AL

Table 10

Table 10 provides the results of linear regression of adaptive leadership and OL. Thus, as it is shown in the model summary, the R Square value 67.1% indicates the total variation in the dependent variable OL is explained by the independent variable, adaptive leadership. In other words, the amount of coefficient of non-determination which accounts for 32.9%, indicates that the effect of the independent variable is also significant.

Table 11 *Coefficients (Adaptive Leadership and Organizational learning)*

Model		Unstand Coeffici		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.675	.098		6.866	.000
1	AL	.881	.025	.819	34.726	.000

a. Dependent Variable: OL

In addition, as depicted in Table 11 above, the Beta coefficient with a value of 0.82 also indicates the direct effect of adaptive leadership on OL. In general, the regression model with all adaptive leadership dimensions produced Beta = 0.82, t = 34.73, p = .000 sig. level. Furthermore, the F-ratio in the ANOVA test Table 12 below with F (1, 591) = 1205.9, p = .000 which is < .05 also indicates that the independent variable statistically significantly predicts the dependent variable, (i.e., the overall regression model is a good fit of the data).

ANOVA (Adaptive Leadership and Organizational learning)

Mod	lel	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	125.098	1	125.098	1205.900	.000 ^b
1	Residual	61.309	591	.104		
	Total	186.408	592			

a. Dependent Variable: OL

Table 12

b. Predictors: (Constant), AL

4.3.5. The Effects of Adaptive Leadership Dimensions on Organizational Learning

In relation to the research question which is concerned with investigating the predictive power of each dimension of adaptive leadership on OL, the result of the regression analysis is depicted in table 13 below.

Coeff	Coefficients (Adaptive Leadership Dimensions and Organizational learning)							
Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
	(Constant)	1.581	.264		5.977	.000		
	GB	.147	.054	.122	2.740	.006		
	IAC	.319	.046	.345	6.964	.000		
1	RD	.051	.049	.049	1.049	.294		
	MDA	.139	.029	.185	4.830	.000		
	BP	.002	.044	.002	.043	.966		
	VP	107	.031	146	-3.448	.001		

a. Dependent Variable: OL

Table 13

(GB Get on the Balcony, IAC Identify Adaptive Challenges, RD Regulate Distress, MDA Maintain Disciplined Attention, BP Give the work Back to People, VP Protect leadership Voices from Below)

As depicted in Table 13 above, the direct effect of each dimension of the independent variable on OL was examined using beta coefficients. Thus, the effects of get on the balcony (B=0.12, t=2.74, p=.006), protect leadership voices from below (B=-0.15, t=-3.45, p=.001), identify adaptive challenges (B=0.35, t=6.96, p=.000), maintain disciplined attention (B=0.18, t=4.83, p=0.00) on OL of the universities were statistically significant. That is to say, 12.2%, -14.6%, 34.5%, and 18.5% of OL was accounted by leaders' practices in the above mentioned four dimensions of adaptive leadership. The value of two dimensions "give the work back to the people" (B=0.002, t=0.04, p=.97) and regulate distress with test results of (B=0.05, t=1.05, p=0.29) disclosed no statistically significant effect on OL.

4.3.6. Relationship between adaptive leadership practices and organizational effectiveness

To ascertain the degree of relationship between adaptive leadership practices and OE, Pearson correlation analysis was performed between adaptive leadership as the predictor variable and OE as a dependent variable. The result is shown in Table 14 below.

Correlations (Adaptive Leadership Practices and Organizational Effectiveness)

		Adaptive Leadership	Organizational Effectiveness
	Pearson Correlation	1	.644**
AL	Sig. (2-tailed)		.000
	N	593	593
	Pearson Correlation	.644**	1
OE	Sig. (2-tailed)	.000	
	N	593	593

^{**.} Correlation is significant at the 0.01 level (2-tailed).

As depicted in Table 14, the result of the correlation analysis indicates that there is significant relationship (r= 0.644, P<.01). Thus, the r value specifies a significant positive correlation. In addition, the correlation test performed to ascertain the relationship between adaptive leadership dimensions and OE indicates that, all correlations among the dimensions are significant at level p < .01. The highest score within adaptive leadership construct is maintain disciplined attention which shows moderate relationship with (r= 0.44; p < .01). The lowest relationship with nonsignificant negative relationship is (r= -0.19; p < .01) scored by the construct protect leadership voices from below (Appendix I).

In addition, as it is shown in the model summary Table 15 below, the "R Square" value 41.5% indicates the total variation in the dependent variable OE is explained by the independent variable, adaptive leadership. In other words, the amount of coefficient of non-determination which accounts for 58.5%, indicates that the effect of the independent variable is also noteworthy.

Table 15

Table 14

Model Summary (Adaptive Leadership and Organizational Effectiveness)

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	.644 ^a	.415	.414	.63352

a. Predictors: (Constant), AL

The regression model (Table 16) with all adaptive leadership dimensions produced $R^2 = 0.415$, F(1, 591) = 419.63, p < .01. This indicates that the independent variable statistically significantly predicts the dependent variable, (i.e., the overall regression model is a good fit of the data).

ANOVA^a(Adaptive Leadership and Organizational Effectiveness)

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	168.417	1	168.417	419.633	.000 ^b
1	Residual	237.194	591	.401		
	Total	405.611	592			

a. Dependent Variable: OE

Table 16

Table 17

b. Predictors: (Constant), AL

Moreover, the regression results depicted in Table 17 below, indicate that adaptive leadership has a significant positive effect on OE signified by the coefficient of Beta factor of (β = 0.644, p < .01) indicating significant relationship between the independent and the dependent variable and we can say that adaptive leadership has a significant effect on OE.

Coefficients^a (Adaptive Leadership and Organizational Effectiveness)

				Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.186	.193		6.139	.000
	AL	1.022	.050	.644	20.485	.000

a. Dependent Variable: OE

4.3.7. The Effects of Adaptive Leadership Dimensions on Organizational Effectiveness

In relation to the research question which is concerned with investigating the predictive power of the dimensions of adaptive leadership on OE, the result of the regression analysis is depicted in Table 18.

Coefficients (Adaptive Leadership Dimensions and Organizational Effectiveness)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.769	.355		4.983	.000
	GB	.187	.072	.105	2.604	.009
	IAC	.429	.062	.314	6.974	.000
	RD	.106	.065	.069	1.621	.106
	MDA	.434	.039	.392	11.238	.000
	BP	217	.059	148	-3.697	.000
	VP	236	.042	219	-5.683	.000

a. Dependent Variable: OE

Table 18

To evaluate the direct effect of each dimension of the independent variable on OE was examined using beta coefficients. Thus, the effects of the dimensions "get on the balcony" (B=0.105, t=2.604, p=.009), "protect leadership voices from below" (B=-0.219, t=-5.683, p=0.000), "identify adaptive challenges" (B=0.314, t=6.974, p=.000), "maintain disciplined attention" (B=0.392, t=11.238, p=0.00) and "give the work back to the people" (B=-0.148, t=-3.697, p=0.000) on OE of the HEIs were statistically significant. That is to say, 10.5%, 21.9%, 31.4%, 39.2% and -14.8% of OE was accounted by leaders' practices in the above mentioned five dimensions of adaptive leadership. The value of one dimension which is "regulate distress" with a test result of (B=0.069, t=1.621, p=.106) disclosed no statistically significant effect on OE. In general, the result of the linear regression analysis between adaptive leadership dimensions and OE indicates that the independent variable has significant effect on the dependent variable (OE).

4.4. Discussion of the Findings

In this part of the research, the findings of the study were discussed with the support of the relevant literature review and empirical studies. Therefore, the discussion was conducted in line with the basic research questions of the study.

4.4.1. The Extent of Adaptive Leadership Practices

Based on the results of both quantitative and qualitative data analysis, it can be expressed that, the leaders and academic staff members of HEIs under study perceive that the university leadership is practicing adaptive leadership at every level. The results indicate that even though, the leaders do not specify that they are practicing adaptive leadership deliberately, the activities that are done to identify adaptive challenges, to find solutions with the collaboration of multiple stakeholders, empowerment of employees to find solutions to challenges and provision of a holding environment designates that, respondents perceive the practices of adaptive leadership in the universities. The result is supported by Hempe (2013) who argued that in an environment where there are no clear-cut solutions for many of the challenges being faced, educational leaders need to engage in adaptive leadership style. The theory of adaptive leadership is thus seen as a method to applying a combination of tactics and practices that can assist organizations and the people in resolving difficult issues, enacting change, and developing the adaptability to succeed in a challenging, competitive, and complex environment (Zimmerly, 2016). Literature also suggests that some HEIs are structurally rigid and inflexible organizations, and this is a significant hindrance in their development toward learning; hence, HEIs leaders ought to adjust their leadership style to develop a culture that favors overall learning (Ortenblad, 2018). It is also stated that the model of adaptive leadership recognizes that effectiveness in knowledge-based environments depends less on the heroic actions of a few individuals at the top and more on adaptive and flexible leadership practices distributed throughout an organization (Alanoglu & Demirtas, 2016).

