

**Addis Ababa University Faculty of Business and Economics Department of
Management**



**The Mediating role of Job Satisfaction in the relationship between
Organizational Culture and Organizational Commitment:
The Case of Ethiopian Airlines Group**

By: Dereje Melku

Research Advisor: Lakew Alemu (PhD)

**A Thesis Submitted to Addis Ababa University Faculty of Business &
Economics Department of Management in Partial Fulfilment of the
Requirement for the Award of Master of Science Degree in Management
specialization in Total Quality Management and Organizational Excellence.**

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Addis Ababa, Ethiopia

ADDIS ABABA UNIVERSITY
FACULTY OF BUSINESS AND ECONOMICS
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Approved by: Board of Examiners

Internal Examiner: _____ Signature _____ Date _____

External Examiner: _____ Signature _____ Date _____

Advisor: ___Lakew Alemu(PhD)___ Signature _____ Date _____

DECLARATION

I, the signatory declare that this study entitled “The Mediating role of Job Satisfaction in the relationship between Organizational Culture and Organizational Commitment: A Case in Ethiopian Airlines Group” is my personal work. I have conducted the research work self-reliantly with the sole guidance and support of my research advisor. This research work has never been submitted for any degree or diploma fulfillment program in this or any other institutions and that all sources of materials used for the research have been rightly acknowledged.

Declared by

Name: **Dereje Melku**

Signature: _____

Date: February ,2021

Place: Addis Ababa, Ethiopia

Advisor: **Lakew Alemu (PhD)**

Signature: _____

Date: _____

CERTIFICATE

This is to certify that Dereje Melku Debebe has undertaken his research work on the topic study entitled “The Mediating role of Job Satisfaction in the relationship between Organizational Culture and Organizational Commitment: A Case in Ethiopian Airlines Group”. The work is appropriate for submission for partial fulfillment of Master of Science Degree in Management Specialization in Total Quality Management and Organizational Excellence

Board of Examiners

Advisor: **Lakew Alemu (PhD)** Signature _____ Date _____

Examiner: _____ Signature _____ Date _____

Examiner: _____ Signature _____ Date _____

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List of Abbreviations and Acronyms

CVF-Competing Values Framework

EAG-Ethiopian Airlines Group

EAL-Ethiopian Airlines

HCM-Human Capital Management

HR- Human Resource

IATA -International Air Transport Association

IBM-International Business Machines

JDI-Job Description Index

OCAI-Organizational Culture Assessment Instrument

OCI-Organizational Culture Index

OCQ-Organizational Commitment Questionnaire

SPSS-Statistical Package for the Social Sciences

SWOT-Strength, Weakness, Opportunity and Threat

VIF -Variance Inflation Factors

VUCA-Volatile, Uncertain, Complex and Ambiguous

ABSTRACT

The main aim of this study was to determine the mediation effect of job satisfaction on the relationship between organizational culture and organizational commitment in the Ethiopian Airlines Group. To undertake the study, a quantitative research approach was used and structured questionnaires were adopted from preceding research works and self-administered by employees at Ethiopian Airlines Group. Out of a sample of 377 target respondents, 335 of them were able to complete the questionnaires. The relationship between the variables was analysed using explanatory research designs and employed descriptive and inferential statistics. The data gathered in the study further assessed using the Statistical Package for Social Science (SPSS) 20.0 statistical program via numerous statistical methods and test techniques (i.e. frequency distribution, correlation regression, ANOVA, t-test,). The results of the study stipulated that the dominant cultural dimension in the Ethiopian Airlines Group is clan culture followed by market and hierarchy culture. Clan culture emphasizes teamwork, focuses on nurturing, mentoring, and a family-like working environment. The correlation results show that the relationships between the three variables of the study which are organizational culture, job satisfaction, and organizational commitment were positive and strong. Besides, clan culture has a significant and positive correlation with both job satisfaction and organizational commitment. The study results also established that job satisfaction had a partial mediation effect in the relationship between organizational culture and organizational commitment. The general implication of the study result depicted that a corporate culture dominated by teamwork, collaboration, mentoring, employee engagement, and a family-like environment is highly desirable in the Ethiopian Airlines Group. Yet again, employees are very much satisfied with and willing to commit to the company whenever clan culture is predominant. Therefore, by adopting a clan type of corporate culture, Ethiopian Airlines Group can create employees' job satisfaction and organizational commitment.

Keywords: organizational culture, clan culture, job satisfaction, organizational commitment, mediation.

CHAPTER ONE

INTRODCUTION

1.1. Background of the study

To thrive during robust economic times and survive the inescapable downturns, organizations must continuously improve their capability to deliver high-quality goods and services as swiftly as possible and at the lowest possible cost. At the same time, they must cultivate new capabilities, attract and retain a talented workforce, and avail a safe working environment (Quelch, 2009). In today's volatile, uncertain, complex and ambiguous (VUCA) world of business, market demands, technological advancements, and new business requirements challenge companies to adapt quickly, fashioning the agility and flexibility crucial to become responsive to their customers and other stakeholders (Hagen et al., 2019).

Aviation industry is one amongst the few challenged by this VUCA business environment (Mitchell & Moncrieff, 2016). Being a part of this dynamic and changing business environment, Ethiopian Airlines is expected to compete and survive. This dynamic change will affect some or all facets of the organization such as organization culture, job satisfaction and organization commitment.

For organizations like Ethiopian Airlines, it is not sufficient to acquire talented employees who perform their jobs well, they also need to be able to hang on to those employees for extended periods of time so that the organization can profit from their efforts (Colquitt et al., 2017).

In order to help commit employees, organizational culture can play a pivotal role. Myriad of literatures attested that organisational culture in general has a significant effect on the organisational commitment that employees exhibit (O'Reilly, 1989; Martins and Martins, 2003; Sola, et al. 2012; Agwu, 2013; Alvi, 2014; Aranki et al., 2019).

Organizational culture is pivotal to organizational success better than other factors such as organizational structure, strategy or politics (Deal and Kennedy, 1982). For Martins & Martins (2003), organizational culture is a system of mutual meaning held by members, what distinguishes the organization from other organizations. Therefore, organizations should uphold a strong conviction on corporate culture to benefit from its fruits.

Similarly, organizational Culture significantly influences employee job satisfaction. According to Morse (1953), change in the organizational culture impacts and imposes the job satisfaction of the employees and it also alters their behavior and attitude. Hellreigel et al. (1974) supports this by affirming the existence of relationship between organizational culture

and job satisfaction. Similarly, Wallach (1983) discloses that job performance and job satisfaction are connected to organizational culture. Wallach further unveils that job satisfaction and culture of the organization are mutually related and interdependent on each other. Sempane et al. (2002) revealed that there is a strong relationship between job satisfaction and organizational culture whereby job satisfaction is the outcome of organizational culture. Mansoor and Tayib (2010) supported the above arguments by revealing the positive effect of organizational culture on the job satisfaction.

Studies conducted on the relationship between job satisfaction and organizational commitment revealed that there is a positive and significant relationship between the two. Mowday et al. (1979) has indicated that job satisfaction has been shown to be significantly related to organizational commitment. Similar conclusion has been supported by (Angle and Perry, 1981). Correspondingly, Samwel (2018) study findings revealed that there is a significant relationship between employees' job satisfaction and the level of commitment. As Singh (2010) explained it, if Employees are unmotivated and disinterested, that will have a consequential effect of dissatisfaction and low commitment. This will eventually bring about unproductive trends including business decline and higher costs and it is vital for corporate management to understand the prospect of business success in a way depends on employee satisfaction. Hence, these researchers unequivocally indicated that answering employee satisfaction question will improve their level of commitment to the company.

Shurbagi & Zahari (2014) concluded in their empirical research that there is a strong and significant relationship between three variables such as job satisfaction, organizational culture and organizational commitment.

Therefore, it is strongly believed that job satisfaction which can be an intervening variable and serves as a link that explains the correlation between organizational culture and employees' commitment which is not yet addressed in any research work until to date shall be studied cautiously in this research work.

1.1.1. Overview of the company

EAL was established in April 1946, just a year after the end of the Second World War. From a very modest domestic airlines start to a Principal African Aviation Group and has come along 75 years of fruitful journey. Ethiopian started operation with the first 5 C-47 aircraft, scraps of 2nd World War, back in 1946 during its debut flight to Cairo via Asmara (Ethiopian Fact Sheet, 2020). At that very humble beginning, cynics doubted the airline's capability of shifting modern management and technology culture to a country that is short of the competencies to

administer those traits and apply its comparative advantage (Oqubay & Tesfachew, 2019, p.3).

Living its motto of “Bringing Africa Together and Beyond”, Ethiopia has created a missing link through its vast African network to 62 cities and more than 125 international passenger and cargo destinations, with daily and extra flights, with a lowest layover in Addis Ababa. As a veteran African carrier, Ethiopian has positioned a vast Intra-Africa network better than any Airline.

During the last seven decades, EAG has transformed itself as a leading aviation group by adapting all facets of the aviation industry technological, leadership, network expansion, and aviation-mentoring strategies.

Towards maintaining that tradition, EAG was the first in Africa to obtain Airbus A350-XWB, familiarizing the extra effect to the continent. Leading the way again, EAG was the first African Airline to operate the latest Boeing 787-900 in 2017. Below the industry average, Ethiopian currently operates more than 123 of the young and most modern fleet, with less than five years of age, and has 50 fleets in order. In an effort to bolster its network expansion and competitiveness, EAG became a member of the biggest airline alliance, the Star Alliance, in December 2011.

EAG is currently adopting a 15-year strategic plan called “Vision 2025” that will help the airline become the leading aviation group in Africa with seven Strategic Business Units (SBUs).

Ethiopian is a multi-award-winning airline including SKYTRAX Best Airline Staff Service in 2013 & 2016, Best Airline in Africa in 2017, 2018, and 2019, and Four Star Airline Certification in 2017. Yet again, it has been registering an average growth of 25% per annum for the past seven years (Ethiopian Fact Sheet, 2020).

1.2. Statement of the problem

As it is briefly summarized on the background of the study, various researchers and authors argued that there is a strong, positive, and significant relationship between organizational culture and organizational commitment, employee satisfaction and organizational commitment & organizational culture and employee satisfaction (O’Reilly, 1989; Martins and Martins, 2003; Sola, et al. 2012; Agwu, 2013; Alvi, 2014; Champoux, 2017; Samwel, 2018). However, there is no research work found to show the mediating or intervening role of job

satisfaction in the relationship between organizational culture and organizational commitment until recently (Aranki et al., 2019).

According to IATA Airline HR Report, Airline HR professionals say that it is harder to find applicants with the right skill levels and it is also harder to meet applicant salary demands. Staff retention is also problematic. The airline industry currently is challenged by an annual staff turnover of 20% in ground operations and 18% in customer services and cabin crew. These are jobs that require considerable training time and expense (IATA, 2018). This finding depicts how critical it is for an airline to hire and retain employees with the right skillset and experience.

Ethiopian Airlines is operating in one of the most challenging operating environments with cut-throat competition, thin profit margins, uneven playing field, ever-increasing costs mainly due to skyrocketing fuel prices, and other turbulent industry circumstances (Tolkin, 2010). To survive this, keeping its prize asset employees is one of its paramount tasks. In its sixteen years' strategic road map also known as Vision 2025 SWOT analysis, the high turnover of skilled and licensed professionals has been mentioned as one of the weakness variables. Further, the corporate human resource strategy section of the same document stipulated that regaining the company's corporate culture of employee belongingness and commitment as a family of Ethiopian airlines is one of the goals (Vision 2025).

The airline Annual HCM revealed that During the 2016/17, 2017/18 & 2018/19 fiscal year a total of 3.30%, 3.96% & 5.14% employees respectively left the company voluntarily due to different reasons. The major causes of turnover are resignations and discharges. Additionally, associated costs of turnover of Birr, 12,348,689.46, 14,100,437.12 & 17,637,795.54 incurred in 2016/17, 2017/18 & 2018/19 fiscal year respectively. Further, attrition rate change of 115.47% increase of core competence employees alone registered in 2018/19 fiscal year compared to 2017/18 (HCM/Council Performance Report 2018 and 2019).

Ethiopian Airline's workforce service year distribution shows, 22.43% of the employee has served 10 years & above. Besides, 27.03% of the employee has served 5-10 years and 50.54% have less than 5 years' work experience which shows most of the staffs are junior. According to the headcount report of the company, about 22% of the employee that left the company are with a service year experience of 5 to 15 years (HR Headcount report 2019). What makes the situation worrying is that those employees leaving the company are the most experienced ones.

To address the above worrying figures regarding employee commitment to the airline, it is vital for the airline to assess its corporate culture and identify those cultural dimensions that can invoke employee satisfaction and consequently glue them to commit to the airline.

There is a gap in identifying the determinants of cultural dimensions that affect employee commitment in the airline business so far and particularly in the Ethiopian airline's context.

Though several studies conducted focusing on the relationship between organizational culture and organizational commitment, the intervening or mediating effect of employee satisfaction was not considered in these previous researchers. This present study in turn will seek to examine if the mediating role of employee satisfaction has any effect on the relationship between organizational culture and organizational commitment. In supporting this claim of the current researcher, Aranki et al. (2019) identified this gap and suggested future researchers to consider it and fill the existing empirical gap.

In that regard, this paper will in a way answers what key organizational cultural dimensions are important in Ethiopian Airlines in particular. Do these organizational cultural dimensions (Clan, Adhocracy, Market, and Hierarchy) determine Ethiopian airlines employee's organizational commitment or not, and if job satisfaction mediates the relationship between organizational culture and organizational commitment. It also seeks to determine if these variables really are applicable and significant in the Airline's context and how each one of them affects and determines Ethiopian Airlines' success.

The research, in general, will seek to identify how organizational culture as an independent variable and employee satisfaction as a mediator variable influence employee's organizational commitment.

1.2.1. Research Question

In view of the above gaps, the researcher opted to address the following specific research Questions:

1. Does organizational culture have an influence on organizational commitment at Ethiopian Airlines?
2. Does Organizational Culture have an influence on Job satisfaction at Ethiopian Airlines?
3. Does Job Satisfaction have an influence on Organizational Commitment at Ethiopian Airlines?

4. Is there a relationship between organizational culture, job satisfaction, and organizational commitment in Ethiopian Airlines?
5. Does job satisfaction mediate the relationship between organizational culture and Organizational commitment of Ethiopian Airlines?

1.3. Research Objective

1.3.1. General Objective

The general objective of this study is to examine and identify whether organizational culture would have an impact on employees' job satisfaction and organizational commitment and prove the mediating role of Job Satisfaction in the relationship between organizational culture and organizational commitment.

1.3.2. Specific Objective

The following specific objectives will be addressed

1. To identify the existing and dominant organizational culture in Ethiopian Airlines Group.
2. To identify if there is any relationship between organizational culture and organizational commitment in Ethiopian Airlines Group.
3. To identify if there is any relationship between organizational Culture and job satisfaction in Ethiopian Airlines Group.
4. To identify if there is any relationship between organizational commitment and job satisfaction in Ethiopian Airlines Group.
5. To identify if job satisfaction as a mediator variable have any effect on the relationship between organizational culture and organizational commitment in Ethiopian Airlines Group.

1.4. Significance of the study

This study will have the following significances:

- ✍ Identifying the dominant cultural dimension that will positively contribute to employee's commitment mediated by employee satisfaction. This in turn help Ethiopian Airlines to focus on most important organizational culture dimensions that can create job satisfaction and in turn bring about employee commitment.
- ✍ The result of the study would provide information the extent to which sound implementation of organizational culture practices would affect employee's

organizational commitment mediated by employee satisfaction. This research will mainly be helpful for management, employees, stakeholders, and other decision makers.

- ✍ The finding of the research will assist the management on how to solidify the organizational commitment of employees in relation to organizational culture mediated by employee satisfaction.
- ✍ The study shall also be contributory in providing information to other airlines in the same industry on the effect of organizational culture practices on employee's job satisfaction and organizational commitment.
- ✍ The study further adds new arena of knowledge about organizational culture and employee's organizational commitment mediated by employee satisfaction from the aviation industry perspective.
- ✍ Ultimately, the study findings could serve as an input to the academic field by setting a foundation for further research regarding mediating effect of Job satisfaction which has not yet been considered in the previous researches.

1.5. Delimitation of the study

Though there are a number of organizational culture models, this research focuses only on Cameron and Quinn (2005) Competing Value Framework (CVF) organizational culture model constituting of clan, adhocracy, hierarchy and market cultural dimensions. Further, employee satisfaction variable will be used and tested as a mediating variable. To undertake this, overall job satisfaction survey with five items that was used by Judge et al. (1998) adapted from Brayfield and Rothe (1951) was used. Facet based job satisfaction measure is not considered in conjunction with this universal type of question, but future research may use the combination the two. It is virtually impossible to address all factors affecting employee commitment. There are quite a number of key determinant factors on employee commitment in aviation industry. From the standpoint of organizational commitment, other factors affecting employee's organizational commitment like economic position of the country, leadership styles, national culture, and demographic characteristics of the respondents are beyond the scope of this study. Hence, to measure organizational commitment, the study used the Organizational Commitment Questionnaire (OCQ) that was developed by Allen and Meyer (1990).

The study also delimit itself to the Company's headquarter that exists in Addis Ababa excluding domestic and outstation employees. The respondents to the survey will be

limited to full time professional employees of the airline. The researcher finds it important targeting the airlines “core competencies” Employees (i.e. Cockpit Crew, Cabin Crew, Aircraft Technician and Customer Service Agents) as a population by excluding other support staffs.

In regard to methodology, the study limits itself to employing cross- sectional study and quantitative research design.

1.6. Limitation of the study

To conduct the research within the given time frame and to reduce the cost of conducting the study, the researcher is limited the sample to some selected employees in Ethiopian Airlines Group located in Addis Ababa. This research excluded supporting staff of the airline focusing only on those earmarked as Core Competencies by the Airline. However, the Ethiopian Airline Group is the continent's leading carrier in African Aviation which has enormous domestic and International offices. Due to time constraints and geographical limitations, covering all these offices was difficult. Therefore, research findings and inferences have been made based on the sampled employees in the headquarters of the Airline group.

1.7. Organization of the paper

This paper is organized in to five chapters.

- ✍ The **first chapter** includes background of the study, statement of the problem, research objectives, delimitation of the study, limitation of the study, significance of the study, organization of the study, and definition of terms.
- ✍ The **second chapter** contains review of different related literatures on organizational culture, job satisfaction, and organizational commitment. In this section, the concepts of organizational culture, job satisfaction and organizational commitment and their relationship will be discussed basing the related literatures.
- ✍ The **third chapter** discusses about the research methodology used to conducting the research. It further presents the chosen research design, ways of information gathering, how questionnaires will be organized and how it will be distributed for the determined target sample employees and how the results will be analyzed.
- ✍ The **fourth chapter** is about results and discussion of the study.
- ✍ Finally, the **fifth chapter** contains summary of findings, conclusion and recommendations and future research areas based on the results of the research.

1.8. Definition of Terms

Organizational Culture: The distinctive pattern of shared assumptions, values, norms, attitudes, symbols, beliefs, rituals, socialization, and expectations of the people in the organization (Schein, 1992; O'Reilly et al., 1991; Hellriegel et al., 2004; Rowe et al., 1994).

