THE RELATIONSHIP BETWEEN LEARNING STYLES, STRATEGIES' USE, CULTURE AND READING COMPREHENSION: A STUDY OF YEMENI EFL LEARNERS

Thesis submitted to the Kuvempu University
For the Award of degree of

DOCTOR OF PHILOSOPHY

IN

ENGLISH

By:

Iftikhar Yusuf Abdulmoghni S. Al-Ariqi

Under the Guidance of:

Prof. Rajendra Chenni

Co-guide:

Dr. Jagannath K. Dange

Department of P.G. Studies and Research in English
Kuvempu University, Shankaraghatta
Karnataka, India

February, 2018

Declaration

I declare that the thesis entitled "***The Relationship between Learning Styles, Strategies' Use, Culture and Reading Comprehension: A Study of Yemeni EFL Learners***" submitted by me for the Degree of Doctor of Philosophy in English is the record of work carried out by me under the guidance of ***Prof. Rajendra Chenni,*** Department of P.G Studies and Research in English and ***Dr. Jagannath K. Dange,*** *Co-guide,* Department of P.G Studies and Research in Education, has not formed the basis for award of any degree or diploma in this or any other university or other institution of higher learning. I further declare that the material obtained from other sources has been duly acknowledged in the thesis.

Date: 26/02/2018

Place: Shankaraghatta

Iftikhar Yusuf Abdulmoghni Saeed Al-Ariqi

Researcher

Kuvempu University

Department of P.G. Studies and Research in English
Jnana Sahyadri, Shankaraghatta – 577 451
(Shivamogga District, Karnataka State, India)

Prof. Rajendra Chenni
Department of P.G. Studies and Research in English
Kuvempu University
Shankaraghatta - 577451

CERTIFICATE

This is to certify that **Mrs. Iftikhar Yusuf Abdulmoghni S. Al-Ariqi** has worked on the thesis "***The Relationship between Learning Styles, Strategies' Use, Culture and Reading Comprehension: A Study of Yemeni EFL Learners***" under my supervision and guidance.

This thesis, being submitted to Kuvempu University for the award of degree of Doctor of Philosophy in English is an original record of the work carried out by the candidate herself and has not been previously submitted for the award of any other degree or diploma of this or any other University in India or abroad.

Date: 26/02/2018

Place: Shankaraghatta

Chenni. RG
(Prof. Rajendra Chenni)
Dr. Rajendra Chenni
Professor of English
Department of P.G. Studies in English
Guide
Kuvempu University
Jnanasahyadri,
SHANKARAGATTA - 577 451
Shimoga Dist. Karnataka

Kuvempu University

Department of P.G. Studies and Research in Education
Jnana Sahyadri, Shankaraghatta – 577 451
(Shivamogga District, Karnataka State, India)

Dr. Jagannath K. Dange
Associate Professor
Department of P.G. Studies and Research in Education
Kuvempu University
Shankaraghatta - 577451

CERTIFICATE

This is to certify that **Mrs. Iftikhar Yusuf Abdulmoghni S. Al-Ariqi** has worked on the thesis "***The Relationship between Learning Styles, Strategies' Use, Culture and Reading Comprehension: A Study of Yemeni EFL Learners***" under my guidance as co-guide.

This thesis, being submitted to Kuvempu University for the award of Degree of Doctor of Philosophy in English is an original record of the work carried out by the candidate herself and has not been previously submitted for the award of any other degree or diploma of this or any other University in India or abroad.

Date: 26/02/2018

Place: Shankaraghatta

Dr. Jagannath K. Dange
26/2/18

Co-Guide

Dr. Jagannath K. Dange
Associate Professor
Dept. of P.G. Studies in Education
Kuvempu University
Shankaraghatta, Shivamogga-577451
Karnataka.

Kuvempu University

Department of P.G. Studies and Research in English
Jnana Sahyadri, Shankaraghatta – 577 451
(Shivamogga District, Karnataka State, India)

Dr. Dattatreya M
Associate Professor
Department of P.G. Studies and Research in English
Kuvempu University
Shankaraghatta - 577451

CERTIFICATE

This is to certify that the work incorporated in the thesis "***The Relationship between Learning Styles, Strategies' Use, Culture and Reading Comprehension: A Study of Yemeni EFL Learners***" submitted to Kuvempu University for the award of Degree of Doctor of Philosophy in English by **Mrs. Iftikhar Yusuf Abdulmoghni S. Al-Ariqi** is the result of bonafide research work carried out by the candidate under the guidance and supervision of **Prof. Rajendra Chenni,** Professor, Department of Post-graduate Studies and Research in English with **Dr. Jagannath K. Dange,** Co-guide, Associate Professor, Department of Post-graduate Studies and Research in Education, Kuvempu University,

Place: Shankaraghatta

Date: 26/02/2018

Dr. Dattatreya M.
Chairperson
Dept. of P.G. Studies in English
Kuvempu University
Jnana Sahyadri, SHANKARAGHATTA-577 451
Shimoga Dist. Karnataka

Chairman

ACKNOWLEDGEMENTS

First and foremost, I am infinitely grateful to the **Almighty Allah** for ever-ending grace, mercy and provision during the most toughest time of my life and for blessing me for much more than what I deserve; and mercy and blessings of Allah is upon Prophet Mohammed, his family and companions. Moreover, I would like to extend thanks to the many people in Yemen and India who so generously contributed to the work presented in this thesis and helped me throughout this journey. I am endlessly grateful and with them I will happily share any credit.

