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Organizational Culture, Job and Customer Satisfaction: A Quest for A Relationship: The Case of the Pharmaceutical Industry in the Sudan

ثقافة التنظيم الرضا الوظيفي ورضا العميل: البحث عن علاقة؟ دراسة حالة الصيدلانية في السودان

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Of
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قال تعالى:

} بَلِّئِيْتِهَا الَّذِينَ آمَنُواْ إِذَا قِيلَ لَكُمْ تَفْسَحُواْ فِي الْمَجَالِسِ فَافْسَحُواْ يُفْسَحُ اللَّهُ لَكُمْ وَإِذَا قِيلَ أَنْشُزُواْ فَانشُزُواْ يُرْفَعِ اللَّهُ ٱلَّذِينَ آمَنُواْ مِنكُمْ وَٱلَّذِينَ أُوْتُواْ ٱلْعِلْمَ دَرَجَاتٍ وَلَهُ بِمَا تَعْمَلُونَ خَبِيرٌ

سورة المجادلة الآية (11).

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Dedication:

I dedicate this humble effort to my parents for their continuous prayers; my family for their continuous support, my University for giving me this sparkling time of my life, my friends for their unlimited interest and concerns, and my 9 sisters who are always behind me.

But for most, I dedicate this work to the soul of my late dear young brother Osman, whom I consider a great loss of my life, and can’t stop tears whenever I recall his short lived life, may Allah the Almighty rest him in peace and award him paradise.
Abstract

Organizational Culture, Job Satisfaction, and Customer Satisfaction: A Quest for a Relationship

This study investigated the relationship between Organizational Culture, Job Satisfaction, and Customer Satisfaction, and whether a causal relationship existed where Job Satisfaction mediates the relationship between Organizational Culture and Customer Satisfaction in the Pharmaceutical Industry in the Khartoum State in the Sudan.

The field study consisted of three factories randomly selected through the SPSS involving the sales representatives of the three factories as well as their clients. A quantitative survey methods using questionnaires was used to collect and analyze data. Three questionnaires were used. One questionnaire is to elicit the organizational culture type (OCAI), the other is for measuring overall job satisfaction level (JSS), and the third questionnaire is for measuring the overall customer satisfaction level (CSQ). This study has two groups of population. One population is the sales representatives of the three factories, (27, 26, and 5 for F1, F2, and F3 respectively), the other population is the customers of these factories (66 for the three factories).

The finding of this research indicates that the foreign pharmaceutical organizations (2 factories) are dominated more by the Market Culture type, while the Sudanese local organization (1 factory) is dominated more by the Hierarchal Culture type. Another major finding is that all the three constructs, organizational culture, job satisfaction, and customer satisfaction enjoy a statistically significant correlation among themselves, while there is a statistically significant
causal relationship between organizational culture and customer satisfaction mediated by job satisfaction. Yet another result is that the level of both job satisfaction and customer satisfaction for the three sample organizations is negative (dissatisfaction), and it is found that this industry is dominated by male sales representatives, while customers are mostly females. Both sales representatives and customers are graduates, young with few years of experience.

Based on the results and findings of this study, some recommendations for leaders and practitioners were suggested. Organizational leaders need to identify the kind of organizational culture prevailing in their organizations, and what impact it has on different organizational outcomes, such as job satisfaction and customer satisfaction. Also, leaders should realize the importance of treating staff (sales representatives) as internal customer, as research indicates that customer satisfaction is just a reaction to employee satisfaction, based on this reality, the old conventional wisdom that “the customer runs the company” may now be re-phrased as “both employee and customer run the company”. For Human Resource Managers, this study recommends that it imperative for the human resource leaders, as change agents, to educate and train themselves on organizational culture issues and the impact it has on other organizational dimensions. Also, it is suggested that the type of the prevailing organizational culture to be included in the advertisement for vacancies, as it will help candidates to know what kind of organization is it. Employment is a kind of long term engagement, and as such it needs to be initiated on clear grounds. Mismatch of the organizational values, and those of the candidate will lead to loss on both sides, and this is why it is important that selection of new hires be based on “culture-fit” dimension as well. Finally, this study suggest that it is time for
human resource people to engage into communication with customers and use their feedback on trainings and evaluation of the front line staff (sales representatives).
هدفت هذه الدراسة للتحقق من وجود علاقة بين متغيراتها الثلاثة وهي الثقافة التنظيمية، رضا العامل ورضاء العملاء. ومن أهدافها أيضاً التأكد من وجود علاقة سببية بين الثقافة التنظيمية ورضاء العملاء بحيث يكون رضا العامل هو المتغير الوسيط.

وقد تناولت الدراسة الميدانية ثلاثة من مصانع الأدوية في ولاية الخرطوم، السودان، تم اختيارهم بواسطة برنامج －(SPSS)－، وتكونت عينة المستندات من مندوبين المبيعات لهذه المصانع وعملائها. وتم استخدام 3 استبيانات لمعرفة نوع الثقافة التنظيمية السائدة بكل مصنع وكذلك مستوى درجة رضا العامل والعملاء لكل مصنع على حدة. وتكونت عينة الدراسة من 27 مصنع. مندوب مبيعات لكل من المصانع 1، 2، و3 بالتناوب. وكان عدد العمال لثلاثة مصانع هو 66 عامل.

وقد توصلت الدراسة لعدة نتائج منها أن هناك علاقة ذات دلالة إحصائية بين متغيرات الدراسة الثلاثة وهي ثقافة المنظمة، رضا العامل ورضاء العملاء، وكذلك من النتائج المهمة أن مصنع الأدوية الأجنبية يسود فيه ثقافة "السوق" وأن مصنع الأدوية السودانية يسود فيها ثقافة "الهرم". أيضاً توصلت الدراسة أن مستوى رضا العامل والعملاء يعتمد بشكل كبير على مصنع الصناعة ( مندوب المبيعات) والعملاء جميعهم من فئة الشباب وأن من يعملون بوظيفة مبيعات أغلبهم من الشباب الذكور بينما عملائهم أغلبهم من الإناث وهم خبراء من ذوي الخبرات القصيرة.

وبناء على النتائج أعلاه، فقد قدمت الدراسة بعض المقترحات لقادة المنظمات ومديري الموارد البشرية بما ومن هذه التوصيات والمقترحات أن على قادة المنظمات تحديد ومعرفة نوع الثقافة السائدة منظماً ومدى تأثرها على أداء المنظمة ومكانة العامل ووظائفها كدرجة رضا العامل والعملاء. أولاً أن رضا العامل يعتبر الأساس على رضا العامل، على أن يكون من الأفضل معاملة العامل (مندوب المبيعات) على أنه عملاء داخلي تسعى المنظمة لكسب رضاه. أو المقبولية السائدة في وقت سابق أن "العمل مثير لل춘وب" لم تكن دقيقة حيث تشمل العامل أيضاً. ووجهت الدراسة بعض الاقتراحات لمديري الموارد البشرية، بتحريك آليات تعديل الثقافة المناسبة في كل مكان، تجربة مندوب المبيعات وتقييم الفائدة في تطبيق مندوب المبيعات وتضمن ملاحظات في الدورات التدريبية من تجربة العامل.

ومن النتائج أيضًا أن رضا العميل يعتمد بشكل أساسي على رضا العامل، عليه يكون من الأفضل معاملة العامل (مندوب المبيعات) على أنه عملاء داخلي تسعى المنظمة لكسب رضاه. أو المقبولية السائدة في وقت سابق أن "العمل مثير لل춘وب" لم تكن دقيقة حيث تشمل العامل أيضاً. ووجهت الدراسة بعض الاقتراحات لمديري الموارد البشرية، بتحريك آليات تعديل الثقافة المناسبة في كل مكان، تجربة مندوب المبيعات وتقييم الفائدة في تطبيق مندوب المبيعات وتضمن ملاحظات في الدورات التدريبية من تجربة العامل.

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I thought of doing my PhD degree after more than 30 years of experience in the business world, and this shift in direction has posed and presented several challenges, changes and chances for me personally and professionally. Understanding various aspects of an academic work was the most, among so many, that has challenged and changed me.

This research has seen the light of the day because so many dear ones have shared with me this experience, these include, my friends, my family, my colleagues at work, and faculty members, just to name a few.

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Chapter One – Introduction

1.1 Background

Societies are made up of organizations whether social, political, business or otherwise. One is born in a family which is the first form of an organization to teach the child the good and the bad, the wrong and right. Then one goes to school, which is another form of an organization where formal learning takes place, from kindergarten up to university education and beyond. After that one may go to some business organizations to practice what has been formally or informally learned in order to produce something of value to oneself and to the society at large.

The latter form of organizations, the business organizations, is the one where people spend most of their lives, interacting and dealing with different people in different businesses in different places whether local or international. The world is becoming boundaryless and globalization is the landmark of the new millennium that made the world like a small village with unprecedented technological advancement that brought people and business together in an amazing conglomerate.

The interaction between people on one side and organizations on the other side has yielded certain values, behavior and attitudes that, have together, been named as “organizational culture”. Recent research has proven that business success in different countries depends, to large extent, on identifying, understanding, and considering the
culture of the hosting country. This is why the study of organizational culture has been
given much attention both at the academic and business levels.¹

Organizational culture might mean different things to different people. Scholars have
not yet agreed upon a one single definition to settle on, but have identified some
frameworks that may help in identifying and classifying the phenomenon of
organizational culture. The most popular definition of organizational culture is that of
Schein who wrote, “Culture is what the group learns over a period of time as that group
solves its problems of survival in an external environment and its problems of internal
integration”.

One of the most inspiring definitions to the researcher, the one that have sparked this
research in the first place is the one provided by the father of culture, Geert Hofestede
when he defines cultures as“ the software of the mind”. To the researcher this
definition depicts culture as the program that shapes how the mind operates and how
the organs execute.

It follows nicely then that business organizations are nothing but the people working in
them. Studying organizational behavior means studying the behavior of the people
working in these organizations.

The last twenty years or so have witnessed a flood of research on the impact of
organizational culture on many organizational outcome or variables. Among the most
important organizational variables are job satisfaction and customer satisfaction.²

¹ Erich B. Bergiel, Blaise j. Bergiel, John W. Upson, “Revisiting Hofestede’s Dimensions: Examining the Cultural
Convergence of the United States and Japan”, American Journal of Management, Vol., 12(1), page 69
To the mind of the researcher, business lies at the junction of three types of people. There are people, who make or manufacture a product or design a service (producers), and people who buy them (customers) and the people who sell them (sellers). These transactions of producing, selling and buying do not take place in vacuum; Organizational culture constitutes the platform where they take place.

There is no scarcity in the organizational culture literature on the theories and instruments that define and measure organizational culture traits. The Competing Values Framework (CVF) is one of the most popular theories developed by Quinn and Cameron who also developed the Organizational Culture Assessment Instrument (OCAI) to classify, assess and compare organizational cultures. This instrument has gained sound reliability and validity in different studies in different countries. The Competing Values Framework (CVF) identified 4 types of organizational cultures, the Clan, the Adhocracy, the market, and the Hierarchy cultures. Each cultural type has a distinct sect of values that differentiates it form the others. The (OCAI) measures six dimensions in any organization in order to identify the prevailing culture, although, different type of cultures may normally co-exist to varying degrees within the same organization. However, there would always be one dominant type of culture in any organization. The six dimensions that are measured by the OCAI are the: The Dominant Characteristics;

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organizational leadership; management of employees; the organizational glue; strategic emphasis; and criteria for success.  

Job satisfaction has captured the interest of many organizational scholars due to its direct impact on organizational performance. It has also been looked at from different dimensions. According to Noor the multiregional definitions however provide a more elaborate type of definition resulting in several dimensions of the job satisfaction construct being conceptualized and operationalized as facets such as satisfaction with pay, promotion, co-workers, nature of work and communication”. This is the approach or dimension this research will take. One more reason for the importance of job satisfaction is that front line employees (sales representatives); symbolize the organization in the eyes of the customer. The organization does not go the customer, the employee does.

Paul Spector, an American psychologist, defined job satisfaction as “An affective or attitudinal reaction to a job”. Based on this definition, he has developed his famous Job Satisfaction Survey (JSS). Paul Spector’s definition and questionnaire are both adopted in this study. The Job Satisfaction Survey consists of thirty six statements that describe nine facets of jobs satisfaction: satisfaction with pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers, nature of work and communication.

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Customer satisfaction is one of the most areas that have recently been thoroughly researched in business. Business survival and growth depends largely on how much customers perceive and value the product and or services rendered to them.

No doubt, customer satisfaction is the cornerstone of any business. No customers, no business. But the researcher also argues that, no employees, no business, and no employees, no customers. So there is an obvious connection between employee satisfaction and customer satisfaction a fact that most leaders are either not aware of or they do not recognize it at all or they recognize but just ignore it. Customer satisfaction has been the central focus for many studies in recent research, especially so in the era of service economy. Customer satisfaction has been defined differently by different scholars, but among the most famous definitions is that of Oliver who defines customer satisfaction as” The result of an evaluative process that contrasts pre purchase expectations with perceptions of performance during and after the consumption”.

Based on this definition, Parasuraman, developed a questionnaire that contains statements to depict the customer perception and feelings about a certain product or service in five factors that are important for customers. The questionnaire used in this study is an amended version of the original Parasurman one. The researcher added the communication dimension which is thought to be vital and important for customer satisfaction. This aims to connect employee satisfaction to customer satisfaction; therefore, communication is the only tool to engage the two with each other. The 5 dimensions measured in this study are: dependability; responsiveness; access; competence; and communications.
This research is particularly interested in finding how organizational culture traits and job satisfaction facets as well as customer satisfaction dimension are correlated and impact each other in the Pharmaceutical manufacturing Sector in the Sudan. This Sector consists of a wide range of organizational types, i.e. local and foreign, public and private investments. The impact of this Sector on the health and well being of the Sudanese citizens is obvious and of high importance due to many reasons including, but not limited to, the increasing rate of diseases coupled with increasing rate of consumer awareness.

Leaders of the Pharmaceutical Sector need to be informed of the type of organizational culture prevailing in their organizations and how does it affect the level of job satisfaction of their employees and consequently on customers satisfaction. Understanding industry and organizational characteristics will help in reducing or eliminating factors that may lead to job dissatisfaction and consequently lead to customer dissatisfaction. Also, the Pharmaceutical Sector is an industry where quality of products and services are second to none and it can’t be compromised for any other reasons, i.e. prices.

Current research has proven the link and relationship between organizational culture, job satisfaction, and customer satisfaction. Most of the previous research has explored the relationship between any two combinations of these three constructs, but this research intends to explore them together in one study in order to further investigate the relationships and correlations as well as whether or not job satisfaction variable is mediating the relationship between organizational culture and customer satisfaction.
In other words is there a three-way relationship where the existence of job satisfaction and customer satisfaction is dependent on the type of the prevailing organizational culture.

1.2 Problem Statement

Prior research confirms the impact of organizational culture on many organizational outcomes such as organizational performance, job satisfaction, employee turnover, customer satisfaction and others. Numerous studies have been conducted on organizational culture, job satisfaction and customer satisfaction whether as single variables or any combination thereof. As of yet, it has not been known that there is study that investigated the relationships between these variables in one research like this one. Also, the mediating role of the job satisfaction on customer satisfaction needs further investigation, especially in the Sudanese business context. For example does employee satisfaction mediate the relationship between organizational culture and customer satisfaction? Does customer satisfaction depend on employee satisfaction? This current study expands on the existing research to further explore the kind and level of relationship that may exist between the three variables in the Sudanese context using the Pharmaceutical Industry as the case study. The following conceptual model or framework might help to illustrate the relationships between the Independent variable (Organizational Culture), the mediator (the Job satisfaction) and dependent variable (Customer satisfaction).
1.3 Research Questions:

There are several questions that this study aims to answer, these are:

1. What is the dominant organizational culture in the sample organizations?
2. What is the level of overall job satisfaction in the sample organizations?
3. What is the level of overall customer satisfaction in the sample organizations?
4. To what extent does a relationship exist between organizational culture and overall job satisfaction in the sample organizations?
5. To what extent does a relationship exist between organizational culture and overall customer satisfaction in the sample organizations?
6. Is job satisfaction mediating the relationship between organizational culture and overall customer satisfaction?

7. To what extent does a relationship exist between overall job satisfaction and overall customer satisfaction in the sample organizations?

8. To what extent does organizational culture differ among the sample organizations?

9. To what extent does overall job satisfaction level differ among the sample organizations?

10. To what extent does the overall customer satisfaction differ among the sample organizations?

11. To what extent does a relationship exit between overall job satisfaction and some selected demographic variables of employees in the sample organizations?

12. To what extent does a relationship exit between overall customer satisfaction and some selected demographic variables of customers in the sample organizations?

1.4 Significance of the Research:

This research has provided an in depth knowledge in the area of organizational culture; job satisfaction; and customer satisfaction in the pharmaceutical industry in the Sudan, and is among the few studies that put these three variables in one research. Therefore, its results are thought to be of great help to organizational leaders in the following manner:
1. Help leaders and human resource managers of the pharmaceutical industry in the Sudan to identify the type of culture prevailing in their organization;

2. Help leaders and human resource managers of the pharmaceutical industry in the Sudan identify the overall level of their sales representatives;

3. Help leaders and human resource managers of the pharmaceutical industry in the Sudan to identify the overall level of their customers;

4. Help leaders and human resource managers of the pharmaceutical industry in the Sudan to recognize the impact that organizational culture has on overall job satisfaction;

5. Help leaders and human resource managers of the pharmaceutical industry in the Sudan recognize the impact that organizational culture has on overall customer satisfaction;

6. Help leaders and human resource manager of the pharmaceutical industry in the Sudan recognize the link between overall job satisfaction of the sales representatives of their organization with the overall satisfaction of their organizations customers;

7. Confirm to leaders and human resource managers of the pharmaceutical industry in the Sudan that front line employees (sales representatives) resemble the organization in the eyes of the customer;

8. Organizational culture plays an important role in shaping social groups perceptions about an organization. Therefore, this research offers significant implications for positive social change within organizations. Ensuing form the discussion and
recommendations of this study is the importance of how internal aspects of organizational culture can shape, positively or negatively, the attitudes of employees external behavior which ultimately affects overall organizational image and performance.

9. It draws the attention of the leaders of the pharmaceutical industry in the Sudan that organizations are like people and have their peculiar personalities, and how this personality is internally perceived by employees reflects on the wider society and thus may deny the organization from having essential high level caliber that are important for the business. We know from social talk and image that some organizations enjoy high reputation and others that are not. For example, in the Sudan, Kenana Sugar Company and DAL Group of Companies enjoy high public image because the majority of their staff are seen to be satisfied.

10. It asserts that employee satisfaction is as important as customer satisfaction and customer satisfaction is a reflection of employee satisfaction.

11. It helps link customer satisfaction, to internal organizational issues like leadership, people management, organizational glue; strategic focus issues and success criteria.

1.5 Research Objectives:

This study aims to achieve:

1. Identify the kind of organizational culture prevailing in the present sample using the Competing Values Framework (CVF);

2. Compare the results of this study to previously established relationships in the literature in the field of organizational culture, employee and customer satisfaction;
3. Measure, using the Job Satisfaction Survey (JSS), the overall level of job satisfaction in the sample organizations; and

4. Find the relationship between the three variables in sample organizations.

1.6 Research Hypotheses:

This research argues that there are statistically significant relations between the three constructs, organizational culture, job satisfaction, and customer satisfaction it sets to investigate, and accordingly it assumes that:

**H. 1** There is statistically significant correlation between organizational culture and overall job satisfaction.

**H. 2** There is statistically significant correlation between organizational culture and overall customers’ satisfaction.

**H. 3** There is statistically significant correlation between overall job satisfaction level and overall customers’ satisfaction level.

**H. 4** There is statistically significant casual relationship between organizational cultures; overall customer satisfaction where overall job satisfaction is mediating the relationship between organizational culture and overall customer satisfaction.

**H. 5** There is statistically significant negative correlation between overall Job Satisfaction and market organizational culture.

**H. 6** There is statistically significant negative correlation between overall Job Satisfaction and hierarchy organizational culture.
H. 7 There is statistically significant negative correlation between overall customer satisfaction and market organizational culture.

H. 8 There is statistically significant negative correlation between overall customer satisfaction and hierarchy organizational culture.

H. 9 There is statistically significant correlation between the demographic variables of the employees (gender, age, education and tenure), and the dominant organizational culture; overall Job satisfaction and overall customer satisfaction.

1.7 Research delimitations:

This research was limited to the investigation of three variables, namely, organizational culture, job satisfaction, and customer satisfaction in the Pharmaceutical Sector in the State of Khartoum, Sudan. The Study included only 3 factories that compose only 15% of the total population (19) of factories in Khartoum State using sample groups. One group is the sales representatives from each factory to measure their opinions and perceptions about the organizational culture in these factories as well as the level of their satisfaction with some facets of their jobs. The second group is officials of the pharmacies of the health institutions that buy the products of these factories in order to find the relationship between the two groups or populations.
1. 8 Previous Relevant Studies

This section briefly highlights and summarizes the most relevant and recent studies that have explored the relationships between the three variables of this research, namely, Organizational culture, job satisfaction and customer satisfaction.

The researcher have cited relevant studies that issued in the last three years, 2011, 2012, and 2013, with exception of only 2 studies which were issued in 2003, and 2008.

It needs to be noted, however, that the researcher couldn't find studies that used the three constructs in one study; therefore, the previous relevant studies are those that use any combination of the three, i.e. organizational culture and job satisfaction, organizational culture and customer satisfaction; and job satisfaction and customer satisfaction.

The following pages describe these studies and highlight, the title, the author, the University or journal and date, the hypotheses, the methodology, and the outcome of each study.

1. Organizational Culture and Job Satisfaction

Study # 1:

1. Title: Impact of Organizational Culture Type on Job Satisfaction Level of Employees’ in Different Organizations of Lahore, Pakistan

2. Author: Shamaila Gull

3. University, Journal and Dates
4. Hypotheses

- Ho: Culture is not a predictor of Job Satisfaction.

- H1: Culture is a predictor of Job Satisfaction

- Ho: Employees working under CLAN culture type are not satisfied with their jobs.

- H1: Employee working under CLAN culture type are satisfied

- Ho: Employees working under ADHOCRACY culture type are not satisfied with their jobs.

- H1: Employee working under ADHOCRACY culture type are satisfied

- Ho: Employees working under HIERACHY culture type are not satisfied with their jobs.

- H1: Employee working under HIERACHY culture type are satisfied

- Ho: Employees working under MARKET culture type are not satisfied with their jobs.

- H1: Employee working under MARKET culture type are satisfied

5. Methodology

- Cross-sectional, deductive approach;
- Questionnaires. Organizational culture is measured by using the Organizational Culture Assessment Instrument (OCAI), while Job Satisfaction is measured by using the Minnesota Satisfaction Questionnaire (MSQ).

- Analysis was performed on data using SPSS 19.

6. Outcome

Following are the key findings of this study:

- Those who work under Clan culture type are satisfied with their jobs and their jobs.

- Those who work under Adhocracy culture type are satisfied with the jobs.

- Those who work under hierarchy culture type are not satisfied with their jobs.

- Those who work under Market culture type are not satisfied with their jobs.

- Culture is a predictor of jobs satisfaction.

Study # 2:

1. Title: Organizational Culture and the Job Satisfaction-Turnover Intention

Link: A Case Study of the Saudi Arabian Banking Sector.

2. Authors: Abdullah Aldhuwaihi, Himanshu K. Shee, and Pauline Stanton

3. University, Journal and Dates

- University: Victoria University, Australia,
4. Hypotheses

- 1a: Clan and adhocracy culture types are positively correlated to job satisfaction
- 1b: Market and hierarchical culture types are negatively correlated to job satisfaction
- Job Satisfaction is negatively correlated to turnover intention.
- Organizational culture (clan, adhocracy, hierarchy, and market) moderates the relationships between job satisfaction and turnover intentions.

5. Methodology

- Descriptive and correlational research designs.
- Questionnaires. Organizational culture measured by using the Organizational Culture Assessment Instrument (OCAI), while Job Satisfaction measured by using the Job Satisfaction Survey (JSS).
- Data analyzed using SPSS 20.

6. Outcome

- Clan and adhocracy culture types are positively correlated to job satisfaction;
- Market and hierarchy, contrary to previous studies, didn’t correlate negatively with job satisfaction.
- Organizational culture moderates the relationship between job satisfaction and turnover intentions.

Study # 3:

1. Title: Organizational Culture and Job Satisfaction
2. Author: Daulatram B. Lund
3. University, Journal and Dates
   - University: University of Nevada, Reno, Nevada, USA
   - Journal: Journal of Business & Industrial Marketing, vol. 18, No. 3
   - Dates: 2003
4. Hypotheses
   - The influence of organizational culture types on employee job satisfaction will range from best to worst along the continuum of organization processes (clan and adhocracy) to mechanistic processes (Hierarchy and market).
5. Methodology
   - A self-administered structured questionnaires. Organizational culture measured by adapting the Organizational Culture Assessment Instrument (OCAI). Job satisfaction measured by a questionnaire adapted from Wright and Cropanzano (1998).
6. Outcome
   - Being familiar with the dominant culture(s) can help management assess inherent strengths and limitations of their strategies.
- The success of mergers and acquisitions does not only depend on the economic synergies of the merging entities, but largely on the compatibility of the cultures of the merging entities.

- Job satisfaction is important in such a turbulent economy as it reduce the likelihood of leaving, and this needs to be strengthened by the type of dominating organizational culture. Research revealed that clan and adhocracy are more associated with job satisfaction than hierarchy and market culture.

2. Organizational Culture and Customer Satisfaction:

Study # 1:

1. Title: The link between organizational learning culture and customer satisfaction

2. Authors: Angelos Pantouvakis and Nancy Bouranta

3. University, Journal and Dates:
   - University of Piraeus, Piraeus, Greece and University of Western Greece, Agrinio, Greece,
   - Journal of learning organization, vol. 20, No. 1
   - Date: 2013

4. Hypotheses

  H1. Organizational learning culture will have a direct and positive effect on customer satisfaction.
H2a: Organizational learning culture will have a direct and positive effect on customer satisfaction.

H2b: Organizational learning culture will have an indirect and positive effect on customer satisfaction.

H3: Job satisfaction will have a direct and positive effect on customer satisfaction.

H4: The organizational learning culture’s effect on customer satisfaction will be mediated by employee job satisfaction, and this relationship will be moderated by employee education level. Specially, the indirect effect of organizational learning culture on customer satisfaction via employee job satisfaction will be stronger when employee education is high than when employee education is low.

5. Methodology
   - Measure: The questionnaire consisted of 21 items split into three survey instruments that measure organizational learning culture, job satisfaction and customer satisfaction.
   - Sample: Three companies from different service sectors (port, automobile service repair and supermarket.

6. Outcome
   - Organizational culture is directly and positively related with job satisfaction.
- Organizational culture directly and significantly influences customer satisfaction.
- Employee job satisfaction is positively related to customer satisfaction

Study # 2:

1. Title: Exploring the relationship among organizational culture, customer satisfaction and performance in multinational corporations in Nigeria.
2. Authors: Udegbe, Scholastica ebarefimla, Afobunor, S. A. N. and Udegbe, Maurice Iniedegbor.
3. University, Journal and Dates
   - University: Lagos State University, Ojo, Lagos, Nigeria.
   - Dates: February, 2012
4. Hypotheses
   1. Culture does not influence work practices
   2. Culture has no profound impact on the way customers perceive the organization.
   3. MNCs in Nigeria do not tend to maintain the organizational culture of their home countries in their host countries.
   4. There is no relationship between organizational culture, customer satisfaction and organizational performance.
5. Methodology
   - Measure: A structure questionnaire.
   - Sample: Multinational Corporation in Nigeria.

6. Outcome
   - Culture influences work practices;
   - Culture has profound impact on the way customers perceive the organization;
   - MNCs tend to maintain the same organizational culture of their home countries within their host of countries’ operations;
   - There is a relationship between organizational culture, customer satisfaction and organizational performance.

Study # 3:

1. Title: Linking organizational culture and customer satisfaction: Results from two companies in different industries.


3. University, Journal and Dates
   - University: Linfield College, McMinnville, OR, USA, University of Michigan, Ann Arbor, MI, USA.
   - Journal: European Journal of Work and Organizational Psychology, Vol. 17, Issue 1,
   - Dates: 2008
4. Hypotheses

1. Business units with higher scores on the trait of involvement will also have more satisfied customers
2. Business units with higher scores on the trait of consistency will also have more satisfied customers
3. Business units with higher score on the trait of adaptability will also have more satisfied customers
4. Business units with higher scores on the trait of mission will also have more satisfied customers
5. The four cultural traits will relate to customer satisfaction to varying degree. The hypothesized order from strongest to weakest is: adaptability, mission, involvement and consistency.

5. Methodology

- Measure: Survey Questionnaire – Denison Organizational Culture Survey (DOCS)
- Sample: 2 organizations, one in the home building industry and one in the automobile industry.

6. Outcome

- Organizational culture related strongly and positively with customer satisfaction.
3. Job Satisfaction and Customer Satisfaction

Study # 1:

1. Title: Employee Satisfaction, customer satisfaction, and financial performance: An empirical examination

2. Authors: Christina G. Chi, Dogan Gursoy

3. University, Journal and Dates
   - University: Washington State University
   - Dates: 2009

4. Hypotheses
   - There is a positive relationship between customer satisfaction and employee satisfaction;
   - The relationship between employee satisfaction and financial performance is mediated by customer satisfaction;
   - There is a significant indirect positive relationship between employee satisfaction and financial performance;
   - There is no significant direct relationship between employee satisfaction and financial performance.
   - There is a significant positive relationship between customer satisfaction and financial performance.
5. Methodology
   - Sampling methodology.
   - Survey questionnaires

6. Outcome
   - There is a direct relationship between employee satisfaction and customer satisfaction;
   - There is a direct relationship between customer satisfaction and financial performance;
   - The relationship between employee satisfaction and financial performance is mediated by customer satisfaction, and therefore it may not be easily identifiable.

Study # 2:

1. Title: An impact of Employee Satisfaction on Customer Satisfaction in Service Sector of Pakistan
2. Authors: Adeel Daniel; Muhammad Askar; Hafiz Ihsan-Ur-Rehman; and WahabShahbaz
3. University, Journal and Dates
   - Universities: University of Punjab and Muhammad Ali Jinnah University, Islamabad.
   - Dates: 2010
4. Hypotheses

Hypothesis 1

Ho: There is no association between customer satisfaction with perception of service quality, perception of relationship value, employee coordination, customer loyalty and employee behavior and customer.

H1: There is an association between customer satisfaction with perception of service quality, perception of relationship value, employee coordination, customer loyalty and employee behavior and customer.

Hypothesis 2

Ho: There is no association between employee satisfaction with perception of work resources, perception of relations value, leadership and reward system.

H1: There is an association between Employee satisfaction with perception of work resources, perception of relationship value, leadership and reward system.

Hypothesis 3

Ho: There is no correlation between employee satisfaction and customer satisfaction.

H1: There is a positive correlation between employee satisfaction and customer satisfaction.
5. Methodology

- Measure: Survey Questionnaires for Employee satisfaction and customer satisfaction
- Population: The Service of Pakistan

6. Outcome

- Satisfied employees retain satisfied customer

Study # 3:

1. Title: The relationship between employee and customer satisfaction in the balanced scorecard

2. Authors: D G Gous; A Y Habtezin; F N S Vermaak and H P Wolmarns

3. University, Journal and Dates

   • University: University of Pretoria, South Africa
   • Journal: SAJEMS NS 9, No. 3
   • Dates: 2006

4. Hypotheses

   H1: There is no significant relationship between measures of employee satisfaction and employee satisfaction.