Clan Culture: Clan oriented culture is family-like, pleasant working condition that people share a lot of information and focuses on mentoring, nurturing, and teamwork. Loyalty is the glue that grips the organization together. Success is measured in terms of compassion for customers and concern for people. Organizations with a clan culture place greater emphasis on participation, teamwork, and consensus (Hutchinson and Zain, 2009).

Adhocracy Culture: This type of culture is built on creativity and energy. Employees are encouraged to stick their necks out and take risks, and the leaders are considered innovators or entrepreneurs. The organization is glued together by a commitment to experimentation, with stress on individual creativity and liberty. The central ethos is change and agility. Employees possessing robust features in agility and initiative-taking are the most successful in this type of culture (Sugita & Takahashi, 2015).

Hierarchy Culture: Hierarchical culture is a type of culture built upon structure and control. The hierarchical working environment is formal with stringent and strict procedures in place for adherence. Leaders have based their emphasis on coordination, monitoring, and efficiency (Cameron and Quinn, 1999).

Market Culture: According to Cameron and Quinn (1999), a market culture characterized by being goal-oriented, competitiveness, result orientation, emphasis on winning, and reputation building. In sum, the market culture was sturdily associated with command leadership, confrontation and conflict, a prize for accomplishment, and strong directive.

Organizational Commitment: Organizational commitment is a psychological state that binds an employee to an organization, in so doing decreasing the occurrence of turnover (Allen and Meyer, 1990).

Job Satisfaction: Is simply how people feel about their job and different aspects of their job. It is the extent to which people like or dislike their job (Spector, 1997).

Core Competencies: The communal knowledge in a company that differentiates it from other organizations and can be used as a tool to produce competitive advantage (Prahalad & Hamel 2017).

CHAPTER TWO

LITRATURE REVIEW

2.1. Theoretical Literature review on Organizational Culture

After having a look at an array of definitions, Schein, (2017) proposed a dynamic definition of culture as accumulated learning of a form or system of beliefs, values, and behavioral norms that come to be taken for granted as basic assumptions and eventually drop out of awareness. Champoux, 2017 added to Schein's argument that culture is to be trained to new members as the right way to observe, think, feel, and behave in relation to resolving its problems of external adaptation and internal integration and it defines the content of what a new employee needs to learn to become an accepted member of the organization. Hellriegel et al. (2011) further described the influence of a culture that it is embedded in the numerous details of an organization's life and impacts much of what happens to individuals within an organization. These arguments could transpire how profound is the impact of culture in shaping the attitude and behavior of members in the organization.

Hellriegel (2004), defined culture as the personality of an organization that distinguishes it from the rest of the firms. O'Reilly III et al. (2014) bolsters this argument by stressing CEO personality, corporate culture, and firm behavior are strongly linked and that determines company reputation and performance. From this we can deduce that culture not only shape the attitude and behavior of the members, but it is a reason for company performance and image building.

Overtly put it, culture includes the values, norms, rites, rituals, ceremonies, heroes, and villains in the organization's history (Champoux, 2017). Wallach, (1983) painted it very carefully by arguing that there are no decent or bad cultures however, culture is good if it reinforces the mission, objective, and strategies of the organization. Supporting Wallach's argument, Goldstone (2007) put it beautifully that depending on how broadly organizational values are cultivated among members of an organization, organizational culture may be viewed as a strong or weak one. When members are not able to detect the organizations' core values, goals, mission, and strategies, the organization is said to have a weak culture which would end up with members' withdrawal. This would lead to employees of the Organization to rely heavily on personal principles, norms, and values (Taurisa, 2012). To guide the conduct of its members, Organizations with weak Organizational culture depend heavily on rules and regulations than a collective understanding of values and beliefs (Yeh & Chien, 2012). Contrariwise, if organizations' values, mission, and objectives are broadly shared

among members, the culture is said to be strong which presents plenty of benefits to the organization (Goldstone, 2007). Hence, the strength of one's Organizational culture is tied to the level of shared meaning of values, norms, and principles, and the more universal the meaning is shared among the members, the stronger the culture is (Uddin et al., 2012). Cultures, where members' goals are aligned to the Organization's goals and objectives, are thought to be successful (Karlsen, 2011).

2.1.1. Organization Cultural Models

Several organizational culture hypothetical typologies have been presented by various scholars and variation existing in their depiction of organizational culture.

Deal and Kennedy (1982) model identified four general types of cultural dimensions to describe organizational culture. The first one is the **tough guy/macho** culture that Individuals regularly take high risks and get quick feedback on whether their actions were correct or incorrect. For the **Work-Hard/Play-Hard** Culture, Fun and action are the rule here and employees taking few risks, all with quick feedback. To succeed in that, the culture encourages them to maintain a high level of relatively low-risk activity. The third one The **Bet-Your Company** Culture dictates that with big-stakes decisions, employees are expected to wait for years whether decisions have paid off. It is a high-risk, slow-feedback environment. The last one in the continuum is the **Process Culture** which comprises a few or no feedback where employees find it hard to measure what they do instead they focus on how it's done. Simply called bureaucracy. This cultural model is criticized for that few organizations fall precisely into one of these four types, and it is very difficult to link these types to psychological traits.

Similarly, **Charles Handy (1985)** highly decorated organization culture scholar used four sources to categorize organizational culture into Power Culture, Role culture, Task culture and Person culture (Handy, 1985). The drawback with this model However, is that none of the four types can be taken as better or superior. They are each suitable to different types of conditions. Most organizations incline to encompass a mixture of cultures, and in Handy's opinion, each is suited to varied types of conditions, including varied types of personalities.

Edgar Schein (1992) Model of Organizational Culture articulated that culture occurs in the form of **Artefacts, values** and **underlying assumptions**. Artefacts denote to features that can be easily viewed, felt and heard as a person experiences a new culture. Value denotes A profound level to the superficial artefacts. These are the espoused beliefs and values-ideas, goals, aspirations, ideologies and rationalization may or may not be congruent with behavior

or other artefacts. Basic Underlying assumptions are unconscious, taken for granted beliefs and values that determine behavior, perception thought and feeling (Schein, 1992). However, Schein's model emphasizes on symbols such as rituals and ceremonies that could mean that other aspects of organizations are undervalued. Yet again, symbols may distort the reality of organizations and may pass through the presence of change, but the reality continues as before. In addition, Schein's model criticized for not solidifying his argument on how to build appropriate organizational culture other than defining and listing components of the major cultural dimensions.

Another prominent model of culture is **Denison cultural model (2011)**. Denison, in his model, identified **involvement, consistency, adaptability** and **mission** as vital cultural traits. According to Denison model, involvement generates a sense of ownership, responsibility and relies on indirect control systems. Consistency creates a clear picture of the right and wrong way to do things creating a clear set of expectations. Adaptability is the ability of the organization to captivate and stand to changes in the environment. Finally, the mission comprises defining an eloquent long-term direction for the organization that supports to guide employees' activities (Denison and Neale, 2011). Yet, this model criticized for lacking easiness and logicity towards making sense to business leaders.

Wallach, (1983), developed The Organizational Culture Index (OCI) which could be a measure of three dimensions of organizational culture namely bureaucratic, innovative, and supportive culture. All three of those dimensions are considered common in varying degrees to any or all organizations. Bureaucratic culture is hierarchical, compartmentalized, and systematic, organized, and contains a clear line of authority and responsibility. Whereas supportive organizational culture exhibits teamwork, a people-oriented, encouraging, and trusting work environment. And lastly, Innovative culture is characterized by creativity, a result-oriented approach, and a challenging work environment.

From its very nature, organizational culture is more abstract and is about feeling than tangible pieces of evidence. To unlocking this and build a more plausible and tangible sense, acclaimed researchers Robert Quinn and Kim Cameron devised a mechanism that one must investigate two important factors whenever explaining organizational culture typologies. These are the degree of flexibility versus controlling behaviour and internal focus versus external orientation (Cameron and Quinn, 2005).

Although there are multiple ways to look at organizational culture, the Organizational Culture Assessment Instrument (OCAI) has been found to be equally useful and accurate in

diagnosing important facets of an organization's underlying culture. It's been employed in over a thousand organizations and it's been found to predict organizational performance (Cameron and Quinn, 2005).

According to Cameron and Quinn (2005), OCAI's objective is to assist identify the organization's current culture. Further, the identical instrument helps to spot the culture that organization members think should be established to suit the long run demands of the environment and therefore the opportunities to be garnered by the corporate.

For Cameron and Quinn (2005), the key to assessing organizational culture is to search out features of the organization that represent key values and assumptions within the organization and so to grant members an opportunity to reply using their underlying archetypical framework. Hence the OCAI allows this to occur. In doing so, six content dimensions function the muse for the OCAI. These are:

1. The **dominant characteristics** of the organization or what the organization appear as if overall,
2. The **leadership style** and approach that's dominant within the organization,
3. The **management of employees** or how employees are being treated and also the working environment seems like,
4. The **organizational glue** or bond that grips the organization together,
5. The **strategic emphasis** of the organization and
6. The **factors of success** that govern how victory is defined and what gets rewarded and celebrated.

According to Cameron and Quinn (2005), the OCAI is exclusive in its capability to search out the organization's cultural strength, congruence, and type. By gazing the final cultural profile of a corporation, we are able to instantly spot the degree to which one or more cultures are strong (or dominant) in this organization. That is, by studying the profiles associated with each of the above six scenarios (questions) individually, we are able to detect the degree to which the six profiles are congruent with each other or are incongruent (heterogeneous). Lastly, the culture profiles make it easy to mention what style of culture the organization has supported the quadrant that receives the best emphasis (Cameron and Quinn, 2005).

The OCAI relies on a theoretical model called the Competing Values Framework (CVF). The CVF emphasizes on the competing frictions and conflicts innate in any human and/or organizational system with the primary focus placed on the conflict between flexibility and control, and the conflict between the whether the organization should be internal focus and focus on the external environment. This framework is enormously useful in organizing and interpreting a good array of organizational phenomenon (Cameron and Quinn, 2005). CVF relies on four dominant culture types (Clan, Adhocracy, Hierarchy, and Market). In step with Cameron and Quinn (2005), since culture describes the core values, assumptions, interpretations, and methods that depict a company, it's expected that other characteristics of organizations would also reflect these four culture types.

Clan Culture: as the name indicates, this type of culture is like an extended family. It advocates harmony and a peaceful relationship among members of the organization. Teamwork and strong mentoring of new members is vital in clan culture. Someone who aspires to his company to be successful and loves working in a team environment is suitable for this kind of culture. In contrast to adhocracy and market cultures, clan culture is internally focused and pursues to perform well as a cohesive unit (Crandall & Crandall, 2008).

Adhocracy Culture: innovation, entrepreneurship, and risk-taking are the main characteristics of adhocracy culture. Adhocracy culture-oriented company strives to develop new products and acquire new resources in an effort to grow the organization. As opposed to clan culture, this type of culture is externally focused. A person who is adaptable, creative, and flexible in nature will perfectly suit this type of culture (Crandall & Crandall, 2008).

Market Culture: similar to adhocracy culture, focus its attention externally. It advocates in order to grow as a company is competitive in the market is of paramount importance. Being a leader in the industry they operate and winning a competition in the market environment is a peculiar characteristic of market culture-oriented organizations. Achievement savvy kind of individuals are opted to succeed in market culture (Crandall & Crandall, 2008).

Hierarchy Culture: in this type of culture, policies, procedures, rules, and orders are predominant. Similar to clan culture, hierarchy culture is internally focused in that smooth running of the company and predictableness of the operations is of paramount importance. This type of culture thrives in an environment (Crandall & Crandall, 2008).

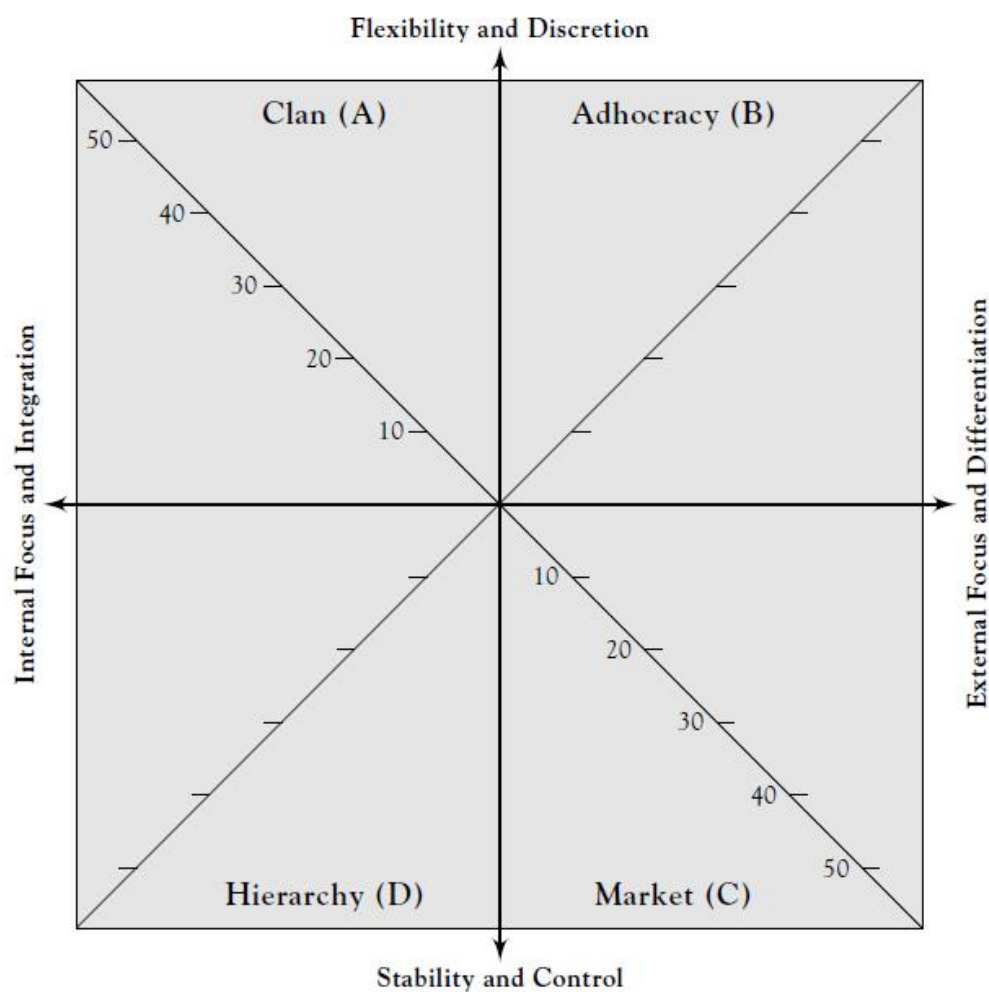
In this study, it is anticipated that Cameron and Quinn's (2005) four dominant culture types that are Clan, Adhocracy, Hierarchy, and Market set employees' behaviour at workplace create job satisfaction and ultimately job satisfaction define employees will to commit to the organization.

The Clan Culture

An organization that focuses on internal maintenance with flexibility, concern for people, and sensitivity to customers.

The Adhocracy Culture

An organization that focuses on external positioning with a high degree of flexibility and individuality.



The Hierarchy Culture

An organization that focuses on internal maintenance with a need for stability and control.

The Market Culture

An organization that focuses on external positioning with an emphasis on competition and fast decision making.

Source: Cameron & Quinn (2011).

This literature will also review Job satisfaction as a mediator, which has rarely been considered until to date (Aranki et al., 2019).

2.2. Theoretical literature review on Job Satisfaction

Job satisfaction is one of the most studied concepts in organizational studies. It is a multi-dimensional construct with a range of definitions and associated concepts that have been studied dated back to the 20th century (Sharma, 2017).

According to Robbins et al., (2013) Job satisfaction entails a positive feeling about a job, resulting from an evaluation of its characteristics. For Colquitt et al. (2017), it is a pleasurable emotional state resulting from the appraisal of one's job or job experiences. In other words, it represents how individuals feel about their job and what they think about their job. Personnel with high job satisfaction, manifest positive feelings when they reflect on their responsibilities or take part in duty activities and workers with low job satisfaction, display negative feelings when they contemplate their responsibilities or take part in their duty (Colquitt et al., 2017). Therefore, we can say that job satisfaction is the positive or negative judgment of an employee about his/her job or working conditions.

Spector (1997) stressed that job satisfaction is simply how people feel about their jobs and different aspects of their jobs. Weiss, (2002) put job satisfaction in a different perspective that it is an attitude. In Attitude, employees exhibit their thinking or real feeling about their job and company. Armstrong (2004) supported Weiss's argument that job satisfaction is the attitudes and feelings people develop about their job. Such kind feelings about their work are usually evaluated through measures of job satisfaction. A positive and favorable job attitude denotes job satisfaction whereas a negative and unfavorable job attitude indicates job dissatisfaction.

Quinn and Staines (1979) beautifully put satisfaction as an affective reaction to the job and the degree to which employees have a positive affective orientation towards employment by the organization. From all the above definitions of job satisfaction, we can deduce that it is all about individual perception and attitude about their job. It generally implies that individual workers tend to gravitate to satisfying works and avoid dissatisfying ones.

According to Colquitt et al. (2017), some employees are more satisfied than others. It is because, at a general level, employees are satisfied when their job provides the things that they value. Values are those elements that individuals intentionally or subconsciously need to pursue or attain. Therefore, for employees, what things their job gives them is a source of

satisfaction or dissatisfaction. It could be a good wage, sense of achievement, colleagues to be around with, supervisor, the work environment and the work itself are some to mention.

Luthan (1998) postulated that there are three significant dimensions to job satisfaction. The first dimension is that Job satisfaction is an emotional reaction to a job circumstance that is not visible but inferred. The second dimension of job satisfaction is often determined by the degree of outcome meeting or exceeding expectations. For example, if employees feel that they are working harder than others in the unit but are receiving fewer rewards, they may have a negative attitude towards their job, the supervisor, and coworkers. On the other hand, if they feel that they are being treated fairly, they will likely have a positive attitude towards their job. The final dimension of Luthan (1998) stipulates that job satisfaction represents multiple related attitudes which are vital characteristics of the job for which participants have actual responses. These are the likes of pay, promotion, the work itself, supervisor, and coworkers.

Bruce & Blackburn (1992) posited that well-enriched jobs encompass five work dimensions. These are task identity, task variety, task significance, autonomy, and feedback. The presence of these psychological conditions leads to motivation, high performance, high job satisfaction, low absenteeism, and low turnover.

Pestonjee (1991) defined job satisfaction as the summation of employee's feelings that are in four important areas. These are job, management, personal adjustment, and social relations. The job and management aspects are factors related to the work which are intrinsic factors whereas the other two are related to extrinsic factors which are assumed to have a bearing on job satisfaction.

Job satisfaction is either a universal attitude about the job or an interrelated group of attitudes about numerous facets of the job. The facet approach is implemented to figure out which aspects of the job crop satisfaction or dissatisfaction. For many employees, the job itself can substitute the need for social interaction and supportive and friendly employees are also a source of job satisfaction (Drago et al., 1992).