First, I would like to begin by expressing my sincere gratitude and appreciation to my advisor **Prof. Rajendra Chenni,** for the continuous support of my PhD study and related research, for his patience, motivation, and immense knowledge. The door to Professor Rajendra Chenni office was always open whenever I ran into a trouble spot or had a question about my research. His careful suggestions and insightful feedback have enormously contributed to the production of this thesis. I could not have imagined having a better advisor and mentor for my PhD study rather than him. I am gratefully indebted to him.

I also would like to express my deep appreciation and special thanks to my co-guide **Prof. Jagannath K. Dange.** I am deeply grateful to him for his invaluable input in carrying out the statistical analysis of this work. His thoughtful comments, support and encouragement have really enlightened my work on this thesis.

I owe a special word of thanks and appreciation to chairman, **Dr. Dattatreya M.** and all English department staff for constant support and assistance in following up the administrative processes regarding my PhD degree during the last three years.

I acknowledge with special thanks the funding received from **Ministry of Higher Education in Yemen** and **Embassy of Yemen in India-Cultural Attaché** for sponsoring my PhD study in Kuvempu University, India.

I also would like to express my special appreciation and gratitude to my friend and extremely obliging fellow, **Khadijah Al-Mahdi,** who spared me a lot of her precious time and great efforts in the data collection for this work. I'm extremely thankful to her sincere concern and support despite her intense involvement and responsibilities. I'd like also to thank my sisters and friends who came to help in the day of collecting data as well as the second year students of English Department for the year 2015-2016 who participated as the sample of the study.

I would like to express my indebtedness to my senior and real brother **Dr. Haseeb Al-Ariqi**, for his moral support and encouragement he gave me in the very difficult times during this journey. I believe my success is at least in part due to the support and wisdom he has imparted upon me. My sincere gratitude also goes to my second Yemeni family in India, **my sister Amani** and her mother, **auntie Amoun** who have shown up every time I need them and for their honest love and boundless care with no waiting for any return.

Most importantly, I would express my very profound and eternal gratitude to the source of aspiration and success, my ever affectionate parents, my mother, **Mrs. Sufarjal** and my father, **Mr. Yusuf** whom this accomplishment would have been impossible without their prayers, encouragement and satisfaction on me. I owe them my life for providing me with unfailing support, trust and continuous affection throughout my entire life. Their prayers for me have been what sustain me thus far. I thank them for immeasurable sacrifices that they have made on my behalf. I am indebted to them for the constant love, confidence, patience on my absence, hope and believing in me. I would also like to thank all members of my family, my siblings and friends in Yemen who endure my absence and keep supporting and motivating me to strive towards my goal.

Finally but most significantly, I wish to give my heartfelt thanks as ever to my dedicated and beloved husband, **Mir Mohsin.** Undertaking this PhD has been a truly life-changing experience for me and it would not have been possible to do without the immense concern, spiritual and moral support as well as academic assistance that I've received from him. I am grateful to him for his unconditional love, being so caring and understanding, sharing and putting up with me through the toughest and happiest moments of our personal life as well as my academic endeavors in analyzing and writing this thesis. He has always provided me with cheerfulness, self-determination and the trust I need to move on. I thank the Almighty ALLAH for enlightening my life with such a great and noble man. And here, I owe special and deep thanks to all members of my family-in-law particularly my parents-in-law, **Mr. Mir Ghullam Nabi** and **Mrs. Dil Afrooz**, for their constant prayers, love and encouragement to me and Mohsin.

I owe it all to you. Many Thanks!

Iftikhar Yusuf Al-Ariqi

I dedicate this work to the ever-ending spring of love and support,
My Great Parents

I also dedicate it to the unwavering love and source of inspiration,
My beloved husband,
Dr. Mir Mohsin

Iftikhar Yusuf Al-Ariqi

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

Acronym	Full Word
EFL	English as a foreign Language
ESL	English as a Second Language
EST	English for Science and Technology
ELT	English Language Teaching
CECY	Crescent English Course for Yemen
CLA	Communicative Language Approach
PLSPQ	Perceptual Learning Style Preferences Questionnaire
PLSP	Perceptual Learning Style Preferences
SORS	Survey of Reading Strategies
CALL	Communicative Approach Language Learning
SLA	Second Language Acquisition
L1	First Language
L2	Second Language
LLS	Language Learning Strategies
LC	Learning Culture
CLS	Cognitive Learning Strategies
MRS	Metacognitive Reading Strategies
TOEFL	Test of English as a Foreign Language
SEM	Structural Equation Modeling
IM	Instant Messaging
MCQ	Multiple-choice Question
DI	Discrimination Index
DE	Distractor Efficiency
FD	Functional Distractor
NFD	Non-functional Distractor

TABLE OF CONTENTS

CHAPTER – I
INTRODUCTION

This chapter comprises the following sections:

Section 1: This section comprehensively elucidates the introduction and context of the study, English teaching and learning in Yemen.

Section 2: This section comprehensively explains the statement of the problem, research gap, need, objectives of the study. It also discusses the scope and limitations of the study.

1.1 OVERVIEW:

Reading is the most important skill for students to learn and gain knowledge in all fields. In order to decode what he/she reads, it is held that a reader needs to be engaged in mental and physical activities based on his/her purpose and proficiency in reading. Reading is a basic skill which for many English Foreign Language Learning (EFL) students is a complicated process (Al-Sohbani, 2013).