According to Owens (2004), educational organizations today are confronted by problems that are highly complex, often ill-understood, and ambiguous with outcomes that are uncertain. As stated by Plowman et al. (2007), higher education faces an adaptive challenge, and effective adaptation will require engaged leaders of all types; those with and without formal authority and those from every level of organizational hierarchy. Thus, HEI leaders to overcome the uncertain challenges must be adaptable, and responsive to the challenges. Accordingly, the traditional top-down leadership is counterproductive to today's higher education landscape and is in misalignment with research on effective organizations that demonstrates the need for adaptive leadership (Alanoglu & Demirtas, 2016). Owens (2004) also described that, every leader in the

world is facing the need to cope with change, but not all leaders are creating changes that enable their organizations or communities to adapt in a successful and sustained way. To enable the adaptive leadership framework to be effective in HEIs, Nelson and Squires (2017) suggested that leaders must utilize human capital by adopting a leadership approach that facilitates teamwork. Hence, based on empirical study findings and literature, one may surmise that leading HEIs via adaptive leadership mind-sets may result in improved learning that can initiate them for better organizational success and goal achievements.

Moreover, the results of the study on the extent of application of adaptive leadership dimensions, indicates the occurrences of the practices in order starting from the highest mean value maintain disciplined attention, identify adaptive challenges, get on the balcony, regulate distress, protect leadership voices from below, and give the work back to the people. Though the mean values differ, the result shows that all dimensions score high mean values which designate the practices of adaptive leadership at all levels. Based on the work of Heifetz and his colleagues (Heifetz et al., 2009), these behaviors are general prescriptions for leaders when helping others confront difficult challenges and the inevitable changes that accompany them. Although there is a general order as to which leader behavior comes first in the adaptive leadership process, many of these behaviors overlap with each other and should be demonstrated by leaders at the same time (Northouse, 2016). Thus, taken together, these leader behaviors suggest a kind of recipe for being an adaptive leader.

Accordingly, the finding implies that compared to other dimensions, leaders demonstrate highly the dimension maintaining disciplined attention, which ensure the members of the institutions to focus on the task at hand and provide a degree of structure to the working and operation of the employees (Heifetz et al., 2009). Hoch and Dulebohn (2017) pointed out the need for the leader to ensure employees focus on the organizational objectives because employees may have their own objectives as a result of different social backgrounds. The other dimension which is also practiced highly was the dimension identifying adaptive challenges. This implies that, through identifying adaptive challenges leaders of the institutions are exploring new solutions, from a number of perspectives, and implementing creative and innovative possible solutions created from the collaboration of employees (Squires, 2015). In determining adaptive challenges, Arthur-Mensah and Zimmerman (2017) suggested that, leaders must

develop a capacity to differentiate the technical and the adaptive issues. Once the issue identified, the leader must determine how to address the adaptive challenge (Doyle, 2017). From this perspective, the leaders of HEIs have developed the capacity to differentiate between technical and adaptive challenges. As stated by Northouse (2016), one of the greatest errors of leadership is not properly diagnosing the challenge as technical versus adaptive, which results in the application of improper leadership.

The next dimension which is practiced next to the above dimensions is get on the balcony. This shows that the leaders of the HEIs understudy play a role in assessing the existing situation by viewing patterns from a distance to develop a perspective of the environment without engaging directly with the action. Leaders seeking to solve adaptive issues are encouraged to balance action with perspective taking, move from the dance floor to the balcony and reframe the problem into one that generates inquiry and collective problem solving rather than blaming and shaming (Nicolaides & McCallum, 2013). They are concerned with where people are at within the change process. Successful adaptive leaders are able to listen to others and understand the hidden meanings in what is being conveyed (Fowler, 2013). Leaders are able to see the bigger picture of what is happening in order to take a more strategic approach (Campbell-Evans, 2014). It is a dimension used to describe the leader stepping back from the situation to determine the adaptive issues (Arthur-Mensah & Zimmerman, 2017). Adaptive issues may not be of a technical nature that requires technical expertise, but instead may be complex issues that require a different type of decision-making approach (Arthur-Mensah & Zimmerman, 2017; Vincent et al., 2015).

The other dimension practiced with a significant mean value in HEIs under study is regulate distress. This result specifies that in overcoming adaptive challenges faced to the institutions, leaders employ a delicate balance between having people feel the pressure to change and not having them feel overwhelmed by the envisaged change. In relation to this, Doyle (2017) stated that by regulating the distress leaders make opportunities for diverse groups to share practice, discuss issues and progress to create mutual support, clarify assumptions and relieve competing perspectives. In addition, Doyle (2017) stated that, leaders must create an environment that all members are able to express themselves as drivers for change without fear of judgment or retribution. It is also described that, organizational performance and its

relationship to success is through active engagement between leaders and the followers (Aga et al., 2016; Doyle, 2017). This implies that, to create an environment where members can express themselves, the leaders must control the interpersonal relationships by improving the social relations, clarifying roles, and solving interpersonal problems that the organization may encounter (Aga et al., 2016). Doyle (2017) also added that the leader must manage potential conflicts and uneasiness when asking difficult questions. Therefore, it can be expressed that, the finding of this study is similar to the above findings because it indicates that the leaders in HEIs under study are working in creating a holding environment through minimizing the distress and dissatisfaction of employees and stakeholders which could be developed in the implementation of change initiatives.

The dimension, protect leadership voices from below, denotes that the leaders are involved in listening the voices of the members of the organization who may feel overshadowed throughout the process and may not express important views or make suggestions in the change process. In relation to this result Kok et al. (2014) stated that, employee participation and involvement in decision-making in HEIs needs to be considered and improved in order for institutions to adapt to the challenges from a rapidly changing environment and from competition. In addition, as a behavior of adaptive leadership its major role is to protect the voices of the members of the institution who may feel overshadowed throughout the process and may not express important views or make suggestions that will enable the change process to take place (Heifetz et al., 2009). In such a case the leaders encourage followers to share their views (Epitropaki et al., 2017). Cullen-Lester et al. (2017) asserted that this adaptive leadership behavior extends beyond individual knowledge and skills to include social relationships and group networking to improve teamwork performance.

The study's findings indicate that, when taking into account the dimension that demands that a leader give the work to the people, leaders of HEIs currently slightly rely on their employees' creativity and are only minimally engaged in giving the work to the people by giving them the freedom to come up with innovative solutions to adaptive challenges. This result is supported by Arthur-Mensah and Zimmerman (2017) who argued that empowering employees allow them to develop innovative and creative solutions to challenging issues. Hoch and Dulebohn (2017) supported the point and described that effective leadership strategies and

empowered employees will lead to a greater level of effort and out of range goals for organizational objectives. The effective leadership strategies that Hoch and Dulebohn (2017) posited to empower to the followers include inspiring, raising their levels of autonomy, and promoting the development of their skills and capabilities. This type of empowerment is centered on encouraging the building of intellectual capacity, sharing the level of autonomy and responsibility, and heightening the awareness of what they can do (Ceri-Booms et al., 2017). In summary, adaptive leadership style was empirically tested and described as suitable in the current context of higher education in South Africa and Vietnam universities (Harman et al., 2010; Kok et al., 2014). In relation to this Highsmith (2014) argued that adaptive leadership is necessary at all levels of technology and business in order to survive and thrive in the fragmented, uncertain corporate world of today. This indicates that, it is a leadership style that uses the best aspects of established leadership styles, and theories. In relation to the education sector, Nelson and Squires (2017) described that the adaptive leadership framework offers a unique means by which to conceptualize and sustainably address the unique challenges facing educational institutions today. Therefore, it can be concluded that, the finding of the qualitative data in this study implies that the current challenges have made the HEIs leadership to practice a model which is suitable to the current contexts of the institutions under study.

4.4.2. The status of organizational learning

The overall results of the quantitative and qualitative data analysis on the status OL designate that, respondents perceive in the institutions under study there is OL. This result is related to the findings of Schleicher (2018) and Benevot (2017) who describes that, world HEIs currently are highly expected to prepare students for life and work in a rapidly changing environment, for jobs and for using technologies some of which have not yet been created. Attaining competitive advantage requires organizations to be more effective in their learning strategies. Patterson (1999) has pointed out that HEIs are the places where teaching and learning activities go simultaneously, which in addition to providing knowledge to the learners, should also act as a source of continuous learning. However, this can only be achieved if these institutions develop a culture that creates and transmit knowledge. In a changing world, the strategic response of these institutions is to develop new ideas and approaches and implement them in their way of working, thus in the process of OL (Schleicher, 2018). To this end, HEIs

today have to be effective LOs (Schleicher, 2018). In addition, educational organizations are nowadays urged to learn faster than ever before to deal effectively with the seeming growing pressures of a rapidly changing environment (Fullan & Quinn, 2016). This implies that, for institutions attempting to promote sustainable change and development, this is an encouraging finding.