2.2.1. Approaches to job satisfaction.

There are three predominant approaches to understand the concept of job satisfaction. There is (1) attitudinal approach (Herzberg, 1959) (2) need gratification approach (Maslow, 1954), and (3) factorial approach (Vroom, 1964; Lawler, 1971). The attitudinal approach of job satisfaction deduces job-based on non-exclusive affective orientation ranging from specific job factors to individual adjustments and interaction with the group. Need gratification approach was assumed to closely relate to job satisfaction. For individuals, In the course of seeking adjustment with

what is of importance to them, they are likely to exhibit positive attitudes to their job and this demonstrates higher job satisfaction. That is to say, job satisfaction can serve as an index of need gratification. The factorial approach is endeavored to find out the determinants of job satisfaction, by taking into account the fundamental sources of job satisfaction. We can understand these approaches, by going through the diverse theories of job motivation.

2.2.2. Measurement of Job Satisfaction.

Measuring job satisfaction has repeatedly been emphasized by researchers and management in an organization always been interested in identifying factors of job satisfaction (Jamieson & Richards, 1996; Ellickson & Logsdon, 2001). Nevertheless, one of the chief difficulties faced by researchers was the need for enough measure to evaluate job satisfaction (Azash and Thirupalu, 2017). Similar to the extensive definitions used for job satisfaction, a plethora of scales of measurements has been used. The significance of these scales for measuring job satisfaction emanates from the fact that if scales used are unreliable in measuring job satisfaction, the finding will therefore be incorrect (Hinkin, 1995). It has been claimed that no single accurate measurement exists as job satisfaction is linked directly to the complexity of human feelings and attitudes (Wanous & Lawler III, 1972). Different methods ranging from asking observers or management, questionnaires, interviews, incident analysis have been used to measure job satisfaction (Greenberg and Baron, 2000). However, researchers generally appear to favor questionnaire techniques to assess job satisfaction rather than other data collection methods due to the demands of time (Spector, 2008). Three main approaches have been used to measure job satisfaction. These are global measures, facet measures, and a combination of global and facets measures (Spector, 2008; Fields, 2002). According to Spector (1997), at times both methods may be used to get a whole picture of employee job satisfaction. The faceted method of measuring job satisfaction comprises observing certain facets that make up a specific job, such as pay, supervision, and promotion. Researchers like Howard and Frink (1996) and Porter and Steers (1973) highlight that job satisfaction is a multifaceted construct, with numerous features or facets contributing to the concept as a whole. This kind of measurement is used to find out how workers feel about each aspect of the work and to identify areas of dissatisfaction that must be targeted for improvement (Spector, 1997). It is important to mention that the levels of facet satisfaction have different degrees of relationship with universal satisfaction. For instance, satisfaction with pay may have the largest positive correlation while satisfaction with supervision might have the lowest (Fields, 2002). The global measure is merely the measure of an individual's overall job satisfaction as can be seen in answers to questions like "how satisfied are

you with your job Overall?" this type measure suggests, job satisfaction remains more than just the total effect, and people can show discontent with some elements (facets) of the job but can still be generally be satisfied (Thierry, 1998). Nagy (2002) specifies that having just one question to assess global job satisfaction can just be as good since employees generally know how satisfied they are, and do not require an entire set of questions to express their satisfaction. Likewise, Thierry (1998) disapproves of facet measure on the principle that individuals might not attribute equal significance to each of the facets. Researchers argue that the usage of global measures reflects individual differences in the construct rather than simply focusing on replies to specific items (Fields, 2002). Furthermore, researchers that have implemented global measures contended that the global measure is more inclusive (Scarpello & Campbell, 1983; Highhouse & Becker, 1993). To achieve the objective of this research, the research will adopt a global job satisfaction measure adopted from Judge et al. (1998) adapted from Brayfield and Rothe (1951).

2.3. Theoretical literature review on Organizational Commitment

Having a gifted and high performing employee is not sufficient. Organizations need to be able to stick to those employees for extended periods of time so that they can benefit from these employee's performances. Employee turnover can be very costly. A study by Shepherd (2010) identified that turnover costs account for between 90 percent and 200 percent of an employee's annual salary. Allen et al. (2010) further strengthened the argument that those estimates include numerous costs comprising administrative, departure, screening, recruitment and training costs. Therefore, it is imperative for organizations to retain their high performing employees to escape from these daunting costs. Organizational commitment can be defined as the desire on the part of an employee to remain part of the organization (Meyer, 1997). Organizational commitment influences whether an employee stays as a member of the organization that is to say retained or leaves to pursue another job that is turning over (Colquitt et.al. 2017). Porter et al. (1974) further clarified organisational commitment as an attachment to the organisation, manifested by a will to remain in it; identification with the values and goals of the organisation; and a readiness to employ additional effort on its behalf. Individuals reflect the degree to which their own values and goals coincide to that of the organisation as part of organisational commitment. Therefore, it is considered to be the bond between the individual employee and the organisation. Miller (2003) also explains that organisational commitment is a situation in which an employee identifies himself/herself with a particular organisation and its goals and determines to maintain affiliation in the organisation. This obviously shows that Organisational commitment is the degree to which an

employee is enthusiastic to continue membership due to interest and identification with the organisation's goals and values. In addition, Morrow (1993) illustrated organisational commitment as branded by attitude and behaviour. For him, organisational commitment as an attitude reflects feelings such as attachment, identification and loyalty to the organisation as an object of commitment. With regards to behaviour, Best (1994) articulated that committed individuals exhibit specific behaviours due to the belief that it is morally right rather than personally beneficial. Employees who are not committed to their organizations engage in withdrawal behaviour, defined as a set of actions that employees perform to avoid the work situation—behaviours that may eventually culminate in quitting the organization (Hulin, 1991). Meyer & Allen (1997) concluded that Organizational commitment is a psychological state that characterizes the employee's relationship with the organization and has inferences for the decision to continue or discontinue membership in the organization. They further supported their argument by introducing their three-component model of commitment namely Affective Commitment, Continuance Commitment & Normative Commitment. These definitions have been adopted for the study.

2.3.1. Organizational Commitment Model

Meyer and Allen (1997) used a three-component model to conceptualize organizational commitment in dimensions namely, affective, continuance, and normative commitments. These dimensions designate the different ways of organizational commitment development and the implications for employees' behavior.

Affective commitment is characterized by a craving to stay as part of an organization due to a passionate connection to and involvement with, that organization. Put simply, people tend to remain because they want to. Individuals who are committed on an affective level remain with the organization since they see their individual employment relationship congruent to the objectives and values of the organization (Beck & Wilson 2000).

Affective commitment is a job-related attitude with positive feelings towards the organization (Morrow, 1993). Sheldon (1971) also asserts that this type of attitude is an orientation towards the organization, which associates or aligns the identity of the person to the organization. Affective commitment is the relative strength of an individual's identification with and involvement within a particular organization (Mowday et al. 1982).

The organizational commitment model of Meyer and Allen (1997) specifies that affective commitment is predisposed by factors such as job difficulty, role simplicity, and goal simplicity,

and goal difficulty, openness by management, peer unity, fairness, personal position, feedback, involvement, and reliability.

Affective commitment change encompasses identification and internalization (Beck & Wilson, 2000). Individuals' affective attachment to their organizations is firstly based on identification with the wish to create a worthwhile relationship with an organization. Secondly internalization refers to congruent goals and values held by employees and the organization. In general, affective organizational commitment is about the extent to which an individual identifies oneself with the organization (Allen & Meyer, 1990).

The second commitment model of Allen & Meyer (1997) is **Continuance commitment**. It is a willingness to stay part of an organization because of awareness of the costs related with leaving it. These costs based on reasons for remaining as part of the organization, including issues of compensation, benefits, and advancements, as well as concerns around evacuating a family. In other words, individuals remain since they got to. It is calculative in nature since of the individual's discernment or weighing of costs and dangers related to leaving the current organization (Meyer & Allen, 1997).

Continuance commitment can be seen as a dynamic connection to the organization, where the individual's affiliation with the organization is based on an appraisal of monetary related benefits (Beck & Wilson, 2000). Organizational individuals develop a commitment to an organization because of the positive outward rewards obtained through what is in it for me without associating oneself with the organization's objectives and values. Therefore, so as to retain employees who are continuance committed, the organization should give more emphasis and credit to those variables that boost the employee's morale to be affectively committed.

The last commitment model is **normative commitment**. It is defined as an ambition to stay as a member of an organization due to a feeling of obligation or commitment. This mirrors some obligation based reasons for committing with the current organization, including a sense that a debt is owed to a boss, a colleague, or the larger company. In this case, people stay because they ought to (Allen & Meyer, 1990).

Wiener and Vardi (1980) articulated normative commitment as the work conduct of individuals, guided by a sense of responsibility, obligation, and commitment towards the organization.

All these three types of organizational commitment combine to form a general sense of psychological attachment to the company. Of course, different persons may evaluate the three

types differently. Some employees may be very rational and careful by nature, focusing mainly on continuance commitment when assessing their overall aspiration to commit. Other employees may be more sensitive and innate by nature, going more on “feel” than a planned assessment of costs and benefits.

The significance of the three commitment types likewise may differ over the course of a career. For example, an individual might list affective reasons early in his/her work life before shifting his/her attention to continuance reasons as he/she start a family or become more established in a community. Irrespective of how the three types are prioritized, though, they offer an important insight into why someone might be committed and what an organization can do to make employees feel more committed. (Colquitt et al., 2017).

2.4. Empirical Literature Review

2.4.1 The relationship between Organizational Culture and Organizational Commitment.

There are multiple studies investigating the relationship between organizational culture and organizational commitment. Their results exhibited that there is a positive relationship between organizational culture and organizational commitment. Messner (2013) concluded that there is a positive and significant relationship between organizational culture and organizational commitment. He further recommended that for organizations it is imperative designing a corporate culture change strategy in order to increase organizational commitment. When employees feel they are part and parcel of the organization, such identification directly helps to foster a high level of commitment and innovation. Inanlou et al. (2017) proved that organizational culture defined by better communication among superiors and subordinates, trust, and innovative climate, is positively related to organizational commitment. Research conducted by Idrus et al. (2015) confirmed that greater organizational culture can improve organizational commitment. Razali et al. (2018) deduced that organizational culture significantly influences either negative or positive on employee loyalty. A strong organizational culture positively affects employee loyalty while weak organizational culture contributes to negative employee loyalty. In their study, Hartnell et al. (2011) found out that organizational culture was related to organizational commitment, with clan cultures having the strongest positive relationship. This finding was as well supported by Odom et al. (1990) concluding that higher levels of commitment, satisfaction, and solidity in the midst of employees are achieved by availing a cultural context that is employee-oriented and supportive such as clan cultures. By the same token, Goodman et al. (2001) in their study concluded that clan culture values were positively

related to organizational commitment. Yet again, Clan cultures have also been found to have a significant positive relationship with affective commitment (Richard, et al. 2009).

2.4.2. Relationship between Organizational Culture and Job Satisfaction.

Numerous researchers have always been interested in finding out the factors that influence job attitude and behavior of employees in an organization. However, scholars agreed on the organizational culture influence of job satisfaction, there is no consensus on the cultural dimensions that influence job satisfaction. Silverthorne (2004) concluded in his study that the job satisfaction of employees is influenced by the supportive, innovative, and bureaucratic organizational culture, in descending order. In their analysis, Hartnell et al. (2011) found that organizational culture was significantly correlated to job satisfaction. The relationship highly depended on the type of culture, with clan cultures having a significant relationship with job satisfaction than other culture types. In support of Hartnell et al. (2011), Batugal (2019) study demonstrated that there is a positive significant relationship between job satisfaction and clan culture. A study conducted by Lund (2003) concluded that job satisfaction was positively correlated to clan and adhocracy cultures, and negatively correlated to market and hierarchy cultures. In their study (Farokhi et al., 2016) found out that there is a direct and significant relationship between Bureaucratic, Supportive & Innovative organizational culture and job satisfaction. JIE et al. (2017), research finding depicts that that bureaucratic organizational culture has a positive and moderate relationship with job satisfaction, while, innovative and supportive organizational cultures have positive and significant relationships with job satisfaction. Further, the researchers attested that innovative and bureaucratic organizational cultures are the predictors that enhance job satisfaction. (Moosvi, 2015) finding show that bureaucratic organizational culture has a significant positive impact and in-role job performance of the employees and innovative culture is also positively related while supportive culture has a non-significant impact on in-role job performance.

2.4.3. Relationship between Job Satisfaction and Organizational Commitment

Studies conducted on the relationship between job satisfaction and organizational commitment showed that there is a positive and significant relationship between the two. Mowday et al. (1979) has indicated that job satisfaction has been shown to be significantly related to organizational commitment. The same conclusion has been supported by (Angle and Perry, 1981). According to Aamodt (2007), whenever employees are satisfied, they incline to be committed to their organization, and as a result, they are more likely to report to work, stay at

the organization, arrive at work in time, perform very well and engage in a behavior beneficial to the organization. Based on Kotze and Roodt's (2005) research findings, there happens to be a strong and positive correlation between job satisfaction and employee commitment. Employee commitment highly likely to be influenced by factors for instance variety and type of job, degree of responsibility with the job, the autonomy associated with the job, the strength of social relations at the workplace, remuneration, and rewards, and career development and promotional opportunities in the organization (Riggio, 2009). According to the result finding of Munir et al. (2014), a various facets of job satisfaction variables such as work, payment, and promotion have a significant and positive relationship with the three dimensions (Affective, Normative, and continuance) of organizational commitment. Mathieu et al. (2016) research finding concluded that job satisfaction seems to predict organizational commitment which, in turn, negatively predicts turnover intentions. Generally, there is a statistically significant relationship between organizational commitment and job satisfaction, and more evidence showing that job satisfaction influences organizational commitments and is, therefore, an antecedent of commitment (Kelly, 2015). If an organization defines the level and structure of pay based on appropriate rules, this may motivate employees to improve their commitment to an organization (Barmby, 2002). According to (Khalid, 2012) Periodic increases in pay and benefits that coincide with employees' education level, employment grade, and length of services will help the organization to retain its employees. Organizational commitment by itself is a job-related factor that may lead to other job-related consequences such as job effort, absenteeism, turnover, job role, and performance (Randall, 1990). The job role that is not clearly stated may lead to a lack of commitment to the organization and promotional opportunities can also enhance or diminish organizational commitment (Curry et al., 1996).

The supervisory relationship is one of the workplace environments working relationship dimensions. (Randall, 1990: 370) attested that “the supervisory relationship can affect organizational commitment either positively or negatively”. A positive supervisory relationship hangs on how on the job practices such as performance management are being realized in the organization. Lin et al. (2011) in their study inferred that co-worker's relationship affects job satisfaction and job satisfaction affects organizational commitment.

2.5. Conceptual Framework of the study

Based on the extensive literature review presented in this chapter, this study proposes a conceptual framework as illustrated in Figure 2.1 below.

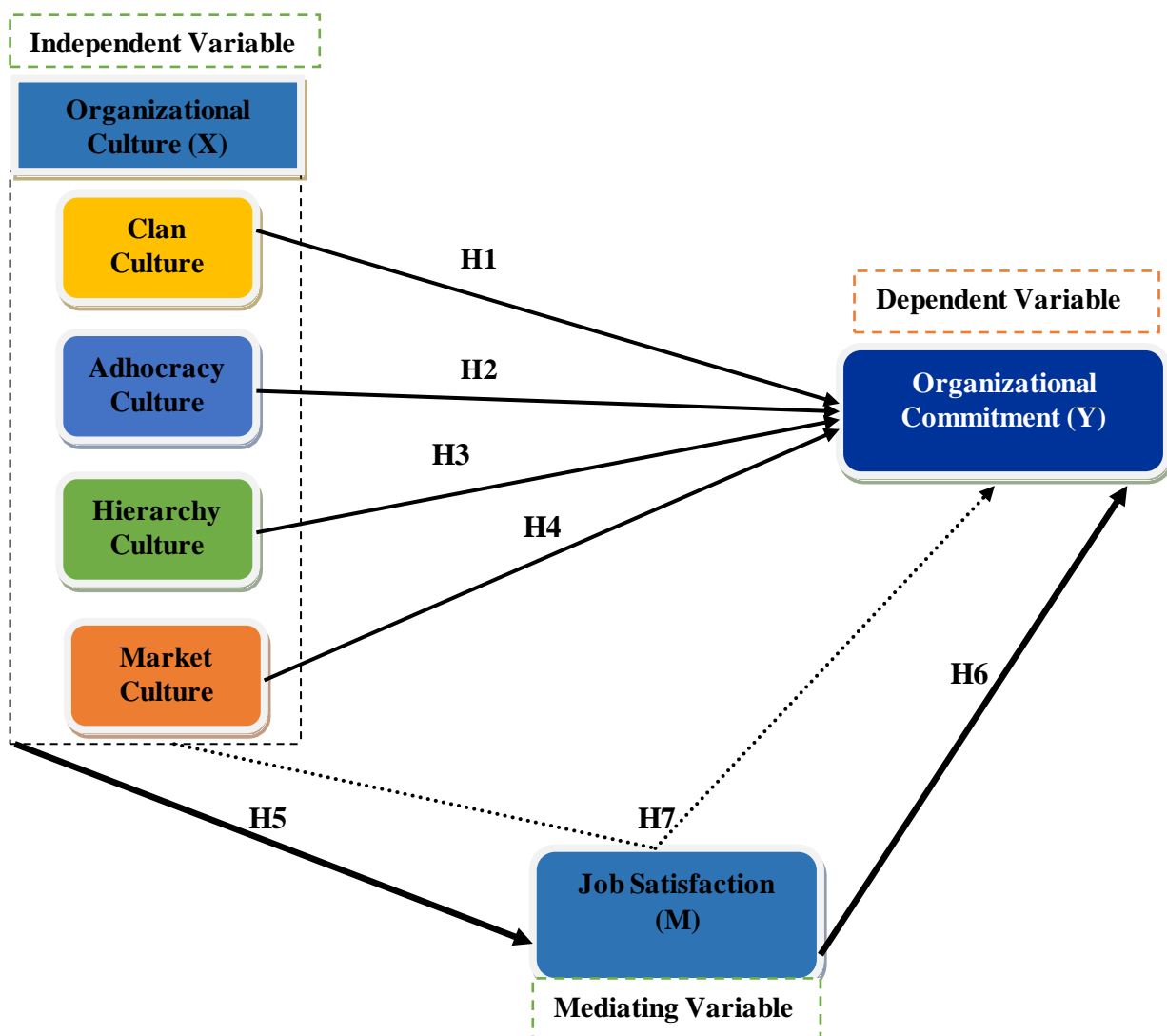


Fig. 2. 1. Conceptual Framework

Source: Related Review Literatures

2.6. Development of Hypothesis

2.6.1 Independent Variable

Clan Culture

Clan oriented culture is family-like, pleasant working condition that people share a lot of information and focuses on mentoring, nurturing, and teamwork. Loyalty is the glue that grips the organization together. Success is measured in terms of compassion for customers and

concern for people. Organizations with a clan culture place greater emphasis on participation, teamwork, and consensus (Hutchinson and Zain, 2009). In clan type of culture, commitment presumed to be very high. For Han (2012), a Clan or supportive culture encompasses participation, employee-oriented leadership, teamwork, and cohesiveness. Hartnell et al. (2011) found out that organizational culture was related to organizational commitment, with clan cultures having the strongest positive relationship. Hence it can be hypothesized that:

H1: There is a positive and significant relationship between clan culture and organizational commitment.