   H2: There is no significant relationship between measures of customer satisfaction and customer satisfaction.

   H3: There is no significant correlation between employee satisfaction and customer satisfaction.

   H4: There is no significant association between measures of employee satisfaction and measures of customer satisfaction.
H5: Measures of employee satisfaction of customer satisfaction are not correlated.

H6: There is no significant association between employee satisfaction and measure of customer satisfaction.

5. Methodology
- Measure: Survey questionnaire
- Sample: Employees of airline Company.

6. Outcome
- There is significant relationship between customer satisfaction and employee satisfaction.
- Measure of employee satisfaction and measures of customer satisfaction have positive associations.
- The correlation between customer satisfaction and the measures of employee satisfaction are positive.
- There is a positive association between employee satisfaction and measures of customer satisfaction.
Chapter 2 - Literature Review

2.1 Organizational Culture:

The study of organizations as Gerloff\(^7\) argues is no doubt essential to our modern society as they form part of our experiences and innovations, yet our individual well being is largely affected, directly or indirectly, by a number of organizations.

According to R Daft\(^8\), organizations are “social entities that are goal-directed, deliberately structured activity systems with identifiable boundaries”. According to him, this definition has four key elements: These are:

1. Social Entities. Organizations are composed of people and groups of people. The building blocks of an organization are people and their roles. People interact with each other to perform essential functions in organizations.

2. Goal-Directed. Organizations exist for a purpose or purposes. An organization and its members are trying to achieve an end. Participants may have goals different from those of their organization, and the organization may have several goals. But organizations exist for one or more purposes without which they would cease to exist.

3. Deliberately structured Activity Systems. Being activity systems means that organizations perform work activities. Organizational tasks are deliberately


subdivided into separate departments and sets of activities. The subdivision is intended to achieve efficiencies in the work process. The deliberate structure is used to coordinate and direct separate groups and departments.

4. Identifiable Boundary. The boundary identifies which elements are inside and which are outside the organization’s jurisdiction. Membership is exclusive to the organization that the employee belongs to. Members normally have some commitment or contract to contribute to the organization in return for money, prestige, or other gains. The organization must maintain itself as an entity distinct from the environment. A visible boundary is necessary characteristic of organizing. When random pieces of scrap metal are organized, they become a machine distinct from other machines. When sounds are organized, they become a song that is distinct from other noise. When people are organized into a company to accomplish a goal, they become a social entity distinct from other companies.

Although organizations, as social systems have existed on earth with the existence of man, it is not up until the verge of the World War 1 that some thinkers have realized the importance of managing organizations as we see it today.  

9 Drucker, Peter, F., The new Realities, Cox and Wyman ltd, Great Britain (1989), page 214
Organizational Theory, as a discipline of studying and managing organizations, has begun with the revelation of the Bible as one eminent scholar assumes\textsuperscript{10}. The author goes on to summarize the development of organizational theories and identify the early contributors into the field of Organizational Theory. He classified the theorists into four schools of thoughts. 1\textsuperscript{st} the classical schools that viewed organizations as closed systems created to achieve goals in an efficient manner. This school represented by Frerick Talyor and his scientific management principles, and Henri Fayol and the principles of organizations, and it argues that its theory is applicable for all situations which posed server critique on the theory due to this statement. 2\textsuperscript{nd} The human relations school emphasizes the social nature of organizations as they are made up of tasks and people. This school is represented by Elton Mayo and the Hawthorne Studies, and Douglas McGregor and his famous theories X and Y. 3\textsuperscript{rd}, the contingency approach school which argues that there is no one best way to manage and as a result came up with the “Principles Backlash” by Herbert Simon, and the “Environmental Perspective” by Katz and Kahn. The 4\textsuperscript{th} school focused on the political nature of organizations which put some limits to the decision making due to conflicting forces within the organization. This school is lead by March and Simons’s “Cognitive Limits to Rationality” and Pfeffer’s “organizations as Political Arenas”.

Daft\textsuperscript{11} defines organizational theory as “a macro examination of organizations because it analyses the whole organization as a unit”. He describes Organization Theory as the sociology of organizations while organization behavior is the psychology of organizations. The first deals with groups and the later deals with individuals.

During the late 1950s and 1960s, the field of organizational Psychology began to differentiate itself from Industrial Psychology with a growing emphasis on work groups, patterns of norms and beliefs that cut across different groups. As the need to understand organizational and inter-organizational relationships grew, concepts from Anthropology, and Sociology began to influence the field\textsuperscript{12}.

Some authors like Peters and Waterman\textsuperscript{13} argue that managers will discover powerful tools to enhance organizational efficiency if they pay more attention to the values, norms, beliefs and ideals of their human resources.

There is an agreement, among the field writers, and as seen from the literature review on organization culture that the year 1982 has witnessed the popularity of the concept of organization culture as we deal with it today. This was largely due to the commercial success of a number of bestsellers books that spoke of culture under various guises, namely \textit{Theory Z}, (Ouchi, 1981), \textit{In Search of Excellence} (Peters & Waterman, 1982), and \textit{Corporate Cultures} (Deal & Kennedy, 1982, Pascale and Athos’s (1982), the Art of

\begin{flushright}
\textsuperscript{11} Op. cit, page 26 \\
\textsuperscript{12} Schein, E. “Organizational Culture”, \textit{American Psychologist}, Vol. 45, No. 2,(1990 ), page 109 \\
\end{flushright}
Japanese Management: Application for American Executives. These four seminal books suggested that a deeper, more complex anthropological approach was necessary to understand crucial but largely invisible aspects of organizational life. This strong turn to organizational culture brought new insights and thinking into the role, importance, and characteristics of organizations as perceived from a cultural viewpoint, Ouchi and Wilkins.\textsuperscript{14}

In Theory Z, Ouchi,\textsuperscript{15} focuses on the Japanese way of management and proposes that involved workers are the key to improved or increased productivity. His work brought about the quality circles movement which prevailed in the 1980s and 1990s. Peters and Waterman\textsuperscript{16} assert that besides the involvement of the workers, the system within which employees work is also of great importance. This was supported by a research study of 1300 major American organizations and the conclusion was that the dominant theme of American management practice will need to change or transform organizational culture more towards participative organization that pay much attention to employee needs as a major corporate strategy.

Later in 1995, Denison and Mishra\textsuperscript{17} highlighted two approaches to organizational culture research. The phenomenological approach focuses on the emergent of culture as a phenomenal nature of organization. This means that business organizations, like

\begin{flushright}
\textsuperscript{14} Ouchi, William, G, and Wilkins, Allan L “Organizational Culture”, \textit{Annual Review Sociology}, Vol. 11,(1981), page 460
\textsuperscript{16} Op.cit, page 72
\textsuperscript{17} Denison, Daniel, R and Mishra, Aneil K. “Toward a Theory of Organizational Culture and Effectiveness”. \textit{Organization Science}, Vol. 6, No. 2,(1995), pages 204-205
\end{flushright}
living beings, develop, over time, the kind of rules, rituals that suits their situation and mind. The 2\textsuperscript{nd} approach however, is the functionalist approach, which emphasizes the predictable impacts of organizational culture on business organizations.

2.1.1 Definitions and concepts of Organizational Culture:

Not long ago, the term “organizational Culture” was confined to some intangible rituals of an organization such as policy manuals that contain guidelines on issues like dress codes, working hours, discipline and the like. Leaders, who normally have great impact in shaping the culture of an organization, have only recently discovered the importance and power that the organizational culture carries. These leaders or founders contributed a lot to their organizational cultures by being the heroes who continuously tell stories about their organizations, which then became not only folklores, but a social fabric that bond employees together\textsuperscript{18}

Organizational culture studies have been characterized by being more heterogeneous than homogenous. This is due to the fact that this new field has emerged as a result of a merger of so many fields of study like anthropology, sociology, industrial psychology, and lately management, just to name a few. And as a result, there is no one single dominant discipline, but rather a mixture of approaches each trying to depict and analyze organizational culture through its own lenses.\textsuperscript{19}

\textsuperscript{19} Op.cit, page 459
By 1952, Kroeber and Khuckohn, as cited by Ott\textsuperscript{20}, have identified 164 definitions of organization culture and today there are certainly even more definitions of organizational culture than they were at that time. It seems, from the literature review the word “culture” has many meanings and connotations, and when combined with the word “organization”, we are just inviting more confusion to the term. According to Schein\textsuperscript{21}, “Organizational Culture develops over time when a group of people have shared experiences and history long enough to form a common understanding to deal with its internal integration and external adaptation, and as such there may not be a dominant and overwhelming culture, but instead there will always be subcultures that develop over different times within one organization and can even be conflicting with each other”. The same source, however, suggests that “any definable group with a shared history can thus have a culture, and therefore, there may be subcultures within an organization. Although there may be tendency for integration and consistency, but sometimes, subculture may be independent or even conflicting with one another”\textsuperscript{22}.

As seen from the literature, organizational culture has been viewed differently by different scholars, and there isn’t one single approach on how they look at it, let alone a unified definition that one may conclude with, but one can briefly go over the most commonly cited definitions by well known scholars in the field of organizational culture.

\textsuperscript{20} Ott, J Steven, \textit{The Organizational Culture Perspective}, The Dorsey Press, Chicago, (1989), page 51
\textsuperscript{21} Op. cit, page 111
\textsuperscript{22} Ibid, page 111
To many, Pettigrew was the first writer who formally used the term “organizational culture”. Pettigrew\textsuperscript{23} defined culture as “Culture is the system of such publicly and collectively accepted meanings operating for a given group at a given time”.

Hofestede, as cited by Shili\textsuperscript{24} who is considered as the father of national culture, defines organizational culture as “the collective programming of the mind which distinguishes the members of one human group from another”.

One of the most commonly cited and used definition of culture is that of Schein\textsuperscript{25} in which he states that organizational culture is “a pattern of basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptations and internal integration, and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems”.

Denison\textsuperscript{26} emphasis that organizational culture, “refers to the underlying values, beliefs and principles that serve as a basis for an organization’s management system as the set of management practices and behaviors that both exemplify and reinforce these basic principles”.

\textsuperscript{23} Andrew M. Pettigrew. “On Studying Organizational Cultures”, \textit{Administrative Science Quarterly}, Vol. 24, No. 4, (1979), page 574
\textsuperscript{25} Schein, Edger, H., \textit{Organizational Culture and leadership}. John Wiley & Sons, Inc. San Francisco, (2010), page 18
\textsuperscript{26} Denison, D.R. . \textit{Corporate culture and organizational effectiveness}. John Wiley and Sons, New York,(1990), page 2
According to Mats\textsuperscript{27}, another famous writer in the field sees culture as an encompassing idea and a way of thinking that indicates certain direction of an organization rather than describing a reality for possible study. He defines culture as “shared orientation to social reality created through the negotiation of meaning and the use of symbolism in social interaction”. The author goes on to explain that some writers emphasize materiality and social structure as basis of their view of organization culture, and accordingly they take a different path on their definition of organization culture. According to this view, culture is understood to be “a system of common symbols and meanings, not the totality of a group’s way of life. It provides the shared rules governing cognitive and affective aspects of membership in an organization and the means whereby they are shaped and expressed”.

It is clear that most contemporary definitions of culture embrace one or more elements of what Pettigrew\textsuperscript{28} describes as a family of concepts. Prominent components to Pettigrew’s family of concepts include” values, beliefs, assumptions, myths, rituals and symbols” which organizational members share in common and which guide their everyday survival.

In conclusion, the above definitions highlight many perspectives or approaches to organizational culture, but they look similar and emphasis more or less certain set of expressions that are not far from each other. This shows the importance of

\textsuperscript{27} Mats Alvesson, in Neal M. Ashkanasy, Celeste P M Wilderom, Mark F. Peterson, The Handbook of Organizational Culture and Climate, 2\textsuperscript{nd} edition, Sage Publications, California (2011), page 14

\textsuperscript{28} Op.cit, page 547
organizational culture and the significance of the role it plays in today’s business organizations.

2.1.2 Importance and Functions of Organizational Culture:

Review of the current literature on organizational culture clearly indicates its growing popularity as a result of the importance that both scholars and practitioners place on the essential role it plays. Schein \(^{29}\) suggests that organizational culture is even more important today than any time before for a number of reasons. First, the increased competition, globalization, mergers, acquisitions, alliances, and various workforce developments will need a greater attention to what bonds people of different backgrounds together and direct them toward as common goal. Second, there is a continuous need to integrate group efforts across organizational units in order to improve and enhance efficiency, quality and speed of designing, manufacturing, and delivering products and services. Third, product, process and strategy innovations would require shared values in order to implement them, especially so when introducing new product or technology. Fourth, culture is an essential factor in facilitating communication and support of teamwork.

Eric and Yvonne \(^{30}\) argue that “organizational culture plays greater role in adapting the external and internal changes because for a number of corporations, as intellectual assets, as opposed to material assets, which constitutes the main source of value to the


organization. Therefore, maximizing the value of employees, as intellectual assets, requires a culture that promotes their intellectual participation and facilitates both individual and organizational learning, new knowledge creation and application, and the willingness to acquire and share knowledge among organizational members”.

Deal and Kennedy\(^{31}\) argue that culture “is the single most important factor accounting for success or failure of organizations. This is because organizational culture has some essential features that contribute to this”. To justify their view, they provide a number of reasons. First, successful companies have values or beliefs that lie at the heart of the corporate culture. Second, there are Heroes – the people who embody values and make them walk within the organization. A third feature is that there are rites and rituals; these are the routines of interaction that have strong symbolic qualities where people normally will follow without questioning. Finally, the culture network factor plays a great role as an informal communication system, or the hidden hierarchy of power in the organization, in holding members of the organization together.

Confirming the above significance of the role that the organizational culture assumes in organizations, Peters and Waterman\(^{32}\) assert that there a psychological link between organizational culture and business performance. Culture can be looked at as a reward of work; employees sacrifice a lot to the organization and culture is a form of a vehicle that carries and materializes the reward for them.

\(^{31}\) Deal, T., & Kennedy, A., *Corporate cultures*. Basic books, New York,(2000), page 13

\(^{32}\) Op.cit, page 14
Researchers like Schein\textsuperscript{33} emphasize “that organizational culture does matter as day to day business decisions need to take into consideration the operative cultural forces in order to avoid unanticipated and unwanted consequences”. He further asserts “that when cultural factors taken seriously, some results could have been properly predicted and negative results probably prevented”. However, some authors such as Sathe\textsuperscript{34} think that an organization’s culture can also be a liability. This is, according to him, because shared beliefs, values and assumptions can interfere with the needs of the business and lead people to think and act inappropriately.

Organizational culture, as a shared values and beliefs, have been proven by many researchers that it does affect organizations in different ways. Linda\textsuperscript{35} pointed out several important roles that organizational culture may play in organizations; these can be summarized as follows:

- It conveys sense of identity. Organizational culture carries and symbolizes the image and the brand of an organization that make its members proud to be identified with it;
- It facilitates commitments by providing a feeling of attachment and being part of something large than the self. A common purposes, a mission etc;
- It promotes social system stability by enforcing and reflecting how positive is the work environment as perceived by employees;

\textsuperscript{34} Sathe, V. . \textit{Culture and related corporate realities}, Homewood, IL: Irwin, (1985), page 21
- It shapes and guides employee behavior by helping them to make sense of their surroundings.

According to Karl 36, organizational culture creates a homogeneous set of assumptions about decision making which make compliance with the rules and standards far more easy. It also helps to shape employees behavior in cases of emergency and when there are no precedents to follow.

Charles Handy 37 adds more functions to the organizational culture which only indicates how powerful it is. First, the organizational culture defines the boundaries between one organization and others. Culture to an organization is like a character to a person. No two organizations are the same. Second, Culture serves as a control mechanism by guiding and shaping employees behavior and thus helps them to sort out what works here and what is not. Third, Culture as liability is hard to change over a short period of time, and therefore, it may creates barriers to organizational change, diversity, acquisitions and mergers.

To reinforce the above roles of organizational culture, Antony 38 asserts that organizational culture affects attitudes, labor turnover, and the quality of services provided. Also Culture is a significant factor in determining the successful adoption of new ways of doing things, like technology.

Most importantly according to Steve and Ron\textsuperscript{39}, the organizational culture might play a negative role, and be a liability when it is not in congruence with what required improving organizational performance. As such it is going to hinder, not help, the organization to easily adapt to changes that are, sometimes is dictated on it.

Literature review shows, with confidence and evidence, that organizational culture is an important theme and phenomena that needs to be taken serious in order for organizations to reap its benefits.

2.1.3 Models and Typologies of Organizational Culture:

What organizational cultures are made of or what makes them is an arguable concept. Organizational culture and its perceived role in the success or failure in organizations depend largely on the discipline a researcher or a writer is using. Scientists of major disciplines look at culture from their own perspectives, and thus reach different models of organizational culture\textsuperscript{40}.

According to Daniel Dauber et al\textsuperscript{41}, organizational culture has been subjected, for some decades to research from different disciplines, and there were many models and typologies that addressed it. A revision of the current literature shows three main categories of research. 1\textsuperscript{st} the dimensional approach which tries to assess

\textsuperscript{39} Steve Simpson Ron Cacioppe, “Unwritten ground rules” Transforming organizational culture to achieve key business objectives and outstanding customer service”, \textit{leadership & Organizational Development Journal}: Vol. 22, No. 8, (2001), page 396

\textsuperscript{40} Lesley Willcoxson & Bruce Millet, “The Management of Organizational Culture”, \textit{Australian Journal of Management & Organizational Behavior}, Vol. 3, No. 2, page 97

\textsuperscript{41} Daniel Dauber, Gerhard Fink and Maurice Yolles. “A configuration Model of Organizational Culture”. \textit{Sage open”}: downloaded from sgo.sagepub.com, May 20,2013
organizational culture along some scales in order to define their relationship, $2^{nd}$ is the interrelated structure approach which tries to relate the concept of organizational culture to other organizational characteristics, ie. Structure, strategy etc,. According to the same source, this type of research is often the theoretical base for empirical studies, and it is the most useful for organizational studies. Finally, the typology approach which tries to group organizational cultures into predefined sets without necessarily show the relationship between each cluster and another.

The following pages focus on some of the most cited models and types of organizational culture.

Models of organizational culture are plenty in the literature and they attempt to diagnose and describe organizational culture for better understanding and conceptualization of its definition and components. Therefore, only three prominent models of organizational culture, namely Schein three level models, Denison Organizational Culture Model, and finally Competing Values Framework (CVF), will be explored in more details to gain better understanding of how the phenomenon of the organizational culture has been conceptualized by different famous scholars in the field. More focus will be placed on the Competing Values Framework (CVF) as it will be the model the researcher will use for the purpose of this research.
According to Hatch\textsuperscript{42}, some researchers argue that these models oversimplify a complex concept, but she admitted that, these models also help in conceptualizing this phenomenon and give guidelines to future researches on the topic.

1. Shein’s Three layer Organizational Model:

Schein\textsuperscript{43}, as reflected in figure 2.1, proposed one of the most cited models in the organizational culture literature. He identified and differentiated between three elements of culture by treating basic assumptions as the essence or the core of the culture, and values and artifacts are observed manifestations of the cultural essence. He also argues that these levels depend on each other in a sequence, the basic assumptions, the values and then the behaviors. The following table shows or depicts Schein’s model.

\textsuperscript{42} Hatch, Mary Jo, “The Dynamics of Organizational Culture” \textit{The Academy of Management Review}, Vol. 18, No. 4, (1993), pages 678-679
\textsuperscript{43} Schein, Edgar, H. “Coming to a New Awareness of Organizational Culture”, \textit{Sloan Management Review}, Vol. 25, No. 2,(1984), page 3
Figure 2: Schein’s Model of Organizational Culture:

<table>
<thead>
<tr>
<th>Artifacts:</th>
<th>Values:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Technology</td>
<td>• Visible but not decipherable</td>
</tr>
<tr>
<td>• Art</td>
<td></td>
</tr>
<tr>
<td>• Visible and Audible Behavior Pattern</td>
<td>• Greater level of awareness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basic Assumptions:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Relationship to environment.</td>
<td>• Taken for granted</td>
</tr>
<tr>
<td>• Nature of reality, time and space.</td>
<td>• Invisible</td>
</tr>
<tr>
<td>• Nature of human nature</td>
<td>• Preconscious</td>
</tr>
<tr>
<td>• Nature of human activity</td>
<td></td>
</tr>
<tr>
<td>• Nature of human relationships</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from, Shein, E, “Coming to a New Awareness of Organizational Culture” Sloan Management Review, Vol. 25, No. 2,(1984), page 4

Schein, in the above model distinguishes between the three layers in order to avoid conceptual confusion. The three layers will be discussed in more details in the following pages.
Layer 1: Artifacts.

Du Toit\textsuperscript{44}, explains that artifacts are visible, obvious expressions and manifestations of culture. They consist of its constructed physical and social environment. They are tangible and audible demonstrations of behavior supported by organizational norms, values and assumptions. They range from aspects such as architecture, office design, language, rituals and celebrations. At this level researchers, when examining organizational culture, might focus on physical space, the technological output, written and spoken language, artistic productions and overt behavior of the group. Confirming the same, Rozalia\textsuperscript{45} argues that Schein model is an intuitive one as it pictures organizations as icebergs, and it depicts artifacts as the elements that appear on the surface, like dress, furniture, technology, buildings but at the same time are not easy to interpret or understand and by themselves they do not mean much to the outside observer.

Level 2: Values.

Values, according to Michelle et al\textsuperscript{46} are conscious and explicitly articulated and form the bases and guiding principles to govern people or group behavior. Also, value indicates what employees of an organization see as right or wrong or what one can do


\textsuperscript{45} Rozalia klara Bako. “Organizational Discourses As Status And Symbols”, Act universitatis Sapienntiae, Philolgica, 2, (2010), page 154

and one cannot do. In the same line of thought, Stanford\textsuperscript{47}, posits “that the set of values to employee are like constitutions to countries. When values are well communicated through the company mission, vision, annual reports, and presentations, they then form the way that staff should conduct”.

Du Toit\textsuperscript{48}, states that “norms relate to values in that they indicate what the expectations are amongst the staff of the organization while norms set the unwritten or unspoken rules that govern the actions relevant to certain situations”.

According to Esra et al\textsuperscript{49} values are seen by the organization member as guide-lines or maps that explicitly or implicitly that guide people behavior towards a desirable outcome that influence individuals to act in a certain way”.

From the researcher experience, values and norms are essential in building informal structure that sometimes may conflict with the formal structure of the organization. Informal structures identify who are the heroes here to refer and revert to them in certain occasions. Heroes in the informal structure, made by the values and norms of the organizations, and are normally consulted in how to interact with the formal structure. This researcher suggests that values and rituals are the platforms where the artifacts operate, and where the basic assumptions, and beliefs, which are the software of the mind, are made or imported.

\textsuperscript{47} Naom Standford, Organization culture, Profile books ltd, London, (2010), page 56  
\textsuperscript{48} Op.cit, page 78  
Level 3: Basic Underlying Assumptions and Beliefs.

Schein\(^{50}\), argues that “values at level 2 are hard to see directly, and in order to make sense of them, one might need to interview some staff to attach some meaning to those values. Basic underlying assumptions are the real reasons for the explicit behavior one can see and feel”. He goes on to say that “underlying assumptions are unconscious and taken for granted and they do shape or determine how the group members perceive, think and feel. Basic assumptions are learned and they are formed by the espoused values once they start work in solving the group problems, they turn into unquestioned assumptions”.

One of Schein’s\(^{51}\) key assertions is that the changes in culture flow from the higher to the lower levels, with the “basic underlying assumptions’ being the highest level. In Schein’s model, the higher levels drive the lower levels and introducing change at a higher level can bring transformative change throughout all the lower levels, Hatch\(^{52}\).

Schein\(^{53}\), in his book, Corporate Culture Survival Guide, gave a more clear understanding and illustration of the basic underlying assumptions which he called “the shared Tacit Assumptions”. To him, “tacit assumptions are a product of the history of the founders who made the company and during time, they have imposed their own beliefs on how do they want the company to run and look like. New comers take it for granted and do

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\(^{50}\) Op.cit, page 3
\(^{51}\) Ibid, page 679
\(^{53}\) Ibid, page 19
not question these assumptions as they become so inculcated into the mind of the current staff”.

The researcher, from his experience, does confirm the above idea of Schein. In the company where he works now, the founders have made solid basic assumptions that were not easily breakable. Assumptions like promotions according to numbers of years one stays on the job, a guaranteed end of year bonus regardless of the Company performance and similar ones were not taken into consideration when a transformation program was implemented, as a result, the program was seen by many as a failure, both on morale and production levels.

2. Denison Model of Organizational Culture

According to Cengiz Yilmaz et al\(^\text{54}\) Denison’s “Organizational Culture Model tries to clarify the relationship between an organization’s culture and one of its most essential outcomes“ effectiveness”. Unlike Schein’s model, it builds more on surface-level values and the organizational practices associated with them. As shown in figure 2.2 below, Denison and Mishra\(^\text{55}\) identified four organizational traits that may facilitate or inhibit organizational performance.

\(^{54}\) Cengiz Yilmaz and Ercan Ergun “Organizational culture and firm effectiveness: an examination of relative effects of culture traits and the balanced culture hypothesis in an emerging economy”, *Journal of World Business*, Vol. 43 (2008), pages 292

\(^{55}\) Op.cit, page 212-216
The four organizational traits illustrated above are briefly described below:

- **Involvement:**
  This trait consists of building human capabilities, ownership and responsibilities. Organizational cultures characterized as highly involved strongly encourage employee involvement and create a sense of ownership and responsibility. They depend more on...
informal, voluntary and more implied control systems rather than formal, explicit, bureaucratic control systems.

- **Consistency:**
  This trait provides a central source of integration, coordination and control. Organizations that are consistent normally develop a mind set of management systems that support internal system of governance based on mutual understanding by organizational members. These types of organizations have shared values, among their members, that prevent deviation from what the group used to do.

- **Adaptability:**
  Adaptability is the power of quickly, and adequately receiving, interpreting and acting upon signals coming from the business environment. Organizations that are characterized as highly adaptable, normally share strong norms and beliefs which identifies and recognize what is happening in their environment and how the organization should deal with them in order to survive.

- **Mission:**
  Mission trait is vital for organizations as it defines a long term direction for the organization by articulating its business and social goals. The mission defines a clear direction in order to have a clear course of action for the organization and its members. As shown in figure 2.2 above, the four traits are quite integrated. Consistency and involvement deal with the internal issues facing the organization, while mission and adaptability traits address external matters that the organization may need to confront. Reading the same figure from different angle, the model can be divided into horizontal
and vertical pairs. Horizontally, the adaptability and mission traits focus on the relationship between the organization and its external environment while the involvement and consistency focus on the relationship between the organization and its internal dynamics. Vertically, the model can be divided in another way. Mission and consistency traits focus on the stability and direction of the organization, while the adaptability and involvement focus on the organizational readiness for flexibility and change.

3. Competing Values Framework (CVF)

The Competing Values Framework (CVF) has been cited by several writers as one of the most used and extensively researched model in the organizational culture literature. This is attributed to its comprehensiveness and practicality as a tool to measure and indicate different organizational outcomes, i.e. organizational change, and development\textsuperscript{56}.

According to Tianyuan et al\textsuperscript{57}, the Competing Values Framework has initially been developed to identify factors affecting organizational effectiveness, but the model later proved to be more useful in integrating most of the organizational culture dimensions. This view is also held by D Kokt and CA van der Mersi\textsuperscript{58} as they argue that “the Competing Values Framework links the political, strategic and other organizational outcomes based on the idea of the shared values, and the assumptions and

\textsuperscript{56}Igo, Ton and Skitmore, Martin, “Diagnosing the Organizational culture of an Australian Engineering Consultancy using the Competing Values Framework”, \textit{Construction Innovation Vol. 6, No. 2}, (2006), page 6
\textsuperscript{58}D Kokt and CA van der Merwe. “Using the Competing Values Framework (CVF) to Investigate Organizational Culture in a Major Private Security Company” \textit{SAJEMS NS 12, No.3} (2009), pages 343-347
interpretations that depict the culture of an organization”. They further explain that “the Competing Values Framework is one of a few models that allow the comparison of different organizational cultures, and this is why it has been acclaimed to be one of the most 40 influential models in the history of business management”.

Judy et al\(^5\) explains that the name of the Framework indicates that it treats different contrasting and contradicting values that may be found in any one organization. For example, the organization would need to be flexible in order to be able to adapt to its external environment, but at the same time, it is required to be stable and controlled.

According to Scott et al\(^6\), the Competing Values Framework has four quadrants, which have been given different names and labels by different writers, including the developers themselves. Quinn and Rohrborough, the developers, originally called the quadrants like, the human relations model, the open system model, the internal process model, and the rational goal model. Denison and Spreitzer\(^6\), gave them different names like the group culture, the developmental, the hierarchal, and the rational cultures.

Also, according to Denison and Spreitzer\(^6\), Quinn and Cameron later labeled them as the clan, the adhocracy, the hierarchal and the market as figure 2 illustrates. The latter labeling is the most cited in the literature, and this is what the researcher will use for the purpose of this research.

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\(^6\) Ibid, page 1
Figure 4: The Competing Values Framework

Clan Culture

Cultural Values: Cohesion, moral, HRM
Leader type: Facilitator, Mentor, parent

Adhocracy Culture

Cultural Values: Creativity, Growth, cutting-edge output
Leader type: Innovator, entrepreneur, visionary

Hierarch Culture

Cultural Values: Efficiency, timeliness, smooth functioning
Leader type: Coordinator

Market Culture

Cultural Values: Market share, goal achievement, beating competitors
Leader type: Hard-driver

Control


(*) Adhocracy in this context is a kind of a culture that may prevail in an organization with certain characteristics.
The above figure provides a conceptual representation of the organizational culture according to two notable dimensions: internal/external focus and stability and flexibility structures, where each of the quadrants falls in one of the two dimensions with specific characteristics and leadership styles appropriate to the prevailing or dominant cultural type, whether it is a clan, adhocracy, Hierarchal or market type of culture.

The figure above is composed of four quadrants each describing a specific cultural type. According to Kokt and Merwi⁶³, “what makes this model unique is that it contains subcultures and it argues that that there is no single culture in any one organization, rather on the contrary that there are always different cultures living together, but there may be a dominant one. These different cultures compete to achieve different stakeholder’s objectives”. The same authors further postulate that “the model provides three different values in order to assess different cultures. 1ˢᵗ, it offers a descriptive content of organizational culture, and 2ⁿᵈ, it defines certain organizational dimensions that help evaluating and comparing the difference/or similarity of organizational cultures, and finally, it suggests tools and techniques to analysis culture in organizations”⁶⁴.

Now each of the four quadrants, namely, Clan, Adhocracy, Hierarchy, and Market will be briefly described in the coming pages. According to Denison et al⁶⁵, the four quadrants are:

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⁶³ Op.cit, page 344
⁶⁴ Ibid, page 5
⁶⁵ Op.cit, page 18
• Clan Culture:

This type of culture occupies the upper left corner of the model. It has an internal dimension, and inclined more towards the development of the human resources. This is why it is called, according to some writers, the Human Resources Model, as it represents the Human Relations School of management thought. In this type of culture, values like group maintenance, belongingness, teamwork are normally dominant. Leaders of this type of culture tend to be more participative, considerate, and supportive and encourage integration and communication through teamwork. In such culture, decisions tend to be made through consensus, as much as this is possible.