The researcher, who has been teaching reading to EFL learners for more than eight years, has found that students have always suffered while reading academic or any other types of texts in English. Reading is considered the most complicated skill to be acquired by students in which they very often get the least marks among the other skills of English learning. In spite of all the efforts which have been made to improve the Yemeni education system particularly in English, Yemeni students still do not show good performance even at tertiary levels. In the last 20 years, research has changed its focus from language teaching pedagogy to the language learners and the variables which might affect language learning. A very substantial research has revealed that there are different factors which might affect EFL learners' reading ability. It has been

recognized that individual differences such as learning style, strategy use may influence the process of learning English as a foreign language. However, some of those studies have investigated the relationship between the learning styles and use of strategies but very few have done so in relation to reading. In this study, learners' preferences and strategies use have been given a focus with reference to the Yemeni EFL learners in tertiary education. Furthermore, going through most of the research in the area, it is noticed that English learning culture has not been given a clear scope in the learning context. Most of the researchers examine the impact of the target culture on foreign language learning processes, but very often have investigated the local culture's impact on learning context, which is called here 'learning culture'. This term refers to any cultural factors or traits which may be appear in learning situations. Only learners' beliefs, behavior and preferred activities of a cultural pattern are discussed in this study in relation to reading comprehension ability among Yemeni EFL learners.

It is unquestionable that learners have different preferences i.e. styles in the way they process, perceive, take in and understand information. Understanding these learning style preferences is of extreme importance in the teaching and learning process (Al-tamimi & Shuib, 2009). Furthermore, students might use different strategies to comprehend a reading passage or to answer questions on it. Thus, this study tries to investigate some of the individual differences which influence students' reading comprehension ability in English. It focuses specifically on English reading of EFL Yemeni learners' in relation to their learning style preferences and reading strategy use. It is suggested that these two variables in addition can be identified as some of the factors which have an effect on learners' language reading comprehension. The study also focuses on the learning culture variable as a point of reference among EFL Yemeni learners. Thus, the current study was carried out with the intention of identifying the

learning style preferences and use of reading strategies, learning culture impact in Yemeni EFL learners at tertiary level as well as measuring the real performance of learners in English reading comprehension. It aims to investigate the relationship of learning style preferences, use of reading strategies and English reading comprehension among Yemeni EFL learners as well as to give a broad scope to the learning cultural context in EFL classrooms.

1.2 THE CONTEXT OF THE STUDY:

1.2.1 Republic of Yemen:

The republic of Yemen is an Arab country located at the south west of Asia (map1). It occupies, exactly, the southwestern corner of the Arabian Peninsula. It is bordered by the Arabian Sea and the Gulf of Aden to the south, Saudi Arabia to the north, the Sultanate of Oman to the east, and the Red Sea to the west (map2). Yemen is the second-largest country in the peninsula, occupying 528,076 km^2 (203,891 sq mi) and a population of about 25,408,000 (Wikipedia, 2017). Administratively, Yemen is divided into 22 governorates. Each governorate consists of many districts. The largest governorates are Sana'a, which is the capital city, Aden, the economic and commercial capital, Taiz, Hadramout, Ibb, Hodiedah and Lahj.

1.2.2 The Place of English in Yemen:

Yemen is a monolingual country with official Classical Arabic which is Qur'an language and used only in writing and formal speaking, and Colloquial Arabic which refers to the many regional dialects derived from Arabic spoken daily across the country and practiced as a first language. Because of the necessity of English, it has been included in the Yemeni educational system; and those who can speak and write English very well are considered the most successful in getting jobs and the most educated people in society (Ba-Udhan, 2010). English, in Yemen, is considered a foreign language and is taught as a compulsory subject in government schools at the basic educational stage for three years and another three years at the secondary stage, while, all the other subjects are taught in Arabic. The mother tongue, Arabic is the only medium of communication used by Yemeni people, particularly colloquial Yemeni Arabic and multiple distinct dialects throughout the entire country. Knowing English and speaking in English is not necessary for every day communication since the whole country is monolingual (Altamimi, 2006; Azzan, 2001; Al-Hamzi, 1999; Al-Ahdal, 2010).

1.2.3 Reading Culture in Yemen:

Reading culture is given little attention in Yemen. Yemeni and Arabs do not possess a strong reading culture. The number of books published in all Arab countries together equals the number of publications of one country like Holland in six months. The publications of Arab world do not exceed 1.1% of world production. Moreover, among the cities in Yemen, very few bookshops and stationeries can be found (Zebisch, 2005).

Book fairs which are hold annually in the capital, Sana'a, still cannot upgrade the level of reading among people. The number of visitors to the yearly fair reaches to 20.000 visitors every year which represents 1% of the total population only. The percentage of general facilities and equipment is very little. There is shortage of new stocks and books in university libraries in major cities. However, there are some attempts in libraries at the public level as well as the private such as Al-Jeel Al-Jadeed and Al-Saeeda Foundations. The few other bookshops in Sana'a may have a random book selection and those books which involve unacceptable titles against the country culture are not allowed.

On the other hand, there are some libraries with specialization in religious matters such as Dar AlMakhtutat , a unique collection of ancient Quran writing, and the Tarim Library, a center of research for scholars in religions in Hadramout City as well as Youth Organization where a separate room is arranged for reading. As for press and media, cultural newspapers and magazines are not very popular. Some newspapers like Althawra and 26 September are restricted to political issues only. A small space would be given for cultural and social themes in these newspapers.

It is obvious that a very negligible consideration is given to reading in Yemen. Little awareness is shown among young people of the importance of reading. Reading for pleasure or to broaden their knowledge is rarely seen among Yemeni people.