Adhocracy Culture

This type of culture is built on creativity and energy. Employees are encouraged to stick their necks out and take risks, and the leaders are considered innovators or entrepreneurs. The organization is glued together by a commitment to experimentation, with stress on individual creativity and liberty. The central ethos is change and agility. Employees possessing robust features in agility and initiative-taking are the most successful in this type of culture (Sugita & Takahashi, 2015). Krajcsak (2018) finding revealed that commitment is very high in Clan and adhocracy culture variables compared to Market and Hierarchical culture. Hence, it can be hypothesized that:

H2: There is a positive and significant relationship between Adhocracy culture and organizational commitment.

Hierarchical culture

Hierarchical culture is a type of culture built upon structure and control. The hierarchical working environment is formal with stringent and strict procedures in place for adherence. Leaders have based their emphasis on coordination, monitoring, and efficiency.

Earlier research works have demonstrated that hierarchy culture has significant effects on a commitment to work (Monga et al., 2015). Furthermore, Samuel (2015) has revealed that the hierarchy culture and work stress have a significant and positive correlation.

A study conducted by Kwakye (2018) has further shown that hierarchy culture has a significant implication and impact on employee turnover.

Hence it can be hypothesized that:

H3: There is a positive and significant relationship between Hierarchy culture and organizational commitment.

Market Culture

As opposed to Hierarchy culture which concentrates on internal stability, market culture types give strong emphasis on external positioning and mainly focus on control and stability (Cameron and Quinn 1999).

According to Cameron and Quinn (1999), a market culture characterized by being goal-oriented, competitiveness, result orientation, emphasis on winning, and reputation building. In sum, the market culture was sturdily associated with command leadership, confrontation and conflict, a prize for accomplishment, and strong directive. All these are well-suited with the market culture values (Cameron and Quinn 2005).

Hence it can be hypothesized that:

H4: There is a positive and significant relationship between Market culture and organizational commitment.

2.6.2 Organizational culture and job satisfaction

A study conducted by Lund (2003) concluded that job satisfaction was positively correlated to clan and adhocracy cultures, and negatively correlated to market and hierarchy cultures. Likewise, Bigliardi and Galati (2012) confirmed in their study that there is a strong relationship between diverse types of organizational culture and job satisfaction amongst knowledge workers. Furthermore, Cronley and Kim (2017) empirical work attested that lesser organizational culture scores are directly and significantly associated with lower satisfaction.

Hence it can therefore be hypothesized that:

H5: There is a positive and significant relationship between organizational culture and job satisfaction.

2.6.3 Job satisfaction and organizational commitment

As it is thoroughly prescribed in this chapter above, extensive studies conducted on the relationship between job satisfaction and organizational commitment showed that there is a positive and significant relationship between the two (Mowday et al., 1979; Angle and Perry, 1981; Aamodt, 2007; Kotze and Roodt, 2005; Munir et al., 2014).

Mathieu et al. (2016) research finding concluded that job satisfaction seems to predict organizational commitment which, in turn, negatively predicts turnover intentions. This

argument indicates, without job satisfaction, employees' retention efforts will not come to fruition.

Generally, there is a statistically significant relationship between organizational commitment and job satisfaction, and more evidence showing that job satisfaction influences organizational commitments and is, therefore, an antecedent of commitment (Kelly, 2015).

H6: There is a positive and significant relationship between job satisfaction and Organizational Commitment.

2.6.4 Mediating Variable

As stipulated above while formulating hypothesis number five, organization culture happen to significantly affect job satisfaction (Lund, 2003; Galati, 2012; Cronley and Kim, 2017)

At the same time, organizational culture has significantly affected organizational commitment (Odom et al., 1990; Hartnell et al., 2011; Messner, 2013; Inanlou et al., Idrus et al., 2015; 2017; Razali et al., 2018).

Yet again, as stated above, multiple research findings have shown that job satisfaction has a significant and unique effect on organizational commitment (Mowday et al., 1979; Angle and Perry, 1981; Aamodt, 2007; Kotze and Roodt, 2005; Munir et al., 2014).

Based on the above arguments, we propose the following hypothesis:

H7: Job satisfaction significantly mediates the relationship between organizational commitment and organizational culture.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This part describes the methodologies that were used in this study. It covers the selection of the research design, research approach, data type and source of data, data gathering procedure and instruments, sampling and sampling techniques and data analysis techniques in addition to a suitable justification associated with each approach. Hence, this study explores the relationship between the four dimensions of organization culture, with construct of job satisfaction and organizational commitment.

3.2. Research Approach

Research approaches are plans and procedures for research that details the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation (Creswell, 2014).

According to Creswell (2014), research approaches are types of inquiry within qualitative, quantitative, and mixed methods approaches that provides specific direction for procedures in a research study. Quantitative research design encompasses both experimental and non-experimental (survey) designs. Fellows and Liu (2015) detailed that quantitative researchers use mathematical models, theories, or hypotheses to scrutinize relationships among the study variables. Fowler (2009) further added that Survey research delivers a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population.

Quantitative research to a great extent is incontrovertible, generalizable, and cost-effective which allows researchers to come up with projectable findings to a larger population compared to qualitative study which is vital for exploratory research purposes where the area of study is vague and hardly known (Daniel, 2016).

Quantitative research comprises longitudinal and cross-sectional studies using survey questionnaires or interviews for data gathering with the aim of concluding from a sample to the general population. Basing the above discussion and in order to accomplish this study's objectives, a quantitative research method employed to decide if the theoretical propositions will be accepted or rejected based on responses to the survey using statistical methods. This study applied correlation and regression analysis to address the degree of relationship of

variables and to test the research hypothesis. Accordingly, the quantitative research approach found to support the testing of causal relationships in connection with organizational culture and organizational commitment, and the intervening role of job satisfaction.

3.3. Research Design

For researchers to be confident in the conclusion that they draw and reach at accurate measurement, choosing a good research design is a paramount importance (Albery and Munafo, 2008). To a great extent, the design of a study is more important than the analysis of the data. For poorly analyzed data, it always is probable to analyze them again, nonetheless if in the first place research is wrongly designed then it may never be likely to eloquently interpret the data which result drawn from it (Albery and Munafo, 2008).

In order to detect the relationship amongst different variables of interest in the planned study, explanatory study is preferable. Hence, the researcher has followed this research type. Because unlike descriptive study which is concerned with describing the characteristics of a particular individual or group and it is to a certain extent related to report writing and not desirable at this level. Whereas exploratory research deals with investigating a problem which is not clearly defined. It is conducted to have enhanced understanding of the existing problem, however, will not provide conclusive results. For such a research, a researcher jolts with a general idea and uses this research as a medium to spot issues that can be the focus for future research.

The research secondary sources of the data comprise the airline HCM report, previous research papers, different published books, journals, websites, and archives.

3.4. Target Population

As the Airlines' Headcount Report indicates as of March 31, 2020, there are a total of 14,117 Fulltime Employees. Out of that, there are 887(6.27%) Cockpit Crew, 1,700(12.02%) Cabin Crew, 1,785(12.62%) Aircraft Technicians, 1213(8.57%), Customer Service Agents, 1,479 (10.54%) Team Leader and Above and 7,083 (50.07%) Others. **Core Competencies** headcounts represent **5,585 (39.5%)** employees of the total fulltime headcount. The details are presented under the below column graph:

Fulltime Employees by profession as of March 31, 2020.

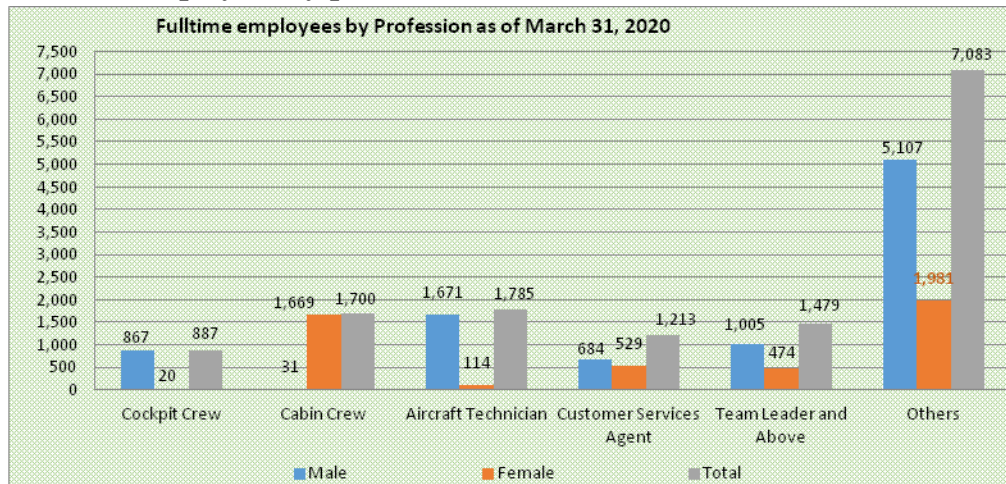


Fig. 3.1. Monthly Head Count Report as of March 31, 2020.

Source: Ethiopian Monthly Head Count Report

As IATA HR report indicated, the airline industry currently challenged by an annual staff turnover of 20% in ground operations and 18% in customer services and cabin crew jobs (IATA, 2018). Further, Ethiopian airlines HCM report is in congruence with IATA HR report that the airline is being challenged towards retaining these well experienced and skilled employees as well. Due to that reason, this research finds it important targeting the airlines’ 5,585 core competencies employees (i.e. Cockpit Crew, Cabin Crew, Aircraft Technician and Customer Service Agents) as a population by excluding other support staffs.

As Kawshala (2017) explained, it is very important that any company differentiates itself from the rest of the competition through a unique set of skills, commonly referred to as “core competencies”. A core competency results from a particular arrangement of skills or creates strategies that convey an extra incentive to the client. These empower an organization to get to a wide array of markets. Understanding that, EAG has already earmarked those employees that can differentiate it from the rest of the pack. Keeping a tap on these skilled employees is a paramount importance to any organization in general and Ethiopian Airlines in particular.

3.5. Sample Size and Sampling Techniques

In order to obtain a representative sample, applying a stratified sampling technique is advisable if the population from which a sample is to be drawn doesn’t constitute a homogenous group (Kothari, 2004).

The sample for this study has been drawn applying a Stratified Random Sampling technique taking the professions at Ethiopian Airlines as a stratum. Stratified random sampling divides

the population into discrete subgroups termed strata that have similar features. Then a random sample is taken from each stratum or profession that the size of sample proportional to its stratum size as compared to the population. This will guarantee that the sample will show the difference between stratum groups.

From the sample, each respondent will be chosen randomly. This is due the very nature of job characteristics of the respondents. To put it in a perspective, cockpit crews, cabin crews, and technicians are frequently traveling, and this makes it important to select the respondents randomly.

Therefore, as stipulated above, the target populations for the study (5585) are employees identified by their profession in the airline. Accordingly, to find the sample size, the researcher opts to use a confidence interval of 95%, which is the level of certainty whether the response for each question is the true answer or not. And a 5% margin of error is the amount of error from the difference in the responses that can be tolerated when drawing a conclusion from the data. Hence, the sample size was determined by applying the below sample size calculator formulated by Yamane (1967).

Profession	Employee	Percentage	Sample Size Distribution
Aircraft Technician	1785	32%	119
Cabin Crew	1700	30%	114
Customer Service	1213	22%	81
Cockpit Crew	887	16%	59
Total	5585	100%	373

Fig. 3.2. Sampling

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

Where:

n =required sample size

e² = error rate which is 0.05

N = Target population

$$= \frac{5585}{1 + 5585 \times (0.05)^2} = 373$$

3.5.1 Sample Frame

In this study the sampling frame are all permanent aircraft technicians, cabin crews, and customer service and cockpit crew employees of Ethiopian Airlines Group located in the head office.

3.6 Variable of the study

- ✍ Independent Variable: Organizational Culture
- ✍ Dependent Variable: Organizational Commitment
- ✍ Mediating variable: job satisfaction
- ✍ Demographic variable: Age, Gender, Education, Service Year, Marital Status and Employment Group.

3.7 Model Specification

A number of Single and Multiple Regression analyses were conducted to determine the intervening or mediating effect of Job Satisfaction on the relationships between Organizational Culture and Organizational Commitment. For this purpose, the researcher established three regression models as illustrated below:

Model 1: $Y = \gamma_0 + \gamma X + \varepsilon_1$ -----Equation 1 or

$Y = \gamma_0 + \gamma_1 X_1 + \gamma_2 X_2 + \gamma_3 X_3 + \gamma_4 X_4 + \varepsilon_1$

Model 2: $Y = \gamma'_0 + \gamma' X + \beta M + \varepsilon_2$ -----Equation 2

Model 3: $M = \alpha_0 + \alpha X + \varepsilon_3$ -----Equation 3

Where:

Y is Dependent variable = Organizational Commitment,

X is predictor variable = Organizational Culture,

X1= Clan Culture, X2=Adhocracy Culture, X3=Market Culture & X4=Hierarchy Culture

M is the mediator = Job Satisfaction,

γ is the overall effect that establishes the zero-order correlation between X and Y (controlling M) in the 1st equation.

γ' is direct effect that shows the Beta coefficient relating the independent variable (X) to the outcome variable (Y) adjusted for the effects of the mediator(M) in the 2nd equation.

β = is the Beta coefficient relating the mediator variable (M) to the outcome variable (Y) adjusted for the effects of independent variable (X), in the 2nd equation,

α = is the coefficient that explains the zero-order correlation between X and M (controlling Y), in the 3rd equation.

$\varepsilon_1, \varepsilon_2$ and ε_3 are unexplained variability of equations 1, 2, and 3 respectively. While

γ_0, γ'_0 and α_0 are the intercepts for equations 1, 2, and 3 respectively.

3.8. Procedure for data gathering

From the inception, the researcher formally requested and got permission from Director Human Resource Management to conduct this study within the airline. A formal email accompanied by the research questionnaires explaining the motive and objectives of the research, providing detailed directions and highlighting the importance of ethical considerations has been submitted. These deliberations also included that participation in the study will be voluntary, anonymous and confidential.

3.9. Data Collection Instrument

The data for this study was acquired from two sources, primary and secondary. The primary data was collected from the research participants through structured, self-administered questionnaire. Secondary data have been acquired from books, articles, journals, company website, publications and internal brochures.

Due to COVID-19 pandemic and the need for social distancing, the researcher finds it vital to distribute the questionnaire in the form of online survey to avoid contact and create confidence for respondents. In addition to COVID-19, the very nature of the job of some employees demanded the need to fill out paper questionnaires. Hence, Aircraft technician employees who were not in a position to carry smart phone or personal computer in the compound were subjected to fill out print version of the questionnaire.

In this study the researcher used close ended questionnaire and the questionnaire is arranged in 5-Point Likert Scale format. That is prepared in English language and distributed to targeted employees located at the head office. For adopting only English language questionnaire, it is justified that for an employee to join any of the core competency division, should first fulfil English Proficiency Rating Level III. The assessment will be undertaken all the way from selection to placement and administered by Leadership and Career Development Training Section (Aviation Academy-Basic Programs AMT, CC & COM, 2018).

3.9.1. Questionnaires

A questionnaire has numerous advantages and concerning this approach, Cohen et al. (2007) stressed that a questionnaire inspires the respondent to be honest as it will be answered anonymously and is more economical than an interview. Likewise, a questionnaire has the ability to solicit information from several respondents within a very short span of time (Johnson & Christensen, 2008). Stressing the advantage of using a scaled item response format, McMillan & Schumacher (2010) explained that a questionnaire allows the

respondents to choose easily the appropriate answer. This research adopted standardized questionnaires for the variables under investigation which are organizational culture, job satisfaction, and organizational commitment. For organization culture, Organizational Culture Assessment Instrument (OCAI), for job satisfaction, overall job satisfaction Survey, and for organizational commitment, organizational commitment questionnaire (OCQ) were used. Hence, details of each standardized instrument presented below.

3.9.1.1 The OCAI Instrument

The OCAI developed by Cameron and Quinn (1999), is an instrument that allows diagnosing the dominant culture of an organization based on the four culture types (clan, adhocracy, market, and hierarchy) which is based on the Competing Values Framework (CVF). The objective of OCAI is to measure one of six dimensions of organizational culture (dominant characteristics, institutional leadership, and management of employees, organizational glue, strategic emphasis, and criteria of success). Each of these organizational culture dimensions has four alternatives i.e. clan, adhocracy, market, and hierarchy cultures. In each dimension, the first alternative shows clan culture, the second alternative illustrates the adhocracy culture, the third alternative depicts the market culture and finally, the fourth alternative shows hierarchy culture. Based on the mean values of each alternative, the researcher will analyze the data. For example, if the first alternative of a given dimension is the highest mean value, the researcher would conclude that clan culture is dominant to that specific dimension. The OCAI is one of the most influential and extensively used models in the area of organizational culture research. This instrument has been found to be equally useful and accurate in diagnosing important facets of an organization's underlying culture. It has been used in more than a thousand organizations and it has been found to predict organizational performance (Cameron and Quinn, 2005). Compared with other models and scales, the CVF has better validity and reliability and is very suitable for practical operations (Yu and Wu, 2009).

3.9.1.2 Job Satisfaction Instrument

Since there is no one size fits all definition of job satisfaction, and no generally accepted theory to explain it, there is no agreement on the best way to measure job satisfaction (Spector, 1997). The most extensively adopted survey instruments found in the literature include; the Job Descriptive Index (JDI), the Job Satisfaction Survey (JSS), the Minnesota Satisfaction Questionnaire (MSQ), the Job Diagnostic Survey (JDS) and overall job satisfaction survey. To undertake this study, an overall job satisfaction survey with five items

that were used by Judge et al. (1998) adapted from Brayfield and Rothe (1951) was used. Since this study aims to measure universal job satisfaction without denoting any explicit facets, a global version was used with a summated rating scale format ranging from 1-strongly disagree to 5-strongly agree.

3.9.1.3 Organizational Commitment Instrument

Organizational Commitment was measured by adopting the most accepted tool to measure organizational commitment that was developed by Alan and Meyer (1990). Hence, the questionnaire is composed of fifteen items, five items in each of the following defined dimension: - Affective Commitment, Continuance Commitment and Normative Commitment. A 5-point Likert type scale stretching from 1-strongly disagree to 5-strongly agree has been used to measure the extent of organizational commitment.

3.10. Validity and Reliability Test of Instruments

The reliability and validity of OCAI were tested by different scholars and found to be used as a standardized questionnaire for the organization culture study. The reliability of the OCAI instrument has been verified by Quinn and Spreitzer (1991) that 796 executives from eighty-six different public utility firms assessed their organizational culture. Cronbach alpha coefficients, a reliability statistic type, were used for each culture type. The coefficients found to be .74 for Clan culture, .79 for Adhocracy culture, .73 for Hierarchy culture, and .71 for Market culture. This indicates respondents inclined to rate their organization's culture consistently across the several questions on the instrument (Cameron & Quin, 2011).