Kokt\textsuperscript{66}, elaborates more on this type of culture by describing it as family type business culture, and it represents the Japanese paternalistic style of management spread in the 60s and the 70s, and to him, “this type of culture is more like an extended families than an economic set up”.

• Adhocracy Culture:

As shown in the figure, this culture lies in the upper right quadrant of the model. According to Denison et al\textsuperscript{67}, “the inclination of this kind of culture is outwards towards flexibility and change with a clear focus on the external environment. This type of culture nurtures values such as growth, resources acquisition, and creativity while giving considerable attention to the outside world. Leaders appropriate to this kind of cultural type need to be visionary, entrepreneurship and risk-takers”.

\textsuperscript{66} Op.cit, page 346
\textsuperscript{67} Op.cit, page 6
Judy\textsuperscript{68}, explains more by asserting that “members in this type of culture are normally bonded together through challenge, inspiration and delivery”. Tianyuan et al\textsuperscript{69} argues “that this type of culture is most of the time temporary and is changed whenever the task is over, but it can be used again if the need arises”. They go on to add that this culture type is normally dominant in fast paced industries like, the space, the software development and the film making, and the consulting firms and their likes.

- Hierarchy culture:

This culture is situated in the lower left quadrant of the figure model. This type of culture is more inward focused and it promotes values like conformity, efficiency, coordination. Organizations dominated by this type of culture normally pay much attention to issues like execution of rules, policies and regulations. The purpose is centered on system stability, maintenance, and tight internal control, and members are bonded together by insuring job security, order, written rules and regulations. Leaders of this type of culture are conservative; details oriented, and consider technical business issues are of high importance to them, as Denison and Spreitzer\textsuperscript{70} demonstrate.

Esra et al\textsuperscript{71}, posit that organizations where this culture is dominant are characterized by clear organization structures, job descriptions and policy manuals. Success on this cultural type is largely dependent on conformity to rules and how the employee

\textsuperscript{68} Op.cit, page 5
\textsuperscript{69} Op.cit, page 595
\textsuperscript{70} Op.cit, page 5
\textsuperscript{71} Op.cit, page 1563
performs his job according to the established policy manuals without breaking the system.

- Market Culture:

According to Denison and Spreitzer\textsuperscript{72}, this culture lies at the lower right quadrants of the figure model and is more outwards culture that emphasizes values like growth, goal fulfillment, achievement, productivity and company overall performance. Leadership style where the market culture is dominant needs to be directive, goal oriented, and instrumental in guiding the company to its desired strategic goals. Kokt and CA van der Merwi\textsuperscript{73}, argues that this culture is externally oriented, and places much focus on positioning the organization within its outside market like suppliers, competitors, customers, and the kind of challenges that might face the organization from its external environment. The major area of concentration and concern is the economic transaction that the organization carries or performs with the external forces. Also considerable attention is being paid to planning, goal setting, productivity, and efficiency.

\textsuperscript{72} Op.cit, page 5
\textsuperscript{73} Op.cit, page 364
2.1.4 Measuring and Assessing Organization Culture:

Measuring organizational culture would first require an agreement or a consensus on what makes it. What are the components that when put together one will see or feel a culture? A quick survey of the current organizational culture literature result in an array of different views as an answer to the question, what makes a culture? Deal and Kennedy, as cited by Edwin\textsuperscript{74}, proposed 5 dimensions for organizational culture, while some prominent scholars in the field like Hofestede et al\textsuperscript{75}, provide six organizational cultural dimensions that would need to be measured. Hofestede himself started his organizational culture dimensions by four, and then 5 and lately six dimensions. This clearly shows that there is no one single approach to follow in order to describe organizational culture.

Thoughts and instruments on what to measure in organizational culture have taken two paths, and consequently each of the many instruments available is using one of the two approaches. The two approaches are the Typological and the Dimensional. The Typological approach normally classify organizational culture into groups or a predefined sets, while the dimensional approach try to link and relate parts of the organizational elements to one another. There are many instruments for each of the two approaches, each instrument services different objectives.

\textsuperscript{74} Op.cit, page 208
According to Tobias et al.\textsuperscript{76}, using one instrument depends largely on the purpose. For example, typological instruments try to explain or interpret organizational culture as an end in itself, while dimensional ones try to assess culture to measure organizational outcomes like job satisfaction, organizational performance in order to effect some change that is required to align organizational culture with its strategic goals.

Measuring organizational culture, has always been confronted by the question “why measure culture”? Schein\textsuperscript{77}, tried to give some answers to this compelling question. He explains that by measuring their culture, organizations will know whether the current culture is in line with the intended goals. This exercise helps define or pinpoint the gaps that exist between the current prevailing culture and the desired one, and thus organizations leaders will think, according to the results of the gap analyses, of the appropriate interventions to enhance their organizational capabilities necessary for its survival and growth. Normally, organizations carry out certain organizational culture analyses when, for example, introducing transformational programs like a new technology, a merger or acquisition for better internal integration and or external adaptation to their business environment.

In the previous paragraphs, the researcher has tried to derive answers from different scholars to the question what and why shall we care about measuring or assessing organizational culture, but it may equally be important to ask how organizational culture is measured?


\textsuperscript{77} Op.cit, page 301
When reviewing the literature on how to measure organizational culture, one will be surprised by the number of instruments available. Tobias et al\textsuperscript{78} have identified 70 available instruments. In this review, only three of the most cited ones will be briefly explained. These are, the Denison organizational culture survey/or scale, which is built on the Denison Organizational Culture Model discussed earlier, and the Organizational Culture Inventory which is one of the most globally used instruments, finally the Organizational Culture Assessment Instrument, which is based on the Competing values Framework also explained earlier being the model that will be used in this research.

Each of the three instruments has an official website that gives and updated information about its instrument. These websites will be cited as a reliable source of information and as confirmed by the opinions of prominent writers in the field.

Denison consulting is the owner of the Denison Organizational Culture survey or scale as it is sometimes called. According to the website\textsuperscript{79}, this instrument has been developed by Professor Daniel Denison 20 years back and ever since it has been popular and used by as many as 5000 organizations worldwide to assess the effectiveness of their organizational culture. The website gives further reasons for the benefits that their clients have gained. These include benchmarking against world class organizations using the database of the developers in order to enhance the best practices their field or industry. The Denison Organizational Culture Survey has 60 items that evaluate specific

\textsuperscript{78} Op.cit, page 1089
\textsuperscript{79} \url{www.denisonconsulting.com}, retrieved, June 26, 2013
cultural dimensions in each of the four traits of the Denison Model, mission, consistency, involvement, and adaptability.

According to the Human Synergetic\(^80\), the owner of the Organizational Culture Inventory (OCI), this instrument has been developed 30 years back and has become one of the leading tools used to measure organizational cultures. Pierre et al\(^81\), asserts that the (OCI) is administered to serve purposes like initiating, directing and managing organizational change programs, facilitate mergers, acquisitions and strategic partnerships. Also it is helpful when transforming the culture of the highly performing units within the same organization, to lower performing units. The (OCI) measures 12 items and in 12 dimensions grouped into three organizational traits, constructive, passive-defensive, and aggressive-defensive.

The Organizational Culture Assessment Instrument (OCAI) has a website called “OCAI Online”, where the most recent information about it is published. According to the website\(^82\), this instrument is based on the Competing Values Framework Model (CVF) which has been described earlier. Ever since its inception, this instrument has been used by more than 10,000 organizations worldwide in different industries, whether in the public or private sectors. What distinguishes this instrument is that it argues that many cultures may exist within one organization, although culture may be dominant over others. The website goes to illustrate the usefulness of this instrument. 1\(^{st}\), it is helpful

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80 [www.humansynergetics.com](http://www.humansynergetics.com), retrieved June 27, 2013
82 [www.OCAI.com](http://www.OCAI.com), retrieved June 27, 2013
in shaping the overall organization culture and its distribution within the organization.  

2\textsuperscript{nd}, It is timely and focused as it measures only 6 dimensions that mostly contribute to organizational success, therefore, it facilitates the quick and easy implementation of change programs.  3\textsuperscript{rd}, it helps shaping both the current and the desired culture of the organization in the same exercise. It is a manageable Instrument as it is guided by step-by-step methodology, and finally it is involves all employees and as a result, it also measures other organizational outcome like employee satisfaction. Yun et al\textsuperscript{83}, confirms that the OCAI instrument is universal and is used across wide range of businesses. He also confirms that it uses 24 cultural items divided into four organizational culture types, the clan, the Adhocracy, the hierarchal and the market.

In order to execute any of the above Instruments, the DOCS, the OCI or the OCAI, one would need to apply a research methodology in order to explore organizational culture. This is an area where there is almost consensus among the field writers. According to Standford\textsuperscript{84}, these methodologies are the quantitative, qualitative or a mix of the two. The quantitative methodology normally uses questionnaires or surveys to tap the participants’ opinions or views on certain organizational culture dimensions, and as such is quick, cheap and easy to manage, but some writers like Hofestede argue that this type of surveys contain an element of bias. The other type, according to Stanford, is the quantitative methodology where methods like interviews; group discussions and focus groups are used to probe more into the organizational culture dimensions and this

\textsuperscript{84} Op.cit, page 29
reduces the researcher’s bias, but it is a slow, costly and time consuming, especially in large organizations.

To overcome the above limitations, Hofstedede\(^\text{85}\) advocates that organizational culture as complex phenomenon should not be left to any one methodology to handle it, and suggests a combination of qualitative, quantitative, a mix of the two methodologies.

2.2 **Job Satisfaction:**

Ishfag et al\(^\text{86}\), argue that the concept of job satisfaction was sparked by the studies of Taylor in the year 1911 in which he found that workers may be more motivated by factors like, incentive pay, promotions, recognition of good performance, and the availability of opportunities to advance their career. Taylor concluded in those studies that these factors do affect the morale and job satisfaction of the worker which in turn leads to increase of productivity, the ultimate objective of any organization. Taylor in his famous landmark book “Principles of Scientific Management” argued that there was only one way to perform a given task. This book has profoundly contributed to the change brought about in the industrial production practices of skilled labor and piecemeal work towards the more modern approach of assembly lines and hourly rate.

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85 Hofstede, G. Attitudes, “Values and Organizational Culture: Disentangling the Concepts” Organization Studies, Vol.19, No.3,(1998), page 479
According to Kumar and Singh\textsuperscript{87}, Hoppock was the first to introduce the term “job satisfaction” in the literature when he reviewed a number of studies relating to the subject of job satisfaction. From this review, Hoppock, observed that job satisfaction is a function of many variables like psychological, physiological and environmental factors. According to the same source, another contribution to the topic of the job satisfaction was the Hawthorne studies carried out between the years 1924-1933 by Elton Mayo of the Harvard Business School. These studies found the effects of various conditions, like illumination, on the productivity of workers. As a result, it has been noted that changes in the work conditions may increase or enhance productivity; this is called “Hawthorne Effect”. This finding strongly showed that workers have other purposes than just pay which paved the way for researchers to investigate those purposes/or factors affecting workers productivity.

Some scholars argue that the Maslow’s Hierarchy of Needs is the first theory that tried to answer the above question by laying down the foundation for job satisfaction. This theory, as will be explained later, argues that people seek to satisfy 5 specific needs in their life span, namely, physiological, safety, social, self-esteem and self-actualization needs. This theory was a land mark for other researchers to investigate workers needs and wants.

2.2.1 Importance and Factors Influencing Job Satisfaction:

Barbara et al\textsuperscript{88}, posits that in today’s competitive environment managers are compelled to take care of their employees in order to be competitive and remain so in the international markets. In doing so, companies realized that the concern for people comes first, and their job satisfaction is required to be positive as much as it can be.

Lack of job satisfaction causes many organizational problems. It may affect employee productivity and loyalty to the organization. Also, unsatisfied employees normally spend much of their time thinking of leaving the service of the company instead of thinking how to enhance the quality of their performance. Lack of job satisfaction is also seen as a sign of poor people management which might harm the reputation of the organization and reflects on its image and its ability to attract the kind of caliber required for its operation, Aziri\textsuperscript{89}

Jamie and Greg\textsuperscript{90}, indicates a social concern for job satisfaction as the work experience, whether positive or negative, will have deep social impact on the life of the individuals. Therefore, organizations are required, among other things, to cater for the social life of their employee. Confirming the importance of the job satisfaction in hospital, Marina et

\textsuperscript{88} Barbara Bigliardi, Alberto Ivo Dormio, Franscesco Galati, and Giovanni Schiuma, “The impact of organizational culture on the job satisfaction of knowledge workers” The international journal of information and knowledge management systems, Vol. 12, No. 1, (2012), pages 36-37
\textsuperscript{90} Jaime Cano, Greg Miller, “An Analysis of Job Satisfaction and Job Satisfier Factors Among Six Taxonomies of Agricultural Education Teachers”, Journal of Agricultural Education, (1992), page 9
al, postulate that hospital staff will not be in a position to fully meet the patient needs if their own needs are well taken care of, thus endangering patient lives at some points or at least serving them with the minimum degree of attention and care.

The number one reason for the importance of the job satisfaction as an area of study comes directly from the fact that it concerns people working in the organization. It is a known fact that an organization is nothing but the people working in it and they constitute its unbeatable competitive advantage. A happy worker is a productive worker, and as such most organizations are forced to make efforts to introduce ways and means that will add value to their staff, Shah et al.

On a different dimension, Mucahit, argue that job satisfaction is a vital factor in implementing the concept of total quality. Total Quality depends, among other things, on the commitment of both the employee, who does the job, and the management of the organization, therefore, a dissatisfied employee will hinder the process of improving quality in the organization.

According to Wadhwa et al, the importance of the job satisfaction has compelled both researchers and practitioners to look for factors and variables that contribute to the

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enhancement of the satisfaction of their employees. Job satisfaction is a personal feeling and what motivates one employee may not necessarily motivate another, as satisfaction to some writers, is the state of mind of the worker. Therefore, there are factors that relate to the employee and others that relate to the organization or the work itself. These are called internal and external variables. Internal factors are composed of things like feeling of independence, feeling of control, feeling of achievement, feeling of association and belonging, self-esteem, and other similar factors. External variables are those belong to the work itself or its environment such as relationship with colleagues, high salary, good benefits and services etc.

According to James et al\textsuperscript{95}, job satisfaction factors are as different as the organizations and the individuals in them. In order to judge on job satisfaction, researchers need to look at a number of characteristics that compose a job. To them, variables like pay, promotion, co-workers relations, company policy, supervision and customers are among the ones that should not be missed.

The famous Job Characteristics Model (JCM) developed by Hackman and Oldham in 1976, as cited by Timothy and Ryan\textsuperscript{96} argue that “jobs that contain intrinsically motivating characteristics lead to higher levels of job satisfaction”. This Model identified five core characteristics, these are:

\textsuperscript{96} Timothy A. Judge and Ryan Klinger, “Job Satisfaction: Subjective Wellbeing at Work”. \textit{Journal of Applied Psychology}, Vol. 90, page 399
1. Task Identity – the degree to which one can see his or her work from beginning to end;

2. Task significance – the degree to which one’s work is seen as important and significant;

3. Skill variety – the extent to which job allows one to do different tasks;

4. Autonomy – the degree to which one has control and discretion over how to conduct one’s job; and

5. Feedback – the degree to which the work itself provides feedback for how one is performing the job.

According to the model, jobs that contain the above elements are most likely to be motivating than others that do not.

The Society for Human Resources Management (SHRM), is the world’s largest association devoted to the Human Resources Management. It represents more 250,000 members in 140 countries, the Society serves the needs of the Human Resources professionals and advances the interests of the Human Resource profession. Founded in 1948, the Society has more than 575 chapters affiliated chapters in the United States, and some subsidiary offices around the world (www.shrm.com)\(^97\). The researcher is an old member of this organization.

This prestigious organization used to carry out an annual employee satisfaction survey for the last 10 years, the latest of them was in the year 2012. In this survey, jobs

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\(^97\) www.shrm.com
satisfaction factors have witnessed some fundamental changes that are attributed to social, economic changes or a change of the workplace itself. For example, in last year's survey, only two factors remained among the top five contributors when compared to those of 2002.

The Survey found the top five aspects of job that contribute most to the job satisfaction are:

1. Opportunities to use skills and abilities;
2. Job security;
3. Compensation and pay;
4. Communication between employees and senior management; and
5. Relationship with immediate supervisor.

As seen from the above, this survey does confirm that factors contributing to job satisfaction are changeable, from time to time, and from place to place and from gender to gender.

The results of the job satisfaction survey mean much to organizations, as job satisfaction is a major contributor to achievement of the company's overall objectives.

Having seen the historical development of the job satisfaction concept, its importance, and the many factors that make it happen, one would ask a simple question: what is job satisfaction?
2.2.2 Definition of Job Satisfaction:

There is quite a debate on the definition of the job satisfaction. Some writers see it as a feeling while other see it as a perception that have been formed due to the interaction of many different influences, organizational, environmental, situational, etc., while other researchers see it as a gap between a perceived and expected outcome, Stebbins.\(^98\)

Despite its wide spread usage in literature and everyday life of organizations, and among practitioners as well as academic circles, the term job satisfaction remains controversial like most of the organizational behavior terminologies. In the following pages, the most commonly cited definitions of the job satisfaction will be briefly described.

According to McCormick and Ilgen,\(^99\) job satisfaction is an attitude or a belief which describe a conscious state, and it is a “specific subset of attitudes held by organization members. It is the attitude they have toward their jobs. Stated another way, is is their affective response to their jobs”.

Aziri,\(^100\) argue that different researchers see job satisfaction from different angles, and therefore have different approaches to it. He defines job satisfaction as “Job satisfaction represents a feeling that appears as a result of the perception that the job

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\(^100\) Op. cit, page 77
enables the material and psychological needs”. To him, job satisfaction is an outcome of many facets that result in meeting the employee material and psychological needs or requirements.

According to the same source, Hoppock, defined job satisfaction as “any combination of psychological, physiological and environmental circumstances that cause a person truthfully to say I am satisfied with my job”. This definition implies that job satisfaction is a function of many aspects put together to generate a feeling of satisfaction toward one’s job.

Locke’s definition, as cited by Clark\textsuperscript{101}, has been regarded as classical reference for the meaning of job satisfaction as he connects the idea of workers wellbeing back to the idea of scientific management. He defines job satisfaction as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience”,

Spector, another famous scholar in the field, as cited by Olorunsola\textsuperscript{102} defines job satisfaction as “A cluster of evaluative feelings about the job”. He identified a number of job related factors that affects job satisfaction, such as “pay, promotion, supervision, benefits, contingent, rewards, and communication”.

\textsuperscript{101} Andrew E. Clark, “Job Satisfaction in Britain”, \textit{British Journal of Industrial Relations}, 34:2 (1996), pages 189-217

\textsuperscript{102} E. O. Olorunsola. “Job Satisfaction And Gender Factor Of Administrative Staff in South West Nigeria Universities” \textit{Contemporary Issues in Education Research}, Vol. 3, No. 10, (2010), pages 51-
One more definition of the concept of job satisfaction comes from Kalleberg\textsuperscript{103} who defines it as “An overall affective orientation on the part of the individuals toward work roles which they are presently occupying”.

The lack of consensus on the definition of job satisfaction is well articulated by Golembiewski\textsuperscript{104}, who argues that the issues with job satisfaction or motivation are not only the lack of a comprehensive definition, but also the need for having an umbrella concept or a theory that helps in understanding it.

2.2.3 Theories of Job Satisfaction

A review of the current literature on job satisfaction talks about two related and interchangeable concepts. These concepts are the job satisfaction and work motivation concepts. The researcher thought it would be better to clarify the relationship between the two concepts. This is important because in the literature, motivation theories are the job satisfaction theories.

Work motivation, as defined by Campbell and Pritchard, cited by Wanda\textsuperscript{105} is” a label for the choice to expend a certain amount of effort, and the choice to persist in expending effort over a period of time”, while job satisfaction, as defined Alberta\textsuperscript{106} is ” The result of various attitudes possessed by an employee towards his or her job”. To the

\textsuperscript{104} Giewonsiki
\textsuperscript{105} Wanda Roos, ” The Relationship Between Employee Motivation, Job Satisfaction, and Corporate Culture”, South Africa Journal of Industrial Psychology, Vol. 34, No. 1, page 55
\textsuperscript{106} Alberta Yaa Graham, “ A survey of job satisfaction of senior staff of the University of Cape Coast”, Prime Journal of Social Science, Vol 1, No. 2, (2012), page 12
researcher, motivation is seen as the drive that makes one choose a certain job while, satisfaction is the feeling of being happy doing that job, thus job satisfaction comes as a result of the choices one makes. Also, motivation theories try to identify the personal needs that are required to be fulfilled, and once they are, then job satisfaction happens to varying degrees. Therefore, these concepts are interlinked, as motivation is the effort to fulfill a need, and job satisfaction is how you feel filling that need.

Marina\textsuperscript{107}, gave a good clarification on how researchers approached the topic of motivation at the workplace. She argues that there are two prevailing streams, ones that is “top-down”, and the other is “bottom-up”.

The top-down approach is a management view point on what motivates an employee to perform well in his or her job, it is an imposed approach on the employee, and this school is well presented by Fredric Taylor (Taylorim), the “Economic man” which holds that people are lazy by nature, and they will only be motivated by money. This approach deals with the employee as an “object” that needs to be managed from the top neglecting the environmental conditions that surround him or her.

The bottom-up school of thoughts is more personalized and takes the employee himself as the “subject” of study and focuses on the behavior of the human at work from a more psychological view point in order to identify the satisfiers and dissatisfies. This school is well represented by Elton Mayo and the Hawthorne studies representing the

\begin{footnote}{Op.cit, pages 253-261}\end{footnote}
“humanistic” approach to the management of people. This approach is now leading the current and best practices of the management of the human resources in organizations.

Aslo, according to Saif et al\textsuperscript{108}, theories of job satisfaction are normally grouped into Content and Process theories. Process theories like, Behavior Modification, Cognitive Evaluation Theory, Goal Setting Theory as well as other similar theories, and Content theories like Maslow’s Needs Hierarchy, Herzberg’s Two Factor Theory, McGregor theory X & Y, and the like. Content Theories focus more on the identifying the needs and the drives of the staff and how are they being prioritized by the employee. Experts have acknowledged different types of needs like biological, psychological, and social ones and categorized them in levels such as primary, secondary, and high needs that require to be fulfilled in order to motivate an employee.

Following is a brief description of the three most widely cited ones in the field of job satisfaction and will be discussed according to their chronological appearance in the literature.

1. Maslow’s Hierarchy of Needs Theory – The Original 5-stages Model - (1943)

Maslow’s Hierarchy of Needs Theory founded 70 years back is still a dominant and one of the most popular theories of motivation in the management and organization behavior literature. The theory provided a conceptual framework to explain how human needs are organized in ascending order beginning with the most crucial, the

physiological needs, the being needs. He based his theory on the concept of deprivation, domination, gratification, and activation, which means that a needs will dominate when the person is deprived from it, and once it is relatively met, then it paves the way for the next higher one to appear and dominate, and so on, Wahba and Bridwell 109

According to Mcleod 110, the hierarchy of needs have once been called the theory of 5 stage or needs; the physiological, the safety, the belonging, self-esteem, and self-actualization, but in the year 1970 Maslow extended his theory to include three more needs, the cognitive, aesthetic, and the transcendence needs. This study focuses on the original 5 needs, as shown in the following figure.

Figure 5: Maslow’s Hierarchy of Needs


The beauty of Maslow’s theory is that it tried to describe the life of a human being like a journey starting by the basic and concrete needs to the most abstract and divine ones. This theory gives an interpretation for the life mission theory that argues “man has a huge and fundamental talent that can be realized both in private and professional life”, and the theory further argues than once we know what are our needs are, then it becomes own responsibility to fulfill them, thus having a plan of life based on this theory. Maslow believed that the happy person is the one who is able to fulfill the eight needs, but very few have succeeded.

According to Maslow\textsuperscript{111}, the 5 need are:

1. The Physiological Needs:

The Physiological and sometimes called the lower needs, are the basic drives, such as hunger, thirst, sex. They are the most important of all, as individuals, first in their life would all seek to gratify these needs, they would not be concerned much with the safety, belonging, esteem and self-actualization needs. Once they are relatively fulfilled, their strength start to decrease and they seize to be a motivator any more.

The researcher argues that Maslow’s physiological needs, according to Islam, are innate instincts (غرائز) that people are born with; therefore, fulfilling them will not be the responsibility of the company as there will be no company that provides sex, for example, as a motivator or satisfier for its employees. Also, if

an organization provides water and food would they be motivators? definitely not.

2. The Safety Needs;

The Safety needs refers to security, stability, dependency, protection, and need for structure, order, law and regulations. To gratify the safety need, an individual requires a safe, orderly, predictable, and lawful world where he or she can feel secured from human or non-human made disasters. In societies where racial conflicts are dominant, like the case of Sudan, these needs have priority over the belonging and esteem ones. Security comes next to physiological needs, and once they are fulfilled their power or domination decrease and opens the air for the next higher needs.

3. The Belonging and Love Needs;

The feeling for relationships with the people dominates at this stage, when the physiological and safety needs are gratified. One will start to look for friends, wife, an affiliation to a group, a family, a tribe, and so on. He or she would want to be part of someone or some ones. The first two needs will now be easier to accomplish or fulfill when the person is part of a group where food, sex, and security are more of group activity than an individualistic ones.

4. The Esteem Needs;

It is quite natural that when people have fewer issues to do with their hunger, sex, safety, and belonging, they strive more for a more abstract power that fills them. Issues like confidence, high regard for one self, dignity, self-respect, for
themselves and for others and by others. The Esteem need is more prevailing nowadays in the western societies where there is no fear of hunger, or disorder. The above needs are called “D-needs” or deficiency need as they occur when there is a deprivation of a certain need.

5. The Need for Self-Actualization

This is the highest need in the first version of this theory. It simply refers to need for the individual to become everything he or she can or is capable of becoming. This need is called the “B-need”, the need for being as it maintains the individual interest without feeling hunger or deprived of something, rather it increases because the other four needs have well been met, and the person now wants to stretch his potential to the maximum he or she can reach. One special characteristic of this need is that unlike the other four, it has no end as the more one gets, the more one wants.

Despite the importance and wide acceptance of Maslow’s Theory of Motivation, but has also received its share of criticism. According to Francis112, This theory is not well structured, and conceptually is not well integrated. Also, the theory seems too simple and has not been tested and validated. The self-actualization concept lacks a clear definition. He further confirms that Maslow himself confesses that his work might not conform to the conventional psychological experimentation criteria.
2. Herzberg’s Two-Factors Theory (1959)

Herzberg’s Two-Factor, and sometimes called motivation-hygiene theory, has been and still is one of the most well received theories of motivation in the literature. Herzberg, in 1959, has conducted a semi structured interview with 200 engineers and accounts to get an analysis of their feelings toward their jobs. This study was carried in nine USA companies where employees were asked to describe the time when they felt extremely good or bad about their jobs. Answers about good feelings are considered to be related to job contents, and they are called, motivators. Bad feelings are attributed to the reasons dealing with the job context- external factors, and they are called, hygiene factors, Tech and Amna.113

Hackman114 contend that Herzberg Two-Factor theory is by far the most influential theory of job satisfaction and work motivation. It argues that there are certain factors inherent in the job itself that causes motivation, as well as certain factors that are hygiene factors, and by themselves they do not motivate, but they prevent dissatisfaction. By so doing, this theory has brought about what is called in the human resource management “job design and redesign”. When managers look for reasons to make their staff perform better they are actually referring to Herzberg two-factor theory to design their jobs in way that motivates staff.

To the researcher Maslow has done one thing that is still valid today. If one wants to know what motivates an employee, he simply needs to ask him or her. This is a bottom-up approach which has been described earlier.

One of the best papers that describe the motivation-hygiene theory is that of Tietjen and Myers\textsuperscript{115}, who postulate that the essence and contribution of Herzberg theory is its argument that in order to know what motivates and employee you need to know his or her attitudes by probing their state of mind to provide pragmatic information about motivation.

To form or establish his theory, Herzberg originally wanted to answer three basic questions. \textit{1}st, how can one specify the attitude of any individual toward his or her job?, \textit{2}nd What causes these attitudes, and \textit{3}rd, what are the consequences of these attitudes. Herzberg concluded that the starting point to motivate and individual is to understand his attitudes, and ask him or her of what motivates them. From the analysis of the questionnaires he designed the motivators, and the hygiene factors. Maslow didn’t assume those factors, instead they were a result of the study he has done and based on the answers to the three basic questions, he developed two distinct sets of factors. One list of factors causes happy feelings or good attitudes in the individual, and they are job related, they are intrinsic to the work itself, while the other group of factors may not cause happiness, but their absence will contribute to a state of dissatisfaction. These are external to the job but they constitute the environment within which the job is being done.

The first group, which are called the motivators (job factors), include:

- Recognition;
- Achievement;
- Possibility of growth;
- Advancement;
- Responsibility; and
- Work itself.

The other group of factors, which are called hygiene factor (external to the job) include:

- Salary;
- Interpersonal relations with supervisor; subordinates and peers;
- Company policy and administration;
- Working conditions;
- Factors in personal life;
- Status; and
- Job security.

In this theory, Herzberg argues that satisfaction and dissatisfaction are not two differing ends of one continuum, but two different and distinct sets altogether. According to Herzberg, as cited by the same source, the opposite of job satisfaction is not dissatisfaction, but rather “no satisfaction”. Take the example of the availability of transportation. If transportation is not available one day, for any reason, employees will
be dissatisfied, that particular day, but the availability of it doesn’t bring job satisfaction. These are two different things.

Figure 6: Herzberg Two Factor Theory

Extrinsic Factors (Hygiene)
- Salary
- Supervision
- Relationship
- Policy
- Working Condition

Intrinsic Factors (Motivator)
- Achievement
- Advancement
- Work itself
- Recognition
- Responsibility


The two-factor theory of motivation has been exposed to some criticism. House and Wigdor, as cited by Graham and messner, have criticized Herzberg on four levels. First, the methodology followed to identify critical incidents that causes employees feelings whether good or bad is not questionable. Second, rates are required to evaluate the behaviors of respondents and this may result in rater contamination. Third, there was no measure of overall satisfaction of job, and finally, the variable contained in the situation was not treated in defining the relationship between the level of job satisfaction and worker productivity. Also, this theory has been criticized on the

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assumptions it made. It assumes that all employees are the same, all situations are the same; and there is one best way.

In response to the last part of the criticism, the researcher argue that the theory didn’t assume that employees are the same, but it said that in order to motivate an individual, you need to understand his or her behavior, thus making each and every employee different from one another. This theory is easily generalisable.

To Confirm the above statement, Worlu and Chidozie\textsuperscript{117}, in a study of the Nigerian political environment, argue that this theory is a good alternative to Maslow’s one and results of replicating Herzberg theory do support his assumptions in a totally different employees, situation, and environment.

3. McGregor’s X & Y Theory (1960)

At the Sloan School of Management, 5th Anniversary Convocation, Douglas McGregor started the debate on how to manage the “human Side” of the organization”. By so doing, he challenged the management of organizations to reconsider the way it manages its people, thus putting the first brick in the human relations school. He formulated his ideas and observations into a theory called X & Y, which lately shaped a number of human resources management practices. In this theory, McGregor argues that the management style of a manager is a function of

his or her believes about their subordinates, and therefore, McGregor assumes that
there two sets of managerial attitudes dominating the work place, Heny and Arief\textsuperscript{118}
According to the same source, two different assumptions about managing people in
organizations shape their managerial style. If the management classifies its staff
according to theory X (authoritarian style), then their leadership style is
characterized by:

- Work organization, planning and decision making is the sole responsibility of the
  management and workers has no participation into these organizational duties;
- People are centrally controlled and well directed and supervised and there is
  little room for delegation;
- Motivation is the responsibility of the management;
- There is a lack of trust between management and its employees.