1.2.4 English Language Education in Yemen:

The Yemeni government has exerted huge efforts to encourage English learning all around the country in both government and private sectors. In the government sector, most of the students who join will have studied English for six years before they join the tertiary stage in which learners are prepared to be highly educated to come out and

participate in societal development. However, English is still considered a foreign language in Yemen and in all the Arab states. In the current educational system all over the republic of Yemen, there are two stages; basic (9 years) and secondary (3 years). English is introduced to students in 7th level of the basic stage at the age of 13 which is considered quite late. Moreover, English is taught as a subject not as a language, in which around 5 to 6 periods of 40 minutes only are given in a week to students using the grammar-translation method and very rarely try to practice it outside (Al-Shamiry, 2000; Al-tamimi, 2006). Basically, the objectives set by the Ministry of Higher Education (MOE) for the development of English in Yemeni schools, according to Al-Ghraphy (1999:3), are as follows:

1) *"To teach the students to read and write the foreign language so that they can carry out their own academic research in English".*
2) *"To provide the students with skills which will enable them to communicate orally, and to some degree in writing, with the speakers of the foreign language and with the people of other nationalities who also speak this language".*
3) *"To bring the students to some degree of understanding of people across nationalized barriers by giving them an insight into the ways of life and the ways of thinking of the people who speak the language they are learning".*
4) *"To increase the students' understanding of how language functions and to bring them, through the study of a language, to a greater awareness of the functioning of their own language".*
5) *"To enable the students to study abroad where English is the medium of instruction".*

However, the students' poor performance in English at secondary schools and tertiary levels indicates that these objectives are not being fully accomplished

(Ba-Matraf, 1997). The low standard of Yemeni students in English prevails as a difficulty. Due to the government's concern to improve the outcomes of learning English with Yemeni students, a new policy is currently being formulated aiming at introducing English as a subject starting from Grade 4 and increasing the number of English learning hours at elementary and secondary levels (Prime Minister, 2005). Recently, English has started to go through a transition period moving from being a foreign language into being a second language (Saeed, 2010). Saeed explains that Yemeni people are strongly motivated to learn English for different purposes like finding a proper job and going abroad for study. He states that educated people in Yemeni society send their children for learning English in language institutes in their leisure time and push them to schools where English is taught from the 4th grade on or to private schools where most of the subjects are taught in English (2010). Thus, for improving English learning in Yemen, humble beginnings of a language planning effort have been undertaken in a serious way, according to Saeed (2010). Teaching English continues even at the university level as a compulsory subject in colleges of humanities, and it is used as a medium of instruction in schools of sciences, engineering, medicine and agriculture (Al-Hamzi, 1999, cited in Altamimi (2006)).

The Yemeni government has encouraged the educational system in the private sector as well as the public to grow rapidly all over the country. In private schools which demand more money for enrollment, English is given more attention in which it is taught from kindergarten to secondary level, which most of common people can not afford (Al-Sohbani 1997: 32). A huge number of private schools offer courses from K.G. to the tertiary levels. English section has been introduced in most of these private schools, but not affordable for majority of Yemeni families. Varieties of English textbooks have been used in those schools as an attempt to let students learn

and communicate in English. English in private schools is taught from kindergarten till secondary levels in which the medium of instruction is English. Classes in those schools are considered well-equipped with audio-visual aids which create an attractive and encouraging environment of learning English to the students.

On the other hand, language institutes have been opened to teaching English to all age groups, especially young people, for different purposes. Some of these institutes are the British Council, Yemen American Language Institute (YALI), English Language Canadian Institute and the Indian Cultural Mission with the help of Indian School. Most of English classes are offered by teachers who are native speakers or Yemeni who have acquired English in America or Britain. In these institutions, very good libraries with useful English are available as well as multimedia lab and different well-equipped aids. In summer vacations, the schools and institutes in the private sector provide extensive and advanced courses.

1.2.5 English Curriculum Change in the Yemeni Educational System in the Two Regions (North & South):

English language teaching has been going through different phases in Yemen before and after the unification of the north and south in 1990. Before the unification, the first English textbook introduced in the north of Yemen was in 1926 during the rule of Imam Yahya Monarchy, and in the south of Yemen during the occupation of British in the 19th century. When the north of Yemen got rid of the monarchy in 1962, *The English Textbook* from Egypt, involving the use of Grammar Translation Method, was taught at both the basic and secondary stages. After that, a new course called *The Progressive Living for the Arab World* was started. This course was replaced by the Egyptian Course *The Nile Course of English for Use*, in 1968-1969, which was used in all the Gulf States. In the eighties, another course was introduced in schools; *English*

for Yemen from the seventh class of the basic stage to the third class of the secondary school stage (Dulul ,2012).

In the south of Yemen, three main stages can be traced from the 60s to the present. At the first stage, throughout the 1960s and 1970s the schooling system consisted of three levels i.e. basic (6 years), intermediate (3 years) and secondary levels (3 years). Only in the intermediate level, English was introduced. The curriculum was based on literature and grammar. *The Michael West Series* syllabus was taught at these stages. In the beginning of the 1980s *The Michael West Series* syllabus was replaced by a new syllabus prepared by the Department of English, the College of Education, Aden, called *The Yemeni Reader*. The focus of this new syllabus was grammar, sentence structures, reading comprehension drills and substitution tables.

The second stage started in south of Yemen in the eighties. The educational system consisted of two levels: an elementary level (8 years) and a secondary level (4 years) in which new syllabus called *English for Yemen* published to replace the previous courses *The Yemeni Reader* and *English for Yemen* which both focused on the content of the English language (Dulul ,2012).

However, the previous textbooks either in the north or south have proved to be inappropriate to Yemeni learners once they have to communicate outside classrooms or join colleges in the tertiary levels. Thus, a new syllabus *Crescent English Course for Yemen* (CECFY), has been introduced in both regions in the third stage after the unification of Yemen. This syllabus is still prevalent in all over the country (Dulul, 2012) in the current educational system. This system consists of two stages; basic or primary (9 years) and secondary (3 years) in which the (CECFY) in English subject is introduced in the 7th level of the basic stage. The (CECFY) is a communication oriented course concentrated on the four skills of the language. Despite the fact that the new

syllabus looks attractive and enjoyable, new difficulties have been arose up after some years of using it.