Moreover, Cameron & Quin (2011) cited evidence of the reliability of the OCAI instrument from the research conducted by Yeung, Brockbank, and Ulrich (1991). Their study addresses 10,300 executives within 1064 businesses many of them are listed as Fortune 500 companies. The results exhibited that the clan culture reliability was .79, the adhocracy culture .80, the hierarchy culture .76, and the market culture .77. In all instances, reliability coefficients surpassed acceptable levels.

Assessing the validity of the OCAI instrument, Cameron and Freeman (1991) demonstrated the OCAI instrument measured the four types of organizational culture in their study of 334 institutions of higher education, with 12 to 20 individuals responding from each institution for a total of 3,406 individuals who participated. The validity of the instrument was determined by matching the domain of effectiveness in which the organization excelled, and the kind of

decision-making, structure, and strategy employed (Cameron & Quin, 2011). In short, these analyses generated results that are very consistent with the adopted values and organizational attributes believed to be distinct to each culture type in the Competing Values Framework. To be specific, a strong indication for concurrent validity was generated.

Regarding job satisfaction, in order to ensure the five-item measure was reliable, Judge et al. (1998) distributed an independent sample of 222 respondents and the reliability of the five-item scale in this sample was .88. Additionally, with data from the current studies, this measure of overall satisfaction correlated on average .89 with a composite measure of the facets of the Job Descriptive Index (JDI).

Finally, as confirmed through meta-analysis, the reliability of each of the three components of organizational commitment instrument is high .82 for the affective commitment scale, .76 for continuance commitment scale, and .73 for normative commitment scale (Meyer, et al., 2002). Ellonen (2020) study further attested that organizational commitment instrument found to be valid and reliable with a Cronbach's alpha value obtained as 0.89.

Table 3.1: Reliability analysis summary of Variables.

Variable	Variable Components		
Organizational Culture		Quinn & Spreitzer (1991)	Yeung, et.al. (1991)
	Clan Culture	.74	.79
	Adhocracy Culture	.79	.80
	Market Culture	.71	.77
	Hierarch Culture	.73	.76
Job Satisfaction	Five-item scale	.88	
Organizational Commitment	Affective Commitment	.82	
	Continuance Commitment	.76	
	Normative Commitment	.73	

3.11. Data Analysis Tools

The data analysis made using both descriptive and statistical regression and IBM's Statistical Package for the Social Sciences (SPSS) Version 20. Descriptive statistics types such as frequencies, percentages, means, and standard deviations used to summarize and present the data. Additionally, tables were used to paint a clear picture and enable ease of comparison of the data collected from the survey. Further, inferential statistics, such as correlation and regression analyses were used. Regression analysis used to examine the relationship between the dependent variable and the independent variables in our case organizational culture and organizational commitment respectively. At the same time, it is used to measure the relationship between the independent variable and mediating variable that are organizational culture and job satisfaction. And finally, mediating variable and independent variable that are job satisfaction and organizational commitment.

To test the mediation effect of a mediator variable on the relationship between the independent and dependent variables, this study followed the standards proposed by (Baron

and Kenny, 1986). According to Baron and Kenny (1986), there are four steps in establishing mediation: Step 1: Conduct a simple regression analysis with Organizational culture (X) predicting organizational commitment (Y). Step 2: Conduct a simple regression analysis with organizational culture (X) predicting job satisfaction (M). Step 3: undertake a multiple regression analysis with X and M Predicting Y and Show that the mediator affects the outcome variable. Step 4: To establish that M wholly mediates the X-Y relationship, the effect of X (IV) on Y (DV) controlling for M should be zero. The effects in both Steps 3 and 4 will be estimated with the same regression equation. If all four of these steps are satisfied, then the data are consistent with the hypothesis that variable M completely mediates the X-Y relationship, and if the first three steps are met but not Step 4, then partial mediation is indicated. For M partially mediates the X-Y relationship, the direct effect must be less than the zero-order correlation of X and Y.

3.12. Ethical Consideration

Informed consent of all participants has been obtained before starting the study. Respondents have been given a clear explanation about the nature of the study and advised that they will be free to pull out from the study at any time. Further, participants have been informed about data collecting procedure. The anonymity of the subjects will be protected and guaranteed by preventing to write their names and providing clear instruction. Furthermore, the information obtained thorough the procedure is only will be used for the research purpose and confidentiality is maintained.

An official later will be written to Ethiopian Airlines Group to get permission from MBA Program, College of Business and Economics; Addis Ababa University. In addition, the entire study participant will be informed about the purpose of the study and finally their consent will be obtained before giving the questioner. Ethical considerations of respect for others are of greater significance (Cavan, 1977). Data analysis will be dealt with scientific impartiality, honesty, accuracy and sensitivity. Factors such as age of targeted sample; sensitivity of subject under research, and controversies (Cohen et al., 2007) will also be given due account.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

This study targets to explore the mediating role of job satisfaction in the relationship between organizational culture and organizational commitment at the Ethiopian Airlines Group. This chapter deals with the analysis and interpretation of the collected data at Ethiopian Airlines Group. The collected data were analysed and interpreted using descriptive and inferential statistics.

4.1. Response Rate

Mugenda and Mugenda (2003) emphasize that a response rate of above 70% found to be very well for data analysis and reporting results. Towards conducting this study, the researcher distributed survey questionnaires both online and printed copy for a total target respondent of 373. Out of which 335 (282 online and 53 offline) respondents were able to complete the questionnaires. The achieved response rate, therefore, is 90% which is tantamount to the above criterion. Hence, it can be justified that the response rate is sound and adequate to undertake this study.

4.2. Demographic profile of respondents

In this section, a descriptive statistic in the form of frequency and percentage has been used to discuss the demographic profiles, such as age, gender, educational achievement, marital status, service year, and employment group in the airline.

4.2.1. Age Group Descriptive Statistics

As it is portrayed in Table 4.1 below, out of a total of 335 respondents 152 or 45.4% of respondents are found to be aged between 26 and 35 years. This age group encompasses the majority of respondents. The age group between 18 to 25 years with 106 respondents formed a 31.6% response rate. The count of respondents between the age of 36 and 45 years is 62 with a response rate of 18.5%. Respondents above the age of 45 years are 15 which is 4.5% of the total respondents. The respondent's analysis based on age shows the airline has diversified age groups who can give valid information about the field of study.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	106	31.6	31.6	31.6
	26-35	152	45.4	45.4	77.0
	36-45	62	18.5	18.5	95.5
	Above 45	15	4.5	4.5	100.0
	Total	335	100.0	100.0	

Source: SPSS output 2020

4.2.2. Gender Descriptive Statistics

Table 4.2 depicts the distribution of gender of the respondents. 193 (57.6%) of the respondents were male while 142 (42.4%) of the respondents found to be female. This can be witnessed that both genders (male and female) were soundly represented.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	193	57.6	57.6	57.6
	Female	142	42.4	42.4	100.0
	Total	335	100.0	100.0	

Source: SPSS output 2020

4.2.3. Educational Achievement Descriptive Statistics

As can be demonstrated in Table 4.3 below, 278 (83%) which are the majority of the respondents have BA Degree. 11.9% (40) of the respondents are the holder of master's degree or above while 17(5.1%) of them are Diploma holders. Based on this, we can deduce that employees of Ethiopian Airlines Group are professional.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	College Diploma	17	5.1	5.1	5.1
	BA Degree	278	83.0	83.0	88.1
	Second Degree	40	11.9	11.9	100.0
	Total	335	100.0	100.0	

Source: SPSS output 2020

4.2.4. Work Experience Descriptive Statistics

Table 4.4 shows the majority of respondents which are 137 (40.9%) served the Ethiopian Airline Group for a period of 5 years or less. Whereas, 108 (32.2%) of the respondents

worked in the organization between 6 to 10 years. A total of 60(17.9%) respondents have served the Airline Group between 11 to 15 years period. Lastly, 30(9%) of the respondents have served the company for more than 15years.

<i>Table 4.4. Tenure/Work experience of respondents</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	137	40.9	40.9	40.9
	6-10	108	32.2	32.2	73.1
	11-15	60	17.9	17.9	91.0
	Above 15	30	9.0	9.0	100.0
	Total	335	100.0	100.0	

Source: SPSS output 2020

4.2.5. Descriptive Statistics for Marital Status

Table 4.5 depicts, out of the total of 335 respondents, 179 (53%) respondents are single while close to 47% or 156 in number are married ones.

<i>Table 4.5. Marital status of respondents</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	179	53.4	53.4	53.4
	Married	156	46.6	46.6	100.0
	Total	335	100.0	100.0	

Source: SPSS output 2020

4.2.6. Descriptive Statistics of Employee Group

Table 4.6 below indicates that from the total respondents of 335, close to 82% or 273 in numbers are non-management employees. Response from lower, mid, and top-level managers encompasses 62 in total which is close to 19% of the total respondents. Data analysis obtained based on the employment group shows that diverse views of both management team and subordinates of the former have been garnered.

<i>Table 4.6. Employment Group of respondents</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Management	62	18.5	18.5	18.5
	Non-Management	273	81.5	81.5	100.0
	Total	335	100.0	100.0	

Source: SPSS output 2020

4.2.7. Descriptive Statistics of Variables

Descriptive statistics output of the variables will help us figure out the perception of the respondents about organizational culture, job satisfaction, and organizational commitment of the airline.

Table 4.7. Descriptive Statistics of variables

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Organizational Culture	335	3.2175	.51245	-.232	.133	.311	.266
Clan Culture	335	3.6025	.85029	-.803	.133	-.419	.266
Market Culture	335	3.4949	.86083	-.528	.133	-.700	.266
Adhocracy Culture	335	2.6104	.74328	.855	.133	-.559	.266
Hierarchy Culture	335	3.1622	.67871	-.116	.133	-.884	.266
Job Satisfaction	335	3.7600	.88295	-.804	.133	.013	.266
Organizational Commitment	335	3.0517	.49229	-.105	.133	.528	.266
Valid N (listwise)	335						

Source: SPSS output 2020

As illustrates in Table 4.7, the mean score of respondents on Organizational Culture was 3.21 whereas the mean score of Job Satisfaction was 3.76, and the mean score for organizational commitment was 3.05. This predicts that Ethiopian Airlines employees have a strong perception and give more value for job satisfaction. Again, as can be apparent from the table, the dominant culture of Ethiopian Airlines is Clan Culture with a mean score of 3.60 followed by Market Culture with a mean score of 3.49. Hierarchy and Adhocracy cultures followed in the pecking order with a mean score of 3.16 and 2.61 respectively. Clan-dominated culture means the airline exhibits teamwork, focuses on nurturing, mentoring, and a family-like working environment. Similarly, Market Culture is seen as the second dominant culture that indicates the airlines' focus on competition among employees, achievement-oriented and with an attitude of getting the job done by any means.

Looking at the skewness and kurtosis of the variables, we can conclude that the distribution is normal. According to Brown (2016), if the values for skewness or kurtosis are less than ± 1.0 , then the skewness or kurtosis for the distribution is not outside the range of normality. As can

be seen in Table 4.7 above, the skewness and kurtosis of all the variables are within the range of + or -1. Therefore, the distribution is considered normal.

4.3. Reliability Test

Reliability indicates the stability and consistency that the instrument measures the concept and supports to evaluate the goodness of a measure (Sekaran and Bougie, 2016). Towards performing the reliability test, the researcher processed Cronbach's Alpha values by means of IBM SPSS Version 20 for the items in each construct as indicated in table 4.7 below. Based on Sekaran and Bougie's (2016) analysis, reliabilities less than 0.60 are considered as poor, those in the 0.70 range are labeled as acceptable, whereas those over 0.80 considered as good.

Table 4.8 Reliability Test

S. No.	Variables of the Study	Number of Items	Cronbach's Alpha Value
1	Organizational Culture	24	.892
2	Job Satisfaction	5	.921
3	Organizational Commitment	15	.724

Source: SPSS output 2020

According to Table 4.8, Cronbach's Alpha coefficient values, Organizational culture, Job Satisfaction, and Organizational Commitment have registered 0.89, 0.82 & 0.72 respectively. The overall reliability of the measures used in this study can be categorized as good and acceptable.

4.4 Correlation Analysis of the Variables

The aim of this analysis is to investigate the direction as well as strength of relationship among the variables under study namely Organizational Culture (Independent Variable), Job Satisfaction (Mediating Variable), and Organizational Commitment (Dependent Variable). In investigating the relationship, Pearson's Correlation analysis has been employed and the results of the same have been summarized in the following table.

Table 4.9 Correlation

		Organizational Culture	Job Satisfaction	Organizational Commitment
Organizational Culture	Pearson Correlation	1	.463**	.582**
	Sig. (2-tailed)		.000	.000
	N		335	335
Job Satisfaction	Pearson Correlation		1	.631**
	Sig. (2-tailed)			.000
	N			335
Organizational Commitment	Pearson Correlation			1
	Sig. (2-tailed)			
	N			

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

Source: SPSS output 2020

Pearson correlation values range from +1 to -1. +1 indicates a perfect positive linear relationship whereas -1 represents a perfect negative linear relationship. A value of 0 means no relationship between the variables. According to Arkkelin (2014), there is no hard and fast rule on the degree of relationship. However, the general rule of thumb dictates, a coefficient 0.5 and above indicates a strong correlation whereas values around 0.30 and above indicate moderate correlation, and a coefficient less than 0.20 indicates a weak correlation. It is possible that the two variables can statistically correlate even if the relationship is weaker. Researchers seek to modify their conclusion by stressing the relationship is statistically significant.

As shown under table 4.9, it was established that the direction & strength of the relationship between Organizational Culture and Job Satisfaction is positive with a coefficient (0.463) and a significant relationship with a p-value ($p=0.000$) we can say that there is a moderate correlation among the variables. Likewise, the direction of relationship between Organizational Culture and Organizational Commitment is positive with a positive coefficient

(0.582) and significant with a p-value ($p=0.000$). This indicates that there is a strong correlation between the variables.

Finally, Job Satisfaction is positively and significantly correlated with Organizational Commitment (0.631, $p=0.000$). Hence, there is a strong correlation here too.

Table 4.10 Correlation between independent, mediating and dependent variables

		Clan	Adhocracy	Market	Hierarchy	Organizational Commitment
Clan	Pearson Correlation	1				.600**
	Sig. (2-tailed)					.000
	N					335
Adhocracy	Pearson Correlation		1			.439**
	Sig. (2-tailed)					.000
	N					335
Market	Pearson Correlation			1		.085
	Sig. (2-tailed)					.122
	N					335
Hierarchy	Pearson Correlation				1	.348**
	Sig. (2-tailed)					.000
	N					335
Organizational Commitment	Pearson Correlation	.600**	.439**	.085	.348**	1
	Sig. (2-tailed)	.000	.000	.122	.000	
	N	335	335	335	335	335
job Satisfaction	Pearson Correlation	.787**	.145**	-.031	.126*	.631**
	Sig. (2-tailed)	.000	.008	.570	.021	.000
	N	335	335	335	335	335

Source: SPSS output 2020

As we can see from table 4.10 above, Clan Culture was strongly positively and significantly correlated with organizational commitment (0.600, $p=0.000$). Hence, the result coincides with the first hypothesis **H1** which states that there is a positive and significant relationship between clan culture and organizational commitment.

The correlation between Adhocracy Culture and Organizational Commitment was positive and significant (0.439, $p = 0.000$). Therefore, the results reinforced hypothesis **H2** which stated that there is a positive and significant relationship between Adhocracy culture and organizational commitment.

The Pearson Correlation coefficient of Market Culture and Organizational Commitment was positive but not significant (0.085, $p=0.122$). The result doesn't support hypothesis **H3** which dictates that there is a positive and significant relationship between market culture and organizational commitment. Similarly, the correlation analysis between Hierarchy Culture and Organizational Commitment depicts a positive and significant relationship (0.348, $p=0.000$). This, therefore, fulfills **H4** Hypothesis read that there is a positive and significant relationship between Hierarchy culture and organizational commitment. Overall, we can conclude that organization culture has a positive and significant relationship with organizational commitment which is in agreement with hypothesis **H5**.

Further, it is can be observed that there is a positive and significant relationship between job satisfaction and organizational commitment (0.631, $p=0.000$). This in turn fulfills hypothesis **H6** that reads there is a positive and significant relationship between job satisfaction and organizational commitment.

Pearson Correlation result also demonstrated that clan culture has a strongly positively significant relationship with job satisfaction (.787, $p=0.000$). Similarly, adhocracy and Hierarchy cultures have a weak positive and significant relationship with job satisfaction with (.145, $p=0.008$), (.126, 0.021) respectively. Lastly, market culture output depicts a negative and non-significant relationship with job satisfaction (-.031, $p=.570$).

Per Arkkelin (2014) guideline, we can come to the conclusion that Clan Culture and job satisfaction represented a strong association with Organizational Commitment while Adhocracy and Hierarchy Cultures had a moderate association. Conversely, market culture result has demonstrated a weak and insignificant correlation with organizational commitment.

4.5 Diagnostic Tests of Linear Regression Model

Before applying the regression analysis toward testing research hypothesis, preliminary test was undertaken.

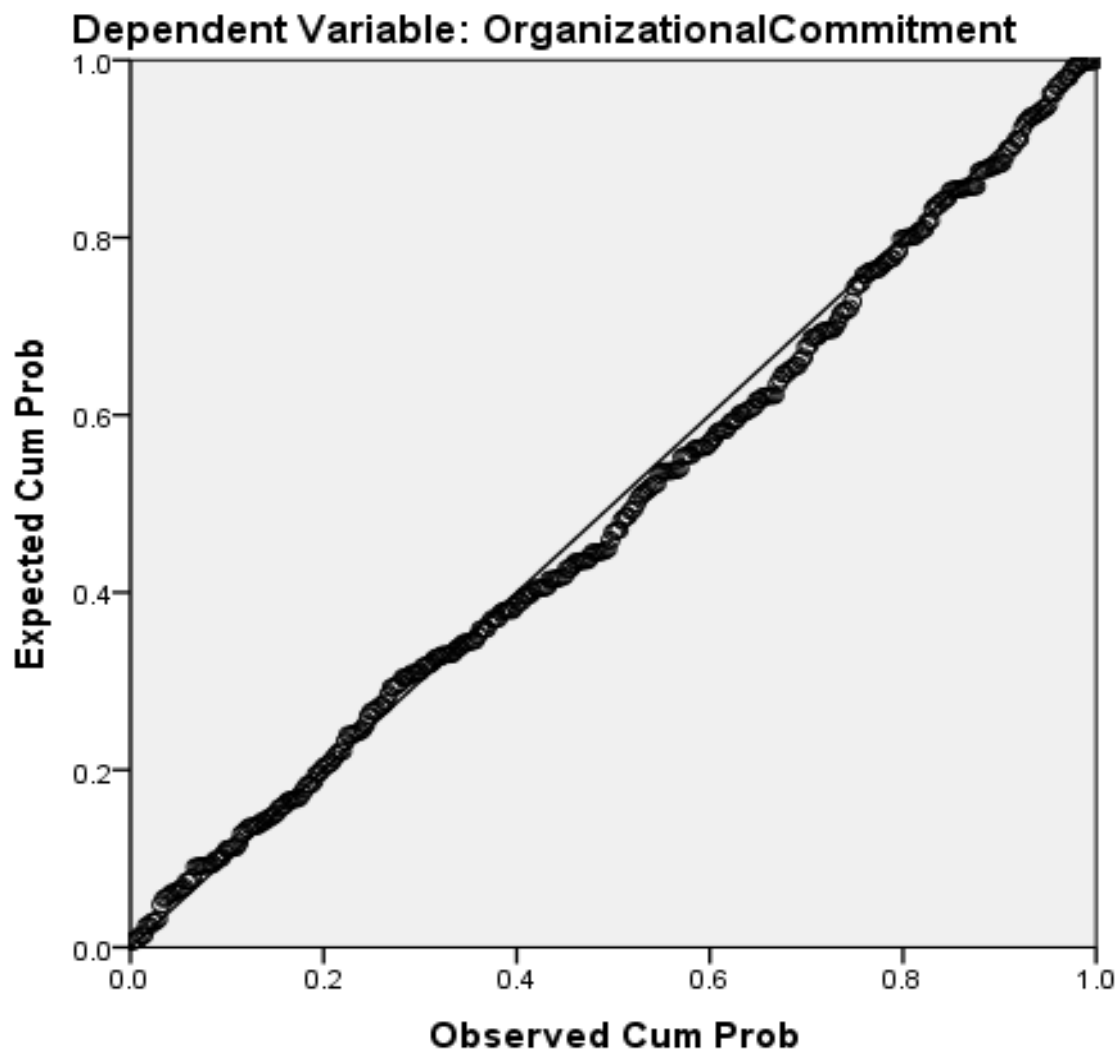
4.5.1 Normality Test of Residuals

Normality is undertaken to determine whether the residuals or error terms are normally distributed or not and a researcher must first check normality before testing for hypothesis (Brooks, 2008).