This is the top-down approach mentioned earlier.

When management classifies its staff according to theory Y (participative style, the
opposite view about people, and then the management will be more characterized
by:

- Decision can be delegated to employees at lower organizational levels;
- Employees are – by nature – cooperative and with the right kind of leadership,
  they won’t be passive or resistant;

\textsuperscript{118} Ir. Heny K. S. Daryanto and Ir. Arief Daryanto, “Motivational Theories and Organizational Design”, AGRIMEDIA,
Vol. 5, No. 1, (1999), pages 56-63,
• Employees have the abilities, the willingness to be productive, assume responsibility, and are self motivated, the management role is to provide the right environment for such qualities to dominate;

• Management can trust employee.

One best descriptions of the assumptions of McGregor Theory X and Y came from Ott\textsuperscript{119}, who provided good record of Theory X and Y Assumptions as follows:

1. Theory X Assumptions:

• Management is responsible for organizing the elements of productive enterprise- money, material, equipment, people, - in the interest of the economic ends;

• With respects to people, this is a process of directing their efforts, motivating them, controlling their actions, modifying their behavior to meet the needs of the organizations;

• Without active intervention by management, people would be passive, even resistant to organizational needs. They must therefore be persuaded, rewarded, punished, and controlled. Their activities must be directed. This is management task in managing workers;

• The average person is by nature indolent and works as little as possible;

• The average person lack ambition, dislikes responsibility, and prefers to be led;

\textsuperscript{119} J. Steven Ott, \textit{The Organizational Culture Perspective}, Brooks/Cole Publishing Company, Pacific Grove, California, 1989, page 156
• The average person is inherently self-centered and indifferent to organizational needs;
• The average person is by nature resistant to change;

2. Theory Y Assumptions:

• Management is responsible for organizing the elements of productive enterprise- money, material, equipment, and people- in the interest of the economic ends;
• People are not by nature passive or resistant to organizational needs. They have become so as a result of experience in organizations;
• The motivation, the potential for development, the capacity for assuming responsibility, the readiness to direct behavior toward organizational goals are present in people. Management does not put them there. It is a responsibility of management to make it possible for people to recognize and develop these human characteristics for themselves;
• The essential task of management is to arrange organizational conditions and methods of operation so that people can achieve their own goals by directing their own efforts toward organizational objectives.

Ramesh and Che\textsuperscript{120} contend that Theory X and Y is an idea developed by McGregor and appeared in his famous book “The Human Side of Enterprise” in the 1960. They describe theory X as the style of management and leadership that dominated the

management thinking as a result of the scientific movement school, where an authoritarian style is required to control people and productivity, and it constitutes a negative way of looking at and dealing with people. While on the other hand, theory Y is the opposite of theory X it is built on a more positive thinking about people; hence the leadership style that follows this theory is more participative. This theory sparks the beginning of the human school of thinking on how to management “the human Side of the Enterprise”. In Wall Street Journal, Murray\textsuperscript{121}, wrote:

“As an alternative to Theory X, McGregor offered up Theory Y, Which rests on these assumptions:

- The expenditure of physical and mental effort in work is as natural as play and rest.
- External control and threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the services of objectives to which he committed.
- Commitment to objectives is a function of the rewards associated with their achievement
- The average human being learns, under proper conditions, not only to accept but to seek responsibility.

• The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population

• Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partly utilized.

In those six assumptions lie the roots of modern management. The goal is to create conditions that make them want to offer maximum effort on their own. Unleashing the imagination, ingenuity and creativity of your employees can multiply their contributions many times over, simple stuff, but powerful consequences.

However, like most of the social sciences theories, theory X and Y has its limitations. According to Porter et al\textsuperscript{122}, the essence of McGregor theory is that it emphasizes self-control and self-direction compared to organizational and system control over the employee. This argument of self-control and self direction can’t be generalized in most situations. There are positions, like the cashier for example, who normally holds big amounts of cash money in his or her custody, and therefore, it would be risky to leave the control for the employee to decide. Also, the situation where self-control or self-direction is to exercise is not clear in McGregor theory X and Y. Another vital reason for the self-control and self-direction to be exercised is that people are different, and some may not be willing or able to practice self-control and self-direction, and take decisions,

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or participate into those ones that concern their jobs. This inhibition may be as a result of their past experience in life or in other organizations where they have been working.

The researcher has been a practicing manager for over thirty years, and I do confirm that the issue of self-control and self-direction need to be on case by case basis and it can’t be generalized. I had some of my managers, who are afraid of making decision of their jobs, and always wanted to be guided or closely supervised. So, it all depends on the situation, the employee, and the kind of job in hand.

To conclude, managers need to be careful when implementing theory Y on their staff and answers the questions as to when- the situation, the who- the employee, and why- the job is the kind of job I should leave it for the employee to exercise self control and self-direction.

2.2.4 Measuring Job Satisfaction:

Job satisfaction is a well researched area in organizational management and theories. It is assumed that lack of job satisfaction causes negative organizational outcomes on organization performance, employee turnover, productivity, low morale and some other organizational dysfunctions, Saane et al\textsuperscript{123}.

According to Astrauskaite et al\textsuperscript{124}, despite much research on job satisfaction, but still there are issues that need attention, among them is the many instruments acclaimed to measure job satisfaction in the workplace. Saane et al\textsuperscript{125}, in a systematic review of the instruments measuring job satisfaction have identified 29 instruments being currently in use. According to the same source, these instruments differ widely both in their specialization, generalization, validity, reliability, industry and the like.

Lise and Timothy\textsuperscript{126}, argue that the two most extensively validated employee satisfaction instruments are Job Descriptive Index (JDI), and the Minnesota Satisfaction Questionnaire (MSQ). In addition to these two instruments, Ozkan et al\textsuperscript{127}, add another two important instruments, the Need Satisfaction Questionnaire, which developed according to Maslow’s hierarchy of needs theory, and one of the latest developed instruments, the Job Satisfaction Survey (JSS) developed by Professor Paul Spector in the year 1985.

Three of the above four instruments will be briefly described in the following pages, these are the Job Descriptive Index (JDI), the Minnesota Satisfaction Questionnaire (MSQ) and the Job Satisfaction Survey (JSS).


\textsuperscript{125} Op.cit, page 195


1. The Job Descriptive Index (JDI)

It took 10 years of study for the researchers’ Smith and her colleagues in order to develop and evaluate The Job Descriptive Index (JDI) which was completed in the year 1969 when they wanted to develop a measurement tool for job and retirement satisfaction and now is widely used in measuring job satisfaction, Price.\textsuperscript{128} According to the same source, the JDI is among the very few measurements that have been subjected to the test of quality. Okzan et al\textsuperscript{129}, explain that the JDI includes factors such as type of job, remuneration, promotion, supervisory management, and job associates. According to Jaime and Jamie\textsuperscript{130}, the JDI measures 18 job items on a five-point Likert type scale, with responses starting from 1 (strongly disagree) to 5 (strongly agree). Lise and Judge\textsuperscript{131}, have reported something different on the number of items the JDI measure. They argue that the JDI assesses 5 job dimensions, pay, promotion, coworkers, supervision, and the work itself, and they also confirm that the JDI is reliable and has been well validated. This point has been confirmed by Ernest and Daniel who say that “the JDI is well developed and used widely”.

Price\textsuperscript{132}, commented that “Smith and her colleagues have recommended that researchers need to use 5 pages in order to administer the JDI, one page for each job

\textsuperscript{129} Op. cit pages 1-13
\textsuperscript{130} Jaime X. Castillo and Jamie Cano” Factors Explaining Job Satisfaction Among Faculty”, Journal of Agricultural Education, Vol. 45, No. 3, (2004), pages 665-74
\textsuperscript{131} Op. cit, pages 395-407
\textsuperscript{132} Op.cit, pages 305-489
satisfaction dimension. The length of the scale has been cited as one of the major limitations of The Job Satisfaction Index”.

2. The Job Satisfaction Survey (JSS)

Spector\textsuperscript{133}, the author of this instrument, argue that he has developed it for three main reasons. First, there is a need to develop an instrument to cover the human services industry as the instruments in use at the time have a number of limitations which he wanted to overcome. Second, the JSS was intended to cover subscales in the measurement of the job satisfaction, a dimension was also absent in the currently used scales like the JDI. Third, he wanted to have a shorter scale in comparisons to those in use.

According to Nor and Mansor\textsuperscript{134}, in their study of the occupational stress among male personnel in one base of the Malaysian Navy, has described the JSS as a useful instrument that included 36 items testing nine job factors, namely, pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, co-workers, nature of work, and communication.

Confirming the importance and usefulness of the JSS, Gholami et al\textsuperscript{135}, gave three reasons as to why they have chosen the Job Satisfaction Survey over other instruments in order to carry their study. 1\textsuperscript{st}, the JSS covers the sub domain of the


\textsuperscript{134}Nor. L M. Bokti and Mansor A. Talib “ A preliminary study on the Occupational Stress and Job Satisfaction among Male Navy Personnel at a Naval Base in Lumut, Malaysia”, vol. 2, No. 9, (2009),page 302.

\textsuperscript{135}Gholami, F. M., Talebiyan D, and Mohammadian M “ Reliability and validity of “ Job Satisfaction Survey” questionnaire in military health care workers”. Iranian Journal of military Medicine, vol. 13, No. 4, (2012), pages 241-246
job satisfaction, a value that is not found in similar instruments. 2\textsuperscript{nd} the JSS, unlike most of the prevailing instruments it relatively uses smaller number of questions covering more field. Finally, the JSS uses Likert type scale with 6 options given to the respondent while other instruments use the typically traditional likert type scale with only five options. This scale gives wider choice for the replier than other instruments do. According to the source, the reliability and validity of the JSS questionnaire are very satisfactory in measuring job satisfaction in the military health care staff.

3. The Minnesota Satisfaction Questionnaire (MSQ)

According to the Psychology Dictionary\textsuperscript{136}, the Minnesota Satisfaction Questionnaire (MSQ) “is a questionnaire which examines the level of job satisfaction work has, first developed by the University of Minnesota but now used across the Country”. It got the name after the place where it has been developed, the University of Minnesota.

Stanley\textsuperscript{137} adds that the MSQ has been developed by researchers working in a program called “Work Adjustment Project” which started in the year 1957 by Weis, Dawis, England, and Lofquist and based on a theory called “work adjustment”. According to the same source, the MSQ measures both intrinsic and extrinsic job factor, based on Maslow’s theory of motivation. Also, the MSQ has two forms, a long one an short one. The long one consists of one hundred items in a Likert type

\textsuperscript{136} \url{www.psychologyDictionary.com}
format. Price\textsuperscript{138} explains that the short format of the MSQ measured the job satisfaction for people from the district of Minneapolis-St Paul area selected from different professions, namely, assemblers, clerks, engineers, janitors-maintenance men, machinists, and salesmen and it consists of 20 questionnaire items on Likert type scale. Fiona and Alan\textsuperscript{139} argue that the MSQ has been widely used in management research and more appropriate for a wide range of research application in empirical studies. They confirm that the MSQ have been tested and proved to be acceptable, and is also simple format and easy to administer, the short form only takes 5 minutes to fill while the long form takes about 15-20 minutes to fill.

The researcher will use The Job Satisfaction Survey (JSS) for the purpose of this research.

This section of the literature review has covered the importance, the development, and measurement of the concept of the job satisfaction and briefly described each of the above dimensions in order to build a strong argument of its importance, and why should it be taken serious both at the research and practice levels. Being a human resources manager, general manager, director, and a consultant in this field for almost thirty years now, I can easily confirm that the Sudanese private and public sectors do not take the issue of job satisfaction as serious as it should be. I have once suggested to my managing director to carry such an exercise he said “Do open the door against us”. He already knows that his employees are not satisfied, but he doesn’t want to confess and

\textsuperscript{138} Op.cit, page 15
\textsuperscript{139} Fiona Edgar and Alan J. Geare "Employee voice on human resource management" \textit{Asia Pacific Journal of Human Resources}, 43: (2005), page 361
confirmed it. In the best run organizations, employee satisfaction is a major key performance indicator (KPI) of the person who is running the organization.

2.3 Customer Satisfaction:

According to Jan and Ander\textsuperscript{140}, economies are determined by the driving force of the demand of the people; therefore, efforts focusing on customers, the people who buy and use the products or services, are essential. In the vast growing global economy and the severe and intense competition as a result of the virtual marketing across borders, the attention to customer issues is becoming even more important than any time before. This situation called for studies to seek new approaches and methods to take business firms to leading positions in their markets. Among these approaches and methods is the notion of customer satisfaction.

Kottler and Levy\textsuperscript{141}, famous gurus of marketing, argue that the issue with the idea of “customer satisfaction” is which customer?. Organizations serve many customers, like; employees, suppliers, consumers, stakeholder, shareholders, etc. Although all are important, and the company need to strike a good balance among those diverse group of customers, but the commonly used term “customers” means to many organizations, those who buy the product/ or service.


\textsuperscript{141} Philip Kotler and Sidney J. Levy, “Broadening the Concept of Marketing”, \textit{Journal of Marketing}, Vol. 33, No. 1, (1969), page 12
Michael and James\textsuperscript{142}, the authors of “Re-engineering the Corporation”, explain that organizations need to redesign their processes to meet customer requirements in an effort to make customers happy with what they buy. There is no such an idea like “the customer”, instead, “this customer”, customers are becoming so demanding to their own individual terms and conditions, thus the power of the market has now shifted from the producer to the consumer. They state that “consumers expect and demand more; because they know they can get more. Technology, in the form of sophisticated, easily accessible data bases, allows service providers and retailers of all kinds to track not only basic information about their customers, but their preferences and requirements, thereby laying a new foundation for competitiveness”. In support of the above, Emrah\textsuperscript{143}, refers to the practice under the concept of total quality management is defined as “the culture of an organization committed to customer satisfaction through continuous improvement”. Despite the fact that this “culture” differ greatly across countries and industries, but business firms need to try their level best to satisfy the need and the expectations of their customer regardless of their point of domicile. Total Quality Management, however, has certain principles and guidelines which can be operationalized in different organizational settings to secure greater market share in order to enhance and increase their profits, and reduce their costs.


\textsuperscript{143} Emrah Cengiz “Measuring Customer Satisfaction: Must or Not?” Journal of Naval Science and Engineering, Vol. 6, No. 2, (2010), page 77
An idea on the same line comes from Olga\textsuperscript{144} who contends that “Quality = customer satisfaction”, as the consumer normally compares the quality he or she expects with the actual one he or she experiences, thus if quality is not convincing, the consumer won’t be happy or satisfied with the product or service and vice versa.

2.3.1 Developments and Definitions of the Concept of Customer Satisfaction:

Studying customers is an old idea which dates back to the beginning of the ninetieth century when famous retailers moved from the “let the customer be aware” concept to the “let the customer be satisfied”. This marked an enormous shift in the thinking of the merchants, where the focus is not only to have an educated customer but a more delighted one\textsuperscript{145}.

Later in the century, Kotler et al\textsuperscript{146}, reversed the conventional organization charts where customers are placed at the bottom of the organization structure. In their model, the customer heads the organization in a clear indication that the customer runs the company and everyone in it is there to serve him or her. The following figure shows this concept.


The nineties have witnessed a leap development in the concept of customer satisfaction. According to Thoresten and Alexander\textsuperscript{147}, the evidence of this development is clear in the design of the many customer satisfaction indices both at the industry and national levels. The same sources goes on to say “Customer Satisfaction has developed extensively as a basic construct for monitoring and controlling activities in the relationship marketing concept”.

William argues that “without customers there is no business”. He explains this because there is an emerging new management philosophy that takes the lead and pride in the quality of the services they provide and the customer care they render to their end users. This change is brought about due to many reasons, like economic, social and customer awareness of what he or she pays for. Customers are looking for value for money, what I pay against what I receive.

One landmark of the development of the concept of customer satisfaction was the launch of the American Customer Satisfaction Index (ACSI) in the year 1996, and was gradually recognized by governments and companies alike within the United States of America as well as worldwide, but the Swedish Customer Satisfaction Barometer was developed first in the year 1989 to serve the same purpose.

Joan and Joseph, concluded, during their review of the literature on customer satisfaction, that there is no unanimously accepted definition of this concept. The lack of agreement on the definition of customer satisfaction poses a number of issues for customer satisfaction research and Practice. 1st, each researcher needs to select his or her own definition and justify it for his or her study, 2nd, the operationalization of the definition will be subject to different views. Finally the results and interpretation of the data will also going to be different. As a result, replication and testing of theories is going to be a problem, as the definitions of the constructs composing the theory are not

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agreeable. However, their literature review revealed that there are commonly three shared components in most revised definitions, these components are:

1. Customer satisfaction is a response (emotional or cognitive).
2. The response pertains to a particular focus such as expectations, product, consumption experience, etc; and
3. The response occurs at a particular time (after consumption, after choice, based on accumulated experience”.

Therefore, satisfaction is a process of three basic components, a response pertaining to a particular focus determined at a particular time.

In this respect, Victoria\textsuperscript{151}, quoted two popular definitions: McDougal, according to her, defines customer satisfaction as “overall attitude towards a service provider”, while Zineldin said that it is “an emotional reaction to the difference between what customer anticipate and what they receive”.

Olga\textsuperscript{152}, defines customer satisfaction as “the sense of satisfaction that a consumer feels when comparing is preliminary expectations with the actual quality of the acquired product”. In this definition, Oglia argues that customer satisfaction is quality driven whether it is a product or service. To the researcher, this definition is too narrow. Although there is no doubt that quality is an essential driver of customer satisfaction, but it is not the only factor that result in satisfaction.

\textsuperscript{152} Op.cit page 283
According to Maria and Demenico\textsuperscript{153}, customer satisfaction can be defined as “a function of the discrepancy between a consumer’s prior expectations and his or her perception regarding the purchase”.

\subsection*{2.3.2 Importance of Customer Satisfaction and Factors Affecting It:}

Deming, as cited by Muhammad and Tarig\textsuperscript{154} said “Customer-driven quality of service or product is viewed as a success striving factor”. According to the same source, although customers are not listed in the balance sheet of organizations, but considered by many as an asset. Customer satisfaction, due to economic reasons, has become a goal for companies in today’s competitive global markets.

To some writers, like Dawn et al\textsuperscript{155}, customer satisfaction is essential for business organization as well as non-business organization, like Non-government Organizations (NGOs), at least for three major reasons. First, Customer satisfaction is one of the best methods to evaluate the company product or service. Second, Customer judgment, although sometime is subjective, is an important feedback for the product or service provider. Third, customer satisfaction is most likely lead to customer loyalty to the brand and thus would yield continuous purchases. In addition, the researcher adds that customer feedback is an essential element in enhancing the features or price of an existing product or service and in developing a totally new product or service.

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and development departments rely heavily on customer measured expectations and feedback as indicators of what is needed or required.

The importance of assessing and managing customer satisfaction is becoming one of the best practices and one that “must-do” for companies in order to remain in the competitive market or even alive. In the production line, it is extremely essential for the company to analyze its product to identify elements that are important to customers. This analysis is called the “importance-performance Analysis” and is critical in effectively utilizing company scarce resources to the best benefit of both the company and the customer.¹⁵⁶

Naik et al¹⁵⁷ explain that customer satisfaction has impact on the profitability of every organization as when customer have good perception on the quality of the product or service, they normally transfer their satisfaction to at least nine to ten people. It is estimated, according to the same source, that nearly 50% of the American business is built on the unofficial “word of mouth” that spread through customer to their acquaintances. It has also been confirmed by Griffin, as cited by the same source, that a meager or little increase in customer satisfaction can increase profit by not less than 25%.

Reinforcing the importance of customer satisfaction, another confirmation comes from Eugene et al\textsuperscript{158}, who confirm that organizations that achieve high customer satisfaction reap high economic return. For example, in one company, an annual one-point increase in customer satisfaction has resulted in a net value of 7.48 million US dollars over a period of 5 years.

The importance of the customer satisfaction has firmly been argued by Robert and William\textsuperscript{159} when they pointed out that in the past 20 years more that 15000 academic articles have published in on the topic. According to one survey, over 90% of the responding companies have indicated their reflection of the customer satisfaction in the mission of their companies. The authors concluded by saying “Satisfying customers is fundamentally a sound principle”.

Edwards\textsuperscript{160}, gave a number of points to guide companies to ensure good customer satisfaction, he called these points as the “the basic rules for customer satisfaction”, here is a brief description of the points.

1. Involve Top management
2. Know the customers;
3. Let the customers define what attributes are important;
4. Know the customers’ requirements, expectations and wants;

5. Know the relative importance of customers’ decision criteria; 
6. Gather and trust the data; 
7. Benchmark the data against the competitors’, and identify the competitive strengths and weaknesses; 
8. Develop cross-functional action plans that enhance strengths and correct weaknesses; 
9. Measure performance continually, and spread the data throughout the firm; 
10. Be committed to getting better and better and better

It is quite evident from the above literature citation, and a lot more that exceeds the scope and interest of this section, that customer satisfaction is by no means a luxury for companies to do or not to do. It is a “must-to-do” exercise for companies and governments alike. The question now is what are the factors determining or affecting customer satisfaction?. In the following pages, the researcher will cast light on some of these dimensions.

Although there is no commonly agreed list of customer satisfaction drivers, as factors affecting this differ largely from industry to industry and from place to place and the like.

However, there are common shared concepts among different writers in the field. of the commonly used dimensions will briefly be discussed here, and in order to minimize repetition, the researcher will provide summary of the three major sets of these of dimensions, which are also overlap with one another.
The work of Parasuraman et al\textsuperscript{161}, is considered by many as the pioneer work that provided a list of common drivers for customer satisfaction regardless of the type of service or product. They argue that these factors fall into ten key categories that describe the attributes of customer satisfaction. Here is a summary and definitions of these constructs.

1. Dependability:
This factor means that the organization need to be consistent in performing the service right the first time and is trustworthy, it is reliable, and there when needed. This dimension involves the accuracy of billing, records keeping, and delivering the service in the appropriate time and place.

2. Responsiveness:
This refers to the willingness of the company personnel to provide the service in a timely manner and this involves giving quick service without loss of time, quick feedback to the customer when needed, and issuing of slips or invoice without delay.

3. Competence:
Competence normally concerns the front and back office personnel and the degree of knowledge, skills and attitude with which they serve the customer.

4. Access:
This factor involves the easiness of acquiring or buying the service and its availability to customers. The service can be provided by phone, i.e. lines are not always busy or hard to access, customer normally get attended to rather immediately, minimal waste of

time on hold; waiting time to receive a service in a queue like banks or supermarkets; operations hours are appropriate to most customers, i.e. like 24 hours operations; locations of the product or service is also accessible to most of interested customers.

5. Courtesy:

Courtesy is important as it shows the politeness, cleanliness and friendliness of the contact personnel like receptionists, telephones, and the way they receive, treat and cater for customers. This leaves a lasting impression on customers as they build personal relations with contact personnel. Customers take emotions back with them, not only their purchases.

6. Communication:

This is one of the most effective dimensions in customer care and retention. It deals with handling customer in the language they prefer and understand, i.e. no jargon, just simple warm words can play miracles. Also increasing the level of sophistication with the elite group of customers and come down to earth with the normal ones. Communication is vital because it involves softly and nicely educating the customer about the service, how must it costs, how it operates, how problems may be handled.

7. Credibility:

Credibility means a lot to many customers. It involves whether or not customers will trust or believe the company represented by the person they deal with; the degree of rapport they build with the contact person; the company name and reputation is of vital importance to customers. Customers nowadays want to deal with brand names, companies that built to last in order for them to trust the service or product continuity.
8. Security:

This is the personal and physical security of the customer; the confidentiality of the information he or she reveals or his financial security. The personal security example in the Sudan is with the teller machine of some banks and in some areas of the capital for example. Few customers will be willing to use the ATM (Automatic Teller Machine) if the security person is not present there at the machine. There is a fear of robbery and even murder in some parts of the Sudanese capital, especially so in the outskirts of the city.

9. Understanding/Knowing the customer:

Understanding the customer involves personalizing the deal with him or her. Front line personnel need to pay individualized attention to each and every customer and seek to cater for his specific needs, giving choices, showing places, recognizing regular customers and calling them by names, rendering special kind of help to people with special needs or disabilities. This is again an emotional experience that the customer will take home with him or her. Purchases get finished, but such a personal experience gets lasted for long.

10. Tangibles:

The last factor, according to Parasuraman and his colleagues, is the tangibles. This feature includes things like the physical location of the facility; appearance and elegancy and tactfulness of the personnel; the availability of the tools and equipments used to serve the customer, i.e. trolleys, loading/unloading equipments; tags on the shelves; and the like.
It is worth mentioning that the authors confirm that these factors may overlap in some areas, and they do not constitute an exhaustive list. The authors themselves, in a 1990 study, as cited by Naik et al\textsuperscript{162} have brought these determinants to only five, the Tangibles; the Reliability; the Responsiveness; the Assurance; and the Empathy. These are the factors; the researcher will investigate when measuring the customer satisfaction for the purpose of this study.

Confirming what has been said before, that there are numerous drivers depending on many variables like country, industry, age, and the like, Manish and Sima\textsuperscript{163}, provided only five dimensions or determinants of customer satisfaction, namely:

1. **Physical Aspect:**
   This refers to physical layout of the store or the selling place, and its appearance. Retail outlets need to be spacious, with convenient parking space, and good looking and clean environment.

2. **Reliability:**
   Reliability means that outlets keep their promises, especially those advertised for, like price deductions, and do things right the first time. Front line staff needs to avoid arguing with customers and try to prove them wrong.

3. **Personal Interaction:**
   Contact personnel need to be polite; neat, personalize the service, helpful, and instill confidence and trust in customers and they serve the customer with passion.

\textsuperscript{162} Op.cit, page 233
4. Problem Solving:

Store personnel are competent and authorized to immediately attend to customer complains like handling returns or exchanges.

5. Policy:

The company or the store, in this case, should have a clear policy on shopping; quality of the goods or services they sell; the operating hours etc.

It is noticeable to the researcher that except element number five, the other first four drivers are almost identical to those of Parasuraman and his colleagues referred to before.

One last citation in this part comes from Jayshree and Ahmad in a recent article this year (2013). In this study the authors have provided eight determinants of customer satisfaction. Again, some of these are overlapping with the previously quoted ones either in the name of the factor; its meaning or both but he added a new dimension as well. The eight factors are:

1. Tangibility:

This driver like Parasuraman last factor, it means that the service should be individualized by giving the customer special attention, while employees behavior toward customers need to be with trust and builds confidence. Also the physical facilities need to be appealing to the customer, and the transactions should be error free.

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2. E-Fulfillment:

This is a new dimension and it deals with e-shopping, i.e internet on-line shopping. Customers who deal through the internet require employees to be available online to answer queries promptly and customer feel that their transactions are safe and trustworthy.

3. Convenience & Availability:

Convenience and availability factor speaks, for example, about the spread of the ATM (Automatic Teller Machine) in different locations including remote areas, and the appropriateness of the operating hours to different type of customers, i.e. those who work late.

4. Accuracy:

The Company needs to keep its promise and deliver business transaction according to certain times and dates, while providing non-conventional services like on-line or phone banking with a high degree of correctness and promptness.

5. Responsiveness:

Here, responsiveness is reflected in the elegance and neatness of the frontline employees and their readiness to attend to customer queries on time. ATM services, for example, need to be provided on a 24 hours basis in a swift and easy way.

6. Empathy:

This factor relates to treating privileged customers separately, not with the crowd. This category of customers is highly demanding and each has specific needs to be met,
therefore employee servicing this type of customers should be well selected and well trained.

7. Promptness:

Services provided to customers need to be delivered without waste of time. Contact employees should know exactly how to perform and discharge their duties. When we apply this factor to the Sudanese market, one would argue with confidence, and as a result of many personal experiences, that it is totally lacking. Sudanese, in general, in the service industry, serve the customer with less attention and with a noticeable degree of recklessness.

8. Personal Assistance:

Personal Assistance factor reflects in employees having the business acumen and tactfulness to answer customer queries while convincing customers that the company is investing in the latest technology relevant to its business.

The above three cited articles on the determinants of customer satisfaction and the similar ones in the literature have been criticized by Robert on different fronts, like the similarities and differences of the constructs that are thought to bring about customer satisfaction. The following points explain his view on the debate currently happening in this area. Customer satisfaction is build around meeting the expectations of the customer, but it has been proved by a number of researchers that determinants of customer satisfactions have multiple facets and can’t be easily listed and generalized.

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The above studies are cases in point. Also, these drivers differ from one industry to
another as customers of the banking industry, for example, have different expectations
from those in retailing industry for example. On the other hand, researcher themselves
kept adding or deleting to and from the same list they recommended in earlier studies.
Replications of these studies by different researchers confirm and some time
disconfirms the results of other researchers. For example, in a study carried out by
Johnston et al, as reported by the same author, was supportive of that of Parasuraman
but they recommended to add two more factors to the list and came up with a list of 12
dimensions.

As can be understood from the literature review, customer satisfaction largely depends
on the expectations of the customer; it is a culture driven thing at the national,
personal, industry, geography or race levels. For example, one would solidly argue that
customer expectations in the Sudan, for the same service or product, is different from
those in the Gulf and those in the Gulf are different from those in the West generally.
This is more clearly seen in the importation of cars for example where one finds the
same model of a car is different from one country to another in order to meet different
expectations of different people. Yet, the benefits of these studies can’t be neglected as
they provided a benchmark list to which a researcher may add or delete based on a
number of variable factors as we have seen in the previously quoted studies.
2.3.3 Models and Theories of Customer Satisfaction:

Customer satisfaction, as described in the latest section, is a popular topic in marketing practices and academic research alike. As we have seen, there is no consensus neither on the definition of customer satisfaction, or on its conceptualization. There are many models and theories on customer satisfaction, the most popular three of them will be discussed briefly in this section, namely, Kano model of customer satisfaction, Oliver expectancy disconfirmation theory, and the three factors theory.

1. Kano Model of Customer Satisfaction:

According to Ting\textsuperscript{166}, Kano’s model was developed by the Japanese professor Noriaki Kano and his colleagues in the year 1984 and still is being used widely in different industries. The model, describes three types of relationships between the degree of customer satisfaction and their fulfillment levels. These attributes, as called by Professor Kano, are the must-be, one-dimensional and attractive attributes. 1\textsuperscript{st}, the “must-be” attributes, are the most essential features of the product or service, and their absence will cause customer dissatisfaction, but their presence doesn’t produce customer satisfaction. Examples of such attributes are the major operating devices of an electronic machine. Every customer will expect such a device to be attached to the product; therefore, the customer will be unhappy if the device, like a remote control for example, where as if it there, this will not lead to customer satisfaction. According to

\textsuperscript{166} Ting Wang and Ping Ji, “Understanding customer needs through quantitative analysis of Kano’s model” International Journal of Quality & Reliability Management, vol. 27, No. 2 (2010), pages 174-175
Hsin-Hung et al.\textsuperscript{167}2\textsuperscript{nd}, the one-dimensional attribute is relative to the quality of the product or service. When the quality of the product or service is high, so will be the higher the customer satisfaction, and when the quality of the product or service is low, so will be the customer satisfaction. 3\textsuperscript{rd}, Attractive attributes are the extra features that attract customer to prefer one product or service over those provided by the competitors. Such attributes like fancy colors, extra hand for carrying a device or folding it, will produce more than expected customer satisfaction, but their absence doesn’t cause customer dissatisfaction as they were not originally expected by the customer.