The results of the study in relation to the presence of OL dimensions indicate that the highest manifestation is observed in continuous learning dimension. This result indicates that HEIs under study encourage continuing education and learning programs for their professionals. This finding corresponds with studies of (Yang et al., 2004; Watkins & Marsick, 1993; Camps & Luna-Arocas, 2012; Kontoghiorghes et al., 2005) in which the dimension is described as the fundamental factor for improving the capability of organizations to achieve employees' satisfaction, to respond promptly to changes and thus enhance its productivity and effectiveness. As described by Kezar et al. (2006) institutions of higher education derive their strength through their ability to adapt to the changing circumstances, which they do so through continuous learning. The next dimension with the highest value is system connection subscale which is the same as the corresponding results of similar studies (Watkins et al., 2009; Song et al., 2009). This finding indicated that HEIs are connected with their environment and use evidence to change their working practices (Marsick & Watkins, 2003). They are also close to the holistic integrative perspective proposed by Watkins and Marsick (1993), where in order to facilitate continuous learning and change, a LO has the capacity to incorporate individuals and systems (Yang et al., 2004). Therefore, HEIs should emphasize the conditions prevailing in the internal and external environment, their culture, and the development of programs for fundamental organizational changes in order to succeed as LOs (Watkins & Kim, 2018). The other dimension the embedded system, had a mean value which corresponds with the results of other relevant surveys (Watkins et al., 2009; Song et al., 2009). This implies that, there has to be a committed adaptive leadership that can systematically acquire and embed new learning for continuous growth and sustainability.

Furthermore, the result of the next dimension points an indication that team learning within the HEIs was at a satisfactory level. This is encouraging because team-level learning is key to achieving organizational-level learning since the skills, the experience, and achievements

accomplished by a continuously learning team can then be shared throughout the organization, thus establishing a learning norm (Watkins et al., 2009). This implies that, using teams at workplace also enhances knowledge sharing through collaborative learning. There are supporting empirical evidences to confirm the long-standing proposition that team learning enhances team performance (Chan et al., 2003; Edmondson et al., 2001). In educational institutions team learning is a discipline through which small groups of people transform their collective thinking, learning to mobilize their energies and actions to achieve common goals. Team learning can be fostered inside classrooms and in pilot groups that pursue successful school change (Senge et al., 2012). The other dimension, strategic leadership, had also a satisfactory presence which is also related to the results of other studies (Watkins et al., 2009; Song et al., 2009). Moreover, in the process of learning, leadership behaviors have a significant impact on the success or failure of the adaptation and change process (Higgs & Rowland, 2005). Thus, a unique set of leadership skills and competencies are needed to effectively manage the unpredictable nature of organizational change while also attending to the human side of change. As it is designated by the results of this study, adaptive leadership is one method that accepts the unpredictability of change and also focuses on the emotional and social side (Heifetz & Laurie, 1997). Given the strategic role of leaders in organizations, not changing or learning how to successfully lead change will only hurt individuals and organizations in the long run. Therefore, the outcome implied that leaders have been able to provide strategic leadership for learning and have been able to create that kind of climate and culture within the institutions which facilitates OL (Marsick & Watkins, 2003).

As regards to the empowerment subscale, it was shown that it had a moderate existence which ensures that employees were involved in creating, owning and implementing a common vision and also that were motivated by leaders to learn, understand and assimilate the tasks and duties for which they were responsible (Marsick & Watkins, 2003). In order to achieve this, HEIs require a leadership pattern that will strengthen the collaborations between individuals and ensure that the visions of their institutions are common and understood by all (Chermack et al., 2018). The result was also related to the findings of other surveys (Watkins et al., 2009; Song et al., 2009). Hence, empowerment as a leadership responsibility is recommended as a feature of a LO (Yuraporn & Laubie, 2004). Lastly, the dimension inquiry and dialogue, had the lowest mean

value among all the OL subscales, though it is lower than others, it does not mean that the value is lower than the theoretically neutral mean. This finding was in line with the studies of Leufven et al. (2015) and Watkins et al. (2009) who described that in such practice the organizational culture supports questioning, feedback, and experimentation in which people gain productive reasoning skills to express their views and the capacity to listen and inquire into the views of others.

Besides, the results of data analysis made by segmenting OL dimensions to the three learning levels indicates that, group/team level learning has the highest value followed by organizational level learning. These indicates that, respondents perceived in the HEIs under study, the lowest learning behaviors value within individual and the greatest at the group level. This is surprising because, the results suggest that separately respondents are less in continuously learning but as they come together at the group and organizational level, learning behaviors increases. In addition, though there are difference at each level, the results gained by segmenting OL dimensions to the three learning levels, did not alter the original findings which stipulates the institutions as LOs. Thus, it can be confirmed that respondents believe learning behaviors are commonly present at the universities which could be supportive to universities leadership as they attempt to implement change and likely that change will be successful or sustainable.

This finding is supported by the study of Fullan and Quinn (2016) who stated that universities in current competitive environment should promote learning activities at the group and organizational level to enhance the quality of teaching and doing research and developing sustainably. In supporting the result, two educators, Mitchell and Sackney (2000), suggested that in educational institutions team/group learning happens in a collaborative process in which members distribute knowledge, become part of a collective discourse, and expand professional capacity. The study conducted by Hargadon and Bechky (2006) described that, moments of collective creativity tended to occur when individuals with new problems to solve interacted with individuals who had useful past experiences. In addition, Hargadon and Bechky (2006) stated that currently higher education faces an adaptive challenge, and answers lie in the collective learning of higher education members. To heighten this learning, higher education leaders can encourage the free flow of information as well as high levels of interaction among organizational

members with disparate views in which the resulting friction and exchange have the potential to generate insight fresh ideas, and innovative adaptations (Hargadon & Bechky, 2006).

Therefore, HEIs if truly want to practice OL, they need to support and encourage learning at all levels and should develop the capacity to utilize that learning to be more effective. This is because learning is crucial for universities which are the hubs of accumulated knowledge. In today's changing and dynamic environment, many organizations including higher learning institutions are required to adapt to changes or else be left out in this competitive world. Thus, in order for organizational members to cope with issues external and internal threat, OL is gaining prevalent attention as a crucial need for global strategic effectiveness (Doz et al., 2001).

4.4.3. The status of organizational effectiveness

The overall result of the quantitative and qualitative analysis suggests that, when taking into account the state of OE of the HEIs under consideration, the respondents see the institutions as highly effective. The result designates that, the HEIs are adapting to the current dynamic environment and working to achieve their short and long-term goals. It also implies that regardless of differences in magnitude, universities are working to realize their institutional effectiveness. The result is supported by the study of Akhtar and Ahmad Khan (2011) who described that, leaders of educational institutions are forced to improve their organization's effectiveness by meeting stakeholder demands and embracing new technology in current competitive driven era. This implies that, in order to stay competitive, institutions need to improve current competencies and enhance their OE. In relation to the finding Jacob and Shari (2013) also described that, in an environment that includes shrinking resource availability and increased competition, OE will be the key to their survival. In addition, adaptive leadership finds OE through the attainment of organizational goals via adaptive change intervention (Owens & Valesky, 2007). Therefore, the finding of this study reveals that HEIs are adapting the current challenges by implementing adaptive leadership which makes them competitive through attaining their overall goals. Thus, it is a necessity for the current HEIs to have more flexible, adaptable and proactive structure.

In relation to the extent of dimensions of OE, the result of the study demonstrates that the institutions are better effective in student academic development, system openness and

community interaction, organizational health, and ability to acquire resources. These results specify that the institutions are effective in the rate and extent of achievement, growth, and progress of their students, the attention which is given to interaction and adaptation with the external environment and the service given to the community. In addition, the HEIs under study can also be considered as effective on the range of resources they earn from outside sources and on their level of smooth functioning from the viewpoint of processes and operations such as good-will and liveliness.

This finding is supported by McCann (2004) who noted that OE is determined as the standard of the organization's successful fulfillment of their purposes through core strategies of teaching-learning, research and community services. It is recommended by empirical research findings of Sullivan and Wilds (2001) that HEIs should enforce their institutional effectiveness to improve the quality of education for greater achievement of student learning outcomes which will consequently impact on country's economic growth and development. Pearce and Conger (2003) also suggested that leaders and educators of effective institutions consider the levels of preparation of their students and provide them a higher than anticipated academic performance. The reviewed literature similarly showed that effectiveness in educational institutions was related to the ability of school leaders and teachers to help the student achieve specific learning outcomes and satisfy the interests of all stakeholders of the educational community (Kwan & Walker, 2003).

The result of this study is directly related with the findings of Jacob and Shari (2013) which also implies that, the leaders of the HEIs often seek OE by investing minimal resources to achieve superior outcomes in all aspects of their mission. Furthermore, the dimensions of professional development and quality of the faculty and student educational satisfaction also indicate the effectiveness of the institutions in these fields. This suggests that, the range of work achievement and improvement of the faculty members as well as the extent of motives toward work progress the institutions provide and the satisfaction of students with their educational experiences at their respective institution is also successful. As it is described by Ashraf and Kadir (2012), effective distribution of resource cooperation and engagement among staff, ethics, effective communication, and performance are the influential factors that any leadership and management must consider salient towards organizational effective performance and change.