To test the normality assumption, two of the conventional tests are 1) Normal Probability Plot (NPP) and 2) Histogram for standardized residuals will be undertaken (Gujarati, 2004).

The normal P-P Plot will help us figure out whether the data are normally distributed by observing the dots against the line. As can be seen below, the observations are pretty much close to the line with no observable deviation. We can therefore conclude that the data is normally distributed.

Normal P-P Plot of Regression Standardized Residual



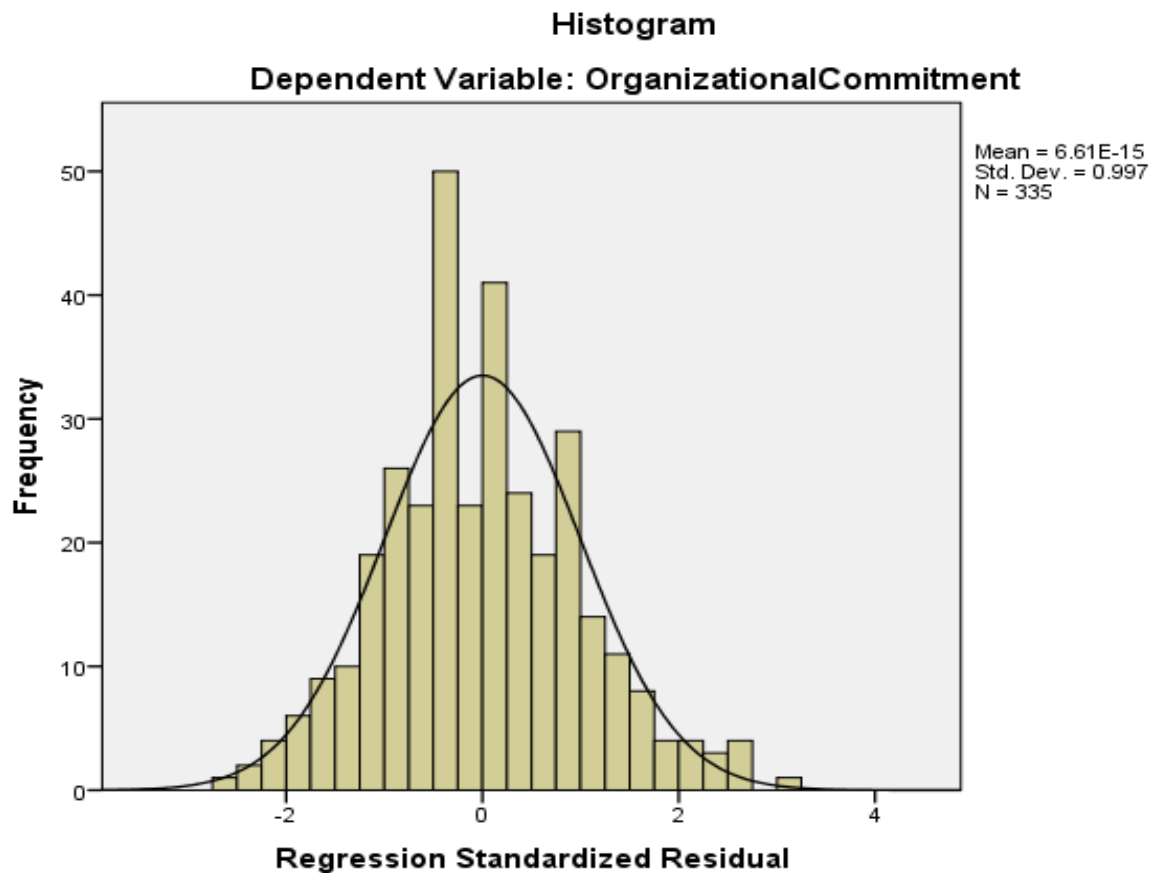


Figure 4.1 Normal P-P & histogram plot of regression of standardized residuals.

Source: SPSS output 2020

Looking at the histogram above, we can observe that the standardized residuals are symmetrical along the center that is 0. Looking at the histogram, we can observe that it is in a typical bell-shaped and most of the bars are within the center.

4.5.2 Test of Homoscedasticity

One of the assumptions of the Classical Linear Regression Model is the homoscedasticity assumption. It assumes that the error terms are constant across the observations. Whenever the error terms have constant variance, it is said to be homoscedastic. The existence of heteroscedasticity is undesirable. Because the existence of heteroscedasticity can nullify statistical tests of significance that assume the residuals are uncorrelated and are normally distributed that their variances do not vary due to the reason of being modeled (Gujarati, 2004).

To check the presence of heteroscedasticity, plot the standardized predicted variable values against the standardized residual values. Heteroscedasticity will be existent if these values spread out from left to right or right to left. Thus, it is desirable that the majority of the observation be concentrated around 0 which indicates that no violation of homoscedasticity.

As shown in the below scatter plot in Figure 4.2, the data under investigation is fairly concentrated around the 0, and no homoscedasticity violation.

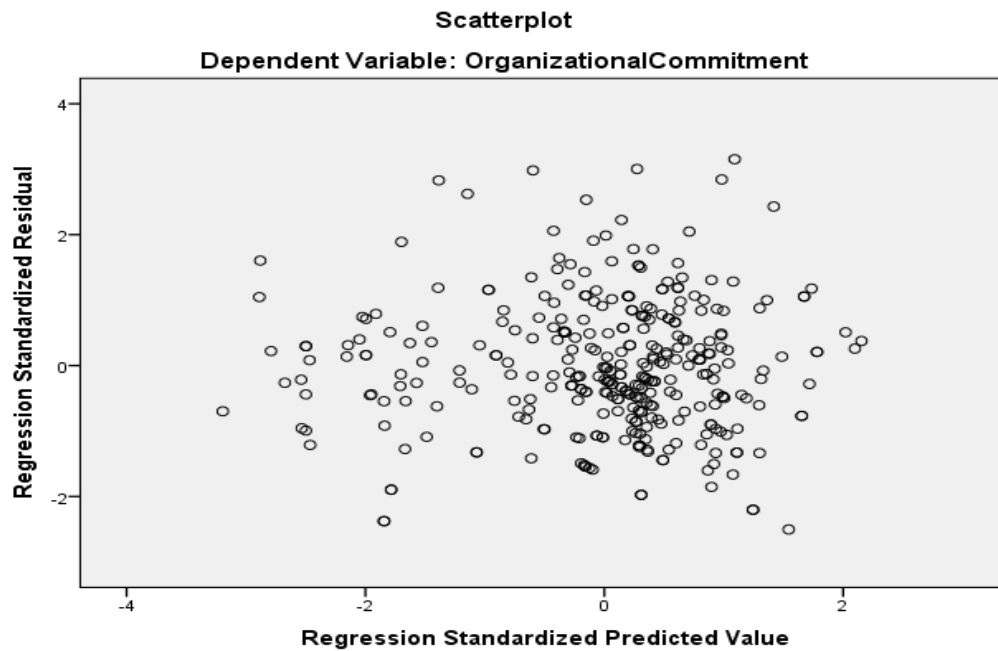


Figure 4.2 scatter plot of regression for standardized predicted value against the residual

Source: SPSS output 2020

4.5.3 Multicollinearity Test

If an independent variable is correlated with the other independent variable, there exist to be multicollinearity. This causes the inability to identify which independent variable is affecting the independent variable in the regression model (Brooks 2008). We can determine the presence of multicollinearity employing SPSS. To determine the presence of multicollinearity, we look at the Variance Inflating Factor (VIF) value from the coefficient table. If the VIF value falls in between 1 to 10, then there is no multicollinearity.

VIF is greater than 10 or less than 1 that indicates the existence of multicollinearity. Kennedy (2008) explained that whenever the correlation coefficient is above 0.7, it might cause a dire multicollinearity issue leading to unreliable results and inefficient estimation. Having a look at Table 4.11 below, it can be deduced that there is no multicollinearity since the VIF value 1.273 falls in the range between 1 up to 10. The other way to check for multicollinearity is looking at the Tolerance in the coefficient table. For tolerance statistics, values between 0.1 and 1 found to be suitable. Looking at the value 0.79 of tolerance in the table, it indeed falls in the range. Therefore, we can conclude that there no multicollinearity.

Table 4.11. Collinearity Diagnosis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	10.361	1.944		5.329	.000		
	Organizational Culture	.329	.039	.368	8.450	.000	.785	1.273
	Job Satisfaction	.961	.091	.460	10.558	.000	.785	1.273

a. Dependent Variable: Organizational Commitment

Source: SPSS output 2020

4.5.4 Linearity Test

Linearity assumption proposes, in the simple bivariate case, the relationship between the independent and dependent variable must be expressed diagrammatically using a straight line. Specifically speaking, the model must be linear in the parameters (α and β), however, it does not essentially be linear in the dependent and independent variables (Brooks, 2008). In order to test linearity, the relationship between the dependent variables and the independent variable was checked using scatter plots to visually inspect the data under investigation. As can be

seen on the below Figure 4.3 if we draw an imaginary line from bottom left to top right, the scatter plot of the error terms shows that the points lie in a reasonably straight line. Therefore, we can say that the assumption of linearity was not violated.

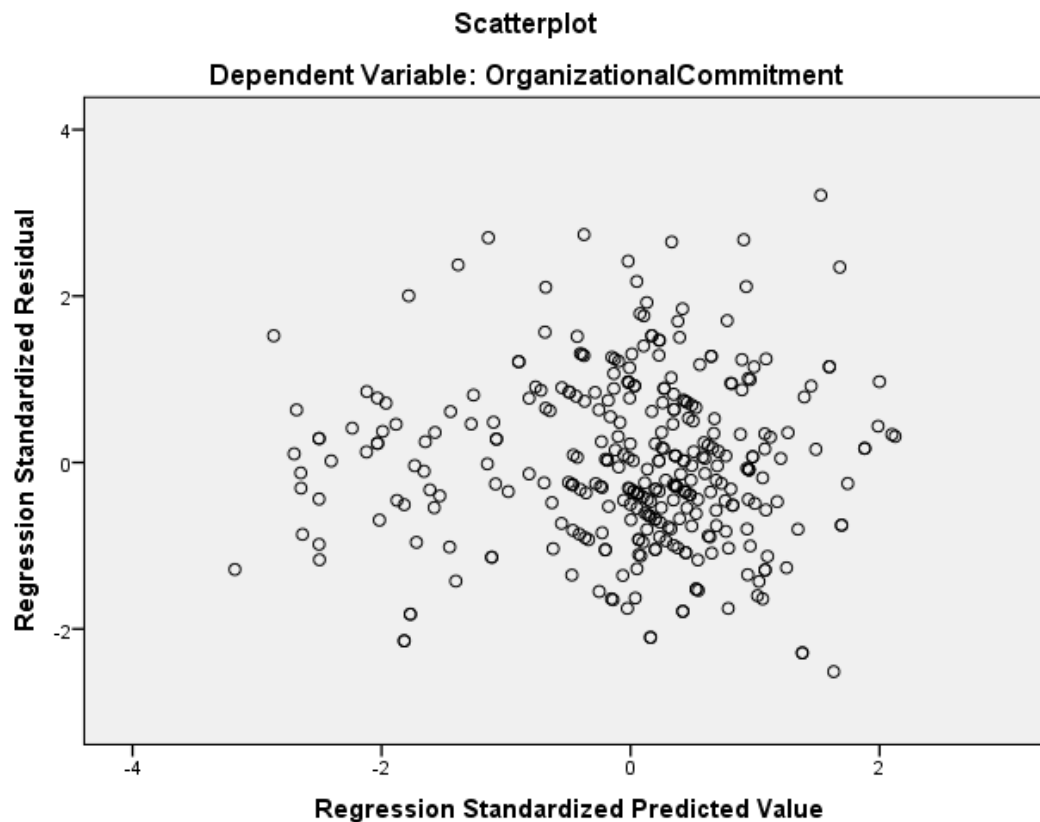


Figure 4.3 scatter plot for testing linearity

Source: SPSS output 2020

4.5.5 Test for autocorrelation

This assumption presupposes that the value of residuals should be independent from one another or uncorrelated. To identify the presence of autocorrelation, we can simply look at the Durbin-Watson statistic in the regression output of the model summary box. The statistic can vary from 0 to 4. For no autocorrelation assumption, Durbin-Watson statistic value needs to be close to 2. A value closer to two indicates no autocorrelation whereas a value closer to zero indicates positive autocorrelation and a value towards four indicates negative autocorrelation (Saunders et al., 2009).

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.669 ^a	.448	.444	.36698	1.562
a. Predictors: (Constant), Job Satisfaction, Organizational Culture					
b. Dependent Variable: Organizational Commitment					

Source: SPSS output 2020

By looking at the above table, we can deduce that there is no autocorrelation with a Durbin-Watson Statistics of 1.6 that is closer to 2.

4.6 Regression Analysis and Hypothesis Testing

Linear and multiple regression analyses were undertaken to investigate if there is any association between the predictor variable, the mediator, and the outcome variable and test the research hypothesis. It helped us to understand the direct effects of regressors on the predicted variable. In the forthcoming analysis, all postulated hypotheses are examined and the direct and indirect effect of regressor variables on outcome variable is discussed.

4.6.1 Overall regression model fit.

As can be seen in Table 4.12 below, the R value indicates the excellence of prediction of the independent variables. An R value 0.71(71%) indeed shows a good level of prediction. It was also discovered that the value of the F-test 169.03 indicated that the model is statistically significant. Yet again, the adjusted R-square value showed that 50.2% of the variance of the outcome variable was explained by the predictor variables. Cohen (1988) recommended R square values for outcome (endogenous) variables shall be evaluated 0.26 as significant, 0.13 as moderate & 0.02 as weak. Therefore, an adjusted R square of 0.502 implies that the model is significant and fit. According to Dhakal (2018), if there is a high discrepancy between the results of R square and Adjusted R Square, the data is a poor fit of the model. Hence it can be concluded that the model is fit since there is a very low discrepancy in the R square 0.505 and adjusted R square 0.502.

Table 4.12. Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.710 ^a	.505	.502	5.42258	.505	169.030	2	332	.000
a. Predictors: (Constant), Organizational Culture, Job Satisfaction									
ANOVA									
Model	Sum of Squares	df	Mean Square	F	Sig.				
Regression	36.232	2	18.116	134.519	.000				
Residual	44.711	332	.135						
Total	80.943	334							

Dependent Variable: Organizational Commitment

Predictors: (Constant), Organizational Culture, Job Satisfaction

Source: SPSS output 2020

In the ANOVA (Table 4.12), the F-ratio also tests if the overall regression model is a good fit for the data. It depicts that the independent variables statistically significant and predict the dependent variable where $F(2,332) = 134.52$, $p(0.000) < 0.05$. Therefore, the regression model is good fit of the data.

4.6.2 Mediation Analysis

A succession of Simple and Multiple Regression analyses was undertaken to determine the mediating effect of job satisfaction on the relationships between organizational culture and organizational commitment. The mediation test inspects the indirect effect of regressor (X) on the outcome (Y) variable through the intervening variable (M). This study uses the guideline proposed by Baron and Kenny (1986) to test the intervening effect of a mediator on the relationship between the predictor and outcome variables. Baron and Kenny (1986), postulated four steps in investigating mediation:

Step 1: There should be a significant relationship between predictor (X) and outcome (Y) variables. After conducting a simple regression analysis with (X) predicting (Y).

Model 1: $Y = \gamma_0 + \gamma X + \epsilon_1$ -----Equation 1

Step 2: The relationship between predictor (X) and the hypothesized Intervening (M) variables ought to be significant.

Model 3: $M = \alpha_0 + \alpha X + \varepsilon_3$ -----**Equation 3**

Step 3: The hypothesized Intervening (M) variable is significantly related to the outcome variable (Y) when both the predictor (X) and Intervening (M) variables are taken as predictors and the dependent variable as the outcome variable.

Model 2: $Y = \gamma'_0 + \gamma' X + \beta M + \varepsilon_2$ -----**Equation 2**

Step 4: As soon as all the assumptions from steps 1 to 3 are fulfilled, the next step will be testing for mediation. Hence, the predictor variable and the mediator are treated as predictors and the dependent variable as the outcome variables. If unstandardized coefficient is zero, we will conclude that M completely mediates the relationship between X and Y. If the strength of relationship between predictor and outcome variables is reduced after controlling for the effect of the mediator variable, that indicates the existence of partial mediation.

4.6.2.1 Outcomes of Simple Linear Regressions

In order to determine step 1 and 2 how organizational culture explains organizational commitment (step 1), and how organizational culture explains job satisfaction (step 2) simple linear regression was implemented.

Step.1: Simple Regression Analysis amongst organizational culture and organizational commitment.

<i>Table 4.13 Results of Simple Regression Analysis between organizational culture and organizational commitment</i>						
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5948.295	1	5948.295	161.513	.000 ^b
	Residual	12263.914	333	36.829		
	Total	18212.209	334			
a. Dependent Variable: Organizational Commitment						
b. Predictors: (Constant), Organizational Culture						
Coefficients ^a						

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		B	Std. Error	Beta			
1	(Constant)	15.195	2.180		6.969	.000	
	Organizational Culture	.520	.040	.582	13.044	.000	
a. Dependent Variable: Organizational Commitment							
Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	Sig. F Change
1	.582 ^a	.338	.336	6.25768	.338	170.152	.000
a. Predictors: (Constant), Organizational Culture							

Source: SPSS output 2020

The ANOVA table in Table 4.13 above demonstrates the overall fitness of the model with F stat of 161.513 and p-value 0.000, signifying that the model is a good fit for the data at a 5% level of significance. The Coefficient table tells us the essential information to predict organizational commitment from Organizational culture and determine whether organizational culture contributes statistically significantly to the model. Accordingly, the result equation of Model 1 is:

$$Y = 15.195 + .582X \text{ ---- Equation 1}$$

The standardized Beta-value of 0.582 indicates that one unit increase in organizational culture accounts for 0.582 units increase in employee's organizational commitment and the relationship is significant at a 5% level of significance.