Until the beginning of the 1990s, English language teaching (ELT) in Yemen had been traditionally structure-based where it had priority over meaningful language use. However, since 1993, the CLT-based textbook series, Crescent English Course for Yemen (CECFY), replaced the structure-based textbook, English for Yemen. It is found that Yemeni EFL teachers have been facing difficulties choosing between CLT-based and the structure-based practices they had been using for years (Bataineh & Thabet, 2011). The last textbook series (CECFY), which was published with the cooperation between Ministry of Education and Oxford University Press for English teaching in the Arab world aiming to improve English learning among the learners, has been found less effective than expected for many reasons. Al-Ahdal (2013) argues that the English Course for Yemen (CECFY) prescribed for the Yemeni students by the government, is not exactly suited for the socio-cultural and pedagogic situation in Yemen. For Al-Ahdal, the Crescent materials might look attractive and colorful but appear to have assumed a level of competence which is higher than that of the students and even the teachers (2013). This might be true due to the low students' proficiency level as well as to the less qualified teachers who are not trained continuously to develop ability to adapt the materials at the actual level. Al-Ahdal adds that there are also cases of cultural incomprehensibility and unsuitability in the content of some materials of the English language Yemeni textbooks in secondary schools (p.144). Al-Ariqi (2016) finds out, after analyzing the cultural elements in the content of the national textbooks (CECFY) for Yemeni learners in secondary stage based on the criteria of culture evaluation by Byram (1993b), that though some cultural aspects have been treated in a very limited way; it remains a number of other cultural elements, as

part of intercultural competence, have not been explored explicitly in those textbooks and must be added to them with more tasks and exercises.

Though CECY has been adopted to be taught in Yemeni schools in the belief that it focuses on the communicative teaching of English, it was found that it was not addressed to the students as it was planned to. Bataineh et al (2011) comment that there is a slight mismatch between teachers' theoretical knowledge and actual classroom implementation of Communicative Language Teaching (CLT). The authors agree that the cycle of innovation in Yemen is regrettably lacking, for the change from structure-based to communicative language teaching, as there are no real or sufficient measures or observation on the practice of CLT in English learning classrooms. Yemeni teachers tend more towards structure-based principles than those of CLT. Despite the claims that CLT is relatively unknown to Yemeni teachers both as a theory and classroom practice Al-Shamiry (2000) and Bataineh et al (2008)), it is claimed also that teachers are most likely to teach the way they had been schooled regardless of teacher education (McMillan, 1985, cited in Bataineh et al (2008)). Many of these teachers started their occupations long before the advent of CLT in Yemen (Bataineh et al, 2011).

On the other hand, Mohammed & Sidek (2015) find that in Yemeni EFL textbooks curriculum, little attention has been allocated to examine English for specific purposes reading curriculum, particularly English for Science and Technology for 3rd grade (senior level) of secondary school. In addition, they find no published research related to the Yemeni setting and the theoretical grounding of the Yemeni English Science & Technology senior secondary curriculum with its label as a communicative-based curriculum.

1.2.6 Reading in EFL classrooms in Yemeni Educational System

Learning English, particularly reading, is not an easy task for non-native speakers from other countries. In Arab countries, the need to improve learning and teaching reading has become the concern of many educators. In Yemen, a number of Yemeni researches have revealed very little progress in the reading performances of the Yemeni students populations since 20 years (Al-Mekhlafi, 1995; Albadri, 2001; Alwalass, 2000; Ba-Matraf, 1997; Balfakeh, 1999; Habtoor, 2004, as cited in Azman, Bhooth & Ismail, 2013).

Azman et al (2013) have argued that there are many reasons behind the Yemeni EFL learners' poor improvement in reading such as poor word processing strategies, lack of relevant information regarding processing skills and strategies, limited linguistic knowledge and competence. Teaching and learning reading skills in both school and university in Yemen, have been characterized by the domination of traditional teaching practices and lack of culture learning in which the dominant teacher's role a (teacher-centered), passive role of the learners, inauthentic tasks, and asking and answering questions with ready-made opinion, memorization, translation focusing on pronunciation rather than skills and strategies, lack of effective instructional strategies and practices for teaching reading as well as the ongoing use of grammar translation method in teaching reading (Al-Tamimi, 2006; Azzan, 2001; Ba-Matraf, 1997; Balfakeh, 1999; Ali, 2007; Nabil & Patil, 2012, as cited in Azman et al ,2013). Consequently, the students' development of reading skills and strategies are limited which are reflected in their reading performance.

Looking closer at the EFL reading classrooms, it is noticed that there is a gap between the learners' need in terms of improving reading skill, what is written in a text and how it is presented by the teacher. Azzan (2001), cited in Al-Tamimi (2006),

explains that Yemeni students do not master reading ; but succeed in memorization of lessons and recalling and that, according to Azzan, 2001, the current practices of teaching English by EFL teachers over the last 20 years has been to merely read with good pronunciation, developing vocabulary, and asking and answering questions (Azzan, 2001).

Ba-Matraf, (1997) elaborates the process of teaching and learning reading in Yemeni EFL classrooms. He states that Yemeni students are frequently asked to repeat literal ideas from the text which make them build memorization skills rather than reading comprehension skills. Thus, students do not improve their reading skills or become trained on comprehension strategies. Ba-Matraf (1997) argues that students when reading, do not have a purpose and they do not know anything about reading skills or strategies. One of the reasons, according to Ba-Matraf, is that teachers do not teach them about the nature of reading and what, how and why certain strategies can improve their reading. It seems that teachers themselves have limited knowledge or training on the use of reading instruction to improve students' performance in reading. Consequently, students at the secondary level cannot alter their reading styles to suit their reading purposes in which a very wide gap has already existed (Ba-Matraf (1997) & Balfakeh (1999)). It is clear that a gap has existed which is continuously getting wider as the students cannot match their reading styles or strategies with their reading purposes.