\textbf{Figure 8: Kano Model:}

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2. The Expectancy Disconfirmation Theory:

In their review and comparison of the current models of consumer satisfaction and dissatisfaction, Sunil and Clark\(^{168}\), described this theory as the most dominating theory in the customer satisfaction/dissatisfaction domain since the early 1970’s. It basically assumes that “the consumer has preconceptions of the product or service attributes and benefits he or she wants to reap. The post purchase or actual usage of the product then will reveal to the consumer the real performance of the product or the real value of the service”. According to this theory there are three expected results. 1\(^{st}\), if the product proved to perform better than the perceived or expected performance, then positive disconfirmation (happiness) occurs. In this case, there is likelihood that this will lead customer satisfaction and reinforce customer beliefs and enhances or promotes future purchase possibilities, and also improves the producer image by communicating this feeling to friends and colleagues. 2\(^{nd}\), in case the consumer evaluation of the product performance or service quality is lower than expected, then negative disconfirmation (unhappiness) takes place. Negative disconfirmation normally weakens the chances of repeated purchases and, as a result, the consumer may look for alternative product or service with the competitors or service providers. The last possible situation is when the performance of the product or the quality of the service

equals the perception of the consumer, then something called “simple confirmation” (neutral) occurs. Here the consumer is not for or against the product or the service, but still he or she might easily be attracted by the available alternatives when chance arises.

To the researcher, this is a pragmatic theory as most consumers do hold prior perceived value of the product or service and then they compare their pre-purchase conception to their post purchase experience and make a decision according to one of the three possible results described before.

3. Three Factors Theory:

Johan and Kurt\textsuperscript{169} gave a good description of the three factors theory of customer satisfaction. According to them, this theory was originated in the year 2002 by Matzler and Sauerwein imitating Herzberg 2-factor theory of job satisfaction. In their theory, Matzler and Sauerwein argue that there are 3 main satisfaction factors that companies need to identify and design their policies accordingly. These are:

- Basic factors (dissatisfiers).

Like those of Kano, these are the minimum required features of a product or service that they are expected by the customer and their lack of fulfillment will lead to customer dissatisfaction while their provision does not cause customer satisfaction. These basic features are considered by the customer as prerequisites and taken-for-granted. Their fulfillment or lack of it is directly related to customer satisfaction or lack of it.

• Excitement factors (satisfiers):

These are the factors or features that their provision increases customer satisfaction. The level of performance on these factors causes customer satisfaction as they are regarded as a necessity, but their absence does not cause customer dissatisfaction. Excitement factors are not expected by the customer and their provision supervises the customer and brings more joy and delight to him or her as their expectations have been exceeded.

• Performance factors (hybrid):

Such factors may normally bring satisfaction if fully fulfilled or exceeded customer expectations, but may also cause customer dissatisfaction when not properly or adequately fulfilled. Matzler and Sauerwein\textsuperscript{170}, the founders of the theory explain that the performance factors can cause both satisfaction and dissatisfaction.

\subsection{2.3.4 Measurement of Customer Satisfaction:}

Measuring customer satisfaction is not a luxury anymore. It is about the company performance; profit; and competitive advantage in order to achieve long term survival growth and market leadership. Customer satisfaction, when properly and timely monitored, it provides importance insights and signals regarding the product, the service and the relationship of the customer with the company. It also gives indications of the customer pre and post purchase behavior\textsuperscript{171}.


\textsuperscript{171} Op.cit, page 83
According to Mathew and Christine\textsuperscript{172}, customer satisfaction and its measurement have caught the intention and interest of both academic and practitioners alike in the last twenty years or so. At present, measuring customer satisfaction is a key performance indicator of the company performance which allows benchmarking with competitors and industry standards. The same author explains that, more than 200 American companies have participated in a 1994 survey to address customer satisfaction assessment. The survey results show that 90\% of the surveyed companies indicated that they continuously measure, monitor and manage their customer satisfaction and relations.

Emrah\textsuperscript{173}, gave some good points as to why measuring customer satisfaction is beneficiary to any business. 1\textsuperscript{st}, it shows how good or bad are the business processes geared to customers are working, and consequently where improves may need to be made. 2\textsuperscript{nd}, identify what type and magnitude of change, whether in processes; quality; delivery; or other business areas need to introduced. Finally, it allows management to be aware of their customer requirements and needs in order to direct or redirect the business accordingly. The same sources goes on to add “before measure something it must be known what will be measured and why. The measurement program need to answer the, who, what, when, where, how and why questions that are essential for success”. The answers are:

- Who will measure customer satisfaction? The answer is everyone.


\textsuperscript{173} Op.cit, pages 83-84
What must be measured? Everything and anything that affects customer.

When must you measure? All the time.

Where do you measure? Throughout the entire company and every process that has effect on customer satisfaction and quality.

How do you measure? Throughout establish performance standard and criteria that are quantifiable to evaluate performance against numbers and data.

Why you measure? To learn how to improve quality and increase customer satisfaction.

The American Customer Satisfaction Index (ACSI) is one of the internationally recognized indices that measures customer satisfaction at the national and company levels, although the American Customer Satisfaction Index (ACSI) wasn’t the first to be designed, but it gained popularity quite quickly compared to other indices. For example, Sweden built the first national level measurement system of customer satisfaction in the year 1992, and the same American author built the American Index in the year 1996, yet we find that the American Index is more widely used both in government and industry. Both Indices have been developed by Dr. Fornell and his colleagues from the Michigan University\textsuperscript{174}. This model paved the way to many other measures in other western countries like, German, Norwegian and Swiss in addition to a unified one for the whole of Europe. According to the same source, almost all the Customer Satisfaction Indices (CSIs) are typical in measuring customer satisfaction, despite some minor variations due

\textsuperscript{174} Op.cit page 7
to cultural characteristics of different nations; therefore, the American Customer Satisfaction Index (ACSI), taken as a sample or a representative of all other indices, will be briefly described below.

According to the ACSI website\textsuperscript{175}, “the American Customer Satisfaction Index is an independent national benchmark of customer satisfaction in the quality of products and services available to household consumers in the United States. The ACSI benefits business researchers, policymakers and consumers alike by serving as a national indicator of the health of the US economy, and as a tool for indicating and enhancing the competitiveness of individual firms and predicting future profitability”.

The Business Dictionary\textsuperscript{176} defines the American Customer Satisfaction Index as” relatively new (released in October 1994) economic indicator that measures the satisfaction of the US household customers with the quality of goods and services (both local and imported) available to them. It divides goods and services into seven segments: (1) finance and insurance, (2) manufacturing durables, (3) manufacturing nondurables, (4) public administration and government, (5) retail, (6) services, and (7) communication, transportation and utilities”.

Biljana and Jusuf\textsuperscript{177}, explain that the American Customer Satisfaction Index (ACSI) is designed to measure the national customer satisfaction on the quality of goods and services across American companies. It is the only consistently used measure across-
industry and government. Currently, it is being used across 39 industries, 200 private sector companies, two types of local government services, and the US postal service. The ACSI is a weighted average of three questions that measure overall satisfaction, satisfaction compared to expectations, and satisfaction compared to “ideal” organization. As shown in the below figure, the ACSI, being a cause-and-effect model, with the drivers (causes) on the left side, the perceived quality, the customer expectations, and the perceived value, while satisfaction sits in the middle of the model, and the outcomes (the effects), are on the right side of, the customer complaints and the customer loyalty.

Figure 9: The American Customer Satisfaction Index Model

The same authors state that the factors in the ACSI model are measure by several questions to evaluate their importance. These factors are the perceived quality, which the most important factor in measuring the overall satisfaction and it looks at the recent experience with the market; the perceived value, which the relative value of the product or service compared to its price or cost., and finally, the customer expectations, which evaluate the customer anticipation of the quality of the product or service both pre and post purchase experience.

Despite its wide popularity, the American Satisfaction Index has been less criticized compared to similar tools. Johnson et al\textsuperscript{178} have raised some points that the ACSI have missed. 1\textsuperscript{st}, the model doesn’t accommodate or have a place for the word-of-mouth (WOM), when positive it does has profound impact on customer satisfaction. 2\textsuperscript{nd}, according to the model, complains are consequences of satisfaction while it may be considered as a driver rather than a result. Third, quality and value affect customer loyalty in a direct way as they are prime source of customer satisfaction. In the model these factors are affected by the cumulative satisfaction index. 4\textsuperscript{th}, the link between quality and value has no theoretical support.

However, the American Customer Satisfaction Index will remain as leading tool in measuring customer satisfaction both locally within the United States of America as well as globally in other developed countries where most of them use it as the benchmark to develop their own.

Chapter 3 – Research Methodology

This Chapter displays the research methodology that has been followed in studying the research problem and its related aspects including the research population, the sampling method and size, as well as the statistical methods used for the analysis of the research data.

3.1 Research Design

Before deciding on what type of methodology the researcher will use, there are a number of factors that need to be considered. These include time, efficiency and effectiveness of the methodology to be selected. As this research is a descriptive and correctional one, so the quantitative method is thought to be most appropriate for the purpose of this study. This research used the questionnaire tool for the collection of data. Questionnaires, as qualitative methods, have some major advantages over other methods, some of these advantages include:

- Easy to apply and simple for the respondents to fill out;
- Cheap;
- Time saving;
- It provides choices for the respondents to choose from; and
- The respondent fills the form at his or her own pace and time.
3.2 Target Population

Population for the purpose of social science research has been defined in different ways by different scholars. According to Amitav and Suprakash\(^{179}\), population is “an entire group about which some information is required to be ascertained”.

This study explored a number of constructs on organizational culture, job satisfaction and customer satisfaction as experienced and expressed by the respondents. There are two groups of respondents in this study, the first group is the medicine manufacturing factories, represented by the sales representatives of each factory, and the second group is the pharmacies of the health institutions (government, private or non-government organizations (NGOs) that buy the products of any of the three factories. In other words, the factories have two groups of population, the internal customers represented by sales representatives, and the pharmacies of the health institutions represented by those who are authorized to buy the products of the factories on behalf of their institutions. The sales representative is the link between the factory and its customers.

3.3 Sampling and Sample Size

One critical element in sampling the population is defining which source of materials can be chosen. This source, termed “the sampling frame” is generally a container or an official list of some form; such as list of factories in a city or state, a list of pharmacies in

one city or area, or health institutions in the locality. In this study, the list of the factories and the list of Health institutions were provided by the concerned government authorities in the Sudan. Factory lists have been provided by the Ministry of Industry and the Registrar of Companies in the Khartoum State, while the list of Health Institutions has been provided by the General Directorate of Health Services in the Khartoum State as well.

To minimize sampling errors, the stratified random sample is used and the sample size is determined, taking into accounts, two major factors that normally affect the sample size. One factor is the variability of the population, and the other factor is the degree of precision required in the results. For this research, the sample size is made up according to the following statistical equation

\[
 n = \frac{1}{N} + \frac{N-1}{N} \frac{1}{PQ} \left( \frac{k}{Z_{1-\alpha/2}} \right)^2
\]

Where N=population size, P=population proportion, Q=1-p, k=desired level of precision, Z is the value of the normal standard coordinate for a desired level of confidence, 1-\(\alpha\).

Again, due to the characteristics of the population of this study, the simple random sampling is thought of to be the most appropriate as there is high homogeneity among the two populations as the two groups are mostly graduates of school of pharmacy. In order to determine how many factories will represent the Pharmaceutical Industry, the researcher applied the above
statistical equation, and the result was 3 factories. Then in order to select the three factories, the 19 operating factories were subjected to the SPSS, version 20, to randomly select the names of the three factories that represent the industry. The second sample, the health institutions, were also randomly selected by the data collectors when distributing the questionnaire, on the condition that the institution must be dealing with at least one of the three factories, and the sample size for each factory must not be less than 30 participants.

3.4 Procedure:

After thoroughly researching the relevant literature, the researcher has chosen to use three questionnaires forms to investigate the hypotheses of this study. The selected questionnaires forms, namely, the OCAI, the JSS, and the CSQ, are all based on sound theoretical backgrounds. Most respondents, speak and write Arabic, so the researcher has translated the three questionnaires contents into Arabic, and presented them to high level university professors and some practitioners in the field for the purpose of ensuring the face validity of their contents. Some important and valuable remarks were received and incorporated into the final copy of the questionnaires. Also, some meetings were held with the general managers of the three factories to convince them with the rationale for the research and seek their confirmation and permission to participate in the study. It was agreed, in these meetings, that
the researcher will administer the questionnaires (the OCAI and the JSS) himself in order to facilitate the process and answer any queries that might arise. The researcher then held different meetings with the sales representatives of each factory and explained the purpose and benefits of the study and ensured the confidentiality of the information provided. In the same meeting, the researcher has distributed the questionnaires forms to the sales representatives, 27 for Factory 1, 26 for Factory 2, and 5 for Factory 3. Being small sample, all the questionnaires were distributed and collected the same day.

In order to distribute the customer satisfaction questionnaire forms to the Health Institutions, a team of four data collectors was hired to distribute and collect the questionnaires forms. Due to this practical method, 66 questionnaires forms were distributed and collected. This operation continued for 10 working days.

3.5 Instruments – Methods of Data Collection:

As discussed in Chapter 2, this study is descriptive and correlational one; therefore, it requires a quantitative method to collect its data. Also, due to the scattered and fragmented nature of the data, different sources and methods were used to collect data. Primary data is collected through the use of questionnaire, while secondary data was collected from its different sources within the government authorities.

Three instruments, translated into Arabic- using two questionnaire forms- have been administered to collect data for this research. The organizational culture dimensions
and job satisfaction facets have been merged into one questionnaire in order to make it easy for the respondents and save their time. The respondents are the sales representative staff in each factory. The second questionnaire form is the customer satisfaction questionnaire designed for the customers – the medicine procurement personnel in each health institution. Section one in each questionnaire form is designed to collect data on the demographic variables of the sample, such as gender, age, level of education and tenure. Below is a brief description of the three instruments and their scoring methodology:

A. The Organizational Culture Assessment Instrument (OCAI):

The OCAI questionnaire consists of 24 items describing 6 domains (4 statements for each domain) of the organizational culture. According to the Competing Value Framework (CVF), these domains normally co-exist, to varying degrees, in any organization, although one of them will be more dominant than others. Respondents are asked to give a score for each statement ranging from 1 to 5 on a 5-point likert type scale. The respondent gives the higher score to the statement that closely describes his or her opinion about the existence of the domain. The six domains are dominant characteristics; organizational leadership; people management; organizational glue; strategic focus and criteria for success.

The Original OCAI is scored out of 100, but the researcher opted to make the scoring on a 5-point likert type scale for two main reasons. First, the original scoring, according the official website of the OCAI, can’t be analyzed using the SPSS. The second reason was to unify the scoring methodology throughout the study in order
for the results to be homogenous and relate to each other. Respondents are asked to rate their opinions as follows:

1. Never true;
2. Slightly true;
3. Partly true;
4. Mostly true; and
5. Completely true.

B. The Job Satisfaction Survey (JSS)

The Job Satisfaction Survey (JSS) contains 36 items covering 9 areas, namely, satisfaction with pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers, nature of work and communication.

The JSS is scored on a 6-point Likert type scale. Respondents are asked to rate their opinion on a scale from 1-6 as follows:

1. Disagree very much;
2. Disagree moderately;
3. Disagree slightly;
4. Agree slightly;
5. Agree moderately; and
6. Disagree very much
C. The Customer Satisfaction Questionnaire (CSQ)

The Customer Satisfaction Survey (CSQ), consists of 42 items covering 5 dimension of customer satisfaction, namely, Reliability; Responsiveness; Access; Competency; and Communication.

The CSQ uses a 5-point Likert type scale. Respondents are required to explain or express their opinion on a scale from 1-5 as follows:

1. Agree very much;
2. Agree;
3. Do not know;
4. Disagree; and
5. Disagree very much.

Respondents need to rate their opinion about the three factories in the same sheet. This also thought of as a convenient way than giving the respondent three separate questionnaires, one for each factory.

3.6 Statistical Methods:

In order to test the hypotheses of this research, the Statistical Package for the Social Sciences (SPSS) was used. This software package developed by the famous IBM Company is proven and widely used in the social science research. Both its descriptive and inferential statistics were used to analyze the collected data.
3.6.1 Descriptive Statistics:

Babbie and Mouton, as cited by Leigh\textsuperscript{180}, defined descriptive statistics as “computations describing either the characteristics of a sample or the relationship among variable in a sample.”

Descriptive statistics are presented in the form of frequencies, percentages, means and standard deviations.

3.6.2 Inferential Statistics:

Babbie & Mouton, as cited by Leigh\textsuperscript{181}, explained that the inferential statistics are used to make judgments or inference about larger population from the data a small sample drawn from the population.

Inferential techniques were used to determine relationships between variables and whether differences among the variable exist or not. This research used the following inferential techniques to test its hypothesis.

1. Pearson Product Moment Correlation

The Pearson Product Moment Correlation (PPMC) is defined by Anasatsi and Urbina, as cited by Leigh\textsuperscript{182}, as “a technique that considers the person’s position in the group as well as his or her deviation above or below the group mean”.

\textsuperscript{181} Op.cit, page 63
\textsuperscript{182} Op.cit, page 63
The PPMC is normally used to assess the degree of relationship between the dimensions of a survey.

The same author explains that the correlation coefficient could be perfectly negative or perfectly positive. A value of -1 is a perfect negative correlation while a +1 is a perfectly positive correlation.

2. Analysis of Variance (ANOVA)

According to Dominick and Derrick\textsuperscript{183}, ANOVA, is a technique used to “test the null hypothesis that the means of two or more populations are equal versus the alternative that at least one of the means is different”. In this study, the ANOVA analysis was used to determine whether respondent’s perception to the culture traits in the three factors is significantly different or not.

Chapter 4 – Data Analysis and Discussion

This chapter presents; analyses; and discusses the results of this study. The chapter is divided into four sections. Section one presents and explains the reliability of each instrument for each factory; the second part depicts the statistics of the demographic variables of each factory in the study, these variables include, gender, age, level of education, and level of experience/tenure; section three highlights the results of the descriptive statistics of the three variables in each factory which are organizational culture; job satisfaction; and customer satisfaction. The last section concludes by the showing correlations and means analyses between the same three variables using correlational techniques such as Pearson, ANOVA, and t-test; and regression analyses. Some graphics like pie charts will be used for more illustrations where appropriate.

The Organizational Culture Assessment Instrument (OCAI), the Job Satisfaction Survey (JSS), and the Customer Satisfaction Questionnaire (CSQ), are made of 24; 36; and 42 statements respectively. The 24 statements of the OCAI, are distributed among 6 dimensions, like the Dominant Characteristics, Organizational Leadership, Management of Employees, Organizational Glue, Strategic Emphasis; and Criteria of Success. The 36 statements of the JSS are made of 9 facets such as Pay; Promotion; Supervision; Fringe Benefits; Contingent Rewards; Operating Conditions; Coworkers; Nature of Work; and Communication where each facet has 4 statements to describe it. The CSQ 42 statements are made of 5 factors, like Dependability; Responsiveness; Access; Competence; and Communication.
Field Study

This study was meant to investigate the relationship between organizational culture; job satisfaction and customer satisfaction variables in the pharmaceutical industry in the Khartoum state of the Sudan. Initially, the intention was to obtain a large sample that would better represent the private and public sectors of the industry but some factories opted not to participate in this study, therefore, this study is mostly representative of the foreign investment sector and private/family business sector. This is because 2 out of the 3 factories are of foreign investment type, while the third factory is a small local/family business set up. The public sector is not represented in this study.

According to the records of the Ministry of Industry, the Pharmaceutical Industry in the Sudan is a relatively modern sector. It started to emerge in the year 1961 with the inauguration of Chemical Industries Factory in Khartoum North, and Nicholas Badrian Factory in Wad Medani. Both factories have soon stopped due to high custom taxes. As of today, there are about 23 factories out of which 19 are operating including public; private; and the foreign investment sectors. The World Health Organization (WHO) report in the year 2010 indicates that the ratio of pharmacists to population in the public sector in the Sudan is 0.39/10,000. What is rather more recent than the industry itself is the introduction of the “sales representatives” job. In the recent past, customers used to go to the factory and pick up their orders, but now a days sales representatives exert good efforts to convince the customer to buy the products of their factory. This situation may be because of two main reasons, 1st, the intensification of competition, and entrance of the foreign companies into the Sudanese Pharmaceutical market that lead to the reduction of sales, and 2nd, is that Sudanese pharmacists are experiencing a change of perception about working as sales persons.
The three factories that have randomly been selected for the field study are Al Hikma Pharmaceutical (F1); Tabuk Pharmaceutical (F2); and CityPhama (F3). The first two organizations (F1 and F2, are foreign investments, while the third one, F3, is a small Sudanese family business. All of these factories are operating in Khartoum State. Below is a brief description of each of them.

According to Ahmad\textsuperscript{184}, Factory 1 is a subsidiary of a large Jordanian Pharmaceutical Group consisting of 28 facilities distributed in 12 countries around the world, including Sudan. This group is considered the fourth largest pharmaceutical group in London Stock Exchange.

This facility entered the Sudanese market in 1982 as drug importer and distributor. It has two local agents, at the time, who are responsible for sales and distribution of drugs. In 2011, the Company has started manufacturing pharmaceutical products. This facility employs about 200 staff out of which 35 employees are in the sales department.

Factory 2, is a branch of a Saudi Pharmaceutical Company established in the year 1994 as a subsidiary of an international Pharmaceutical Group. In the year 2010, the Group had an expansion strategy outside its home country, and Sudan was chosen to be the first country to implement this strategy. This facility was founded in 2010 when the Group bought an operating facility from another foreign investment company. This facility contributed to the Sudanese Pharmaceutical market by producing a number of pharmaceutical products like life-saving drugs. This factory employs over 250 staff out of which 30 employees are working in the sales department.

Factory 3 is a fairly small local Pharmaceutical Company of family business nature. It was founded in the year 1999 to produce high quality pharmaceutical products for local and regional markets. It employs more than 50 Sudanese staff, out of which 5 are in the sales department.

The Pharmaceutical industry has been chosen for this study for several reasons. First, pharmaceutical industry produces medicines and other stuff that enhances the quality of life of citizens. Once it has been said that the major three enemies of all humanity are illiteracy, illness and poverty. To the researcher, illiteracy is the poorness of mind and illness is the poorness of body, and poverty is the result of both of them. Another fact is that poorness of mind follows the poorness of body, hence comes the importance of health. The old sayings still hold correct, “fit body, fit mind”, and “poor in mind, poor in money”. 2nd, drugs are made by people for people. People are the means and the end at the same time therefore; this industry is the most important of all industries. 3rd, the enhancement of health, or lack of it, has a profound impact on the economic and social aspects of every person and the society and life in its entirety. 4th, all international efforts in establishing sustainable development in the underdeveloped countries, start first by building a healthy and competitive humans in the targeted countries. 5th, there are no similar studies tapping such issues in this industry in the Sudan.

This study mainly hypothesizes that there is a significant statistical correlation, in each factory, between the Organizational culture type; the overall job satisfaction level of its staff (sales representatives in this study), and the level of its overall customers satisfaction (Officers in the health institutions who are responsible for procurement of drugs from the sample organizations).

Employees of each factory as well as its customers have been asked to fill out 3 survey instruments (questionnaires). These are, the OCAI developed by
Professors Quinn and Cameron; the JSS developed by Professor Paul Spector, both instruments have been extensively used in research to examine the relationship between the culture of an organization and the overall level of employees’ job satisfaction respectively. The third questionnaire is the Customer Satisfaction Questionnaire, which is developed to measure the overall customer satisfaction level for each factory. All these instruments have been subjected to reliability tests.

4.1 Reliability of the Measurement Instruments:

A number of writers assert the importance of the reliability concept, among these writers is Drost\textsuperscript{185} who defines reliability as” the extent to which measurements are repeatable – when different persons perform the measurements, on different occasions, under different conditions, with supposedly alternative instruments which measure the same thing”. The same author goes on to illustrate that there are many ways and techniques to estimate the reliability of a scale, among the most widely used techniques is the Cronbach Alpha coefficient. Also, there is no agreement among the scholars on the level of acceptance of the reliability of an assessment. Some like, Dawn and Adam\textsuperscript{186} argue that the Cronbach alpha coefficient level ranges between 0-1, where 0 indicates no internal consistency and 1 indicates the maximum degree of interrelatedness. In reality, the acceptance level may range from 0.3 to 0.7 in some cases. This study used Cronbach Alpha Coefficient to test the reliability of each of its instruments dimensions and subscales. Tables from 1 to 3 show the reliability of each instrument for each factory. Data for the three factories is presented in one table in order to consolidate and minimize data. Only high and low scores of reliability is described below.


\textsuperscript{186} Dawn Iacobucci and Adam Duhacheck,” Advancing Alpha: Measuring Reliability with Confidence”, Journal of Consumer Psychology, Vol., 13, No. 4, page481
1.1.1 Reliability of the Organizational Culture Assessment Instrument:

Table 4.1 below shows Alpha Cronbach coefficient for the Organizational Culture Assessment Instrument. For F1, the Alpha Cronbach coefficient ranges between 0.36 and 0.58, and for F2 the Alpha Cronbach coefficient ranges between 0.18 and 0.65, while for F3, it ranges between -0.07 and 0.74. Except for the market culture for F2, F3, The entire reliability coefficient is within the acceptable level of reliability.

Table 1 - Reliability of the Organizational Culture Assessment Instrument

<table>
<thead>
<tr>
<th>Dimension/factory</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan</td>
<td>0.54</td>
<td>0.45</td>
<td>0.58</td>
</tr>
<tr>
<td>Adhocracy</td>
<td>0.58</td>
<td>0.59</td>
<td>0.21</td>
</tr>
<tr>
<td>Market</td>
<td>0.36</td>
<td>0.18</td>
<td>-0.07</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>0.39</td>
<td>0.65</td>
<td>0.74</td>
</tr>
<tr>
<td>Overall Reliability</td>
<td>0.55</td>
<td>0.56</td>
<td>0.53</td>
</tr>
</tbody>
</table>

1.1.2 Reliability of the Job Satisfaction Survey:

The below table 4.2 provides the Cronbach Alpha reliability coefficients of the JSS facets for the three factories. The Alph Cronbach reliability coefficient for F1 ranges between 0.73 and 0.80 and for F2, the Alpha Cronbach reliability coefficient ranges between 0.64 and 0.71, while for F3, it ranges between 0.49 and 0.73. The entire reliability coefficient is within the acceptable level of reliability.
1.1.3 Reliability of the Customer Satisfaction Questionnaire:

The below table 4.3 indicates the Cronbach Alpha reliability coefficients for customer satisfaction for each factory. The Alpha Cronbach coefficient for F1 ranges between 0.45 and 0.66 and for F2, the Alpha Cronbach coefficient ranges between 0.65 and 0.74, while for F3, it ranges between 0.58 and 0.69. The entire reliability coefficient is within the acceptable level of reliability.

<table>
<thead>
<tr>
<th>Job Satisfaction Facet</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>0.76</td>
<td>0.67</td>
<td>0.49</td>
</tr>
<tr>
<td>Promotion</td>
<td>0.77</td>
<td>0.65</td>
<td>0.56</td>
</tr>
<tr>
<td>Supervision</td>
<td>0.76</td>
<td>0.69</td>
<td>0.77</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>0.80</td>
<td>0.65</td>
<td>0.59</td>
</tr>
<tr>
<td>Contingent Rewards</td>
<td>0.73</td>
<td>0.66</td>
<td>0.52</td>
</tr>
<tr>
<td>Operating Conditions</td>
<td>0.80</td>
<td>0.69</td>
<td>0.76</td>
</tr>
<tr>
<td>Co-workers</td>
<td>0.77</td>
<td>0.69</td>
<td>0.69</td>
</tr>
<tr>
<td>Nature of Work</td>
<td>0.75</td>
<td>0.71</td>
<td>0.58</td>
</tr>
<tr>
<td>Communication</td>
<td>0.75</td>
<td>0.64</td>
<td>0.73</td>
</tr>
<tr>
<td>Overall Reliability</td>
<td>0.79</td>
<td>0.70</td>
<td>0.69</td>
</tr>
</tbody>
</table>
Table 3: Reliability of the Customer Satisfaction Questionnaire

<table>
<thead>
<tr>
<th>Customer Satisfaction Factor</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependability</td>
<td>0.59</td>
<td>0.74</td>
<td>0.58</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.45</td>
<td>0.65</td>
<td>0.69</td>
</tr>
<tr>
<td>Access</td>
<td>0.55</td>
<td>0.72</td>
<td>0.50</td>
</tr>
<tr>
<td>Competence</td>
<td>0.66</td>
<td>0.70</td>
<td>0.58</td>
</tr>
<tr>
<td>Communication</td>
<td>0.52</td>
<td>0.71</td>
<td>0.69</td>
</tr>
<tr>
<td>Overall Reliability</td>
<td>0.61</td>
<td>0.75</td>
<td>0.66</td>
</tr>
</tbody>
</table>
4.2 Population Statistics:

The tables that follow from 4.4 to 4.11 and their corresponding figures 4.1 to 4.8 present the population for the employees and customers of each factory. The population variables, for both employees and customers, are the gender, the age, the level of education and the level of experience/tenure.

1. Employees

A. Gender

The below table 4.4 indicates that for F1, the majority, almost (90%), n=27, of the sales representatives are males, a bit more than 1/10th (11.1%), n=3, are females, and for F2, little less than 2/3rd (61.5%), n=16 are males, and a little more than 1/3rd (38.5%), n=10, are females, while for F 3 a little less than 2/3rd, (60%), n=3, are males, and more than 1/3rd (40%), n=2, are females.

<table>
<thead>
<tr>
<th>Gender</th>
<th>F1</th>
<th></th>
<th>F2</th>
<th></th>
<th>F3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>male</td>
<td>24</td>
<td>88.9</td>
<td>16</td>
<td>61.5</td>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td>female</td>
<td>3</td>
<td>11.1</td>
<td>10</td>
<td>38.5</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100</td>
<td>26</td>
<td>100</td>
<td>5</td>
<td>100</td>
</tr>
</tbody>
</table>
Fig (4.1) Distribution of employees by factory and gender
B. Age

Table 4.5 below shows that, for F1 over half (59.3%) of the respondents, n=16 are in the age group between 30-39, and a little bit more than 1/3rd (33.3%), n=9 are in the age group between 20-29, and for F2 more than 2/3rd (69.2%), n=18 are in the age group between 20-29, while (30.8%), n=8 are in the age group between 30-39, while for F3 the majority (80%), n=4 are in the age group between 20-29, and (20%), n=1 is in the age group between 30-39.

Table 5: Distribution of employee by age

<table>
<thead>
<tr>
<th>Age</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>20.00-29.00</td>
<td>9</td>
<td>33.3</td>
<td>18</td>
</tr>
<tr>
<td>30.00-39.00</td>
<td>16</td>
<td>59.3</td>
<td>8</td>
</tr>
<tr>
<td>40.00-49.00</td>
<td>2</td>
<td>7.4</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100</td>
<td>26</td>
</tr>
</tbody>
</table>
Figure (4.2) - Distribution of employee by age
C. Level of Education

As shown in table 4.6 below, for F1, a big majority of almost 9/10\textsuperscript{th} of the sample (88.9\%), n=24, are graduates and (11.1\%)(n= 3 are postgraduates, and for F2 a big majority (88.5\%), n=26 are graduates, and (11.5\%) n=3 are postgraduates, while for F3, all the respondents (100\%) , n=5 are graduates.