As attested in the Model Summary table above, the value of R for the model between organizational culture and organizational commitment is 0.582. Since the R value represents the simple correlation, 58.2% indicates a high degree of correlation.

The value of R square and adjusted R square for the model is 0.338 and 0.336 respectively. R square value 0.336 indicates that 33.6% variability of organizational commitment is explained or predicted by organizational culture. Therefore, we can conclude that there is a significant correlation between the predictor variable (organizational culture) and the outcome variable (organizational commitment). Hence, this fulfills the assumption in **step 1**.

Step 2: Simple Regression Analysis between Organizational Culture and Job Satisfaction

Source: SPSS output 2020

<i>Table 4.14 results simple regression among organizational culture and job satisfaction</i>							
ANOVA ^a							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	968.891	1	968.891	90.965	.000 ^b	
	Residual	3546.859	333	10.651			
	Total	4515.750	334				
a. Dependent Variable: Job Satisfaction							
b. Predictors: (Constant), Organizational Culture							
Coefficients ^a							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		B	Std. Error	Beta			
1	(Constant)	5.029	1.137		4.422	.000	
	Organizational Culture	.198	.021	.463	9.538	.000	
a. Dependent Variable: Job Satisfaction							
Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	Sig. F Change
1	.463 ^a	.215	.212	3.26362	.215	90.965	.000
a. Predictors: (Constant), Organizational Culture							

The ANOVA output as shown in Table 4.14 above depicts the overall fitness of the model. F stat 90.965 and p-value 0.000 indicated that the model is a good fit for the data at a 5% level of significance.

The Coefficient table tells us the essential information to predict job satisfaction from Organizational culture and determine whether organizational culture contributes statistically significantly to the model. Hence, the resulting equation of Model 3 can be written as:

M=5.029+0.463X----- Equation 3

The standardized Beta-value of 0.463 indicates that one unit increase in organizational culture change accounts for 0.463 units increase in job satisfaction and the relationship is significant at a 5% level of significance.

As shown in the Model Summary table above, the value of R for the model between organizational culture and job satisfaction is 0.463. This indicates simple correlation of 46.3% signifying fairly high degree of correlation.

The value of both R square and adjusted R square for the model is 0.215 and 0.212 respectively. R square value 0.212 indicates that 21.2% variability of job satisfaction is explained or predicted by organizational culture. Therefore, we can conclude that there is a significant correlation between the predictor variable (organizational culture) and the mediator variable (i.e. job satisfaction). Hence, this fulfils the assumption in **step 2**.

Step 3: Multiple Regression Analysis.

4.6.2.2 Multiple Regressions

As it is demonstrated in Table 4.15 below, the ANOVA result witnessed the overall fitness of the model. F stat 169.030 and p-value 0.000, showed that the model is good fit for the data at a 5% level of significance.

The beta coefficients demonstrated the Standardized beta values for the regressors (Organizational Culture and Job Satisfaction) are 0.329 and 0.961 respectively. whereas the constant value of 10.361 and P – values 0.000 and 0.000 respectively. This depicts that organizational culture and job satisfaction predicts organizational commitment. Additionally, organizational culture and job satisfaction statistically and significantly contribute to the model.

Hence, we can postulate Model 2 as follows:

$$Y=10.361 + 0.368X + 0.460M \text{ -----Equation 2.}$$

Where

Y=Organizational Commitment

X =Organizational Culture

M=Job Satisfaction

This shows a strong statistical significance at the 5% level of significance and which demonstrates the explanatory power of the model.

Table 4.15 Result for Multiple Regressions								
ANOVA^a								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	9940.460	2	4970.230	169.030	.000 ^b		
	Residual	9762.258	332	29.404				
	Total	19702.718	334					
a. Dependent Variable: Organizational Commitment								
b. Predictors: (Constant), Job Satisfaction, Organizational Culture								
Coefficients^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	10.361	1.944		5.329	.000		
	Organizational Culture	.329	.039	.368	8.450	.000	.785	1.273
	Job Satisfaction	.961	.091	.460	10.558	.000	.785	1.273
a. Dependent Variable: Organizational Commitment								
Model Summary^b								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		Durbin-Watson	
					R Square Change	df1		
1	.710 ^a	.505	.502	5.42258	.505	2	1.466	
a. Predictors: (Constant), Job Satisfaction, Organizational Culture								
b. Dependent Variable: Organizational Commitment								

Source: SPSS output 2020

In the Model Summary table above R-value of 0.710 (71%) demonstrated that there is a strong relationship between the outcome and predictor variables. The adjusted R-square value (0.502) for the model indicates that 50.2% of the variability of organizational commitment was explained by both organizational culture and job satisfaction. Therefore, we can deduce that the relationship between the dependent variable (Organizational Commitment) and predictor variables (Organizational Culture and Job Satisfaction) has a strong correlation. Yet again, multiple regression of the model indicated that the mediator variable (i.e. Job Satisfaction) is significantly related to the dependent variable (i.e. Organizational

Commitment) when the independent variable (Organizational Culture) is controlled. This therefore satisfies the assumption in **step 3**.

Step 4 tests for Mediation

Once the three assumptions (from step 1 up to step 3) of Baron and Kenney (1986) fulfilled, the next task to be undertaken is test for mediation. The fourth assumption at step 4 dictates that for a mediation effect to exist, the strength of the relationship between the independent and dependent variables should be reduced after controlling the effect of the mediator variable.

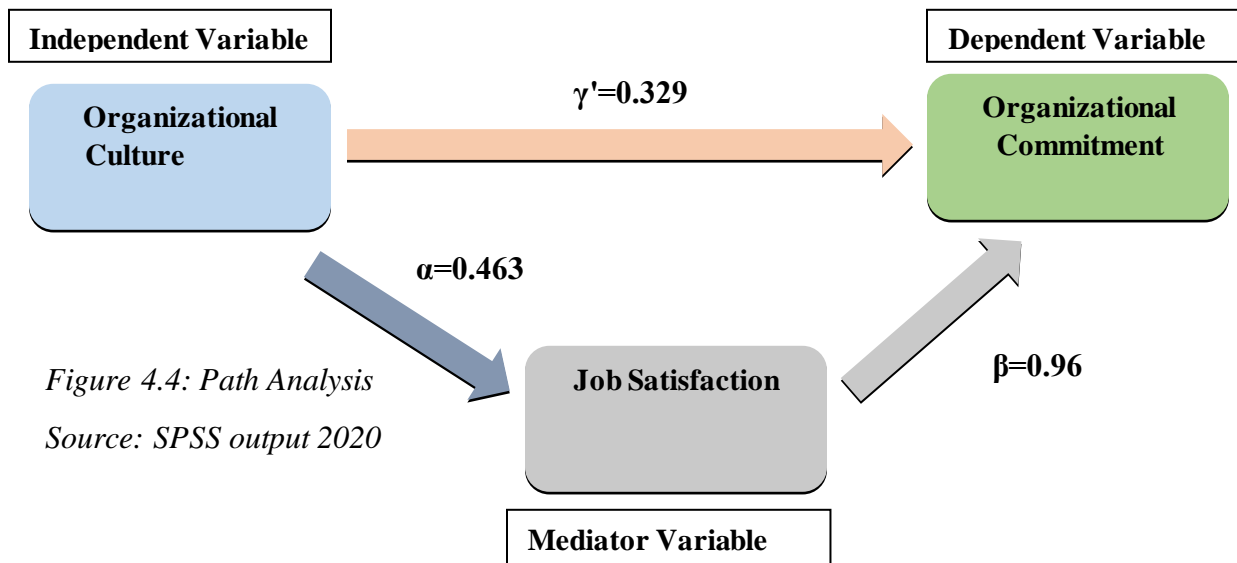
The three models are summarized as follows:

Model 1: $Y=15.195+.582X$

Model 2: $Y=10.361 + 0.368X + 0.460M$

Model 3: $M=5.029+0.463X$

From the above three models, the direct effect (path γ' = 0.329, in Model 2) which is different from zero and less than the total effect (path γ = 0.582, in Model 1). According to Baron and Kenney (1986), it is desirable to use standardized coefficients in explaining mediation analyses. Figure 4.4 below demonstrates the path analysis outcome of the relationship between the predictor, the mediating, and the outcome variables. Path α (0.463), shows the relationship between the predictor and the mediator variables. Path β (0.460) indicates the relationship between the mediator and the outcome variables. Path γ' (0.368) demonstrates the relationship between the independent variable and the outcome variable after controlling for the mediator and its effect is reduced. Hence, the result implies Job Satisfaction has partiality mediates the relationship between Organizational Culture & Organizational Commitment. According to Baron and Kenney (1986), partial mediation happens whenever the predictor variable's influence on the outcome variable is reduced after the mediator is controlled.



4.6.2.3 Determining the indirect effect

Thought Baron and Kenney (1986) guideline for mediation analysis used by plenty of researchers, with this approach alone, there are potential problems. The first problem is that we cannot test the indirect pathway significance that X explains Y through the compound pathway of α and β . The second problem is the presence of Type II error that the Baron and Kenny method tend to miss true mediation effects (MacKinnon and Fritz 2007). Therefore, additional research is highly recommended. In doing so, the preferable method is to check the indirect effect and test for its significance. The regression coefficients for the indirect effect represents the change in DV for every unit change in IV that is mediated by M.

To check the indirect effect, we will use Judd and Kenny (1981) method. They suggested computing the difference between two regression parameters ($\gamma - \gamma'$) taking γ coefficient from Equation-1 and γ' coefficient from Equation-2 above. And the second method is the Sobel approach. According to Sobel approach, the indirect effect is a multiplication of two regression parameters ($\alpha \beta$). So, we check that by taking β coefficient from Model-2 and α coefficient from Equation-3 (Sobel, 1982). For indirect effect, both Judd and Kenny and Sobel's approach will yield identical values.

For the present study, the researcher adopted Sobel's approach (i.e. $\alpha*\beta$). Hence, the indirect effect found to be 0.44 ($\alpha*\beta=0.46*0.96=\underline{\underline{0.4416}}$).

4.6.2.4 Statistical tests of the indirect effect

After the value for the indirect effect determined, it is required to be tested for significance. For this reason, the test statistic will be calculated by dividing the indirect effect coefficients to its Errors.

$$\text{Test Statistics} = \alpha * \beta / \text{Standard Error.}$$

So as to test the significance of the indirect effect z-value and p-value, the researcher implemented Sobel/Aroian/Goodman tests introduced by (Preacher & Leonardelli 2010). The tool used for employing this test is the Kristopher J. Preacher tool. To do so, the procedure is first, enter α (0.46), β (0.96), and their respective standard errors (0.021 & 0.091 respectively) and then run Calculate.

Table 4.16 Sobel, Aroian and Goodman tests

Input:			Test statistic:	Std. Error:	p-value:
a	0.46	Sobel test:	9.50461233	0.04646165	0
b	0.96	Aroian test:	9.49658288	0.04650094	0
s _a	0.021	Goodman test:	9.51266218	0.04642234	0
s _b	0.091	Reset all	Calculate		

Source: SPSS output 2020

As demonstrated in table 4.16 above, the results of each of Sobel, Aroian, and Goodman tests indicated a z-value of close 9.5 with a p-value of 0.000. Once more, this result strongly supports the hypothesis developed for the mediation. Thus, we can conclude that job satisfaction has a significant mediating effect on the relationship between organizational culture and organizational commitment.

4.6.3 Hypothesis test results of the research

From Table 4.17 below, the regression analysis model summary demonstrates how much of the variability in employee commitment is explained by organizational culture dimensions of Clan, Adhocracy, Market and Hierarchy cultures. The table presents that R square of the model is 0.492 that implies, 49.2% of the variability in organizational commitment is explained by a unit change in organizational culture.

Table 4.17 Regression Analyses between dimensions of organization Culture and Employees Commitment.

Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	Sig. F Change
1	.702 ^a	.492	.486	5.50541	.492	80.012	.000

a. Predictors: (Constant), Hierarchy, Clan, Adhocracy, Market

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	13.936	1.984		7.024	.000		
	Clan	.924	.070	.528	13.120	.000	.951	1.051
	Adhocracy	.561	.089	.281	6.323	.000	.780	1.282
	Market	-.052	.077	-.030	-.674	.501	.774	1.292
	Hierarchy	.347	.107	.159	3.243	.001	.643	1.555

a. Dependent Variable: Organizational Commitment

Source: SPSS output 2020

We can postulate the Model 1 as follows:

$$Y = 13.936 + 0.924X_1 + 0.561X_2 - 0.052X_3 + 0.347X_4$$

Where Y= Organizational Commitment

X1= Clan Culture, X2=Adhocracy Culture, X3=Market Culture & X4 =Hierarchy Culture

Looking at the regression coefficients of the model Clan Culture is the most dominant variable in the prediction or explanation of organizational commitment (0.924, p<0.05). Hence, since it is positive and significant, hypothesis **H1** is accepted. Moreover, beta coefficient of Adhocracy Culture in explaining organizational commitment (0.561, p<0.05) and regression coefficient of Hierarchy Culture (0.347, p<0.05) are positive and significant. Since both are positive and significant, hypotheses **H2 & H4** are accepted. Finally, Market Culture with a beta coefficient and p-value (-0.052, p>0.05) is negative and insignificant. Hence the hypothesis **H3** is rejected.

Table 4.18 Regression Analyses between dimensions of organization Culture and Job Satisfaction.

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.787 ^a	.619	.614	2.28328		
a. Predictors: (Constant), Hierarchy, Clan, Adhocracy, Market						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.319	.823		4.034	.000
	Clan	.657	.029	.783	22.475	.000
	Adhocracy	.003	.037	.003	.073	.942
	Market	-.011	.032	-.013	-.333	.739
	Hierarchy	.020	.044	.019	.452	.651
a. Dependent Variable: Job Satisfaction						

Source: SPSS output 2020

Looking at regression coefficients on the above table (Table 4.18), we can conclude that Clan Culture (0.65, p=0.000) is the most contributing variable in predicting job satisfaction. Similarly, a regression coefficient of Adhocracy Culture (0.003, p=.942) and Hierarchy Culture (0.020, p=0.651) shows a positive and insignificant relationship. Lastly, Market Culture with a regression coefficient (-0.011, p=0.739) revealed the relationship between Hierarchy Culture and Organizational Commitment is negative and insignificant. Therefore, the overall result is in conformity with previous research of Lund (2003) stated that clan culture, and adhocracy culture increase job satisfaction, while market and hierarchy culture lessen job satisfaction. Hence the hypothesis **H5** is accepted.

Table 4.19 Regression Analyses between job satisfaction and organizational commitment.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.878	.098		19.208	.000
	Job Satisfaction	.312	.025	.560	12.336	.000

a. Dependent Variable: Organizational Commitment

Source: SPSS output 2020

Having a look at the above table (Table 4.19), the regression coefficient of job satisfaction is (0.312, p=.000). Hence, job satisfaction seems to predict organizational commitment. This in turn agrees with the previous work of Mathieu et al. (2016). The finding also supports hypothesis **H6** that presupposes that there is a positive and significant relationship between job satisfaction and Organizational Commitment.

Table 4.20 Summery tested Hypothesis

	Developed Hypothesises	B	t	Sig.	Test Result
H1	There is a positive and significant relationship between clan culture and organizational commitment.	.924	13.120	.000	Accepted
H2	There is a positive and significant relationship between Adhocracy culture and organizational commitment.	.561	6.323	.000	Accepted
H3	There is a positive and significant relationship between Hierarchy culture and organizational commitment.	.347	3.243	.000	Accepted
H4	There is a positive and significant relationship between Market culture and organizational commitment.	-.052	-.674	.501	Rejected

H5	There is a positive and significant relationship between organizational culture and job satisfaction.	.198	9.538	.000	Accepted
H6	There is a positive and significant relationship between job satisfaction and Organizational Commitment.	.312	12.336	.000	Accepted
H7	Job satisfaction mediates the relationship between organizational commitment and organizational culture.	.961	10.558	.000	Accepted

4.7 Finding and Discussion

The main objective of this study was to investigate the intervening role of Job Satisfaction in the relationship between four dimensions of Organizational Culture (i.e. Clan, Adhocracy, Market, and Hierarchy) and Organizational Commitment. In order to investigate the same, the researcher employed Baron and Kenny (1986) guideline to test if there is a mediation effect of Job Satisfaction.

✎ Descriptive Statistics results of the study recognized that Ethiopian Airlines employees have strong perception and give more value for job satisfaction. As can be apparent from the analysis, the dominant culture that is prevalent in Ethiopian Airlines is Clan Culture with a mean score of 3.60 followed by Market Culture with a mean score of 3.49. Hierarchy and Adhocracy cultures followed in the pecking order with a mean score of 3.16 and 2.61 respectively. Clan-dominated culture means that the airline exhibits teamwork, focuses on nurturing, mentoring, and a family-like working environment. Similarly, Market Culture is seen as the second dominant culture that indicates the airlines' focus on competition among employees, achievement-oriented with an attitude of getting the job done by any means.

✎ Regression analysis of organizational culture on organizational commitment revealed that 70.2% of the variation in organizational commitment is explained by organizational culture and clan culture is found to have the highest regression coefficient and the dominant cultural variable. The result further revealed that clan culture is the only variable that has a significant effect on affective commitment.

When employees are affectively committed means that they identify themselves with

the company and have emotional attachment to the organization or members of the organization. Simply put, they align their identity with the organization. As specified by Meyer and Allen (1997), affective commitment is predisposed by factors such as job difficulty, role simplicity, and goal simplicity, openness by management, peer unity, fairness, personal position, feedback, involvement, and reliability.

- ✍ Regression result of organizational culture on Job Satisfaction demonstrated that 78.7% of the variation in Job Satisfaction is predicted by organizational culture and adhocracy culture is the only cultural variable to have a significant effect. There is no significant relationship among the three dimensions adhocracy, market, and hierarchy culture with the overall Job Satisfaction. This implies that Clan Culture which emphasizes nurturing, mentoring, and a family-like working environment, participation, teamwork, and consensus can predict employees' Job Satisfaction in Ethiopian Airlines.
- ✍ The study finding revealed that the effect of Clan Culture on Organization Commitment is positive and significant. Hence, the study supports hypothesis 1 (**H1**) that states Clan Culture has a positive and significant effect on Organizational Commitment. The result is therefore in tandem with the findings of (Hutchinson and Zain, 2009, Han, 2012, Messner, 2013, Krajcsak, 2018).
- ✍ The result of the study further attested that the effect of Adhocracy culture on Organization Commitment is positive and significant. Hence, this supports hypothesis 2 (**H2**) that states Adhocracy Culture has a positive and significant effect on Organization Commitment and is in agreement with the previous study of Krajcsak (2018) confirmed that commitment is very high in Clan and adhocracy culture variables compared to Market and Hierarchical culture.
- ✍ The study finding revealed that the effect of Market Culture on organizational Commitment is negative and insignificant. The finding doesn't support hypothesis 3 (**H3**) of the study. This implies that employees are not happy with a company being goal-oriented, competition and result oriented, with emphasis on winning and reputation building. The finding supports Krajcsak's (2018) claim that commitment is low in market and hierarchy culture compared to clan and adhocracy cultures.
- ✍ The correlation analysis showed that there is a positive and significant relationship between hierarchy culture and organizational commitment. This is in an agreement with hypothesis 4 (**H4**) and supports a previous finding of Monga et al (2015).