Moreover, Al-Tamimi (2006) has stated that English teachers in Yemen focus on teaching grammar and explaining word meaning, without giving any attention to the pleasure of reading passages that enhance their comprehension skills. He comments that students may not be motivated by the materials used by the teachers who were also not well-trained in the target language. Instead, teachers can use strategy-based

instruction which could make a difference for reading comprehension, reading strategies- awareness and reading attitudes in teaching reading in EFL classes.

From another side, the learning context has not been given more attention in other studies in relation to reading. Azman et al (2013) suggests in her study that there is a need for creating a responsive learning environment, which encourages employing methods with are culturally sensitive and locally productive in the students' learning of English in the era of change (p.3). In this study, there is an attempt to examine the cultural learning environment to check if it has any impact on the students' learning of English. The Communicative Language Learning is related to sociocultural perspective which again has not given sufficient attention to the content of reading materials for Yemeni EFL learners.

1.2.7 English Language Teaching in Higher Education:

It is found that in Yemeni Faculties, Arabic is the most used medium of instruction in Yemeni colleges. English is used only in Science Faculties involving Departments of Medicine, Engineering, and some sections in Arts. English is one of the requirements for graduation in most of the colleges of Commerce and Law, etc. In Yemeni colleges and other institutions for higher education, English has a significant position. Most students, after getting their secondary school, join English institutes or English majors in the state universities or pursue their education abroad. The purpose of teaching English either in the private institutions or in departments of state, is to teach English for general purposes, i.e. the social language, one which is used in different situational contexts. The Departments of English in the colleges of Education have been established to train English language teachers. Graduates of such departments serve in both public and private sectors. Very little research has been done on tertiary levels on teaching and learning English. However, it can be said that the

same method of teaching English continues at the tertiary level in which the teacher reads and students have to answer questions. The teachers might apply what they already had learnt in schools in which Communicative Language Approach (CLA) learning is still not given real attention to be activated in learning situations.

1.2.8 EFL in English Departments in Yemeni Universities:

- **Policy of Teaching English in English Departments:**

The Yemeni government has encouraged English learning among the citizens in many ways. First, it allows both public and private sectors to teach English at tertiary level provided that they follow the educational system agreed by the cooperation between the Ministry of Higher Education and Government Universities like Sana'a University. The assigned committee, who are the policy makers, usually comprises of Yemeni and Indian experts, has to make a yearly plan and set the syllabus and curriculum framework. The committee decides that English has to be taught as a compulsory subject in two semesters of the first year in all public and private colleges and departments of different majors. In the case of Medicine, Engineering and English colleges, English has to be the medium instruction though it has not really applied to some degree in those colleges.

Second, another aspect of the educational policy is that there should be one English department in each government and private Yemeni University. This department is usually found in faculties of Education which aim to train students to be English teachers as well as Faculties of Arts. The admission to these English Departments in both Education and Arts Faculties is to be done through a written test and sometimes an interview as a matter of recruitment process to those who pass the test. A third Faculty of Linguistic has been launched in the last decade as a hint of the

government's efforts at developing English resources in the country and creating more opportunities for those interested students to join different specializations in English.

- **Teachers of English Departments:**

In the 1980s and 1990s, the Yemeni universities have attempted to bring experts in English teaching usually from India or neighboring Arab countries to teach English in their English departments. On the basis of contracts, these English lecturers are supposed to train and teach Yemeni students in these departments to qualify as English teachers. Those teachers are considered highly qualified as they hold degrees from America, Britain, and India. With the country's development, other Yemeni instructors have been employed in these departments whose minimum qualification has to be MA in English. In some cases and due to the shortage of teachers in the Faculties of Education, some courses in language skills have to be allotted to instructors who hold B.Ed in English with long experience.

Those teachers in English departments have at least four courses to cover in every semester. The wages of those teachers do not satisfy their need and that's why they are found to be teaching in other private universities. The departments' staff comprises of the most qualified and highly experienced teachers have to prepare the guidelines of the teaching syllabus and specify the criteria of teaching for each subject. Generally speaking, the teaching materials used in curriculum are different every year. After specifying the criteria of teaching, the selection of materials is the choice of the individual teacher who applies what he or she believes is needed for students. The staff also has to meet monthly to update the syllabus of teaching English or change the textbooks if needed in those departments.

- **Syllabus and Teaching Materials:**

As mentioned earlier, there are two departments of English in two faculties in Yemeni Universities as well as a recently established linguistics faculty. The courses given in these departments relate to different areas such as language skills, literature, linguistics, applied linguistics, education, psychology, technology and other concerned subjects. For example in the English Department, Faculty of Education, the credit hours of these courses distributed as follows; Language skills (54 credits, 35.06%), Literature courses (36 credits, 23.73%), Linguistics, psychology, applied linguistics and education courses constitute 52 credit hours (33.76%) out of the total number of credits for all courses as Dulul (2012) states in his study. Other subjects are distributed within 12 credit hours (7.79%). According to the updated course description for the year 2017-2018, the total of credit hours equals to 155. The three credit hour courses are divided into two classes per week while those 1.5 and 2 credit hours are taught once in a week. The following table (1.1) shows the distribution of 155 hours among the courses for all the semesters with the allocated credits:

Table (1.1) shows the distribution of courses and credit hours during the four years of study in English Department, Faculty of Education, Sana'a University 2015-2016

First Level			**Second Level**		
First Semester		**Hours**	**First Semester**		**Hours**
1	Spoken English 1	3	1	Grammar 3	3
2	Grammar 1	3	2	Reading 3	3
3	Reading 1	3	3	Spoken English 3	3
4	Writing 1	3	4	Writing 3	3
5	Introduction into Literary Forms 1	3	5	Introduction to Language 1	3
6	Arabic Language (101)	2	6	19th Century Novel	3
7	Islamic Education	2	7	Educational Psychology 3	1.5
8	Educational Psychology	1.5	8	Education System in Yemen	2

	Subtotal	20.5		Subtotal	21.5
Second Semester			**Second Semester**		
1	Spoken English 2	3	1	Grammar 4	3
2	Grammar 2	3	2	Introduction to Language 2	3
3	Reading 2	3	3	Reading 4	3
4	Writing 2	3	4	Writing 4	3
5	Introduction to Literary Forms 2	3	5	Spoken English 4	3
6	Arabic Language (102)	3	6	19th Century Poetry	3
7	Islamic Culture	3	7	Educational Technology 1	1.5
	subtotal	21		subtotal	19.5
Third Level			**Fourth Level**		
First Semester		**Hours**	**First Semester**		**Hours**
1	Phonetics & Phonology	3	1	Literary Texts Analysis	3
2	English Language Discourse Skills	3	2	Transformative Generative Grammar	3
3	20th Century Poetry	3	3	Practicum 1	2
4	Methods of Teaching 1	2	4	Fundamentals of Ed. Research	3
5	20th Century Drama	3	5	Elective Course	2
6	Advanced Writing	3	6	20th Century Novel	3
7	Class Management	3	7	Educational Research Methods	2
				Educational Technology	1.5
	subtotal	20		subtotal	19.5
Second Semester			**Second Semester**		
1	Foundations of Education	3	1	Drama 1	3
2	18th Century Novel	3	2	17th-18th Century Poetry	3
3	Morphology & Syntax	3	3	History of English Language	3
4	Drama 2	3	4	Practicum 2	2
5	Methods of Teaching 2	3	5	Topics in Applied Linguistics	1
6	Electives (Computer)	1	6	Ed. Research (Practical)	2
7	Curriculum	3			
	subtotal	19		subtotal	14
Total: 155 hours					

It is worth mentioning here that the courses mentioned above are identified and selected by the departments' committee and can be modified regularly; however the teaching materials are free to be selected by the individual teachers of each course. The teacher of each course has the freedom to select the appropriate materials which will be taught by him to the students. The choice of the materials of teaching depends on the teacher's experience and skills for which he applies what he thinks the students need and really appropriate for them.

This point might be criticized as some of the teachers may not have enough experience to do so. The materials chosen randomly by the less experienced teachers might not be compatible to the syllabus prescribed in addition to the actual needs of the students. The linguistic and cultural appropriateness of the materials may not be considered while selecting those materials. The factors which are behind this might be shortage of specialized teachers, less trained and qualified lecturers, lack of awareness among those teachers, less access to library and very little use of language lab.

- **EFL Context in classrooms in English Departments:**

The EFL classrooms seem to apply the same traditional methods of teaching which are influenced by the Grammar translation methods which focus only on grammar and memorization. The communicative approach is hardly used in some of the spoken and reading classes. The huge number of students reaches to nearly 100 in a medium sized room. This hinders the teacher to pay attention to every student and correct his errors. Though one lab might be established in every department, the practical use of it might be rare. Visiting libraries is not encouraged and activating their role seems to be poor.

It has been noticed that though the instructions medium is English in EFL classrooms, students are passive and the class is teacher-centered only. Students keep listening for three continuous hours without trying to make a complete sentence. Participation might be observed among 4 to 5 students who are considered toppers while others might attend on the purpose of getting marks for attendance. Students get the materials to read for exams or rely on handwritten notes from the toppers in the class in which most of the students will get a Xeroxed form at the end of each semester to pass exam. As a matter of practice, the students get back to their first language once they leave the classroom, which is Arabic. Memorization to answers for expected questions seem to be helpful for some students to pass exams while real practice of English might be seen among very few students who have previous learning in private schools or institutes. Different Yemeni scholars explain some factors behind the inability of English teaching to meet the students' needs and expectations (Al-Tamimi, 2006; Azzan, 2001; Ba-Matraf, 1997; Balfakeh, 1999; Ali, 2007). These factors are poor environment of the educational institutions, inappropriate English language curriculum, traditional teaching methods and materials, overcrowded classrooms, shortage of English books in libraries. E-learning as an alternative to shortage of books or unaffordability to get them is still not completely realized by the people in Yemen.

1.2.9 Reading Environment with EFL learners:

The formal teaching in the form of lectures in EFL departments in Yemeni universities creates a boring and frustrating learning environment for EFL students. Other resources of learning like reading books, using multimedia labs, interacting with hands-on activities or communicating with native speakers are not regularly provided. It is known that reading books can improve the knowledge of the students; but as a matter of fact, the English libraries in Yemeni Universities are poor in updating books.

In addition, the teachers do not encourage students to read books other than the materials they hand over the students.

Despite the fact that there are a few English bookshops in the capital of Sana'a, only interested people or professionals who can afford it are visiting those bookshops. The economic status of most of the students and the lack of awareness to the importance of reading in English do not push them to like reading. Students' only purpose in reading is to pass exams rather than reading for pleasure or gaining knowledge. The same culture of first language reading is found among students who are not very interested to read even in Arabic, their mother tongue. On the other hand, the availability of free soft PDF books on software like mobile and computers is believed to be helpful. However, they seem to be more of distractors to students. For example, the EFL students prefer to surf the net or check their facebook pages rather than searching for information or a website for English practice.