Table 6: Distribution of employee by level of education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>F1</th>
<th></th>
<th>F2</th>
<th></th>
<th>F3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Postgraduates</td>
<td>3</td>
<td>11.1</td>
<td>03</td>
<td>11.5</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Graduate</td>
<td>24</td>
<td>88.9</td>
<td>23</td>
<td>88.5</td>
<td>05</td>
<td>100</td>
</tr>
<tr>
<td>High School</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100</td>
<td>26</td>
<td>100</td>
<td>05</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure (4.3) Distribution of employee by level of education
D. Years of Experience/Tenure

As evident from the below table 4.7 that for F1, well over ¾ (77.8%) of the respondents, n=21 have an experience between 1-5 years and for F2, (14.8%), n=4 have an experience between 6-10 years, while for F3 the majority (80.8%), n=21 have an experience between 1-5 years.

Table 7: Distribution of employee by years of experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= .00</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>1.00 - 5.00</td>
<td>21</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>6.00 - 10.00</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>11.00 - 15.00</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27</td>
<td>26</td>
<td>5</td>
</tr>
</tbody>
</table>
Figure (4.4) – Distribution of employee by years of experience
2. Customers

A. Gender

The below table 4.8 reveals that for F1, over half of the respondents (54.5%), n=31 are females and only (45.5%), n=26, are males, and for F2 more than half of the respondents (54.6%), (n=31) are females, and o (45.6%), n= 26 are males, while for F3, over half of the respondents (52.1%), n=25 are females and a little less than half (47.9%) of the respondents, n=23 males.

Table 8: Distribution of customers by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>F1</th>
<th></th>
<th>F2</th>
<th></th>
<th>F3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>male</td>
<td>30</td>
<td>45.5</td>
<td>26</td>
<td>45.6</td>
<td>23</td>
<td>47.9</td>
</tr>
<tr>
<td>female</td>
<td>36</td>
<td>54.5</td>
<td>31</td>
<td>54.4</td>
<td>25</td>
<td>52.1</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
<td>57</td>
<td>100</td>
<td>48</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 4.5) - Distribution of customers by gender

B. Age

The table 4.9 reads that for F1, over half (57.6%) of the respondents, n=38 are in the age group between 20-29, and (28.8%), n=19 are in the age group between 30-39, and only one respondent is in the age group between 50-59, and for F2, most (57.9%) of the respondents, n=33 are with the age group between 20-29, and (28.1%) of the respondents, n=16 are in the age group between 30-39, while only one customer is in the age group between 50-59, while for F3, the customer age distribution is that a little more than half (54.2%), n=26 are in the age group between 20-29, while a little more than 1/3rd (33.3%), n=16 are in the age group between 30-39, while only one customer is in the age group between 50-59.

Table 9: Distribution of customers by age

<table>
<thead>
<tr>
<th>Age</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.00 - 29.00</td>
<td>38</td>
<td>33</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>57.6</td>
<td>57.9</td>
<td>54.2</td>
</tr>
<tr>
<td>30.00 - 39.00</td>
<td>19</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>28.8</td>
<td>28.1</td>
<td>33.3</td>
</tr>
<tr>
<td>40.00 - 49.00</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>7.6</td>
<td>7.0</td>
<td>4.2</td>
</tr>
<tr>
<td>50.00 - 59.00</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1.5</td>
<td>1.8</td>
<td>2.1</td>
</tr>
<tr>
<td>60.00+</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4.5</td>
<td>5.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>57</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Figure (4.6) - Distribution of customers by age
C. Level of Education

As can be seen from below table 4.10 for F1, the majority (69.7%) of the respondents, n=46 are graduates, and (28.8%), n=19 are postgraduate, while only one respondent (1.5) is a higher school leaver, and for F2, the majority (68.4%) are graduate, n=39, while, (29.8%) , n=17 are postgraduates, and only one respondent (1.8%) is a high school leaver, while for F3 the majority (70.8%), n=34 are graduates, and (27.1%), n=13 are postgraduates, and one respondent (2.1%) is a high school Leaver.

Table 10: Distribution of customers by level education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Postgraduates</td>
<td>19</td>
<td>28.8</td>
<td>17</td>
</tr>
<tr>
<td>Graduate</td>
<td>46</td>
<td>69.7</td>
<td>39</td>
</tr>
<tr>
<td>High School</td>
<td>1</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
<td>57</td>
</tr>
</tbody>
</table>
Figure (4.7) - Distribution of customers by level of education
D. Years of Experience/Tenure

As evident from the below table 4.11, the majority in each factory has between 1-5 years experience in their current job. For F1, well over three quarters (77.8%) of the respondents, n=21, and for F2, the majority (80.8%) of the respondents, n=21, while for F3 all of the respondents (100), n=5

Table 11: Distribution of customers by years of experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>&lt;= .00</td>
<td>1</td>
<td>3.7</td>
<td>3</td>
</tr>
<tr>
<td>1.00 - 5.00</td>
<td>21</td>
<td>77.8</td>
<td>21</td>
</tr>
<tr>
<td>6.00 - 10.00</td>
<td>4</td>
<td>14.8</td>
<td>2</td>
</tr>
<tr>
<td>11.00 - 15.00</td>
<td>1</td>
<td>3.7</td>
<td>00</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100</td>
<td>26</td>
</tr>
</tbody>
</table>
Figure (4.8) - Distribution of customers by years of experience
4.3 Descriptive Statistics

Business organizations continuously face and confront operational challenges. One of the most possible, but neglected reason, might be the organizational culture type that dominates the firm. Recent research has confirmed the impact the organizational culture has on organizational issues such as job satisfaction and customer satisfaction levels.

This section of the Chapter presents the descriptive data that has been collected through the questionnaires, and analyzed through the SPSS. The following tables show the frequencies; means; standard deviations; ranks in order to indentify the dominant organizational culture as well as the overall job and customer satisfaction in each factory separately.

A. Organizational Culture Type

The below table 4.12 shows the dominant organizational culture type in each factory. All factories are presented in one table to minimize and consolidate data. The dominant culture is identified by the highest mean score as shown in the below table. For F1, the market culture with a mean of 12.3 is the most dominant culture, while for F2, the market culture with a mean of 13.27 is the most dominant culture, and for F3, the Hierarchy culture with a mean of 15.4 is considered the most dominant culture.

<table>
<thead>
<tr>
<th>Organizational Type</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan</td>
<td>Mean 9.7</td>
<td>SD 2.3</td>
<td>Mean 11.31</td>
</tr>
<tr>
<td>Adhocracy</td>
<td>Mean 10.4</td>
<td>SD 2.3</td>
<td>Mean 12.38</td>
</tr>
<tr>
<td>Market</td>
<td>Mean 12.3</td>
<td>SD 2.6</td>
<td>Mean 13.27</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>Mean 8.7</td>
<td>SD 2.0</td>
<td>Mean 11.04</td>
</tr>
</tbody>
</table>
B. Job Satisfaction Survey

1. Frequencies of Job Satisfaction Statements for the three sample organizations

As can be seen from table 4.13 below, that 74.9% of the participants agree very much that they feel a sense of pride in doing their job, while 55.2% of the participants disagree very much that the many rules and procedures making doing a good job difficult.

Table 13: Frequencies of Job Satisfaction Statements

<table>
<thead>
<tr>
<th>Statement (*)</th>
<th>Disagree very much</th>
<th>Disagree moderately</th>
<th>Disagree slightly</th>
<th>Agree slightly</th>
<th>Agree moderately</th>
<th>Agree very much</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
</tr>
<tr>
<td>1</td>
<td>29 50.0</td>
<td>15 25.90</td>
<td>4 6.90</td>
<td>3 5.20</td>
<td>5 8.60</td>
<td>2 3.40</td>
</tr>
<tr>
<td>2</td>
<td>11 19.0</td>
<td>10 17.20</td>
<td>15 25.90</td>
<td>4 6.90</td>
<td>11 19.00</td>
<td>7 12.10</td>
</tr>
<tr>
<td>3</td>
<td>5 8.6</td>
<td>3 5.20</td>
<td>3 5.20</td>
<td>6 10.30</td>
<td>16 27.60</td>
<td>25 43.10</td>
</tr>
<tr>
<td>4</td>
<td>13 22.4</td>
<td>16 27.60</td>
<td>9 15.50</td>
<td>4 6.90</td>
<td>5 8.60</td>
<td>11 19.00</td>
</tr>
<tr>
<td>5</td>
<td>6 10.3</td>
<td>11 19.00</td>
<td>7 12.10</td>
<td>8 13.80</td>
<td>10 17.20</td>
<td>16 27.60</td>
</tr>
<tr>
<td>6</td>
<td>32 55.2</td>
<td>6 10.30</td>
<td>12 20.70</td>
<td>1 1.70</td>
<td>4 6.90</td>
<td>3 5.20</td>
</tr>
<tr>
<td>7</td>
<td>0 0.0</td>
<td>3 5.20</td>
<td>1 1.70</td>
<td>2 3.40</td>
<td>16 27.60</td>
<td>36 62.10</td>
</tr>
<tr>
<td>8</td>
<td>4 6.9</td>
<td>6 10.30</td>
<td>5 8.60</td>
<td>6 10.30</td>
<td>6 10.30</td>
<td>31 53.40</td>
</tr>
<tr>
<td>9</td>
<td>8 13.8</td>
<td>0 0.00</td>
<td>7 12.10</td>
<td>19 32.80</td>
<td>17 29.30</td>
<td>7 12.10</td>
</tr>
<tr>
<td>10</td>
<td>24 41.4</td>
<td>17 29.30</td>
<td>6 10.30</td>
<td>5 8.60</td>
<td>2 3.40</td>
<td>4 6.90</td>
</tr>
<tr>
<td>11</td>
<td>6 10.3</td>
<td>5 8.60</td>
<td>5 8.60</td>
<td>11 19.00</td>
<td>15 25.90</td>
<td>16 27.60</td>
</tr>
<tr>
<td>12</td>
<td>3 5.2</td>
<td>7 12.10</td>
<td>1 1.70</td>
<td>4 6.90</td>
<td>12 20.70</td>
<td>31 53.40</td>
</tr>
<tr>
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<td>29 50.0</td>
<td>13 22.40</td>
<td>5 8.60</td>
<td>7 12.10</td>
<td>0 0.00</td>
<td>4 6.90</td>
</tr>
<tr>
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<td>2 3.4</td>
<td>14 24.10</td>
<td>9 15.50</td>
<td>6 10.30</td>
<td>14 24.10</td>
<td>13 22.40</td>
</tr>
<tr>
<td>15</td>
<td>7 12.1</td>
<td>10 17.20</td>
<td>11 19.00</td>
<td>17 29.30</td>
<td>7 12.10</td>
<td>6 10.30</td>
</tr>
<tr>
<td>16</td>
<td>3 5.2</td>
<td>4 6.90</td>
<td>3 5.20</td>
<td>10 17.20</td>
<td>12 20.70</td>
<td>26 44.80</td>
</tr>
<tr>
<td>17</td>
<td>3 5.2</td>
<td>3 5.20</td>
<td>4 6.90</td>
<td>8 13.80</td>
<td>13 22.40</td>
<td>27 46.60</td>
</tr>
<tr>
<td>18</td>
<td>5 8.6</td>
<td>8 13.80</td>
<td>3 5.20</td>
<td>3 5.20</td>
<td>14 24.10</td>
<td>25 43.10</td>
</tr>
<tr>
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<td></td>
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<td></td>
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<tr>
<td>---</td>
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<td>---</td>
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<td>5.20</td>
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<td>22</td>
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<td>22.40</td>
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<td>25.90</td>
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<td>1.70</td>
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<td>25.90</td>
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<td>3.40</td>
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<td>0.00</td>
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<td>17.20</td>
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<td>30</td>
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<td>3.4</td>
<td>1</td>
<td>1.70</td>
<td>2</td>
<td>3.40</td>
</tr>
<tr>
<td>31</td>
<td>5</td>
<td>8.6</td>
<td>7</td>
<td>12.10</td>
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<td>10.30</td>
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<td>27.60</td>
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<td>11</td>
<td>19.00</td>
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<td>3.4</td>
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<td>8.60</td>
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</tr>
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<td>3.4</td>
<td>6</td>
<td>10.30</td>
<td>5</td>
<td>8.60</td>
</tr>
<tr>
<td>36</td>
<td>8</td>
<td>13.8</td>
<td>8</td>
<td>13.80</td>
<td>10</td>
<td>17.20</td>
</tr>
<tr>
<td>Total</td>
<td>395</td>
<td>18.9</td>
<td>298</td>
<td>14.3</td>
<td>246</td>
<td>11.8</td>
</tr>
</tbody>
</table>
2. Means and Standard Deviations of Job Satisfaction Statements for the three sample organizations

Table 14.14 below shows that most participants (mean 5.5) strongly agree that they feel a sense of pride in doing their work, while most participants (mean 2.969) moderately disagree that they feel they are being paid a fair amount for the work they do.

Table 14: Means and Standard Deviation of Job Satisfaction Statements

<table>
<thead>
<tr>
<th>Rank</th>
<th>Statement</th>
<th>M</th>
<th>Interpretation</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Rank</td>
<td>I feel a sense of pride in doing my job</td>
<td>5.5</td>
<td>Strongly Agree</td>
<td>1.09625</td>
<td>35.5</td>
</tr>
<tr>
<td>statement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowest rank</td>
<td>I feel I am being paid a fair amount for the work I do</td>
<td>2.069</td>
<td>Moderately Disagree</td>
<td>1.46134</td>
<td>1</td>
</tr>
<tr>
<td>statement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Overall Job Satisfaction Level for the three Factories

Below table 4.15 shows the level of job satisfaction for each factory. For F1, the level of job dissatisfaction is 70.4% (n=19), and for F2, the level of job dissatisfaction is 69.2 (n=18), while for F3, the level of satisfaction is 60% (n=3)

Table 15: Job Satisfaction levels

<table>
<thead>
<tr>
<th>F/N</th>
<th>Dissatisfied</th>
<th>Ambivalent</th>
<th>Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>F1 (n=27)</td>
<td>19</td>
<td>70.4</td>
<td>5</td>
</tr>
<tr>
<td>F2 (n=26)</td>
<td>18</td>
<td>69.2</td>
<td>3</td>
</tr>
<tr>
<td>F3 (n=5)</td>
<td>3</td>
<td>60</td>
<td>2</td>
</tr>
</tbody>
</table>
C. Customer Satisfaction Survey

1. Frequencies of customer Satisfaction statements for the three sample organizations

A. Dependability factor

Below table 4.16 shows that a little less than half of the participants (42.7%, agree very much that the factory products arrive in the required quantities, while, more than 1/3rd (41.5%) of the participants disagree very much that it never happened they lost an order of didn’t reach them.

Table 16: Frequencies of customer satisfaction for the three sample organizations

<table>
<thead>
<tr>
<th>Statement (*)</th>
<th>Agree very much</th>
<th>Agree</th>
<th>Do not know</th>
<th>Disagree</th>
<th>Disagree very much</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>45</td>
<td>27.4</td>
<td>97</td>
<td>59.1</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>4.9</td>
<td>11</td>
<td>6.7</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>70</td>
<td>42.7</td>
<td>83</td>
<td>50.6</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>6.7</td>
<td>13</td>
<td>7.9</td>
<td>31</td>
</tr>
<tr>
<td>5</td>
<td>31</td>
<td>18.9</td>
<td>52</td>
<td>31.7</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>0.6</td>
<td>2</td>
<td>1.2</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>36</td>
<td>22.0</td>
<td>72</td>
<td>43.9</td>
<td>26</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>5.5</td>
<td>7</td>
<td>4.3</td>
<td>33</td>
</tr>
<tr>
<td>9</td>
<td>33</td>
<td>20.1</td>
<td>41</td>
<td>25.0</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>244</td>
<td>16.6</td>
<td>378</td>
<td>25.8</td>
<td>191</td>
</tr>
</tbody>
</table>
*key

1. Trust that factory products are delivered on time without delay.
2. Do not trust that factory products are delivered exactly to the specified place.
3. Trust that factory products are delivered in the ordered quantities.
4. Do not trust that factory products are of high quality compared to the competition.
5. Depend on factory products in meeting my customer needs without resorting to alternatives.
6. It happened that I lost an order and it not delivered to me.
7. I believe the advises and promises given by the factory representative.
8. Do not trust that the factory is keen in helping me controlling my accounts.
9. Trust that the factory is able to provide advanced products.
B. Responsiveness

From the below table 4.17 it appears that less than 1/3rd of the participants(28.7%) agree very much that the factory representative is always responding whenever the customer calls, yet a meager ratio of 13/3% of the participants disagree very much that when they want to place an order the factory representative is not responding.

Table 17: Frequencies of customer satisfaction for the three sample organizations

<table>
<thead>
<tr>
<th>Statement(*)</th>
<th>Agree very much</th>
<th>Agree</th>
<th>Do not know</th>
<th>Disagree</th>
<th>Disagree very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>47</td>
<td>28.7</td>
<td>90</td>
<td>54.9</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>10.4</td>
<td>12</td>
<td>7.3</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>8.5</td>
<td>96</td>
<td>58.5</td>
<td>35</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>2.4</td>
<td>21</td>
<td>12.7</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>38</td>
<td>23.3</td>
<td>75</td>
<td>46.0</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>19</td>
<td>11.7</td>
<td>18</td>
<td>11.0</td>
<td>84</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>4.2</td>
<td>14</td>
<td>8.5</td>
<td>84</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>1.8</td>
<td>12</td>
<td>7.3</td>
<td>73</td>
</tr>
<tr>
<td>9</td>
<td>27</td>
<td>16.5</td>
<td>47</td>
<td>28.7</td>
<td>72</td>
</tr>
<tr>
<td>10</td>
<td>22</td>
<td>13.5</td>
<td>18</td>
<td>11.0</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>12.3</td>
<td>257</td>
<td>24.0</td>
<td>308</td>
</tr>
</tbody>
</table>

*key:

1. The factory representative is always responsive when I call to place an order or follow up a complaint.
2. When I enquire about information on the available products, or monthly promotions, the representative is always responding.
3. When I call on the phone, the waiting period is acceptable.
4. When I need to place an order through the representative, he/she is not always responding.
5. I’m always provided with promotions and market campaigns without delay.
6. The factory manager is not easily accessible when I request meeting him/her.
7. Being busy with their internal tasks, doesn’t prevent employees from immediately responding to me when I go to the factory.
8. The factory is not always responsive when I ask for a detailed accounting statement.
9. Factory staff is very responsive in handling any complain or a problem.
10. The factory representative is not always responsive when I face a problem with the near to expire products.
C. Access

Table 4.18 below depicts that a little less than 1/3rd (29.3%) of the participants agree very that the factory is always providing me with the products quickly and easily, while disagree that the factory doesn’t arrange regular visits for the representative to attend to customer needs.

**Table 18: Frequencies of customer satisfaction for the three sample organizations**

<table>
<thead>
<tr>
<th>Statement(*)</th>
<th>Agree very much</th>
<th>Agree</th>
<th>Do not know</th>
<th>Disagree</th>
<th>Disagree very much</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>48</td>
<td>29.3</td>
<td>94</td>
<td>57.3</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>2.4</td>
<td>7</td>
<td>4.3</td>
<td>53</td>
</tr>
<tr>
<td>3</td>
<td>37</td>
<td>22.6</td>
<td>64</td>
<td>39.0</td>
<td>36</td>
</tr>
<tr>
<td>4</td>
<td>19</td>
<td>11.6</td>
<td>27</td>
<td>16.5</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>45</td>
<td>27.6</td>
<td>69</td>
<td>42.3</td>
<td>23</td>
</tr>
<tr>
<td>6</td>
<td>11</td>
<td>6.7</td>
<td>33</td>
<td>20.0</td>
<td>34</td>
</tr>
<tr>
<td>7</td>
<td>31</td>
<td>18.9</td>
<td>58</td>
<td>35.4</td>
<td>34</td>
</tr>
<tr>
<td>8</td>
<td>13</td>
<td>7.9</td>
<td>26</td>
<td>15.9</td>
<td>28</td>
</tr>
<tr>
<td>9</td>
<td>37</td>
<td>22.6</td>
<td>37</td>
<td>22.6</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>16.6</td>
<td>415</td>
<td>28.1</td>
<td>268</td>
</tr>
</tbody>
</table>

*key:

1. The factory always avails my orders quick and with ease.
2. The factory doesn’t provide good accounting services in order to know customer debts; outstanding payments; and to solve customer financial problems.
3. The factory always provides the technical support for the use of its products.
4. The factory doesn’t always arrange regular visits for the representative to follow up customer needs.
5. The factory always provides an efficient and effective customer complains follow up services.
6. The factory doesn’t always a product mix that mostly meets customer needs.
7. The factory always provides valuable advisory services to the customer on the product market conditions and orders.
8. The factory doesn’t always provide a dedicated representative to follow up customer orders on the phone.
9. The factory always avails a representative to handle customer complains.
D. Competence

The below table 4.19 indicates that about 2/3\( \text{rd} \) (30.1\%) of the participants agree very much the factory representative is scientifically knowledgeable in the products he or she sells, while more than 1/4\( \text{th} \) (25.6\%) of the participants disagree very much that the factory representative is not polite and respectful.

**Table 19: Frequencies of customer satisfaction for the three sample organizations**

<table>
<thead>
<tr>
<th>Statement(*)</th>
<th>Agree very much</th>
<th>Agree</th>
<th>Do not know</th>
<th>Disagree</th>
<th>Disagree very much</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>49</td>
<td>30.1</td>
<td>66</td>
<td>40.5</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>3.7</td>
<td>22</td>
<td>13.4</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>50</td>
<td>30.9</td>
<td>72</td>
<td>44.4</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1.2</td>
<td>11</td>
<td>6.6</td>
<td>47</td>
</tr>
<tr>
<td>5</td>
<td>48</td>
<td>29.4</td>
<td>69</td>
<td>42.3</td>
<td>36</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>14.6</td>
<td>32</td>
<td>19.5</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>38</td>
<td>23.2</td>
<td>96</td>
<td>58.5</td>
<td>22</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>2.4</td>
<td>3</td>
<td>1.8</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>221</td>
<td>16.9</td>
<td>371</td>
<td>28.3</td>
<td>195</td>
</tr>
</tbody>
</table>

*Key:
1. The factory representative is scientifically competent on the products.
2. The factory representative doesn’t have the ability; flexibility; and competence to handle and solve customer complains.
3. The factory representative is aware of the products he/she markets as well as the market prices.
4. The factory representative is not aware of the market conditions and he/she has no adequate knowledge with the market controls and practices.
5. The factory representative is trustworthy and of high integrity in what he/she exhibits.
6. Factory representative doesn’t politely and respectfully behave with me.
7. Factory staff treats customer complains satisfactorily.
8. Factory representative doesn’t always dress appropriately.
E. Communication

As can be seen from table 4.20 below that well over 2/3\(^{rd}\) (36.6\%) of the respondents agree very much that the customer will never hesitate to call the factory when there is a need, while, a little more than 1/5\(^{th}\) (20.1\%) of the respondents disagree very much that they feel their communications are of no use or benefit to them.

Table 20: Frequencies of customer satisfaction for the three sample organizations

<table>
<thead>
<tr>
<th>Statement(*)</th>
<th>Agree very much</th>
<th>Agree</th>
<th>Do not know</th>
<th>Disagree</th>
<th>Disagree very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>22</td>
<td>57</td>
<td>34.8</td>
<td>49</td>
<td>29.9</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>25</td>
<td>15.2</td>
<td>58</td>
<td>35.4</td>
</tr>
<tr>
<td>3</td>
<td>42</td>
<td>94</td>
<td>57.0</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>4.3</td>
<td>4.3</td>
<td>48</td>
<td>29.4</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
<td>36.6</td>
<td>47.0</td>
<td>10</td>
<td>6.1</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>5.5</td>
<td>17</td>
<td>10.4</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>14.5</td>
<td>277</td>
<td>28.2</td>
<td>190</td>
</tr>
</tbody>
</table>

• Key

1. I feel that the factory avails the best communication tools;
2. I feel that the available communication tools are operating with high efficiency;
3. I feel that factory staff communicate with me in language that I understand;
4. Factory operating hours are not helping the communication process.
5. I never hesitate to call whenever there is a need.
6. Sometime I feel that my communication with the factory is of no benefits to me.
2. Means and Standard Deviations of customer satisfaction statements

A. F1

Table 4.21 below on the Dependability factor shows that the highest ranked statement disagreed upon is “I depend on the factory products to satisfy my clients needs without resorting to alternative products”, and the lowest ranked statement disagreed upon very much is”It happened that I lost an order and didn’t reach me”.

As for the Responsiveness factor, the highest ranked statement where participants “do not know” is”Being busy with their internal tasks is not preventing employees from immediately responding to me when I go to the factory”, yet the lowest ranked statement is”When I call the factory representative for an order or a complaint he/she always responds”.

On the Access factor, the highest ranked statement is”The factory always provides a representative to attend to customer complains”, while the lowest ranked and disagreed upon statement is”the factory always avails the products quick and with ease.”

On the competence factor, the highest ranked and disagreed upon statement is”The factory representative is of high integrity and trustworthiness in what he exhibits, and the lowest ranked and also disagreed upon statement is”Factory representative doesn’t always dress appropriately”.

On the communication factor, the highest ranked and where participants”do not know” statement is”I feel that the factory provided the best communication tools”, while the lowest ranked and disagreed upon statement is”I never hesitate to call when there is a need is”.
<table>
<thead>
<tr>
<th></th>
<th>Factor</th>
<th>Dependability</th>
<th>M</th>
<th>Interpretation</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highest Rank statement</td>
<td>5</td>
<td>2.5254</td>
<td>Disagree</td>
<td>1.2506</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>6</td>
<td>1.7119</td>
<td>Disagree very much</td>
<td>0.69607</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Factor</td>
<td>Responsiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>7</td>
<td>3.339</td>
<td>Do not Know</td>
<td>0.92121</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>1</td>
<td>1.9492</td>
<td>Disagree</td>
<td>0.89873</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Factor</td>
<td>Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>9</td>
<td>2.7458</td>
<td>Do not Know</td>
<td>1.25387</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>1</td>
<td>1.8983</td>
<td>Disagree</td>
<td>0.8241</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Factor</td>
<td>Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>5</td>
<td>2.5593</td>
<td>Disagree</td>
<td>4.13676</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>8</td>
<td>1.8475</td>
<td>Disagree</td>
<td>0.66472</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Factor</td>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>1</td>
<td>2.7119</td>
<td>Do not know</td>
<td>1.01796</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>5</td>
<td>1.8475</td>
<td>Disagree</td>
<td>1.01393</td>
<td>1</td>
</tr>
</tbody>
</table>
B. F2

Table 4.22 indicates that for the Dependability factor, the highest ranked and where participants’ Do not know” statement is “I depend on the factory products to satisfy my client’s needs without resorting to alternative products”, while the lowest ranked very much agreed upon statement is “Trust that factory products delivered in the ordered quantities”.

As for the Responsiveness factor, the highest ranked and agreed upon statement is “Meeting the factory manager is not easy when I request it”, while the lowest ranked and disagreed upon statement is “When I call the factory representative for an order or a complaint he/she always responds”.

On the Access factor, the highest ranked and where participants’ do not know” statement is “The factory always provides a representative to attend to customer complaints”, while the lowest ranked and disagreed upon statement is “the factory always avails the products quick and with ease.”

For the Competence factor, the highest ranked and where participants’ do not know” statement is “factory representative is aware of the prices of the products as well as those prevailing in the market”, while the lowest ranked and disagreed upon very much statement is “Factory representative doesn’t behave with polite and respect with me”.

On the Communication factor, the highest ranked and where participants “do not know” statement is “I feel that the communication tools are not operating with high efficiency”, while the lowest ranked and disagreed upon statement is “I never hesitate to call when there is a need”.
Table 22: Mean and Standard Deviation for Customer Satisfaction

<table>
<thead>
<tr>
<th>1</th>
<th>Factor</th>
<th>Dependability</th>
<th>M</th>
<th>Interpretation</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>5</td>
<td>2.8596</td>
<td>Do not Know</td>
<td>1.28784</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>3</td>
<td>1.7018</td>
<td>Disagree very much</td>
<td>0.77839</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Factor</td>
<td>Responsiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>6</td>
<td>3.5789</td>
<td>Agree</td>
<td>4.10552</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>1</td>
<td>1.9825</td>
<td>Disagree</td>
<td>0.8761</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Factor</td>
<td>Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>9</td>
<td>2.7193</td>
<td>Do not Know</td>
<td>1.35955</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>1</td>
<td>1.9123</td>
<td>Disagree</td>
<td>0.87179</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Factor</td>
<td>Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>3</td>
<td>2.9474</td>
<td>Do not Know</td>
<td>4.94043</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>6</td>
<td>1.6316</td>
<td>Disagree very much</td>
<td>0.5865</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Factor</td>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>2</td>
<td>2.6667</td>
<td>Do not Know</td>
<td>0.87287</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>5</td>
<td>1.9825</td>
<td>Disagree</td>
<td>1.1416</td>
<td>1</td>
</tr>
</tbody>
</table>
Reading from below table 4.23 it shows that for the Dependability factor, the highest ranked and where participants “do not know” statement is “I depend on the factory products to satisfy my client’s needs without resorting to alternative products”, while the lowest ranked and very much disagree upon statement is “Trust that factory products delivered to me in the ordered quantities”.

As for the Responsiveness factor, the highest ranked statement where participants “do not know” is “Being busy with their internal tasks is not preventing employees from immediately responding to me when I go to the factory”, yet the lowest ranked statement is “When I call the factory representative for an order or a complaint he/she always responds”.

On the Access factor, the highest ranked and where participants “do not know” statement is “The factory doesn’t always provide product mix that meet customer needs”, while the lowest ranked and disagreed upon statement is “The factory always avails my needs quick and ease.

As for the Competence factor, the highest ranked and where participants “do not know” statement is “the Factory representative doesn’t have the ability; competence to handle and solve customer complains”, while the lowest ranked and very much disagreed upon statement is “Factory representative doesn’t behave with polite and respect with me”.

On the Communication factor, the highest ranked and where participants “do not know” statement is “Factory operating hours do not help the communication process”, while the lowest ranked and disagreed upon statement is “I never hesitate to call when there is a need”.

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### Table 23: Mean and Standard Deviation for Customer Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Factor</th>
<th>Dependability</th>
<th>M</th>
<th>Interpretation</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highest Rank statement</td>
<td>5</td>
<td>2.9792</td>
<td>Do not Know</td>
<td>1.26305</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>3</td>
<td>1.6042</td>
<td>Disagree very much</td>
<td>0.57388</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Factor</td>
<td>Responsiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>7</td>
<td>3.3958</td>
<td>Do not know</td>
<td>1.02604</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>1</td>
<td>1.9792</td>
<td>Disagree</td>
<td>0.81187</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Factor</td>
<td>Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>6</td>
<td>2.875</td>
<td>Do not Know</td>
<td>1.14157</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>1</td>
<td>1.9583</td>
<td>Disagree</td>
<td>0.82406</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Factor</td>
<td>Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highest Rank statement</td>
<td>2</td>
<td>2.625</td>
<td>Do not Know</td>
<td>1.04423</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>6</td>
<td>1.6667</td>
<td>Disagree very much</td>
<td>0.55862</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Factor</td>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Highest Rank statement</td>
<td>4</td>
<td>3.2292</td>
<td>Do not Know</td>
<td>6.07835</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Lowest rank statement</td>
<td>5</td>
<td>2.1458</td>
<td>Disagree</td>
<td>1.20265</td>
<td>1</td>
</tr>
</tbody>
</table>
3. **Overall Customer Satisfaction Level**

Below table 4.24 shows the level of customer satisfaction for each factory. For F1, the ambivalent rate is 98.3% (n=58), and for F2, the level of customer dissatisfaction is 56.1 (n=32), while for F3, the level of satisfaction is 50% (n=24)

**Table 24: Customer Satisfaction level for the three factories**

<table>
<thead>
<tr>
<th>Factory/Level of Customer Satisfaction</th>
<th>Dissatisfied</th>
<th>Ambivalent (neither satisfied, nor dissatisfied)</th>
<th>Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>F1 (n=59)</td>
<td>30</td>
<td>51.0</td>
<td>29</td>
</tr>
<tr>
<td>F2 (n=57)</td>
<td>32</td>
<td>56.1</td>
<td>25</td>
</tr>
<tr>
<td>F3 (n=48)</td>
<td>24</td>
<td>50.0</td>
<td>23</td>
</tr>
</tbody>
</table>
4.4 Correlation and Mediation:

This part of the chapter deals with the correlations analysis that show whether scales within dimensions are associated or not with one another, and to what degree is the significance of that association and whether it is positive or negative. The strength of the relationship is indicated by the correlation coefficient factor which is normally between -1 and 1. The perfect negative relationship is described as -1, while the perfect positive one is denoted by 1. A correlation between variables means that they increase together in the same direction, if the correlation is positive or decrease together in the same direction, if the correlation is negative. The significance of a relationship is normally described by a p-value when it is smaller or equal to .05 or 0.01. These correlations were generated using the Pearson Correlation Coefficient scale in the SPSS software.