- ✍ Correlation result demonstrated that there is a positive and significant association between organizational culture and job satisfaction. The study result is in agreement with hypothesis 5 (**H5**) which states there is a positive and significant relationship between organizational culture and job satisfaction. The finding coincides with previous results of (Sempene et al. (2002), Lund, 2003; Bigliardi and Galati, 2012; Cronley and Kim, 2017).
- ✍ Correlation results depicted that Job Satisfaction is positively and significantly correlated with Organizational Commitment (0.631, $p=0.000$). The result coincides with hypothesis 6 (**H6**) which reads that there is a positive and significant relationship between job satisfaction and Organizational Commitment. It is also in agreement with previous research results of (Mowday et al., 1979; Angle and Perry, 1981; Aamodt, 2007; Kotze and Roodt, 2005; Munir et al., 2014).
- ✍ In regard to the mediating role of Job Satisfaction in the relationship between Organization Culture and Organization Commitment, the results depicted that Job Satisfaction has a partial mediating role in the relationship between Organization Culture and Organizational Commitment. Hence, this is in agreement with Hypothesis 7 (**H7**) which states Job satisfaction significantly mediates the relationship between organizational culture and organizational commitment.

CHAPTER FIVE

SUMMARY, CONCLUSION, RECOMMENDATION AND FUTURE RESEARCH AREA

5.1. Summary

This chapter addresses a brief summary and conclusion of the research in line with the study findings and forward recommendations for Ethiopian Airlines management and other concerned stakeholders. Besides, based on the overall research results of the study, the research will reveal possible areas for future research.

To undertake the study, a total of 373 survey questionnaires were distributed and self-administered both online and in a hard copy by target respondents. Out of which 282 online and 53 hard copy questionnaires have been completed. Hence, a total of 335 (90%) valid questionnaires were used and administered for analysis. Among the valid target respondents, 193 (57.6%) of the respondents were male while 142 (42.4%) of the respondents found to be female. organizational culture, job satisfaction, and organizational commitment questionnaires were tested for their reliability, and their respective Cronbach alpha coefficient measures found to be 0.892, 0.921, and 0.724. Hence, it can be concluded that all measures employed in this study have a satisfactory level of reliability.

The collected data has further been analysed using IBM Statistical Package for Social Science (SPSS) version 20 Software. In order to test for the hypotheses, regression analyses were used and before undertaking the same, correlation analysis and additional principal tests (like normality, linearity, multicollinearity, and homoscedasticity) were undertaken. The results of these preliminary tests revealed that there are no such significant violations of the assumptions.

The overall hypotheses testing results depicted that the effect of clan culture on employee commitment is positive and significant. Adhocracy culture and hierarchy culture has a positive and significant effect on employee commitment and that agrees with hypotheses H1, H2, & H4. On the other hand, market culture has a negative and insignificant effect on employee commitment that it doesn't support hypothesis H3. Again, the effect of organizational culture on job satisfaction and job satisfaction on organizational commitment found to be positive and significantly satisfy hypotheses H5 & H6 respectively.

Regarding the intervening or mediating role of job satisfaction in the relationship between organizational culture and organizational commitment, the findings revealed that job satisfaction had a partial mediation role in the relationship between organizational culture and organizational commitment. Hence, the result is in agreement with H7.

5.2. Conclusion

The main aim of this study was to critically examine the effects of organizational culture primarily clan, adhocracy, market, and hierarchy culture on organizational commitments and explores the mediating effect of job satisfaction in the relationship between organizational culture and organizational commitment in Ethiopia Airline Group. Based on the research objective and results of the study the researcher has drawn the following conclusions.

- ✍ As can be apparent from the analysis, the dominant culture that is prevalent in Ethiopian Airlines is clan culture followed by market Culture with a mean score of 3.60 and 3.49 respectively. Hierarchy and Adhocracy cultures followed in the pecking order with a mean score of 3.16 and 2.61 respectively. Clan dominated culture means that the airline exhibits teamwork, focuses on nurturing, mentoring, and a family-like working environment. Whereas market dominated culture indicates that the airlines' focus is on competition among employees, achievement-orientation with an attitude of getting the job done by any means. However, unlike clan culture which is the most dominant culture in the prediction or explanation of organizational commitment (0.924, $p=0.000$), market culture is undesirable in EAG with a negative regression coefficient and statistically insignificant (-.052, $p=.501$).
- ✍ Among the four organizational culture dimensions, clan culture found to have a significant coefficient and is the only predictor of job satisfaction and has the highest regression coefficient in predicting organizational commitment. This claim presupposes that employees will be happy and opt to commit when the airline focuses on teamwork, employee development, improving a humane work environment, empowering employees, advocate participation and consider customers as partners. Therefore, Ethiopian Airlines employees' job satisfaction and commitment intent will be high when clan culture is predominant in the airline.
- ✍ The results of the study also established that the effect of organizational culture on organizational commitment is positive and significant. This result infers that when

there is a favourable cultural change in the company, employee's organizational commitment level increases.

- ✎ The results of the study confirmed that the effect of the organizational culture on employee job satisfaction is positive and significant. The results of the study recognized that Ethiopian Airlines employees have a strong perception and give more value for job satisfaction. This result depicted that when there is a favourable cultural change in the company, employee's satisfaction level will increase.
- ✎ The results of the study indicated that the effect of job satisfaction on employee organizational commitment is positive and significant. This indicates that it is apparent that employee satisfaction will lead to their commitment to the organization.
- ✎ The study finding established that the relationship among organizational culture, job satisfaction and organizational commitment is positive and significant. This indicates that when there is favourable culture in the organization it leads to job satisfaction and ultimately employee organizational commitment.
- ✎ The result of the study proved that job satisfaction partially mediates on the relationship between organizational culture and organizational commitment. This proved that job satisfaction has an indirect or intervening effect in the relationship between organizational culture and organizational commitment.

5.3. Recommendations

As demonstrated in the conclusion of the study, Ethiopian Airlines Group employees have indicated that next to clan culture, market culture, and hierarchy culture is prevalent in the airline. As we have witnessed from the findings of the study, employees' job satisfaction and commitment to the organization will only be high when clan culture is the predominant one. However, market, hierarchy, and adhocracy cultures are not desirable and will ultimately diminish job satisfaction and employee commitment. Therefore, EAG should give due emphasis to favourable organizational culture change to increase job satisfaction and ultimately bolster employee's commitment to the organization. Therefore, the following

recommendations borrowed from Cameron and Quinn (2011) forwarded to EAG higher management for immediate action.

- ✍ Plan a career development program that stresses interdepartmental mobility and will contribute to cross-functional relationships. Further, undertake assessment activities if there is any training need in each unit and by prioritizing the needs, develop a program that is suitable for that particular need and have people inside the unit that can facilitate the training. Additionally, strengthening the employee reward system, give the liberty for managers to use resources to reward exceptional effort. Finally, transform the performance management system by giving the chance for subordinates to assess their superior's performance.

- ✍ Establish an active employee survey program for methodically studying employee attitudes and notions. Create teams of employees that will work on bringing about changes to the identified problems in the survey. Again, include employees in all stages of strategic planning by Creating and increasing the usefulness of the employee suggestion system by benchmarking the best systems from other organizations.

- ✍ Identify interdepartmental conflicts that exist for a long time and examine those conflicts and craft a systematic list of interventions for resolving them. And revamp cross-functional teamwork by arranging a daily fifteen to thirty minutes meeting of all managers. The goal of the meeting should be to identify items that demand coordination and cooperation among departments. Problems will then be tackled after the meeting. Hence, Higher management should regularly conduct a "skip-level" meeting with different departments of lower-level employees to spot problems and forward suggestions for improved cross-functional coordination.

- ✍ As stipulated in the finding above, job satisfaction significantly mediates the relationship between organizational culture and organizational commitment. This implies that EAG shall give due emphasis towards increasing employee's job satisfaction level by inducing clan culture change in the airline group so that they will be committed to the airline.

5.4 Future Research Areas

- ✍ The scope of the study can further be supplemented by adding moderating variables. Future research can be undertaken using multiple intervening variables according to the organizational behaviour of the area.
- ✍ This current research has been undertaken using a cross-sectional study. Hence, any researcher in the future might adopt a longitudinal research design approach that opts to observe employee perceptions at different time intervals that can contribute to more rigorous results in addition to conceivable variances to the current study findings.
- ✍ To undertake this research, overall job satisfaction survey with five items that was used by Judge et al. (1998) adapted from Brayfield and Rothe (1951) was used. Facet based job satisfaction measure is not considered in conjunction with this universal type of question, but future research may use the combination the two.
- ✍ In this research, to test for mediation, Barrons and Kenny (1986) guidelines were used. However, the findings shall be validated with other methods like Structural Equation Modelling (SEM).
- ✍ This research is undertaken only in the Ethiopian Airlines Group with a relatively small sample size. So as to get an all-inclusive representation and generalizations of the findings, forthcoming research can be performed with a relatively larger sample size that should be taken from other airlines and aviation industry players.

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APPENDIX

Appendix I

ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

RESEARCH PROJECT QUESTIONNAIRE FOR FULFILLMENT OF MSC IN
MANAGEMENT

Dear Respondent:

I am Dereje Melku an MSc in Management student at Addis Ababa University. This research is conducted as partial fulfilment of Master of Management Science and focuses on exploring and investigating the dominant types of organizational culture as well as job satisfaction and their effect on employee commitment in Ethiopian Airlines. The findings of the study will help Ethiopian Airlines Group to identify the most important organizational culture and job satisfaction variables that have the greatest effect on employees' commitment and reassess its effort on those variables.

The information that you will provide in this questionnaire will be used for academic purposes only and will be kept strictly confidential. The reliability and the strength of the findings are exceedingly dependent on your trustworthy and honest responses.

I thank you in advance for your valuable time and collaboration!

Note:

- ➔ Please put a “√” mark on your choice on the space provided.
- ➔ You don't need to write your name on the questionnaire.

Part I: Demographic Information

1. Age: 18-25 26-35 36-45 Above 45

2. Gender: Male Female

3. Highest Educational Achievement:

College Diploma Bachelor's Degree

Second Degree (MA, MSc., MBA) Other _____

4. For how long have you been in the organization?

1-5 6-10 11-15 Above 15

5. Marital Status: Single Married

6. Employment Group: Management Non-Management

Part II: Organizational Culture

Please indicate the extent to which you agree with each statement below by putting a “√” mark in the appropriate column in the table below against each of the response scales. Should you have any queries don’t hesitate to ask.

	C1: Dominant Characteristics	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	The organisation is a very personal place. It is like an extended family. People seem to share a lot of themselves.					
B	The organisation is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.					
C	The organisation is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.					
D	The organisation is very controlled and structured place. Formal procedures generally govern what people do					
	C2: Organisational Leadership	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	The leadership in the organisation is generally considered to exemplify mentoring, facilitating, or nurturing.					
B	The leadership in the organisation is generally considered to exemplify entrepreneurship, innovating, or risk taking.					
C	The leadership in the organisation is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.					
D	The leadership in the organisation is generally considered to exemplify coordinating, organising, or smooth-running efficiency.					
	C3: Management of Employees	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	The management style in the organisation is characterised by teamwork, Consensus and participation.					
B	The management style in the organisation is characterised by individual risk-taking, innovation, freedom and uniqueness.					
C	The management style in the organisation is characterised by hard-driving competitiveness, high demands, and achievement.					
D	The management style in the organisation is characterised by security of employment, conformity, predictability, and stability in relationships.					
	C4: Organisation Glue	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	The glue that holds the organisation together is loyalty and					

	mutual trust. Commitment to this organisation runs high.					
B	The glue that holds the organisation together is commitment to innovation and development. There is an emphasis on being at the cutting edge.					
C	The glue that holds the organisation together is the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.					
D	The glue that holds the organisation together is formal rules and policies. Maintaining a smooth-running organisation is important.					
	C5: Strategic Emphases	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	The organisation emphasises human development. High trust, openness, and participation persist.					
B	The organisation emphasises acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.					
C	The organisation emphasises competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.					
D	The organisation emphasises permanence and stability. Efficiency, control and smooth operations are important.					
	C6: Criteria of Success	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	The organisation defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people					
B	The organisation defines success on the basis of it is a product leader and innovator.					
C	The organisation defines success on the basis of the winning in the marketplace and outpacing the competition. Competitive market leadership is key					
D	The organisation defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.					

Source: Cameron & Quinn (2005)

Part III: Job Satisfaction

The following questions are about employees' job satisfaction. Kindly indicate the degree of your agreement/disagreement by putting '√' mark on the number that best describes your view.

No.	Item	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
		1	2	3	4	5
1	At this very moment, I am enthusiastic about my work					
2	Right now, I feel fairly satisfied with my present job					
3	At present, each minute at work seems like it will never end. R*					
4	At this moment, I am finding real enjoyment in my work					
5	I consider my job rather unpleasant R*					

R*Indicates revers scored

Source: Judge et al. (1998) adapted from Brayfield and Rothe (1951)

Part IV: Organizational Commitment

The next questions are about employees' commitment to the organization. Kindly indicate the degree of your agreement/disagreement by putting '√' mark on the number that best describes your view.

No.	Dimensions of Organizational Commitment	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
	Affective Organizational Commitment	1	2	3	4	5
1	I would be very glad to spend the rest of my career in this organization.					
2	I truly feel as if this organization's problems as my own.					
3	I feel like as "part of a family" at this organization					
4	This organization has a great deal of personal meaning for me					
5	I do not feel a strong sense of belonging to this organization. R*					
	Normative Organizational Commitment	1	2	3	4	5

6	I do not feel any obligation to remain with my organization. R*					
7	Even if it were to my advantage, I do not feel it would be right to leave.					
8	I owe a great deal to this organization					
9	I would not leave my organization right now because of my sense of obligation to it					
10	This organization deserves my loyalty					
	Continuance Organizational Commitment	1	2	3	4	5
11	It would be very hard for me to leave my job at this organization right now even if I wanted to					
12	Too much of my life would be disrupted if I leave my organization					
13	Right now, staying with my job at this organization is a matter of necessity as much as desire					
14	I believe I have too few options to consider leaving this organization					
15	One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice					

R*Indicates revers scored

Source: Allen and Meyer (1990).

Appendix II

Correlations between dimensions of organizational culture and organizational commitment

		Clan Culture	Adhocracy Culture	Market Culture	Hierarchy Culture	Affective Commitment	Normative Commitment	Continuance Commitment
ClanCulture	Pearson Correlation	1				.810**	.558**	-.558**
	Sig. (2-tailed)					.000	.000	.000
	N					335	335	335
AdhocracyCulture	Pearson Correlation		1			.214**	.406**	.105
	Sig. (2-tailed)					.000	.000	.055
	N					335	335	335
MarketCulture	Pearson Correlation			1		-.051	.046	.221**
	Sig. (2-tailed)					.348	.404	.000
	N					335	335	335
HierarchyCulture	Pearson Correlation				1	.179**	.312**	.098
	Sig. (2-tailed)					.001	.000	.074
	N					335	335	335
AffectiveCommitment	Pearson Correlation	.810**	.214**	-.051	.179**	1	.742**	-.619**
	Sig. (2-tailed)	.000	.000	.348	.001		.000	.000
	N	335	335	335	335	335	335	335
NormativeCommitment	Pearson Correlation	.558**	.406**	.046	.312**	.742**	1	-.430**
	Sig. (2-tailed)	.000	.000	.404	.000	.000		.000
	N	335	335	335	335	335	335	335
ContinuanceC	Pearson Correlation	-.558**	.105	.221**	.098	-.619**	-.430**	1
	Sig. (2-tailed)	.000	.055	.000	.074	.000	.000	
	N	335	335	335	335	335	335	335

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

Organizational cultural dimensions and affective, normative and continuance commitment

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.045	.212		.213	.831
1 ClanCulture	.942	.039	.787	23.881	.000
1 AdhocracyCulture	.084	.050	.061	1.673	.095
MarketCulture	-.086	.046	-.071	-1.886	.060
HierarchyCulture	.082	.062	.054	1.305	.193

a. Dependent Variable: AffectiveCommitment

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.059	.246		-.240	.810
1 ClanCulture	.509	.046	.481	11.120	.000
1 AdhocracyCulture	.326	.058	.269	5.603	.000
MarketCulture	-.089	.053	-.083	-1.681	.094
HierarchyCulture	.193	.073	.146	2.663	.008

a. Dependent Variable: NormativeCommitment

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.665	.257		14.247	.000
1 ClanCulture	-.634	.048	-.591	-13.217	.000
1 AdhocracyCulture	.189	.061	.154	3.096	.002
MarketCulture	.149	.056	.137	2.674	.008
HierarchyCulture	.070	.076	.052	.920	.358

a. Dependent Variable: ContinuanceC

Regression output of components of Organizational Culture and Organizational Commitment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.702 ^a	.492	.486	5.50541

a. Predictors: (Constant), Hierarchy, Clan, Adhocracy, Market

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9700.561	4	2425.140	80.012	.000 ^b
	Residual	10002.157	330	30.310		
	Total	19702.718	334			

a. Dependent Variable: OrganizationalCommitment

b. Predictors: (Constant), Hierarchy, Clan, Adhocracy, Market

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.936	1.984		7.024	.000
	Clan	.924	.070	.528	13.120	.000
	Adhocracy	.561	.089	.281	6.323	.000
	Market	-.052	.077	-.030	-.674	.501
	Hierarchy	.347	.107	.159	3.243	.001

a. Dependent Variable: OrganizationalCommitment

Regression output of components of Organizational Culture and Job Satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.781 ^a	.611	.606	.55421	.611	129.435	4	330	.000

a. Predictors: (Constant), HierarchyCulture, ClanCulture, AdhocracyCulture, MarketCulture

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	159.024	4	39.756	129.435	.000 ^b
	Residual	101.360	330	.307		
	Total	260.384	334			

a. Dependent Variable: JobSatisfaction

b. Predictors: (Constant), HierarchyCulture, ClanCulture, AdhocracyCulture, MarketCulture

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
		1	(Constant)	.806			.198	
	ClanCulture	.808	.037	.778	21.953	.000	.735	.880
	AdhocracyCulture	-.005	.047	-.004	-.101	.920	-.097	.087
	MarketCulture	-.011	.041	-.011	-.275	.783	-.092	.069
	HierarchyCulture	.031	.058	.024	.529	.597	-.083	.144

a. Dependent Variable: JobSatisfaction

Regression output of components of Job Satisfaction and Organizational commitment

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.878	.098		19.208	.000	1.685	2.070
	JobSatisfaction	.312	.025	.560	12.336	.000	.262	.362

a. Dependent Variable: OrganizationalCommitment