Thus, when leaders of educational institutions give due attention towards effective working environment, it is likely to be excellent student's outcome, avoidance of turnover and poorquality services (Ashraf & Kadir, 2012; Owens, 2004). Compared to other dimensions, the one with the lowest mean value is student career development. This implies that, the HEIs under the study are working less in students' occupational, vocational progress and career opportunities. Thus, leaders should give due emphasis to all dimensions to create a successful institution. This is also supported by Owens (2004) who stated that, if leaders are able to develop abilities that enable them to lead adaptively in complex and rapidly changing situations, their organizations will be able to effectively meet the challenges dictated by the modern world. Therefore, even though the overall result depicts the institutions as effective, the dimensions that are observed with moderate value should be considered properly to overcome the gaps observed.

The results of data analysis in relation to the three domains/fields of OE prove that, the HEIs under study are better effective in academic dimensions which are mainly concerned with student academic development, professional development and quality of faculty and ability to acquire resources. The result is followed by the external adaptation field in which the institutions are working in student career development and system openness and community interaction. However, the moral field in which the activities are related with student personal development, student educational satisfaction, faculty and administrator employment satisfaction and organizational health though the result looks low compared to others, the institutions are also effective with a remarkable mean value.

In relation to these findings, Kwan and Walker (2003) identified the acquisition of key skills by the students through clearly developed learning outcomes as one of the main features of an effective academic organization. In addition, Hofman et al. (2015) based on the findings of their study, proposed that the most critical effectiveness indicators in academic organizations were satisfied teachers and students, academic achievement, satisfied stakeholders, and students who were trained as responsible citizens prepared for the social and economic context that awaits them. Hofman et al. (2015) also stated that, students' academic achievement could be a clear indicator of educational effectiveness. In this sense, Alanoglu and Demirtas (2016) suggested that leaders and educators of effective institutions should consider the levels of preparation of their students and provide them a higher than anticipated academic performance. Therefore, an

effective institution provides added value to the academic performance of its students as compared to similar institutions that accept students with similar levels of preparation (Alanoglu & Demirtas, 2016). However, Gilreath (2006) affirmed that in addition to academic achievement, there were several other outcomes which are related to professional development of faculty, satisfaction of stakeholders and student career and personal development that indicate an effective institution. Thus, it can be expressed that, respondents perceived OE in HEIs takes place at all domains.

4.4.4. Relationship between Adaptive Leadership and Organizational Learning

Considering the relationship between adaptive leadership and OL the result of quantitative data analysis designates positive and significant relationship. This designates that the more adaptive leadership is practiced in the HEIs, the learning capacity will be improved at the individual, group and overall organizational level. This finding is supported by the results of different empirical studies. Uhl-Bien and Marion, (2011) described that, learning is found at the heart of adaptive leadership theory. It is also stated that leaders can make it more likely by fostering high levels of interaction among individuals and groups, promoting unconstrained flows of information, and encouraging divergent ideas, out of these dynamics, learning arises (Uhl-Bien & Marion, 2011). In complex networks, where the contexts and mechanisms that enable adaptive leadership, ideas emerge, combine, diverge, become extinct, conflict with one another, adapt and change, and increase in complexity. The primary outputs of this complex dynamic are adaptability, creativity, and learning (Uhl-Bien & Marion, 2011). In such a case, individuals challenge each other's ideas, which may result in one or more of them adjusting their conceptions to better align with current knowledge (Lichtenstein et al., 2006; Uhl-Bien & Marion, 2011).

An empirical study conducted by Agostino et al. (2013) and Albury (2005) illustrates that the changing environment which has led to the practice of adaptive leadership has in many countries called for public sectors to be innovative in their services through OL. The findings of a study conducted by Damanpour and Schneider (2009) also indicates that innovation can contribute to improving the quality of public services, as well as enhancing the problem-solving capacity of organizations in dealing with societal challenges. This is because adaptive leadership

suggests that the role of leadership is to create optimal organizational situations that foster OL (Uhl-Bien et al., 2007). OL here denotes being able to create new solutions within a changing environment (Uhl-Bien & Marion, 2009). This is very much related to Yukl's (2009) reflection on ways of adaptive leadership that can enhance OL.

Furthermore, the correlation test performed to ascertain the relationship between adaptive leadership dimensions and OL indicates that except one dimension; "protect leadership voices from below" which indicates no significant relationship, the rest five dimensions (give the work back to the people, get on the balcony, identify adaptive challenges, regulate distress, maintain disciplined attention) have significant relationship with p<0.05 value. Thus, the results indicate that when individual dimensions of adaptive leadership are tested for their relationship with OL, give the work back to the people, get on the balcony, identify adaptive challenges, regulate distress, and maintain disciplined attention were having significant positive relationship.

In relation to this finding, it is stated that, a comprehensive understanding of the different dimensions of adaptive leadership underscores the importance of leadership as a learning process (Heifetz & Laurie, 1997) whereby leaders and followers cooperatively experiment with ideas to come up with effective solutions. As a result, followers feel a sense of empowerment and engagement in the process (Gill, 2002; Northouse, 2016), which is critically important when overcoming the uncertainty and unpredictability of organizational change. As stated by Highsmith (2014) adaptive leadership, at its heart, is an articulation of the adaptations necessary for modern organizations to flourish in this new, technological era, and to embrace the change that it enables. This indicates that adaptive leadership is about learning, adapting, and collaboration. In addition, this indicates that, this leadership theory identifies the challenge and the need for adaptive leadership when the solution to the problem is less than obvious and requires new learning (Heifetz et al., 2009).

Based on the results the highest value is observed on an important dimension "maintaining disciplined attention" with r=0.39 value. This result is supported by studies which state the dimension in the adaptive leadership framework, considers employee participation in decision-making which helps to get more satisfaction and commitments in organizations and this could be very important to promote OL (Marquardt & Reynolds, 1994) and more creativity and

innovation with empowerment (Yahya & Goh, 2002). Furthermore, Alsabbagh and Khalil (2016) in the context of HEI found that leadership is positively associated with organizational learning. Sutanto (2017) studied OL in the educational context and found that it is a contributing force for innovation and organizational change.

4.4.5. The Effect of Adaptive Leadership Dimensions on Organizational Learning

In relation to the effects of adaptive leadership on OL, the result of this study indicates that the application of adaptive leadership in the institutions have significant predictive power for OL. It is also designated that the total variation in the dependent variable OL is explained by the independent variable, adaptive leadership. The regression model with all adaptive leadership dimensions also produced that the overall regression model is a good fit of the data. This finding is supported by Uhl-Bien and Marion (2011) who stated that, at its most basic level adaptive leadership refers to adaptive, creative, and learning actions that emerge from the interactions of complex adaptive systems as they strive to adjust to tensions. It was already mentioned that, higher education leadership in the twenty first century has proven to be a good context for adaptive leadership.

According to Keshavarz et al. (2010) educational institutions can be considered as social complex adaptive systems as they show the characteristics of nested systems, continuous change and adaptation, distributed control, emergent changes and unpredictability. From these characteristics emerges the concept of OL which is an adaptive, self-organizing entity (Senge, 1990), able to manage knowledge (Garvin, 1993), and structural aspects enabling the support of learning activities (Armstrong & Foley, 2003) in order to continuously learn, develop and adapt to the changing environment (Ali, 2012). Based on this description it is clear that LO in itself is a complex adaptive system. Hence, as the world grew more complex, so did the need for learning which led to implementing adaptive leadership to overcome the challenges of the complex adaptive systems (Kezar et al., 2006).

In identifying adaptive leadership dimension which better predict OL, except the value of two dimensions (give the work back to the people and regulate distress) which disclosed no statistically significant effect on OL, the value of four major dimensions (get on the balcony, protect leadership voices from below, identify adaptive challenges and maintain disciplined

attention) on OL of the HEIs under study were statistically significant. That is to say, 12.2%, - 14.6%, 34.5%, and 18.5% of OL was accounted by leaders' practices in the above mentioned four dimensions of adaptive leadership. Although, it is possible to conclude that the above four dimensions have significant contributions for predicting OL of HEIs under study, identify adaptive challenges is the best predictor by which 34.5 % of the variability of OL was explained by it. Hence, this result indicates that the leaders of HEIs under study encourage and support others to change their assumptions, perceptions, beliefs, attitudes, and behaviors in defining the challenging situations and implement solutions so as to develop LO culture. This implies that leaders are capable of identifying adaptive challenges that are not easy to reach the solution or do not have a clearly defined solution. As stated by Cawsey et al. (2016) in the process of leading the leader needs to differentiate between a technical challenge (one with identifiable solutions) and the adaptive challenge (one where there are no easy or straight-forward answers). Failures in leadership often occur because leaders fail to diagnose challenges and problems accurately (Cawsey et al., 2016).

4.4.6. Relationship between Adaptive Leadership and Organizational Effectiveness

The result of the correlation analysis performed between the independent and dependent variable designates that, there is positive significant relationship between adaptive leadership practices and OE. In addition, the correlation test performed to ascertain the relationship between adaptive leadership dimensions and OE indicates that, all correlations among the dimensions are significant at p< 0.01. This indicates that the more adaptive leadership is practiced in the HEIs the better attainment of goals and OE. As stated by Muduli (2015) the way employees perceive the leadership of their authorities has a great impact on the effectiveness of their work, and therefore, on the effectiveness of the entire organization. Thus, the result is reinforced by the findings of Ahyar et al. (2017) who described that organizational success will be ensured when leaders utilize adaptive leadership strategies. In addition, the result of this study was consistent with Kouzes and Posner (2002) Nolan (2017), who stated that adaptive leadership is critical upon the organizational effectiveness and provides guidance for managers to compete.