Mediation, on the other hand, as defined by Baron and Kenny\textsuperscript{187}, “mediator explains how an external event takes on internal significance and why such effect occurs”. Authors have identified four steps to measure the mediating effect of an independent variable (one variable) on the criterion (outcome) variable, where there should be an intervening variable (mediating variable), when the relationship between these variables ID,MV and DV, is established, then it said that a casual relationship between the three variables exists as shown in the following diagram:

\begin{equation}
\begin{array}{c}
X \\
\downarrow \downarrow \downarrow \\
M \\
\downarrow \downarrow \downarrow \\
Y \\
\end{array}
\end{equation}

The four steps are:

1. Show the casual variable is correlated with the outcome. Use Y as the criterion variable in a regression equation and X as a predictor. This is to establish that there is an effect that may be mediated;

2. Show that the casual variable is correlated with the mediator. Use M as the criterion variable in the regression equation and X as a predictor, treading the mediator as an outcome variable;

3. Show that the mediator affects the outcome variable. Use Y as a criterion variable in a regression equation and X and M as predictors; and

4. Establish that M completely mediates the X-Y relationship.

In the following pages, Pearson correlations will be examined separately for each factory first, and then the mediation between the variables of the study.

4.4.1 Factory 1

A. Correlations between Organizational Culture and Overall Job Satisfaction

Table 4.25 below shows positive and negative significant correlations between the Market culture and some facets of the job satisfaction scale. The most notable is the statistically negative correlations between Market culture and the overall job satisfaction levels at -0.459*
### Table 25: Correlations between Organizational Culture and Overall Job Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td><strong>.429</strong>*</td>
<td>0.217</td>
<td><strong>.414</strong>*</td>
<td>-.111-</td>
<td>0.155</td>
<td>0.219</td>
<td>0.367</td>
<td>0.352</td>
<td>0.371</td>
<td><strong>.440</strong>*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td><strong>0.026</strong></td>
<td>0.278</td>
<td><strong>0.032</strong></td>
<td>0.581</td>
<td>0.44</td>
<td>0.273</td>
<td>0.06</td>
<td>0.072</td>
<td>0.057</td>
<td><strong>0.022</strong></td>
</tr>
<tr>
<td>Adhocracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.185-</td>
<td>-.185-</td>
<td>-.378-</td>
<td>-.095-</td>
<td>-.195-</td>
<td>-.146-</td>
<td>0.056</td>
<td>0.285</td>
<td>-.344-</td>
<td>-.231-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.355</td>
<td>0.356</td>
<td>0.052</td>
<td>0.636</td>
<td>0.329</td>
<td>0.467</td>
<td>0.78</td>
<td>0.15</td>
<td>0.079</td>
<td>0.247</td>
</tr>
<tr>
<td>Market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.135-</td>
<td>-.237-</td>
<td>-.279-</td>
<td>-.107-</td>
<td>-.457-</td>
<td>-.234-</td>
<td>-.358-</td>
<td>-.340-</td>
<td>-.395-</td>
<td><strong>-.459-</strong>*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.501</td>
<td>0.234</td>
<td>0.159</td>
<td>0.597</td>
<td>0.017</td>
<td>0.24</td>
<td>0.067</td>
<td>0.083</td>
<td>0.042</td>
<td><strong>0.016</strong></td>
</tr>
<tr>
<td>Hierarchy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.155-</td>
<td>0.09</td>
<td>0.099</td>
<td>0.121</td>
<td>0.12</td>
<td>-.067-</td>
<td>0.068</td>
<td>0.282</td>
<td>-.041-</td>
<td>0.094</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.44</td>
<td>0.656</td>
<td>0.625</td>
<td>0.549</td>
<td>0.551</td>
<td>0.742</td>
<td>0.735</td>
<td>0.154</td>
<td>0.838</td>
<td>0.641</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

* Key

1. Pay
2. Promotion
3. Supervision
4. Fringe Benefits
5. Contingent Rewards
6. Operating Conditions
7. Co Workers
8. Nature of Work
9. Communication
10. Job satisfaction
B. Correlations between Organizational Culture and Overall Customer Satisfaction

Table 4.26 below shows positive and negative significant correlations between the Market culture and some factors of the customer satisfaction scale. The most notable is the statistically negative correlations between Market culture and the overall customer satisfaction levels at -0.503*

### Table 26: Correlations between Organizational Culture and Overall Customer Satisfaction

<table>
<thead>
<tr>
<th>Organizational culture</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Overall Custom Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.439*</td>
<td>0.285</td>
<td>0.313</td>
<td>0.016</td>
<td>.419*</td>
<td>.383*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.022</td>
<td>0.15</td>
<td>0.112</td>
<td>0.938</td>
<td>0.03</td>
<td>0.048</td>
</tr>
<tr>
<td>Adhocracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.027-</td>
<td>-.116-</td>
<td>0.139</td>
<td>-.279-</td>
<td>-.259-</td>
<td>-.233-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.892</td>
<td>0.564</td>
<td>0.489</td>
<td>0.159</td>
<td>0.191</td>
<td>0.241</td>
</tr>
<tr>
<td>Market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.280-</td>
<td>-.245-</td>
<td>-.287-</td>
<td>-.350-</td>
<td>-.260-</td>
<td><strong>-0.503</strong></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.157</td>
<td>0.218</td>
<td>0.147</td>
<td>0.074</td>
<td>0.19</td>
<td><strong>0.007</strong></td>
</tr>
<tr>
<td>Hierarchy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.23</td>
<td>0.143</td>
<td>0.306</td>
<td>-.176-</td>
<td>0.077</td>
<td>0.091</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.248</td>
<td>0.476</td>
<td>0.121</td>
<td>0.381</td>
<td>0.701</td>
<td>0.652</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
C. Correlations between Overall Job Satisfaction and Overall Customer Satisfaction

Table 4.27 below indicates except for the pay and dependability, competence, and communication, most scales have significant positive correlations with one another. The most positive significant correlation is between the overall customer satisfaction and the overall job satisfaction which is 0.979 at a p-value of 0.000

<table>
<thead>
<tr>
<th></th>
<th>Dependability</th>
<th>Responsiveness</th>
<th>Access</th>
<th>Competence</th>
<th>Communicatio</th>
<th>Overall Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pearson Correlation</td>
<td>0.219</td>
<td>.522**</td>
<td>.597**</td>
<td>0.328</td>
<td>0.358</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.273</td>
<td>0.005</td>
<td>0.001</td>
<td>0.095</td>
<td>0.067</td>
</tr>
<tr>
<td>2</td>
<td>Pearson Correlation</td>
<td>.454*</td>
<td>0.288</td>
<td>.406*</td>
<td>0.346</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.017</td>
<td>0.146</td>
<td>0.036</td>
<td>0.077</td>
<td>0.318</td>
</tr>
<tr>
<td>3</td>
<td>Pearson Correlation</td>
<td>0.116</td>
<td>0.269</td>
<td>0.083</td>
<td>.544**</td>
<td>.539**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.563</td>
<td>0.175</td>
<td>0.679</td>
<td>0.003</td>
<td>0.004</td>
</tr>
<tr>
<td>4</td>
<td>Pearson Correlation</td>
<td>-.274-</td>
<td>0.269</td>
<td>0.126</td>
<td>.423*</td>
<td>0.056</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.167</td>
<td>0.175</td>
<td>0.532</td>
<td>0.028</td>
<td>0.781</td>
</tr>
<tr>
<td>5</td>
<td>Pearson Correlation</td>
<td>0.202</td>
<td>.547**</td>
<td>.382*</td>
<td>.604**</td>
<td>0.324</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.313</td>
<td>0.003</td>
<td>0.049</td>
<td>0.001</td>
<td>0.099</td>
</tr>
<tr>
<td>6</td>
<td>Pearson Correlation</td>
<td>.503**</td>
<td>0.129</td>
<td>0.299</td>
<td>0.245</td>
<td>0.341</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.007</td>
<td>0.521</td>
<td>0.129</td>
<td>0.219</td>
<td>0.082</td>
</tr>
<tr>
<td>7</td>
<td>Pearson Correlation</td>
<td>.414*</td>
<td>0.217</td>
<td>0.273</td>
<td>0.377</td>
<td>0.295</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.032</td>
<td>0.277</td>
<td>0.168</td>
<td>0.053</td>
<td>0.136</td>
</tr>
<tr>
<td>8</td>
<td>Pearson Correlation</td>
<td>0.197</td>
<td>0.342</td>
<td>.450*</td>
<td>.516**</td>
<td>.409*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.325</td>
<td>0.08</td>
<td>0.019</td>
<td>0.006</td>
<td>0.034</td>
</tr>
<tr>
<td>9</td>
<td>Pearson Correlation</td>
<td>0.284</td>
<td>.679**</td>
<td>.514*</td>
<td>0.35</td>
<td>.448*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.151</td>
<td>0.000</td>
<td>0.006</td>
<td>0.074</td>
<td>0.019</td>
</tr>
<tr>
<td>10</td>
<td>Pearson Correlation</td>
<td>0.377</td>
<td>.594**</td>
<td>.564*</td>
<td>.685**</td>
<td>.549**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.052</td>
<td>0.001</td>
<td>0.002</td>
<td>0.000</td>
<td>0.003</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
*Key
1. Pay
2. Promotion
3. Supervision
4. Fringe Benefits
5. Contingent Rewards
6. Operating Conditions
7. Co Workers
8. Nature of Work
9. Communication
10. Overall Job satisfaction
D. Correlations between Organizational Culture, Job Satisfaction and Customer Satisfaction

As can be seen from Table 4.28, there is a statistically significant relationship between the three variables of the study: the organizational culture, overall job satisfaction, and overall customer satisfaction. As hypothesized, there is a statistically significantly negative correlation between the dominant organizational culture, overall job satisfaction, and overall customer satisfaction at the levels of -0.459* and -0.503* respectively, while there is a statistically positive correlation between overall job satisfaction and overall customer satisfaction at the level of 0.978**. The relationship results between organizational culture; overall job satisfaction; and overall customer satisfaction, clearly indicate that the relationships between the three variables are statistically significant.

Table 28: Correlations between Organizational Culture, Overall Job Satisfaction and Overall Customer Satisfaction

<table>
<thead>
<tr>
<th>Variables</th>
<th>Overall Job Satisfaction</th>
<th>Overall Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Culture</td>
<td>-0.459*</td>
<td>-0.503**</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td></td>
<td>0.978**</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
E. Mediation between Organizational Culture, Job Satisfaction and Customer Satisfaction

Below tables from 4.29 to 4.37 show the regression analysis and the casual relationship between each of the three variables with one another in F1

1. Regression Analysis between organizational Culture and Overall Job Satisfaction

Table 29: Model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.569</td>
<td>.324</td>
<td>.297</td>
<td>.58195</td>
</tr>
</tbody>
</table>

Table 30: ANOVA Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4.052</td>
<td>1</td>
<td>4.052</td>
<td>11.964</td>
<td>.002</td>
</tr>
<tr>
<td>Residual</td>
<td>8.467</td>
<td>25</td>
<td>.339</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.519</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 31: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.493</td>
<td>.613</td>
<td>5.696</td>
<td>.000</td>
</tr>
<tr>
<td>1 Organizational Culture</td>
<td>-178-</td>
<td>.052</td>
<td>-3.459</td>
<td>.002</td>
</tr>
</tbody>
</table>
2. Organizational Culture and Overall Customer Satisfaction

Table 32: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.503</td>
<td>.253</td>
<td>.223</td>
<td>14.80554</td>
</tr>
</tbody>
</table>

Table 33: ANOVA Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1856.564</td>
<td>1</td>
<td>1856.564</td>
<td>8.470</td>
<td>.007</td>
</tr>
<tr>
<td>1 Residual</td>
<td>5480.102</td>
<td>25</td>
<td>219.204</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7336.667</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 34: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>148.416</td>
<td>15.601</td>
<td>9.513</td>
<td>.000</td>
</tr>
<tr>
<td>1 Organizational Culture</td>
<td>-3.814</td>
<td>1.311</td>
<td>-.503</td>
<td>-.007</td>
</tr>
</tbody>
</table>
3. Overall Job Satisfaction and Overall Customer Satisfaction

Table 35: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.945</td>
<td>.893</td>
<td>.889</td>
<td>5.59408</td>
</tr>
</tbody>
</table>

Table 36: ANOVA Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>6554.323</td>
<td>1</td>
<td>6554.323</td>
<td>209.445</td>
<td>.000</td>
</tr>
<tr>
<td>1 Residual</td>
<td>782.343</td>
<td>25</td>
<td>31.294</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7336.667</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 37: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>71.574</td>
<td>2.472</td>
<td>28.954</td>
<td>.000</td>
</tr>
<tr>
<td>1 Overall Job</td>
<td>22.882</td>
<td>1.581</td>
<td>.945</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td>14.472</td>
<td>.000</td>
</tr>
</tbody>
</table>
### 4.4.2 Factory 2

**A. Correlations between Organizational Culture and Overall Job Satisfaction**

Table 4.38 below shows that there are statistically significant correlations between the Organizational Culture and some of the Job Satisfaction facets. The most statistically significant positive correlation is between the Operating Conditions subscale, and the Market Culture scale, while the most statistically significant negative correlation is found between the Market culture and overall job satisfaction at the level of -0.423*.

**Table 38: Correlations between Organizational Culture and Overall Job Satisfaction**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan</td>
<td>Pearson Correlation</td>
<td>-0.016</td>
<td>-0.001</td>
<td>0.217</td>
<td>0.25</td>
<td>0.106</td>
<td>-0.012</td>
<td>0.029</td>
<td>-0.139</td>
<td>-0.142</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.937</td>
<td>0.996</td>
<td>0.288</td>
<td>0.218</td>
<td>0.606</td>
<td>0.952</td>
<td>0.889</td>
<td>0.5</td>
<td>0.488</td>
</tr>
<tr>
<td>Adhocracy</td>
<td>Pearson Correlation</td>
<td>0.18</td>
<td>-0.020</td>
<td>0.104</td>
<td>0.052</td>
<td>0.193</td>
<td>0.237</td>
<td>0.249</td>
<td>-0.068</td>
<td>0.145</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.379</td>
<td>0.922</td>
<td>0.615</td>
<td>0.8</td>
<td>0.344</td>
<td>0.244</td>
<td>0.22</td>
<td>0.743</td>
<td>0.48</td>
</tr>
<tr>
<td>Market</td>
<td>Pearson Correlation</td>
<td>-0.338</td>
<td>-0.355</td>
<td>-0.274</td>
<td>-0.418*</td>
<td>-0.195</td>
<td>-0.255</td>
<td>-0.307</td>
<td>-0.383</td>
<td>-0.254</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.091</td>
<td>0.075</td>
<td>0.176</td>
<td>0.034</td>
<td>0.34</td>
<td>0.208</td>
<td>0.127</td>
<td>0.054</td>
<td>0.21</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>Pearson Correlation</td>
<td>0.211</td>
<td>0.224</td>
<td>0.227</td>
<td>0.046</td>
<td>0.232</td>
<td>0.075</td>
<td>-0.240</td>
<td>-0.002</td>
<td>0.096</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.301</td>
<td>0.272</td>
<td>0.264</td>
<td>0.823</td>
<td>0.253</td>
<td>0.716</td>
<td>0.238</td>
<td>0.991</td>
<td>0.64</td>
</tr>
</tbody>
</table>

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

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

*Key

1. Pay
2. Promotion
3. Supervision
4. Fringe Benefits
5. Contingent Rewards
6. Operating Conditions
7. Co Workers
8. Nature of Work
9. Communication
10. Overall job satisfaction
B. Correlations between Organizational Culture and Overall Customer Satisfaction

As can be seen from below table 4.39, it can be inferred that except for an insignificant correlation between Supervision, Coworkers, and nature of work subscales, all other subscales have significant positive correlation with the overall customer satisfaction. The correlation between organizational culture and overall customer satisfaction is statistically negative and significant at the level of -0.457*

<table>
<thead>
<tr>
<th></th>
<th>Overall Customer satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.176-</td>
<td>-.08</td>
<td>.033</td>
<td>.002</td>
<td>-.183-</td>
<td>-.040-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.39</td>
<td>0.699</td>
<td>0.874</td>
<td>0.991</td>
<td>0.371</td>
<td>0.845</td>
</tr>
<tr>
<td><strong>Adhocracy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.206</td>
<td>0.24</td>
<td>0.229</td>
<td>.394*</td>
<td>0.206</td>
<td>-.016-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.313</td>
<td>0.237</td>
<td>0.26</td>
<td>0.046</td>
<td>0.312</td>
<td>0.937</td>
</tr>
<tr>
<td><strong>Market</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.353</td>
<td>0.206</td>
<td>0.3</td>
<td>0.314</td>
<td>0.092</td>
<td><strong>0-.457-</strong>*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.077</td>
<td>0.312</td>
<td>0.137</td>
<td>0.118</td>
<td>0.656</td>
<td><strong>0.019</strong></td>
</tr>
<tr>
<td><strong>Hierarchy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.094</td>
<td>0.151</td>
<td>-.073-</td>
<td>-.141-</td>
<td>0.105</td>
<td>0.024</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.649</td>
<td>0.462</td>
<td>0.723</td>
<td>0.491</td>
<td>0.61</td>
<td>0.906</td>
</tr>
</tbody>
</table>

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

*key:
2. Dependability
3. Responsiveness
4. Access
5. Competence; and
6. Communication
C. Correlations between overall Job Satisfaction and overall Customer Satisfaction

Reading from below table 4.40, it can be inferred that except for an insignificant correlation between Supervision, Coworkers, and nature of work subscales, all other subscales have significant positive correlation with the overall customer satisfaction. The correlation between the overall job satisfaction and customer satisfaction is significant and positive at the level of 0.814**.

Table 40: Correlations between overall Job Satisfaction and overall Customer Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Correlation</th>
<th>Responsibility</th>
<th>Access</th>
<th>Competence</th>
<th>Communication</th>
<th>Overall Customer satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.305</td>
<td>0.638**</td>
<td>0.37</td>
<td>0.153</td>
<td>0.423*</td>
<td>0.638**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.13</td>
<td>0.00</td>
<td>0.06</td>
<td>0.455</td>
<td>0.031</td>
<td>0.00</td>
</tr>
<tr>
<td>2</td>
<td>0.376</td>
<td>0.197</td>
<td>0.32</td>
<td>0.246</td>
<td>0.108</td>
<td>0.399*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.058</td>
<td>0.335</td>
<td>0.19</td>
<td>0.226</td>
<td>0.599</td>
<td>0.044</td>
</tr>
<tr>
<td>3</td>
<td>0.053</td>
<td>0.337</td>
<td>0.29</td>
<td>0.25</td>
<td>-0.05-</td>
<td>0.371</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.796</td>
<td>0.092</td>
<td>0.14</td>
<td>0.219</td>
<td>0.809</td>
<td>0.062</td>
</tr>
<tr>
<td>4</td>
<td>0.115</td>
<td>0.124</td>
<td>0.534</td>
<td>0.032</td>
<td>0.557**</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.575</td>
<td>0.547</td>
<td>0.00</td>
<td>0.003</td>
<td>0.878</td>
<td>0.003</td>
</tr>
<tr>
<td>5</td>
<td>0.08</td>
<td>0.414*</td>
<td>0.402</td>
<td>0.411*</td>
<td>0.209</td>
<td>0.579**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.698</td>
<td>0.035</td>
<td>0.04</td>
<td>0.037</td>
<td>0.304</td>
<td>0.002</td>
</tr>
<tr>
<td>6</td>
<td>0.107</td>
<td>0.398*</td>
<td>0.37</td>
<td>0.107</td>
<td>0.146</td>
<td>0.405*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.604</td>
<td>0.044</td>
<td>0.06</td>
<td>0.603</td>
<td>0.477</td>
<td>0.04</td>
</tr>
<tr>
<td>7</td>
<td>0.239</td>
<td>0.291</td>
<td>0.05</td>
<td>0.193</td>
<td>-0.152-</td>
<td>0.273</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.239</td>
<td>0.149</td>
<td>0.77</td>
<td>0.345</td>
<td>0.457</td>
<td>0.177</td>
</tr>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------------------</td>
<td>---------</td>
<td>---</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>8</td>
<td>0.319</td>
<td>0.009</td>
<td>-0.058</td>
<td>0.173</td>
<td>0.154</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.112</td>
<td>0.964</td>
<td>0.779</td>
<td>0.399</td>
<td>0.452</td>
</tr>
<tr>
<td>9</td>
<td>0.351</td>
<td>0.273</td>
<td>0.223</td>
<td>0.372</td>
<td>0.23</td>
<td>0.520**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.079</td>
<td>0.177</td>
<td>0.273</td>
<td>0.061</td>
<td>0.257</td>
</tr>
<tr>
<td>10</td>
<td>0.385</td>
<td><strong>0.550</strong></td>
<td><strong>0.499</strong></td>
<td><strong>0.521</strong></td>
<td>0.234</td>
<td><strong>0.814</strong></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.052</td>
<td>0.004</td>
<td>0.01</td>
<td>0.006</td>
<td>0.249</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

*key

1. Pay
2. Promotion
3. Supervision
4. Fringe Benefits
5. Contingent Rewards
6. Operating Conditions
7. Co Workers
8. Nature of Work
9. Communication
10. Overall job satisfaction
D. Correlations between Organizational Culture, Overall Job Satisfaction; and Overall Customer Satisfaction

As can be seen from table 4.41, there is statistically significant relationship between the three variables of the study, the organizational culture, overall job satisfaction and overall customer satisfaction. As hypothesized, there is a statistically significantly negative correlation between the dominant organizational culture, overall job satisfaction and overall customer satisfaction at the levels of -0.423* and -0.457* respectively, while there is statistically positive correlation between overall job satisfaction and overall customer satisfaction at the level of 0.814**. The relationship results between organizational culture; overall job satisfaction; and overall customer satisfaction, clearly indicate that the relationships between the three variables are statistically significant.

Table 4.1: Correlations between Organizational Culture, Overall Job Satisfaction; and Overall Customer Satisfaction

<table>
<thead>
<tr>
<th>Variables</th>
<th>Overall Job Satisfaction</th>
<th>Overall Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Culture</td>
<td>-0.423*</td>
<td>-0.457*</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td></td>
<td>0.814**</td>
</tr>
</tbody>
</table>

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

**. Correlation is significant at the 0.01 level (2-tailed).
E. Mediation between Organizational Culture, Job Satisfaction and Customer Satisfaction

Below tables s from 4.42 to 4.49 show the regression analysis and the casual relationship between each of the three variables with one another in F2

1. Regression Analysis between organizational Culture and Overall Job Satisfaction

<table>
<thead>
<tr>
<th>Table 42: Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 43: ANOVA Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>1 Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 44: Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>1 Market</td>
</tr>
</tbody>
</table>
2. Regression Analysis between organizational Culture and Overall Customer Satisfaction

**Table 44: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.803</td>
<td>.644</td>
<td>.629</td>
<td>10.33476</td>
</tr>
</tbody>
</table>

**Table 45: ANOVA Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4642.665</td>
<td>1</td>
<td>4642.665</td>
<td>43.468</td>
<td>0</td>
</tr>
<tr>
<td>Residual</td>
<td>2563.373</td>
<td>24</td>
<td>106.807</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7206.038</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 46: Coefficient**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-16.180-</td>
<td>18.462</td>
<td>-.876-</td>
<td>0.39</td>
</tr>
<tr>
<td>1 Organizational Culture ( Market)</td>
<td>9.39</td>
<td>1.424</td>
<td>0.803</td>
<td>6.593</td>
</tr>
</tbody>
</table>
3. Regression Analysis between Overall Job Satisfaction and Overall Customer Satisfaction

**Table 47: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.881</td>
<td>0.777</td>
<td>0.767</td>
<td>8.18888</td>
</tr>
</tbody>
</table>

**Table 48: ANOVA Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5596.652</td>
<td>1</td>
<td>5596.652</td>
<td>83.46</td>
<td>0</td>
</tr>
<tr>
<td>Residual</td>
<td>1609.387</td>
<td>24</td>
<td>67.058</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Total</td>
<td>7206.038</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 49: Coefficient**

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>30.287</td>
<td>8.314</td>
<td>3.643</td>
<td>0.001</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td>0.693</td>
<td>0.076</td>
<td>0.881</td>
<td>9.136</td>
</tr>
</tbody>
</table>
A. Correlations between Organizational Culture and Overall Job Satisfaction

Table 4.50 below shows that there are statistically significant correlations between the Organizational Culture and some of the Job Satisfaction facets. The most statistically significant positive correlation is between the Operating Conditions subscale, and the Hierarchal culture scale, while the most statistically significant negative correlation is found between the Market culture and overall job satisfaction at the level of -0.996**.

**Table 50: Correlations between Organizational Culture and Overall Job Satisfaction**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan</td>
<td>Pearson Correlation</td>
<td>-650-</td>
<td>-890-*</td>
<td>.364-</td>
<td>.052</td>
<td>-549-</td>
<td>.378</td>
<td>.316</td>
<td>.399-</td>
<td>.17-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.235</td>
<td>0.043</td>
<td>0.547</td>
<td>0.934</td>
<td>0.338</td>
<td>0.53</td>
<td>0.604</td>
<td>0.506</td>
<td>0.785</td>
<td>0.274</td>
</tr>
<tr>
<td>Adhocracy</td>
<td>Pearson Correlation</td>
<td>-691-</td>
<td>-680-</td>
<td>-310-</td>
<td>-.837-</td>
<td>.684</td>
<td>.760</td>
<td>-.997</td>
<td>.397-</td>
<td>-.773-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.197</td>
<td>0.206</td>
<td>0.675</td>
<td>0.623</td>
<td>0.077</td>
<td>0.203</td>
<td>0.136</td>
<td>0.636</td>
<td>0.509</td>
<td>0.125</td>
</tr>
<tr>
<td>Market</td>
<td>Pearson Correlation</td>
<td>-.899-*</td>
<td>-.627-</td>
<td>.533</td>
<td>-.945-*</td>
<td>-.837-</td>
<td>-.009-</td>
<td>.054</td>
<td>-.837-</td>
<td>-.280-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.038</td>
<td>0.257</td>
<td>0.355</td>
<td>0.015</td>
<td>0.077</td>
<td>0.989</td>
<td>0.931</td>
<td>0.077</td>
<td>0.648</td>
<td>0.032</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>Pearson Correlation</td>
<td>-.942-*</td>
<td>-.829-</td>
<td>.108</td>
<td>-.702-</td>
<td>-.970-</td>
<td>.215</td>
<td>.321-</td>
<td>-.767-</td>
<td>-.174-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.016</td>
<td>0.083</td>
<td>0.863</td>
<td>0.186</td>
<td>0.006</td>
<td>0.729</td>
<td>0.599</td>
<td>0.13</td>
<td>0.779</td>
<td>0.000</td>
</tr>
</tbody>
</table>

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

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

1. pay
2. Promotion
3. Supervision
4. Fringe Benefits
5. Contingent Rewards
6. Operating Conditions
7. Co Workers
8. Nature of Work
9. Communication
10. Overall job satisfaction
B. Correlations between Organizational Culture and Overall Customer Satisfaction

Table 4.51, below shows that all correlations between Hierarchal organizational culture and customer satisfaction factors are negative, but the only statistically negative correlations is between the hierarchal organizational culture and overall customer satisfaction at the level of $-0.934^*$

**Table 51: Correlations between Organizational Culture and Overall Customer Satisfaction**

<table>
<thead>
<tr>
<th>Organizational Culture type/ Customer satisfaction facors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan</td>
<td>Pearson Correlation</td>
<td>-.792-</td>
<td>-.285-</td>
<td>-.478-</td>
<td>-.495-</td>
<td>0.325</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.11</td>
<td>0.642</td>
<td>0.415</td>
<td>0.396</td>
<td>0.594</td>
</tr>
<tr>
<td>Adhocracy</td>
<td>Pearson Correlation</td>
<td>-.490-</td>
<td>0.055</td>
<td>-.259-</td>
<td>-.456-</td>
<td>-.050-</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.402</td>
<td>0.93</td>
<td>0.674</td>
<td>0.441</td>
<td>0.937</td>
</tr>
<tr>
<td>Market</td>
<td>Pearson Correlation</td>
<td>0.192</td>
<td>0.677</td>
<td>0.641</td>
<td>0.792</td>
<td>-.616-</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.757</td>
<td>0.209</td>
<td>0.244</td>
<td>0.11</td>
<td>0.269</td>
</tr>
<tr>
<td><strong>Hierarchy</strong></td>
<td>Pearson Correlation</td>
<td>-.667-</td>
<td>0.351</td>
<td>0.122</td>
<td>-.345-</td>
<td>-.352-</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.219</td>
<td>0.562</td>
<td>0.845</td>
<td>0.569</td>
<td>0.562</td>
</tr>
</tbody>
</table>

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

*key:*

1. Dependability
2. Responsiveness
3. Access
4. Competence
5. Communication
6. Overall customer satisfaction
C. Correlations between Overall Job Satisfaction and Overall Customer Satisfaction

Reading from below table 4.52, it can be inferred that except for an insignificant correlation between Supervision, Coworkers, and nature of work subscales, all other subscales have significant positive correlation with the overall customer satisfaction. The correlation between the overall job satisfaction and customer satisfaction is statistically significant and positive at the level of 0.929*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.631</td>
<td>0.827</td>
<td>0.342</td>
<td>0.15</td>
<td>0.609</td>
<td>0.2</td>
<td>-0.078</td>
<td>0.7</td>
<td>-0.577</td>
<td>0.664</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.254</td>
<td>0.084</td>
<td>0.573</td>
<td>0.81</td>
<td>0.276</td>
<td>0.748</td>
<td>0.9</td>
<td>0.188</td>
<td>0.308</td>
<td>0.221</td>
</tr>
<tr>
<td>Responsiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-0.479</td>
<td>-0.093</td>
<td>0.919</td>
<td>-0.826</td>
<td>-0.294</td>
<td>0.022</td>
<td>0.09</td>
<td>-0.416</td>
<td>-0.594</td>
<td>-0.397</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.414</td>
<td>0.882</td>
<td>0.027</td>
<td>0.085</td>
<td>0.631</td>
<td>0.973</td>
<td>0.885</td>
<td>0.487</td>
<td>0.291</td>
<td>0.508</td>
</tr>
<tr>
<td>Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-0.294</td>
<td>0.068</td>
<td>0.976</td>
<td>-0.734</td>
<td>-0.055</td>
<td>-0.254</td>
<td>0.378</td>
<td>-0.387</td>
<td>-0.385</td>
<td>-0.187</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.631</td>
<td>0.913</td>
<td>0.004</td>
<td>0.158</td>
<td>0.93</td>
<td>0.681</td>
<td>0.531</td>
<td>0.52</td>
<td>0.523</td>
<td>0.763</td>
</tr>
<tr>
<td>Competence</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.094</td>
<td>0.291</td>
<td>0.838</td>
<td>-0.173</td>
<td>0.459</td>
<td>-0.003</td>
<td>0.333</td>
<td>0.121</td>
<td>-0.423</td>
<td>0.304</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.88</td>
<td>0.635</td>
<td>0.077</td>
<td>0.781</td>
<td>0.437</td>
<td>0.996</td>
<td>0.584</td>
<td>0.846</td>
<td>0.478</td>
<td>0.619</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.458</td>
<td>0.055</td>
<td>-0.900</td>
<td>0.847</td>
<td>0.312</td>
<td>-0.002</td>
<td>-0.075</td>
<td>0.409</td>
<td>0.598</td>
<td>0.398</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.438</td>
<td>0.93</td>
<td>0.038</td>
<td>0.07</td>
<td>0.609</td>
<td>0.997</td>
<td>0.904</td>
<td>0.494</td>
<td>0.287</td>
<td>0.507</td>
</tr>
<tr>
<td>Overall Customer Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.779</td>
<td>0.619</td>
<td>0.026</td>
<td>0.721</td>
<td>0.986</td>
<td>-0.106</td>
<td>0.361</td>
<td>0.688</td>
<td>0.143</td>
<td>0.929*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.12</td>
<td>0.265</td>
<td>0.967</td>
<td>0.17</td>
<td>0.002</td>
<td>0.865</td>
<td>0.551</td>
<td>0.199</td>
<td>0.818</td>
<td>0.022</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

*Key

1. Pay
2. Promotion
3. Supervision
4. Fringe Benefits
5. Contingent Rewards
6. Operating Conditions
7. Co Workers
8. Nature of Work
9. Communication
10. Overall job satisfaction
D. Correlations between Organizational Culture, Overall Job Satisfaction and Overall Customer Satisfaction

As can be seen from table 4.53 there is statistically significant relationship between the three variables of the study, the organizational culture, overall job satisfaction and overall customer satisfaction. As hypothesized, there is a statistically significantly negative correlation between the dominant organizational culture, overall job satisfaction and overall customer satisfaction at the levels of -0.956* and -0.457* respectively, while there is statistically positive correlation between overall job satisfaction and overall customer satisfaction at the level of 0.929*. The relationship results between organizational culture; overall job satisfaction; and overall customer satisfaction, clearly indicate that the relationships between the three variables are statistically significant.