It is widely agreed that organizations would be unable to effectively face the difficulties posed by the modern world unless leaders are able to develop qualities that enable them to lead

adaptively in complex and rapidly changing contexts. The research comparing leaders with either successful or derailed careers found that a leader will not be successful if she/he is not flexible enough to adapt to the new requirements of the environment (McCall & Lombardo, 1983). This suggests that, in the current environment, employing an adaptive leadership framework in higher education is the key to boosting their effectiveness to the necessary level. Hence, adaptive leadership is perceived as a forward and practical approach to helping organizations adapt to new or existing realities, so as to be effective (Jamison, 2006); leaders can encourage management of change via direct guidance and application of uniting resources.

According to Torres and Reeves (2014) as changes in today's environment occur, leaders are forced to reconsider strategies, organization, and leadership so as to attain their objectives. In addition, Arthur-Mensah and Zimmerman (2017) and Doyle (2017) identified adaptive leadership as a style that enhance the inclusiveness of people. Their position is that adaptive leadership style reduces the reliance of using technical approaches and procedures to solve complex issues (Blaskovics, 2016). This indicates that adaptive leadership suggests using entire employees as the core driving force for OE. Therefore, the use of adaptive leadership style by leaders as a business strategy may enhance effectiveness, invoke trust within the staff members, and foster a heightened sense of ownership among employees.

Furthermore, the result is supported by Owens (2004) who concluded that OE is primarily associated with adaptive leadership which results in the quality of the results or outcomes of organizations and how they reach their highest priorities and goals. In addition, adaptive leadership finds OE through the attainment of organizational goals via adaptive change intervention (Owens & Valesky, 2007). Owens (2004) also argued that adaptive leadership emphasizes the creation of new knowledge, skills, products, and processes in order to sustain the organization's success in the long run. DeMatthews and Edwards (2014) found consensus among leaders that educational institutions have an essential role in the development and implementation of high standards of quality and effectiveness. Consequently, educational leaders can connect the concepts of leadership and OE to successfully implement change in educational contexts (DeMatthews & Edwards, 2014). Therefore, based on the findings of this research and other empirical evidences cited, it is possible to say that employing adaptive leadership theory

and acculturate it in HEIs may help create supportive working environs characterized by goal achievement and success.

4.4.7. The Effect of Adaptive Leadership Dimensions on Organizational Effectiveness

The result of this study indicates that the application of adaptive leadership in the institutions have significant predictive power for the effectiveness of the HEIs under study. The effects of the five dimensions (get on the balcony, protect leadership voices from below, identify adaptive challenges, maintain disciplined attention, give the work back to the people) on OE of the HEIs were statistically significant. That is to say, 10.5%, 21.9%, 31.4%, 39.2% and -14.8% of OE was accounted by leaders' practices in the above mentioned five dimensions of adaptive leadership. Compared to other dimensions, maintain disciplined attention is the best predictor by which 39.2% of the variability of OE was explained by the dimension. This implies that, the leaders of HEIs as adaptive leaders are giving much attention to encourage followers remain committed to the work, fosters dialogue to address conflicts and refocuses employee's attention on the change process. This finding is in consistent with the study of Ahyar et al. (2017) which confirmed that adaptive leadership has a significant positive effect on OE at universities. Thus, when followers face a tough project or situation, the leaders of the HEIs under study encourage them to really focus on what they need to do and demonstrate disciplined attention to ensure members focus on the task at hand and provide a degree of structure to the working and operation (Cawsey et al., 2016).

Furthermore, the findings of Ebrahimi et al. (2016) and Fabricius and Büttgen (2015) described that, to secure organizational success, leaders must utilize adaptive leadership strategies. This result is also similar with the research findings of Owens (2004) who described that, the long-term survival and effectiveness of organizations rely on greater inclusiveness for those lower in the organization who may have valuable information to add to decision making which is the main dimension of adaptive leadership. Arthur-Mensah and Zimmerman (2017) and Owens (2004) similarly argued that when staff and other multiple stakeholders are included in the decision-making process by contributing their knowledge gained through practice, will largely contribute to the effectiveness of an organization. In addition, Owens (2004) and Owens and Valesky (2007) stated that the application of adaptive leadership in educational organizations

help facilitate organizational performances and effectiveness. Volden (2018) also posited that leaders who engage stakeholders in their organization will see an increase in effectiveness.

In relation to the benefits of stakeholders' engagement, Doyle (2017) and Aga et al. (2016) commented that there is a positive relationship between effectiveness and employee performance when that relationship is prompted by active engagement between the leadership and relevant individuals or groups that may influence the institutions effectiveness. A study about employee involvement and OE conducted by Amah and Ahiauzu, (2013) concluded that effectiveness in organizations is primarily associated with harmony between employees, the quality of the results or outcomes of organizations and how they reach their highest priorities and goals where all these factors rely on the type of leadership. In summary, the findings indicate that adaptive leadership strategies implemented by leaders facilitated the augmentation of OE in HEIs. Millar and Lockett (2014) stated that as individuals learn and develop, they must adapt to changing conditions. Leaders who can adjust to changing conditions ensure that they can adapt to varying situations to secure OE.

Chapter Five

Summary, Conclusions and Recommendations

This chapter covers the summary of the findings, conclusions and recommendations.

5.1. Summary of the Major Findings

The purpose of the study was to investigate the practices, status and relationships among adaptive leadership, OL and OE in federal public HEIs located in the ANRS. More specifically, the study was guided by the following seven basic questions:

- 1. To what extent is adaptive leadership practiced by the leaders of public HEIs located in the ANRS?
- 2. To what extent have the HEIs under study achieved OL capacity?
- 3. To what extent has OE been attained by the HEIs under consideration?
- 4. How significant is the relationship between practices of adaptive leadership and OL at the HEI under study?
- 5. Which adaptive-leadership dimension significantly predicts OL?
- 6. Is there significant relationship between adaptive leadership strategies and OE at the HEI understudy?
- 7. Which dimension of adaptive leadership best predicts OE?

To address the above-mentioned research questions adequately, the study employed mixed methods research approach (QUAN + qual) of concurrent embedded design. University presidents, college deans, directors, (both academic and administrative) and academic staff members were involved in providing data. Thus, a total of 620 participants were involved in providing quantitative data and 10 participants in providing qualitative data for the study. The samples were selected based on a combination of probability and non-probability sampling methods. Questionnaire, semi-structured interviews and document observations were instruments used for data collection from sample respondents and HEIs. The collected data were analyzed both quantitatively and qualitatively. The quantitative analyses involved both descriptive and inferential statistical techniques, such as counts, percentage, mean, standard deviation, one

sample t-test, Pearson's r, regression analysis and ANOVA while the qualitative analysis involved a thematic content analysis method.

Thus, based on the results of data analysis, the major findings of the study are summarized as under;

- 1. According to the perceptions of leaders and academic staff members, adaptive leadership is practiced at a moderate level by the current leadership of the HEIs under study. While the respondents do not explicitly state that they practice adaptive leadership, the activities they engage in to identify adaptive challenges, find solutions with the help of multiple stakeholders, empower employees to solve problems, and provide a safe environment demonstrate that they believe adaptive leadership practices exist in HEIs. Furthermore, HEI executives who face unpredictable shifts in events, constant competition from competitors, and technological breakthroughs use adaptive leadership to overcome these challenges and preserve their institutions' long-term viability. As a result of the current issues, HEI leadership has been pushed to implement a model that is appropriate to the country's political, technological, and social contexts. Furthermore, when compared to others, the results of the study on the extent of application of adaptive leadership dimensions show that leaders demonstrate a high level of disciplined attention to ensure members focus on the task at hand and provide some structure to the employees' work and operations. Despite the fact that the adaptive leadership process has a general order in which leader behaviors occur first, several of these behaviors have been observed to overlap and be shown by leaders at the same time. As a result, the leadership behaviors reveal themselves when examined as a whole. Thus, when the leadership behaviors are considered as a whole, they provide a framework for becoming an adaptive leader.
- 2. Considering the data analysis on the extent and status of OL at the HEIs under study, respondents believe that OL exists at a moderate level in the institutions. This is a promising finding for institutions aiming to promote long-term transformation and development. Furthermore, the results show that with respect to the incidence of OL dimensions, the continuous learning dimension is noticed to the highest degree among the others. This suggests that the HEIs under study encourage their employees to participate in continuing education and learning initiatives. Furthermore, an investigation of the

- extent of OL by segmenting OL aspects into three learning levels found that group/team level learning is the most valuable, followed by organizational level learning. This suggests that respondents in the HEIs under investigation had the lowest individual learning behavior values. As a result, the findings imply that while individuals are not always learning, learning behaviors increase as groups and organization level join together. Furthermore, despite the differences at each level, the findings did not change the basic finding that in the institutions there is OL. Consequently, respondents believe that learning habits are common at HEIs, which may be beneficial to leadership as they work to implement change and ensure that it is successful and sustainable.
- 3. In terms of the OE status of the HEIs under consideration, the general outcome of the quantitative and qualitative analysis suggests that the institutions are perceived as effective at a significant level by the respondents. The outcome indicates that HEIs are responding to the current dynamic environment and trying to attain their immediate and long-term objectives. Institutions are more effective in terms of student academic growth, system openness and community involvement, organizational health, and resource acquisition capabilities when compared to the level of OE aspects. Even though the overall result reveals that the institutions are effective, the moderately important dimension of student career development should be addressed in order to close the gaps. As a result, in order to construct a strong institution, leaders of the HEIs under consideration should pay equal attention to all areas of OE. Moreover, the data analysis findings in respect to the three sectors of OE reveal that the HEIs under consideration are more effective in the academic field, which includes student academic growth, professional development and faculty quality, and resource acquisition capability. The result is followed by external adaption field, indicating that the institutions are concerned with student career development, system openness, and community interaction. The institutions are also effective, with a satisfactory mean value in the moral field, where the activities are related to student personal development, student educational satisfaction, faculty and administrator employment satisfaction, and organizational health, despite the results appearing low when compared to others.
- 4. The data analysis demonstrates an overall positive and significant correlation between adaptable leadership and OL in terms of the relationship between the two constructs. This

- designates that the more adaptive leadership is used in HEIs, the better the individual, group, and organizational learning capacity will be. In addition, the correlation test used to determine the association between separate adaptive leadership dimension and OL revealed a significant positive association when individual adaptive leadership dimensions were examined for their association with OL. This indicates that, leading HEIs with adaptive leadership framework can lead to greater learning, which can lead to increased organizational success and goal attainment.
- 5. Furthermore, the results of this study demonstrate that adaptive leadership in institutions has a great predictive power for OL. The independent variable, adaptive leadership, is also said to explain the entire variation in the dependent variable, OL. According to the regression model with all adaptive leadership aspects, the complete regression model is a good fit for the data. When it comes to developing adaptive leadership dimensions that better predict OL, the value of four major dimensions makes a considerable contribution to predicting the OL of HEIs under examination. The adaptive leadership component that best predicts OL is identify adaptive challenges, which accounts for 34.5 percent of OL variability. As a result, the HEIs under investigation's leaders encourage and support others in defining tough situations and implementing solutions in order to create an LO culture. This means that leaders can recognize adaptive difficulties that are difficult to tackle or for which there are no clear solutions.
- 6. According to the results of the correlation test, the variables adaptive leadership and OE show a positive significant relationship. In addition, the correlation test utilized to establish the relationship between adaptive leadership dimensions and OE discovered that all correlations between the dimensions are significant at p < 0.01. This indicates that educational leaders can successfully execute change in educational settings by combining the ideas of adaptive leadership and OE. As a result, it's plausible to conclude that implementing the adaptive leadership model and acculturating into HEIs will aid in the formation of supportive working environments characterized by goal achievement and success.
- 7. Accordingly, the result of this study reveals that the application of adaptive leadership in the institutions have significant predictive power for the effectiveness of the HEIs under study. Consequently, when separate dimensions of adaptive leadership are tested, five

dimensions better predict OE of the HEIs. Compared to other dimensions, maintain disciplined attention is the best predictor by which 39.2% of the variability of OE was explained by the dimension. This illustrates that HEI leaders, as adaptive leaders, focus on keeping followers interested in the job, promoting problem-solving conversations, and renewing employees' attention to the transformation process. Therefore, it can be expressed that adaptive leadership strategies employed by the leaders of the HEIs understudy may have facilitated the augmentation of OE.

5.2. Conclusions

Nowadays, it is evident that, governments all over the globe are increasingly keen to make higher education more responsive and accountable to their constituents. As a result, the desire for efficiency is an urgent problem for today's colleges all over the world. This suggests that many crucial leaders have been called upon to address the issue in a flexible and successful manner. The purpose of this study is to look into the practices of adaptive leadership and its relationship with and prediction of OL and OE at Ethiopian federal public HEIs which are located in the ANRS. According to the data analysis, the HEIs under research are using an adaptive leadership model to provide solutions to the present unpredictable difficulties and accomplish their desired goals. In relation to the findings of the data analysis on the status of OL in HEIs, respondents feel that in the institutions under consideration there appears OL. For institutions intending to foster long-term transformation and development, this is an encouraging result. When it comes to the relationship between adaptive leadership and organizational learning, the outcome indicates a favorable and significant association. This shows that the more adaptive leadership is practiced in HEIs, the better the individual, group, and total organizational learning capacity will be. As a result, the findings of this study suggest that the use of adaptive leadership in institutions has strong predictive power for OL. Adaptive leadership is also said to account for the majority of the variation in OL. Furthermore, in terms of the institutions' OE, the result indicates that the institutions' overall status is regarded as effective. Despite the fact that it is believed to be successful, there are differences in the various elements of OE. The results of the correlation study also show that adaptive leadership and OE have a positive significant link. Based on this finding, it can be argued that adaptive leadership in HEIs improves performance and effectiveness. Furthermore, the use of adaptive leadership dimensions in the institution has

been shown to have substantial predictive power for HEI effectiveness. Consequently, it is possible to conclude that implementing adaptive leadership dimensions while considering all dimensions has a significant impact on the effectiveness of institutions.

5.3. Recommendations

The findings of this study depicted that practicing adaptive leadership in public HEIs leads to maximize the level of OL and the attainment of OE. As a result, the following recommendations have been forwarded.

- HEI leadership at all levels should develop knowledge of the adaptive leadership
 framework through ongoing training, employ adaptive leadership, and acculturate it in
 HEIs to achieve their institutions' intended goals, recognizing that adaptive leadership is
 the solution to their institutions' current unanticipated challenges.
- In light of their current competitive climate, HEI leaders should adopt ways to build OL
 or promote learning activities at the organizational level to increase the quality of
 teaching learning, community involvement, undertaking research, and developing
 sustainably.
- HEI leaders should create a set of organizational procedures for embracing diverse OL
 views to exchange knowledge inside their institutions, which could lead to enhanced
 productivity and effectiveness.
- 4. In OL process, the role of professional discussions, debates and dialogue is critical in developing professional knowledge and experience of academic staff. Therefore, HEIs' colleges, schools, departments and units need to organize, among other, monthly seminars, conferences and workshop to effectively and constantly share professional knowledge and experiences.
- 5. HEI leadership should also consider and implement each component of adaptive leadership into the HEIs operational strategy at every level, as well as analyze the effects of each on their institutions' performance on a regular basis. Furthermore, having a common understanding of the concept among HEI leadership and other stakeholders is critical for additional success.

6. Finally, the Ministry of Education should think the possible ways of implementing adaptive leadership in HEIs to overcome the current uncertain challenges facing institutions in the country.

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Appendices

Appendix A: Questionnaire

Bahir Dar University

College of Education and Behavioural Sciences Department of Educational Planning and Management

Questionnaire to be filled by Directors, Deans and academic staff members

Dear Respondents;

I am currently a PhD fellow at Bahir Dar University College of Education and Behavioural Sciences in the department of Educational Planning and Management. Thus, I am undertaking research as a requirement for my PhD. My study focuses on the **Adaptive leadership practices**, **organizational learning and organizational effectiveness in the Public Universities located in the Amhara Regional State.** The data will be used purely for academic purposes. Therefore, identity of the respondents is kept anonymous and the responses are strictly confidential. Please note that your careful and genuine response to each item has a serious and direct implication on the results of the research and the recommendations that will be forwarded.

N.B. All the items should be answered in light of the current practices of adaptive leadership, organizational learning and organizational effectiveness in your specific University.

Part I. Background information

Direction: - Please give a response to each statement that best describe your status by checking a tick mark (\checkmark) inside the box.

1.	Sex Male Female
2.	Educational level BA MA PhD other (please
	specify)
3.	Service year in the university: Below 5 5 to 10 above 10
4.	Your: College Department
5.	Occupational status: Manager/leader only Instructor only Leader & instructor
6.	Current leadership position (if any)
7.	Your experience in Current leadership position

Part II: Measurement of the Main Variables of the Study

This questionnaire contains items that assess different dimensions of adaptive leadership, organizational learning and organizational effectiveness and will be completed by you that represent feelings and intentions that you may have about the university.

A. Items on Adaptive Leadership

The following items indicate the activities of university leadership at different levels. Therefore, please indicate the level of your perception on the extent to which your university leadership is engaged with each statement by selecting a response to each questionnaire item in the scales of 1 to 6 (1 – Almost Never, 2 - Very Rarely, 3- Rarely, 4- Occasionally, 5- Frequently, 6 – Almost Always)

Direction: Please put an "X" in the box, which indicates the level of your perception for each item as indicated in the table.