Table 53: Correlations between Organizational Culture, Overall Job Satisfaction and Overall Customer Satisfaction

<table>
<thead>
<tr>
<th>Variables</th>
<th>Overall Job Satisfaction</th>
<th>Overall Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Culture</td>
<td>-0.956*</td>
<td>-0.457*</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td></td>
<td>0.929*</td>
</tr>
</tbody>
</table>
*. Correlation is significant at the 0.05 level (2-tailed).

E. Mediation between Organizational Culture, Job Satisfaction and Customer Satisfaction for F3

Regression Analysis didn’t prove any significant relationship between the three variables in F3

Table 4.54 below summarizes the relationships between Organizational culture, overall job satisfaction; and overall customer satisfaction in each factory.

<table>
<thead>
<tr>
<th>Table 54: Summary of Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factory</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
E. Correlations between Demographic variables and organizational culture, overall job satisfaction and overall customer satisfaction

As can be seen from below table 4.55, there are no statistically significant correlations between any of the demographic variables and organizational culture, overall job satisfaction and overall customer satisfaction

Table 55: Correlations between Demographic variables and organizational culture, job satisfaction and customer satisfaction

<table>
<thead>
<tr>
<th>Factory Variables</th>
<th>(ANOVA) And t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organizational Culture</td>
</tr>
<tr>
<td>F1</td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>P-value</td>
</tr>
<tr>
<td></td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>P-value</td>
</tr>
<tr>
<td></td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>P-value</td>
</tr>
<tr>
<td></td>
<td>Tenure</td>
</tr>
<tr>
<td></td>
<td>P-value</td>
</tr>
<tr>
<td>F2</td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>P-value</td>
</tr>
<tr>
<td></td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>P-value</td>
</tr>
<tr>
<td></td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>P-value</td>
</tr>
<tr>
<td></td>
<td>Tenure</td>
</tr>
<tr>
<td></td>
<td>P-value</td>
</tr>
<tr>
<td>F3</td>
<td>Gender</td>
</tr>
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<td>P-value</td>
</tr>
<tr>
<td></td>
<td>Age</td>
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<td></td>
<td>P-value</td>
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<td></td>
<td>Education</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>Tenure</td>
</tr>
<tr>
<td></td>
<td>P-value</td>
</tr>
</tbody>
</table>
4.5 Testing of Hypotheses

Table 4.56 below shows that all the hypotheses of this study have been supported and confirmed except two hypotheses which have been partially supported.

**Table 56: Testing of Hypotheses**

<table>
<thead>
<tr>
<th>Hypothesis #</th>
<th>Hypothesis Description</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There is statistically significant correlation between organizational culture and the overall job satisfaction</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>2</td>
<td>There is statistically significant correlation between organizational culture and the overall customer satisfaction</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>3</td>
<td>There is statistically significant correlation between overall job satisfaction and the overall customer satisfaction</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>4</td>
<td>There is statistically significant causal relationship between organizational Culture; Overall Customer Satisfaction where Overall Job Satisfaction is a partial mediator</td>
<td>Supported</td>
<td>Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td>5</td>
<td>There is statistically significant negative correlation between Job Satisfaction and Market organizational culture.</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>6</td>
<td>There is statistically significant negative</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>There is statistically significant negative correlation between customer Satisfaction and Market organizational culture.</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>8</td>
<td>There is statistically significant negative correlation between Customer Satisfaction and Hierarchy organizational culture.</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>9</td>
<td>There is statistically significant correlations between the demographic variables, i.e age, gender, level of education and experience, and Market and Hierarchy organizational culture, job satisfaction and customer satisfaction</td>
<td>Partially supported</td>
<td>Partially supported</td>
<td>Partially supported</td>
</tr>
</tbody>
</table>
Chapter 5 – Results and Recommendations

This Chapter discusses the results of this study and its findings in light of previous relevant research and provides its recommendations for leaders and human resources managers. The limitations of this study as well as future research proposal are presented.

5.1 Discussion of Results:

This study has empirically established evidence for the existence of a statistically significant relationship between organizational culture, overall job satisfaction and overall customer satisfaction in the three sample organizations; therefore, the quest of the researcher, as indicated in the title of the thesis, for a relationship between the three variables is met. Also, the research questions were all answered, and the hypotheses were also tested and supported. The rest of this section will highlight the result of this research and compare them to similar ones from previous relevant studies. Once again, as noted earlier, comparisons will be on any two combinations of the three constructs of this study, as there are no exactly similar ones. Therefore, the relationship with organizational culture and overall job satisfaction will be discussed first, and then the relationship between organizational culture and overall customer satisfaction, and third, the relationship between overall job satisfaction and overall customer satisfaction will be discussed, and finally, the mediating role of the overall job satisfaction will be highlighted.
A. Organizational Culture and Overall Job Satisfaction

The relationship between organizational culture and overall job satisfaction in the three sample organizations is shown in table 54. The result indicates that organizational culture (Market and Hierachal) and overall job satisfaction in the three sample organizations show a statistically significant negative correlation at the level of -0.459*; -0.423*; and -0.996** for F1; F2 and F3 respectively. The result has been confirmed by many scholars, among them is Shamaila Gull in her study of the impact of organizational culture on different organizations in Lahore, Pakistan. Shamila found that those who work under Market and Hierarchal cultures are not satisfied with their jobs, and therefore, an organizational type is a predictor of job satisfaction. This result is also in agreement with the one carried out by Lund of the University of Nevada, the USA as published in his article “Organizational culture and Job Satisfaction, where he also confirmed a similar result like that of Shamila as his study revealed that Market and Hierarchal cultures are less associated with job satisfaction. In the Sudanese culture, this result ensures that the Sudanese worker, like many others around the world, is affected by the type of organizational culture that prevails in the company. Employee satisfaction is negatively influenced by an organizational culture that doesn’t make a balance between its internal and external focus; as well as flexibility and control. This

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188 Gull, Shamaila “Impact of Organizational Culture Type on Job Satisfaction Level of Employees’ in Different Organizations of Lahore”, International Journal of Academic Research in Business and Social Sciences, Vol., 2, No. 12, (2012), Pages 105 - 110

means that organizations need to put more efforts in order to enhance the
effect of these factors on employees’ satisfaction. Given the current situation of
the Sudanese economy and the continuous devaluation of the Sudanese Pound,
pay and benefits factors require regular monitoring in order to alleviate the
impact of the devaluation. Also, most of the employees of this industry are
young, and they may opt to migrate to more attractive labor markets outside the
country like the Gulf countries where this industry is a paying one.
This is the knowledge worker era, where employees are more motivated by the
environment in which their relationship with their leaders; supervisor, and
coworkers, therefore, organizations need to focus more in creating such
environments.
From this study it is found that employees in the pharmaceutical industry are
oriented towards organizations that provide their employees with opportunities
for career and personal growth through fair promotion policies and competitive
pay and benefits according to the prevailing market rates. Leaders have to be
close enough to the front line staff, in order to make an impact on the
motivation level of their workforce and consequently a major effect on the
company performance.

B. Organizational Culture and Overall Customer Satisfaction

The correlation between organizational culture and overall customer satisfaction
for the three sample organization is presented in table 54. This study has found
that there is statistically significant negative correlation at the levels of -0.503**;
-0.457*; and -0.934* for F1; F2 and F3 respectively. In today’s high competitive markets, organizations realize the importance of making their customers satisfied or delighted. Customer satisfaction, among other organizational outcomes, is the most important factor for survival and growth. Organizations do not go out to the customer, instead, employees do, and therefore, they represent the organization in the eyes of the customer. A Dissatisfied customer is more likely to consider substitute products from the competitors. Customer satisfaction is not a luxury anymore; a lost customer is hard to bring back, especially in a tight market like the Sudanese pharmaceutical industry, where personal relations, due to tight market, count a lot in retaining or losing a customer. The result of this study is in agreement with the results of the study conducted by Angelos and Nancy in their study on the link between organizational learning culture and customer satisfaction in Greece, where their study has revealed a direct relationship between organizational culture and customer satisfaction. Another study that has similar results come from Udegbe et al of the Lagos State University of Nigeria in their study of the relationship among organizational culture, customer satisfaction and performance in multinational corporation in Nigeria where they found that there is a relationship between organizational culture and customer satisfaction. This


particular study might be more relevant as there is some similarity of cultural values and characteristics and is more relevant to the Sudanese organizational culture than others. This in part, may be due to the similarity of the national cultures.

C. Overall Job Satisfaction and Overall Customer Satisfaction

The correlation between Overall job satisfaction and overall customer satisfaction is shown in table 54 where a statistically significant positive relation is realized at the levels of 0.978**; 0.814**; and 0.929* for F1; F2; and F3 respectively. This result comes as no surprise because simply the relationship is logical and it goes with the Arabic wisdom that “One can’t give something he/she doesn’t have”. The casual relationship between overall job satisfaction and overall customer satisfaction is shown in tables, 35 & 37 and 44 and 46 in chapter 4. This result means that job satisfaction mediates the relationship between organizational culture and Customer satisfaction, and therefore, the road to customer satisfaction will necessary pass through the bridge of job satisfaction. This result is also noted by Ulrich\textsuperscript{192} who states that “customer satisfaction is a reaction to employee satisfaction”. Employees, the front line staff, are the vehicle that takes the organization to the customer. Some customers might have never been to the premises of the organization, and, to them, the organization is the salesperson.

\textsuperscript{192} Davie Ulrich, Op.cit, page 58
One of the lessons learned in this study is that the conventional wisdom “the customer runs the company”, which has prevailed for long time during the eighties, is no longer valid and doesn’t hold true in today’s business organizations. It would be more appropriate to substitute it with one like: “Employee and customer, together, run the company”. Employees can make or break the company in many ways. For example, they can ruin its reputation and image by talking negatively in front of customers; a negative word of mouth harms a lot. Therefore, it will only be fair for the three parties, that organization leaders treat employees as “internal customers”, and strive hard to delight them. When employees perceive their organization as giving, committed; paying; they reflect this perception to their customers, and the society at large, thus helping to build a bright image for the organization. The results of this study reveal that the relationship between organizational culture and overall job satisfaction is always significant and positive. For organizational leaders, this result means that, when things go wrong, they first look for the reasons from inside before looking outside. This result is supported by the work of many researchers, one of them is the study carried out by Gous et al\(^{193}\) in South Africa investigating the relationship between job satisfaction and customer satisfaction in the balance scorecard.

5.2 Recommendations:

The findings of this study have several implications for both research and corporate practices. Organizational culture, as subject of study, is relatively new to the Sudanese business organizations. The following recommendations is the contribution of this study.

A. For business organizations Leaders:

1. It is essential for leaders to identify the dominating organizational culture in their organizations and the impact it has on organizational outcomes, i.e. job satisfaction.

2. It is of high importance for leaders to treat their sales representatives as customers, not just employees.

3. Re-phrase the conventional wisdom that “the customer runs the company” to “Employee and customer, together, run the company”.

4. It is of absolute importance that leaders realize that the way staff are treated, especially sales representatives, will reflect on customers.

5. Recognize and familiarize themselves with the impact of organizational culture.

6. Realize that customer satisfaction is correlated with sales representative’s satisfaction. Customer satisfaction is a reflection of employee satisfaction.

7. Recognize the fact that customer and job satisfaction are both function of the dominant organizational culture.

B. For Human resource Managers:

1. HR Managers need to be trained on organizational culture concept and issues.

2. Include organizational culture characteristics in the advertisement for vacancies in order for the candidate to know what kind of culture is dominant and whether it suits them or not.
3. Include “culture fit factor” as a selection criteria for new hires.

4. Use customer feedback information into the training and development material.

5. HR managers need to know the impact of the dominant organizational culture on organizational outcomes, i.e. employee and customer satisfaction.

5.3 Limitation of this Study:

This research tried to help leaders and human resource practitioners enhance their knowledge about the effect organizational culture may have on employees and customers alike, but it has some limitations that need to be outlined. First, there are differences among scholars of the definition of organizational culture, and, as a result, there are many different models that tap the culture in any organization. Although the model selected in this study is of high reliability and validity, but is a western type of model, and caution need to be taken when applying such models on a different culture like the Sudanese. 3rd, generalisability of the results of this study is an issue as it is industry specific, and location specific. This study investigated the relationship between organizational culture, overall job satisfaction and overall customer satisfaction in the pharmaceutical industry in the Khartoum State in the Sudan; therefore, it is results will be more of use to the same industry. 4th, this study has investigated the perception of certain population working in the pharmaceutical industry, thus may not be easily applicable to population outside the pharmaceutical industry. 5th, cultural differences between countries may also need to be considered when using the results of this study. 6th,
the time during which the data collected needs to be considered as well. The data for this study has been collected before the downtime of the Sudanese economy, a fact that might have aggravated the level of dissatisfaction within the sample organizations even further to higher limits.

5.4 Proposed Future Research:

Stemming from the limitations mentioned in section 5.6 above, this study recommends that it necessary for Sudanese scholars to indigenize/localize the organizational culture phenomenon more by conducting more Studies within the Sudanese context in order to have a benchmark for future studies. It is also, recommended that similar studies to be done on a larger scale within the pharmaceutical industry and include more Sudanese pharmaceutical organizations. Another area of further research is to conduct similar studies outside the geographical boundaries of Khartoum State.
List of References

- Andrew E. Clark, “Job Satisfaction in Britain”, British Journal of Industrial Relations, 34:2 (1996), pages 189-217


- Cengiz Yilmaz and Ercan Ergun “Organizational culture and firm effectiveness: an examination of relative effects of culture traits and the balanced culture hypothesis in an emerging economy”, Journal of World Business, Vol. 43 (2008), pages 292


- D G Gous; A Y Habtezin; F N S Vermaak and H P Wolmarans,”The relationship between employee and customer satisfaction in the balanced scorecard”, SAJEMS NS 9, No.3(2006), pages 211-215

- D Kokt and CA van der Merwe. “Using the Competing Values Framework (CVF) to Investigate Organizational Culture in a Major Private Security Company”. SAJEMS NS 12, No.3 (2009), pages 343-347


- Daniel Dauber, Gerhard Fink and Maurice Yolles. “A configuration Model of Organizational Culture”. Sage open”: downloaded from sgo.sagepub.com. May 20, 2013
- Denison, D.R. Corporate culture and organizational effectiveness. John Wiley and Sons, New York, (1990), page 2
- Fiona Edgar and Alan J. Geare ” Employee voice on human resource management” Asia Pacific Journal of Human Resources, 43: (2005), page 361
- Glowensiki


215
- Naom Standford, Organization culture, Profile books ltd, London, (2010), page 56


- Rozalia klara Bako. “Organizational Discourses As Status And Symbols”, Act universitatis Sapienntiae, Philolgica, 2, (2010), page 154
- Schein, Edger, H., Organizational Culture and leadership. John Wiley & Sons, Inc. San Francisco, (2010), page 18
- Steve Simpson Ron Cacioppe, “Unwritten ground rules” Transforming organizational culture to achieve key business objectives and outstanding customer service” leadership & Organizational Development Journal: Vol. 22, No. 8, (2001), page 396


- [www.denisonconsulting.com](http://www.denisonconsulting.com), retrieved, June 26, 2013
- [www.humansynergetics.com](http://www.humansynergetics.com), retrieved June 27, 2013
- [www.OCAI.com](http://www.OCAI.com), retrieved June 27, 2013
- [www.psychology Dictionary.com](http://www.psychology Dictionary.com)
- [www.shrm.com](http://www.shrm.com)

Appendices

1. Questionnaires:

1.1 Organizational Culture Assessment Instrument (OCAI) and Job Satisfaction Questionnaire (JSS)

An instrument to assess the organization's culture and measure job satisfaction. Date: December 2013

Name: ____________________________

Instructions:

Dear participant:

This questionnaire consists of two sections: the first for assessing the organization's culture (the way the factory works) and the second for measuring job satisfaction. Each section contains four statements. The first section contains six headings and 24 questions in the second section contain 23 questions that measure your feelings towards various aspects that contribute to your satisfaction with this factory. Please mark one of each statement to indicate your opinion on it.

Secondly:

Basic data:

Gender: Male ______ Female _______

Age: ______ years

Education level: University above ______ University ______ Secondary ______ Other ______

Major: ______

Job: ______

Job level: ______

Years of experience: ______

Years of experience in the current job: ______

This factory is a very personal place. It is like a large family, where the employees participate in many of its characteristics.

This factory is a place where the employees are actively involved. They are ready to make the effort and bear the risks.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A factory is a very personal place</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A factory is a place where the employees are actively involved</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ملاحظة: لا يمكنني قراءة النص العربي من الصورة.
يعرف النجاح بهذا المصنع على أساس تميز وحداثة منتجاته.投入使用 في المنتجات ونماذجها.

**النجاح بهذا المصنع على أساس كسب السوق واكتساح المنافسة والريادة في العمل أمر أساسي.**

**النجاح بهذا المصنع على أساس كفاءة الأداء وتسليم المنتجات الموثوق به، والجدولة الدقيقة، وتقليل تكلفة الانتاج في غاية الأهمية.**

### رابعة: قياس درجة رضا الموظف

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<th>الم</th>
<th>لا أوافق تمامًا</th>
<th>لا أوافق قليلا</th>
<th>لا أوافق نوعاً ما</th>
<th>أوافق قليلا</th>
<th>أوافق نوعاً ما</th>
<th>أوافق بشدة</th>
<th>أوافق تمامًا</th>
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<td>6</td>
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<td>5</td>
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<td>2</td>
<td>1</td>
<td></td>
</tr>
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<td>5</td>
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<td>تعدد السياسات والإجراءات يجعل القيام بعمل جيد أمرًا صعبًا.</td>
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<td>الذي يؤدي عمله بصورة جيدة يحتكي بفرض جيدة للترقى.</td>
<td>11</td>
<td>6</td>
<td>5</td>
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<td>2</td>
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<td>12</td>
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<td>5</td>
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<td>الامتيازات التي نحصل عليها تشبه الامتيازات بالشركات.</td>
<td>13</td>
<td>6</td>
<td>5</td>
<td>4</td>
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</tbody>
</table>
لا أشعر بأن العمل الذي أقوم به يلقى التقدير.  
عندما أقوم بعمل جيد نادراً غالباً أكافأ عليه  
أشعر بأنه علي أن أعمل بجد أكبر وذلك لقلة كفاءة الذين أعمل معهم.  
أحب الأعمال التي أقوم بها في عملي.  
عماية وأهداف هذه الشركة ليست واضحة بالنسبة لي.  
أشعر بعدم تقدير الشركة لي عندما أفكر بالأجر الذي أتقاضاه منها.  
العاملون بهذا المصنع يتطورون وظيفياً بنفس السرعة التي يقدمون بها في المصانع المماثلة.  
رئيس المباشر قليل الاهتمام بمشاعر من يعملون معه/معها.  
أشعر أن حزمة الامتيازات التي نحصل عليها بهذه الشركة عادلة.  
لا يوجد أماوات كثيرة بالعمل أكثر من طاقتي.  
أنا مستمتع بعملي مع الزملاء.  
غالبًا ما أشعر بأنني لا أعرف ماذا يحدث بهذه الشركة.  
أنا أشعر بالتفاؤل عند أداء عملي.  
أشعر بالفخر عند زيادة الأجور.  
هناك بعض الامتيازات التي من المفترض أن نحصل عليها ولكنها غير موجودة.
<table>
<thead>
<tr>
<th></th>
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<th>5</th>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<tr>
<td>35</td>
<td>عملي ممتع.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>واجبات العمل غير واضحة بصورة مفصلة.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

شكرا لك على تعاونك.
1.2 Customer Satisfaction Questionnaire (CSQ).

استبيان قياس درجة رضا العمل (صنع ______________________) للأدوية

أولاً: البيانات الأساسية:

1. النوع: ذكر_________ أنثى______
2. العمر: _______ سنة
3. المستوى التعليمي: فوق الجامعي______ جامعي _______ ثانوي _______ آخرى ________
4. الإجابة _______ 5. الوظيفة: ___________ 6. سنوات الخبرة ___________
7. سنوات الخبرة بهذا الصناعة _______ 8. موقع العمل: الوحدة الإدارية _______
9. موقع العمل ________ محلية _______ محلية ________ (اختياري)
10. هل تتعامل مع أي من مصانع الأدوية التالية أو بعض منها أو كلها: مصنع _______ مصنع _______ مصنع _______

ب. هل تتعامل مع أي من مصانع الأدوية التالية أو بعض منها أو كلها: مصنع _______ مصنع _______ مصنع _______

11. ما هي نسبة مشترياتكم من كل من هذه المصانع: تبوك الدوائية_______% أمفارما _______% الحكمة ________% 

عزيزي المشارك: تحتوي هذه الاستبانة على 42 عبارة موزعة على خمس محاور - ليس بالتساوي- يرجى وضع علامة ( ) تحت كل من العبارات مع كل عبارة بحيث يكون الخيار هو الأقرب للتعبير عن رأيك حول نفس العبارة.

ثانياً: المحاور الخمسة

1. محور الثقة والاعتمادية (درجة الثقة في المصنع والاعتماد على منتجاته وخدماته بالوبية والكمية الحصول عليها في الوقت المناسب) Dependability

<table>
<thead>
<tr>
<th>العبارة</th>
<th>م</th>
</tr>
</thead>
<tbody>
<tr>
<td>أثق أن منتجات المصانع تصلني في الوقت المناسب دون تأخير.</td>
<td>1</td>
</tr>
<tr>
<td>لا أثق أن منتجات المصانع تصلني في الوقت المناسب دون تأخير.</td>
<td>2</td>
</tr>
<tr>
<td>أثق أن منتجات المصانع تصلني بالكميات المطلوبة.</td>
<td>3</td>
</tr>
<tr>
<td>لا أثق أن منتجات المصانع ذات جودة عالية مقارنة بمنافسيها.</td>
<td>4</td>
</tr>
<tr>
<td>أعتمد على منتجات المصانع في سد حاجة زياني دون اللجوء للبدائل.</td>
<td>5</td>
</tr>
<tr>
<td>حدث أن ضاعت لي طلبتي ولم تصلني.</td>
<td>6</td>
</tr>
</tbody>
</table>
أثق في الوعود والنصائح التي يقدمها مندوب المصنع.
لا أثق أن المصنع حريص على مساعدتي في ضبط حساباتي معه.
أثق في مقدرة المصنع على توفير منتجات متطورة.

<table>
<thead>
<tr>
<th>العبارات</th>
<th>أوافق بشدة</th>
<th>لا أوافق</th>
<th>أداء غير ملائم</th>
<th>أمانة غير ملزمة</th>
<th>الأداء غير ملائم</th>
</tr>
</thead>
<tbody>
<tr>
<td>عندما اتصل بمندوب المصنع لعمل طلبية، استقبلني قبليًا ورد علي دائمًا.</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>عندما استفسر من المندوب عن معلومات حول المنتجات المتاحة أو العروض الشهرية، فانه لا يقدمني بالسرعة المطلوبة.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>عندما أريد عمل طلبية عبر المندوب، فإني لا يتوجه بسرعة.</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>يتم تزويدي بالمنتجات والحلول التسويقية من بداية دون تأخير.</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يتجاوب معني دائمًا عندما أطلب كشف حساب مفصل.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر خدمات محاسبية جيدة لمتابعة حساب الزبون ولمعرفة قيمة المتأخرات وحل المشاكل المالية.</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر دائمًا زيارات منتظمة لمندوبه لمتابعة احتياجات الزبون.</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر دائمًا خدمة متاحة طلبات الزبون بشكل منتظم وفعال.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر دائمًا إبحارات متاحة طلبات الزبون بشكل منتظم وفعال.</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر دائمًا إبحارات إثارة من الأصناف متاحة بالتنوع الكافي لغرض أغلب احتياجات الزبون.</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر دائمًا موظف مختص لحل مشاكل الزبائن عبر الهاتف.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر دائمًا مندوب لحل مشاكل الزبائن.</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

( مدى تجاوب مندوبى المصنع وموزعي خدمات الزبائن ومقدماتهم لل مجانيات بشكل منتظم)

<table>
<thead>
<tr>
<th>العبارات</th>
<th>أوافق بشدة</th>
<th>لا أوافق</th>
<th>أداء غير ملائم</th>
<th>أمانة غير ملزمة</th>
<th>الأداء غير ملائم</th>
</tr>
</thead>
<tbody>
<tr>
<td>يزودني المصنع دائما بإحتياجاتي من المنتجات بسهولة ويسر.</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر خدمات محاسبية جيدة لمعالجة رسيد الزبون ولمعرفة قيمة المناخات وحول المشاركات المالية.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر دائما مزيج من الأصناف يمتاز بالتنوع الكافي لغرض احتياجات الزبون.</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المصنع لا يوفر دائما مزيج من الأصناف يمتاز بالتنوع الكافي لغرض احتياجات الزبون.</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

( مدى توفر الخدمات من الأدوية والدعم الفني وحل مشاكلك إذا وجدت)
المهنية والمهارة: Competence

<table>
<thead>
<tr>
<th>العبارة</th>
<th>لا أوافق بشدة</th>
<th>لا أطرفي</th>
<th>أوافق بشدة</th>
</tr>
</thead>
<tbody>
<tr>
<td>المندوب متمكن من الأصناف من الناحية العلمية</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المندوب ليس لديه القدرة على التعامل بس[newline]رونة ومهنية مع الشكاوي وإيجاد الحلول الملائمة.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المندوب على دراية بأسعار المنتجات التي يسوقها وبأسعار منتجات المنافسين.</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>المندوب غير مطلع على أحوال السوق و ليس لديه معرفة وافية بعمليات الأسعار والضوابط السوق.</td>
<td>4</td>
<td></td>
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</tr>
<tr>
<td>يتصف مندوب المصنع بالأمانة والصدق فيما يعرض.</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>لا يتم سلوك المندوب معي بالأحترام والأدب.</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>يعتبر أسلوب تعامل طاقم الشركة مع طلبات الزبائن مرضي دائما.</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>مظهر المندوب ليس لائق دائما.</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

الاتصالات: Communication

<table>
<thead>
<tr>
<th>العبارة</th>
<th>لا أوافق بشدة</th>
<th>لا أطرفي</th>
<th>أوافق بشدة</th>
</tr>
</thead>
<tbody>
<tr>
<td>أشعر بأن المصنع يوفر أحدث وسائل الاتصالات.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>أشعر بأن وسائل الاتصالات المتوفرة لا تعمل بكفاءة عالية.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>أشعر بأن موظفي المصنع يتكلمون معي باللغة التي أفهمها.</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>أوقات وساعات عمل المصنع لا تسهل عملية الاتصال.</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>لا أتردد في الاتصال عندما تكون هناك حاجة لها.</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>أشعر أحيانا بعدم جدية اتصاليتي بالمصنع.</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

شكرا لك على تعاونك.
2. Research Supervisor Letter

الموضوع: طالب الدكتوراه في إدارة الأعمال محمد أحمد نزال السيد

وبعد

يقوم المذكور أعلاه بإعداد بحث بعنوان "أثر الثقافة التنظيمية على درجة رضا العامل والعامل " بالتطبيق على قطاع صناعة الدواء، عليه نرجو التكرم بالتعاون معه وذلك بتوجيهه مسؤولي إدارة التسويق والمبيعات. نحن نتمنى أن يكون التزام الإدارة المرفقا وذلك حتى يتمكن من اجتياز بحثه بالصورة المطلوبة.

وجزاكم الله خيراً

مشرف على الرسالة
Mobile: 0912945858
3. Researcher Letter

بسم الله الرحمن الرحيم

الأخ الكريم / 

الموضوع: خط درجة رضا العلماء في فضاء صناعة الأدوية

السلام عليكم ورحمة الله وبركاته.

أشارة للموضوع أعلاه، أرجو كريم تضامن تعبير الاستثناء الرفقي، حيث أنه يمتاز في تعلم نجاح درجة الدكتوراة في جامعة السودان للعلوم والتكنولوجيا.

وهذا البحث ترغب فيه مصادر الأدوية ومهم تعلم أسماء بقائمة عملكم وبحث أن مؤسسة العامية ضمن هذه الفئة، فضلا عن مصالح المحكمة وتوتير وسليم قيم معرفة درجة رضاكم عن الخدمات والمنتجات التي توفرها أكم ومعرفة رككم يسار هذه المنتجات كثيرة في تطور خدماتنا لكم، فأنا أتطلع معاكم في تطور هذا القطاع الحيوي والعالم.

وتأكد أن المادة هذه الاستثناء تعمل على أغراض البحث العلمي ومهمة السهولة والباحث مستقبل قوانا عن ذلك.

هذا ونعتنكم أن ونستعد للرائدة بالذكر الخليل، والله من وراء القصد وهو اليادي إلى سواء السبيل.

الباحث/ محمد أحمد عبد السيد

جوال: 09121221366

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