	Items on Adaptive Leadership	1	2	3	4	5	6
	I. Get on the Balcony						
	In this University:						
1	When difficulties emerge, the leaders are good at stepping back and						
	assessing the dynamics of the people involved.						
2	In difficult situations, leaders sometimes lose sight of the "big						
	picture."						
3	When the leaders disagree with someone, they have difficulty						
	listening to what the other person is really saying.						
4	In challenging situations, the leaders like to observe the parties						
	involved and assess what's really going on.						
5	Leaders thrive on helping people to find new ways of coping with						
	organizational problems						
	II. Identify Adaptive Challenges						
6	When events trigger strong emotional responses among employees,						
	leaders use their authority to resolve the problem.						
7	When people are struggling with a value conflict, leaders use their						
	expertise to tell them what to do.						
8	When employees are struggling with intense conflicts, the leaders						
	step in to resolve their differences for them.						
9	When people try to avoid controversial organizational issues, the						
	leaders bring these conflicts into the open						
10	People recognize that the leaders have confidence to tackle						
	challenging problems						
	III. Regulate Distress						

11	When employees feel uncertain about organizational change, they		
	trust that the leaders will help them work through the difficulties.		
12	When employees begin to be disturbed by unresolved conflicts,		
	leaders encourage them to address the issues.		
13	Leaders have the emotional capacity to comfort others as they work		
	through intense issues.		
14	The leaders think that it is reasonable to let people avoid		
	confronting difficult issues.		
15	When employees are uncertain about what to do, leaders empower		
	them to decide for themselves.		
	IV. Maintain Disciplined Attention		
16	In complex situations, the leaders get people to focus on the issues		
	they are trying to avoid.		
17	During organizational change, leaders challenge people to		
	concentrate on the "hot" topics.		
18	To solve organizational problems, employees enjoy getting a chance		
	given by the leader in providing solutions.		
19	To restore equilibrium in the organization, leaders try to neutralize		
	comments of out-group members.		
20	In an effort to keep things moving forward, leaders let people avoid		
	issues that are troublesome		
	V. Give the Work Back to the people		
21	When employees are struggling with a decision, leaders tell them		
	what they think they should do		
22	When employees look to the leader for answers, they encourage		
	them to think for solutions themselves.		
23	The leaders encourage employees to take initiative in defining and		
	solving problems.		
24	The leaders have an open ear for people who do not seem to fit in		
	with the rest of the group.		
	VI. Protect Leadership Voices from Below		
25	During times of difficult change, leaders welcome the thoughts of		
	group members with low status		
26	Listening to group members with radical ideas is taken as valuable		
	by the leaders.		
27	The leaders are open to people who bring up unusual ideas that		
	seem to hinder the progress of the group.		
28	In a difficult situation, leaders step out of the dispute to gain		
	perspective on it.		

B. Items on Organizational Learning

The following sections raise issues on organizational learning practices in your university. Therefore, you are kindly requested to read the items carefully and indicate your choice that indicates the extent to which your university is engaged with the specific learning behaviors or practices described in each dimension.

Please rate each item by selecting a response to each item in the scales of 1 to 6 (1 – Almost Never, 2 - Very Rarely, 3- Rarely, 4- Occasionally, 5- Frequently, 6 – Almost Always)

	Items on Organizational Learning	1	2	3	4	5	6
	I. Continuous learning						
1	In the university: -						
	Employees help each other learn.						
2	Employees are given time to support learning.						
3	Employees are rewarded for learning.						
	II. Dialogue and inquiry						
4	People give open and honest feedback to each other.						
5	Whenever people state their view, they also ask what others think.						
6	People spend time building trust with each other.						
	III. Team learning and collaboration						
7	Teams/groups have the freedom to adapt their goals as needed.						
8	Teams/groups revise their thinking as a result of group discussions						
	or information collected						
9	Teams/groups are confident that the organization will act as their						
	recommendations.						
	IV. Embedded systems						
10	My university: -						
	Creates systems to measure gaps between current and expected						
	performance.						
11	Makes its learned lessons available to all employees.						
12	Measures the results of the time and resources spent on training.						
	V. Empowerment						
13	My university: - recognizes people for taking initiatives.						
14	Gives people control over the resources they need to accomplish						
	their work.						
15	Supports employees who take calculated risks.						
	VI. Systems connections						
16	My University: Encourages people to think from a global						
	perspective						
17	Works together with the outside community to meet mutual needs.						

18	Encourages people to get answers from across the organization			
	when solving problems.			
	VII. Strategic leadership			
19	In my University: -			
	Leaders' mentor and coach those they lead.			1
20	Leaders continually look for opportunities to learn.			
21	Leaders ensure that the organization's actions are consistent with its			
	values.			

C. Items on Organizational effectiveness (Likelihood)

The following sections raise issues on organizational learning practices in your university. Therefore, you are kindly requested to read the items carefully and indicate your choice that indicates the extent to which your university is engaged with the specific effectiveness measures described in each dimension. Please rate each item by selecting a response to each questionnaire item in the scales ranging from 1 to 7 (1 – Never true, 2 – Rarely true, 3 – Neutral, 4 – Sometimes true, 5 – Usually true, 6 – Always true).

	Items on Organizational effectiveness	1	2	3	4	5	6
	I. Student Educational Satisfaction						
1	Students are satisfied with the services provided by the university						
2	There has been a large number of students either drop out or not						
	return because of dissatisfaction with their educational experiences.						
3	A large number of students complain regarding their educational						
	experience at this university.						
	II. Student Academic Development						
4	The rate and extent of students' academic achievement is as						
	expected						
5	The university's teaching learning process provides opportunities						
	for academic development						
	III. Student Career Development						
6	The programs offered are relevant for future student career						
	development.						
7	Students' are given ample opportunities to select and join their						
	career choice						
	IV. Student Personal Development						
8	The university offers programs and activities non-career, non-						
	academic areas which can help for students' personal development						

9	The non-academic activities are mainly concerned to develop		
	students social, cultural, and emotional well being		
	V. Faculty Satisfaction		
10	The faculty members overall have satisfaction in their jobs.		
	VI. Professional development and quality of the faculty		
11	There is impressive work achievement and improvement of the		
	faculty members		
12	Members are motivated toward work progress which the		
	organization provides.		
13	There is great opportunity for professional development of the staff		
	- e.g., doing research, getting an advanced degree, etc.		
14	The majority of the faculty members published a book or an article		
	in a professional journal last year		
	VII. System Openness and Community Interaction		
15	The system of the internal processes of the university is open.		
16	Great attention is given to interaction with the external environment		
	of the institution		
17	The university's activities and services are adapted to the needs of		
	the surrounding community.		
18	The university sponsors an adequate number of community		
	programs		
	VIII. Ability to Acquire Resources		
19	The university acquires financial and material resources from		
	different sources		
20	The university recruits' faculty members and students of high-		
	quality,		
21	The university tries to develop a good image at the national level		
	IX. Organizational health		
22	The activities (processes and operations) of the university at all		
	levels are functioning smoothly		
23	The university has developed good-will from students, employees		
	and community members		
24	The administration is flexible		
25	The level of trust among employees is high.		
26	Conflict and friction in this institute is common.		
27	Resolution of disagreements or conflicts is the concern of		
	leadership.		
		 ı	

Any additional comments or recommendations are welcome						

Thank You for your participation in the study.

Appendix B: Interview Consent

Bahir Dar university

College of Education and Behavioral Sciences

Department of Educational Planning and Management

Consent Form for a semi structured interview

Principal Investigator: Kefale Solomon

Title of Study: The Effects of Adaptive Leadership, on Organizational Learning and Organizational Effectiveness at Public HEIs of Amhara Regional State; Ethiopia

Introduction: You are asked to take part in this research study. Please read this paper carefully and ask questions about anything that you do not understand.

The person in charge of this research study is Kefale Solomon a PhD student in Bahir Dar university. The purpose of this study is to assess leaders' knowledge, the relevance, practical implementation of Adaptive Leadership, Organizational Learning and Organizational Effectiveness, its challenges. All the top and middle level leaders in the university will take part in the study who are selected purposefully.

You will be asked to;

- The role of current leaders in the university
- Leadership and decision-making practices.
- Describe how you understand the current uncertain problem faced in the university,
- Discuss if there is a need for a new form of leadership.
- Describe what kinds of leadership do you think are needed in higher education today to move the sector and the communities it serves toward greater flourishing.
- Describe some key sources of learning you've experienced in your role so far and how those have shaped you or your work.
- What learning has the system enjoyed.
- Whether your institution is effective or not
- How effectiveness is currently judged and measured.

The sessions to do these activities will take about an hour for each participant. All the verbal exchanges during the activities will be audio-recorded. If you do not want to be audio recorded, you should choose not to involve in the study. You may be visited again if you do not finish all the activities at the first meeting. All the activities will take place in the university compound or at a location and time of your choice. Some questions may make you uncomfortable if you do not know the answer; and, you may feel bored due to the length of the session. The questions that you are asked are for no evaluative purpose and that it is okay if you do not know the answer to the questions. You will probably not get any benefit from taking part in this study. But, being in this

study may help the researcher to get valuable information to further develop the research work. Based on the results of this study, the interview schedule will be modified for future use in other studies.

You will get nothing because of being in the study. However, through conversation with the researcher you will get some important information/ ideas about the issues of the study. You do not have to participate in this research study if you do not want to. You have full right to refuse from participating in this research. You can choose not to respond to some or all questions if you do not want to. There is no potential risk from being part of the study; however, your information is very important for the research. You may give your permission and then change your mind and be out of this study at any time.

Information about you will be kept confidential. Any audio and written information will not be shared with anyone and your name and address will not be included in any typed script. Only code numbers will be used for identification. The tape-recorded information will only be used for the research purpose but not more. The information will be stored in a file and locked by the researcher and no other people will have access to it until the study is finished and they will be shredded afterwards. The data from this research study may be published; but you will not be identified by name.

Finally, nothing in this consent form waives any legal rights you may have. This consent form also does not release the investigator, the institution, or its agents from liability for negligence.

If you have any question or concerns about this research study, you should contact:

Kefale Solomon 0921529786

Agreement:

I have read this information and have received answers to any questions I asked. I hereby give a permission to participate in this research study. I will receive a copy of this signed and dated consent form to keep.

Name	
Signature	Date

Appendix C: Interview Guide

Bahir Dar university

College of Education and Behavioral Sciences

Department of Educational Planning and Management

Semi-Structured Individual Interview Questions Protocol

Thank you for participating in this research.

I am going to ask your permission to record this interview so I can have it transcribed.

The transcription will become a source of data for analysis. I will code the transcripts to identify themes that emerge. I will pull quotes, but will use pseudonyms and will not include anything that identifies anyone or any university information in any way.

You do not have to answer any question that may make you uncomfortable. I have the original consent form you signed before beginning participation in this research. It explains the interview should last about an hour. If you feel uncomfortable you can exit the interview at any time.

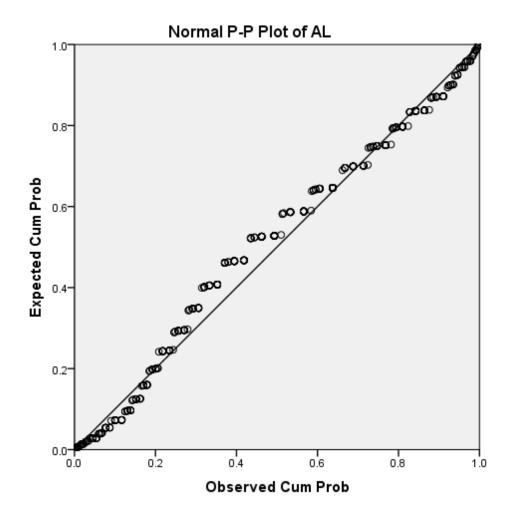
Do you have any questions before we proceed?

- 1. What role can or should higher education play in to move this society forward given where it currently stands, and what is the role of current leaders in that process?
- 2. As you recall, we discussed the problems of top-down, bureaucratic leadership and the need for a new form of leadership described as adaptive where leadership emerges from all levels in an organization. Describe how your understanding of the problem, a need for a new form of leadership, changed over time.
- 3. As you work on leading change, what kinds of things are you paying attention to, either within yourself or in the environment, and how do you make sense of and use what you see there?
- 4. What kinds of leadership do you think are needed in higher education today to move the sector and the communities it serves toward greater flourishing?
- 5. What are the processes of decision making when uncertain challenges face the university?
- 6. Can you describe some key sources of learning you've experienced in your role so far and how those have shaped you or your work? What learning has the system enjoyed? How do you know?
- 7. How do you Create continuous learning opportunities so that employees learn on the job?
- 8. Are employees involved in setting, owning and implementing a joint vision?

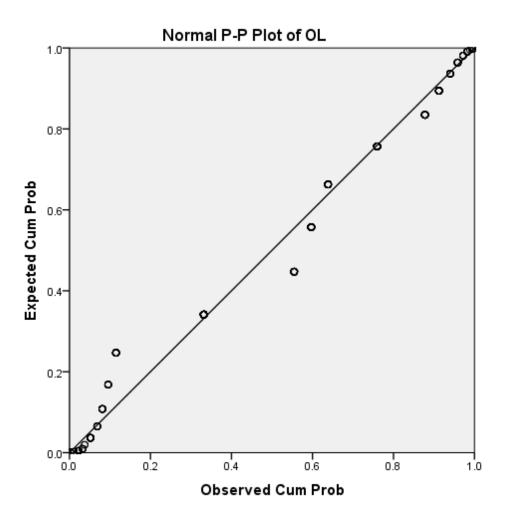
- 9. Would you please tell me about empowerment methods applied to bring employees towards a collective vision?
- 10. What mechanisms do you apply to connect the organization to its environment?
- 11. Would you say that your efforts have made the university successful? In what sense?
- 12. In your organization how is effectiveness currently judged and measured?
- 13. Do you have any general comments about your experience participating in the study?

Thank You

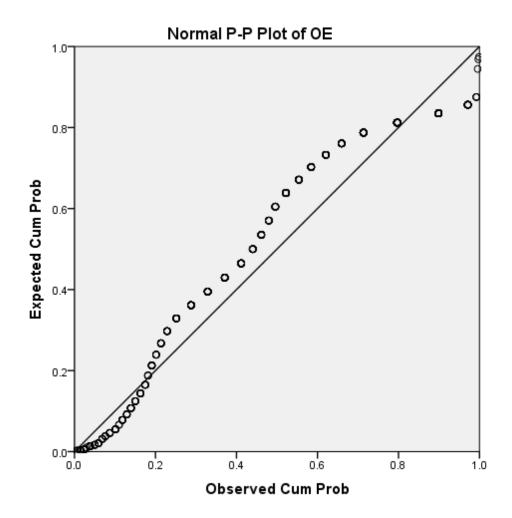
Appendix D: Normal P – P Plot of AL



Appendix E: Normal P – P Plot of OL



Appendix F: Normal P – P Plot of OE



Appendix G: Descriptive Statistics (Kurtosis and Skewness)

Descriptive Statistics (Kurtosis and Skewness)

z eseriper,	· D	ettistics (1	100000	T DICT	11000)	_	·		_		
		N	Minimu m	Maximum	Mean	Std. Deviation	Skewness		Kurtosis		
		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error	
AL		593	3.48	4.92	4.2061	.24300	370	.100	.010	.200	
OL		593	3.71	4.81	4.2609	.17234	150	.100	.371	.200	
OE		593	3.63	5.70	4.8889	.41800	007	.100	.289	.200	
Valid (listwise)	N	593									

Appendix H

Correlations (Adaptive Leadership Dimensions and Organizational Learning)

		GB	IAC	RD	MDA	BP	VP	OL
	Pearson Correlation	1						
GB	Sig. (2-tailed)			I				
	N	593						
Ĭ	Pearson Correlation	.541**						
IAC	Sig. (2-tailed)	.000						
	N	593	593					
	Pearson Correlation	.290**	.535**					
RD	Sig. (2-tailed)	.000	.000					
	N	593	593	593				
	Pearson Correlation	089*	016	.160**				
MDA	Sig. (2-tailed)	.030	.699	.000				
	N	593	593	593	593			
	Pearson Correlation	.322**	.350**	.381**	139**			
BP	Sig. (2-tailed)	.000	.000	.000	.001			
	N	593	593	593	593	593		
	Pearson Correlation	.270**	.295**	.324**	120**	.462**		
VP	Sig. (2-tailed)	.000	.000	.000	.004	.000		
	N	593	593	593	593	593	593	
	Pearson Correlation	.267**	.391**	.252**	.194**	$.087^{*}$	017	
OL	Sig. (2-tailed)	.000	.000	.000	.000	.034	.677	
	N	593	593	593	593	593	593	593

^{**.} Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix I

Correlations (Adaptive Leadership Dimensions and Organizational Effectiveness)

	autons (Maptive Lea	OE	GB	T	RD	F	BP	VP
	Pearson Correlation	1						
OE	Sig. (2-tailed)							
	N	593						
	Pearson Correlation	.153**						
GB	Sig. (2-tailed)	.000						
	N	593	593					
	Pearson Correlation	.285**	.541**					
IAC	Sig. (2-tailed)	.000	.000					
	N	593	593	593				
	Pearson Correlation	.203**	.290**	.535**				
RD	Sig. (2-tailed)	.000	.000	.000				
	N	593	593	593	593			
	Pearson Correlation	.436**	089*	016	.160**			
MDA	Sig. (2-tailed)	.000	.030	.699	.000			
	N	593	593	593	593	593		
	Pearson Correlation	134**	.322**	.350**	.381**	139**		
BP	Sig. (2-tailed)	.001	.000	.000	.000	.001		
	N	593	593	593	593	593	593	
	Pearson Correlation	192**	.270**	.295**	.324**	120**	.462**	
VP	Sig. (2-tailed)	.000	.000	.000	.000	.004	.000	
	N	593	593	593	593	593	593	593

^{**.} Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix J:- Interview Participants

	University
P1	Wollo
P2	Mekdela Amba
P3	Debre Birhan
P4	Bahir Dar
P5	Debre Tabor
P6	Injibara
P7	Wollo
P8	Debre Birhan
P9	Bahir Dar
P10	Debre Tabor