In EFL reading classes, teachers aren't there to prepare learners with schematic knowledge each time they have to read a text in English while many learners come to class with a certain degree of prejudice. Presented with an English text, they believe they need to read and pay attention to each and every detail to understand it. When no comprehension occurs to such texts, they go home and start translating word by word from English into Arabic, their mother tongue.

On the other hand, learners are not encouraged to read for pleasure. They are not exposed to read what is genuinely interesting to them or read as often as possible. It seems that reading is task-bound followed by a set of comprehension questions only. Very little opportunities are created to push them to read a novel, a newspaper article or a blog post. Learners need to develop their overall linguistic competence and be interacted with vocabulary and grammar structures in authentic texts.

1.2.10 Profile of Reading Courses/Syllabuses in the Departments of English for the Year (2015-2016):

Reading textbooks in English departments in Yemeni faculties usually depends on the selection of some topics by the lecturer. It might be a collection of different texts in different themes like politics, social issues, scientific facts or short stories and fiction. The EFL students, future EFL teachers, learn reading as a subject for two or three times a week during four semesters only during their four academic years in college. In other words, reading is taught in Yemeni Faculties for 4 semesters in two years. Modules, content and aims of reading courses in Faculty of Education, English Department are set as below.

Reading 1:

Module aims:

1- To introduce students to various study skills or reference skills such as dictionary reference, note-making and note-taking, channel conversion or information transfer (from tables, graphs, charts…etc) to description accounts and vice versa) and the use of the library.

2. To train students in various reading skills such as; skimming and scanning and to develop in them the habit of silent and fast reading.

3. To train students in close, critical reading of discursive as well as imaginative texts (indeed, a variety of text-types) for comprehension, analysis, interpretation and evaluation.

4. To stimulate students to read texts of a wide range on their own.

Content:

- Context and Word meaning.
- Sequence- The order of events.
- Remembering details.
- Identifying the main idea.
- Judging the adequacy of information.
- Citing evidence.
- Drawing conclusions.
- Predicting outcomes.
- Facts, probabilities, and opinions.
- Author's purpose and point of view

Teaching & Learning Strategy:

The teaching will include a series of lectures in which each of the above mentioned topics are clearly explained with giving examples and chance for the students to practice. It will cover practices relating to reading, studying, time management, group work and pair work and self study texts.

Learning Outcomes:

Students' should be able to:

- Deal with new words/vocabulary.
- Deal with different kinds of texts.
- Identify the topic or central idea of a passage or text.
- Skim a text to identify general ideas and information.
- Summarize the main ideas of a text.
- Scan to locate specific information of details.
- Understand the underlying organization of a text.

- Understand the writers' purpose and point of view. Differentiate between facts, probabilities and opinions.
- Understand a text with the help of extra textual features such as visual clues, pictures, charts….etc.

Assessment Scheme:

15 marks are given for participating in class and homework. 30 marks are given for Mid-term exam and 105 for the final examination.

Reading II (3 credits):

In addition to reinforcing the skills developed in 'Reading 1', special focus will be given to the following reading abilities:

- Understanding the logical relationships between parts of a text and within sentences such as; cause-effect, general-specific, equivalence in meaning, through cohesive devices employed in the text.
- Understanding whether a statement supports, modifies, or contradicts another statement.
- Inferring from information in a text causes, results, conclusions, opinions, etc. Not explicitly stated.
- Distinguishing general statements from specific instances or examples.

Reading III (3 credits):

Besides reinforcing the skills developed in 'Reading I & II', focus will be on the following reading abilities:

- Distinguishing statements of fact from beliefs, hypotheses, and expressions of probability, uncertainty, etc.
- Using one's own prior knowledge, beliefs, and imagination to provide information related to that given in the text (i.e agreeing with the opinions expressed in the text or refuting them, giving reasons)
- Guessing the meanings of words and phrases in context, and understanding idiomatic and figurative language.

- Selecting relevant information from a text (or texts) for particular purposes (e.g., participating in a discussion or a debate, writing a report)
- Interpreting charts, graphs, tables and other diagrammatic or pictorial representation of information and drawing conclusions and generalizations.

Reading - IV (3 credits)

Besides focusing on the abilities listed below, this course module should consolidate all the other skills emphasized in the three earlier modules.

- Evaluating the ideas/arguments developed or presented in a text and evaluating the organization as well.
- Analyzing and evaluating plot, character, etc. in fictional texts.
- Judging the tone of a text or the writer's attitude towards his readers and the subject matter dealt with.
- Evaluating comparatively texts on similar themes in terms of ideas, point of view, tone, purpose and rhetorical effectiveness.

1.3 STATEMENT OF THE PROBLEM:

The study attempts to **find out the relationship between perceptual learning style preferences, reading strategies used, learning culture and reading comprehension ability among the undergraduate Yemeni EFL learners. Further, it aims to investigate the impact of these three variables on the overall reading comprehension of Yemeni EFL learners.**

1.4. RESEARCH GAP:

Ample research has been carried on EFL reading. An exhaustive literature is available regarding EFL across the globe. However, majority of them are qualitative in nature based on personal judgment and experience; only few studies are quantative. It is noticed that there is an absence of empirical evidence to support these qualitative

studies. Therefore, the current study is an attempt to fill this gap by carrying out statistical and empirical analysis using various techniques like descriptive and inferential statistics.

Learning style preferences and reading strategy used and reading comprehension by the learners are supposed to work together and affect positively the learners' language performance. The study carries another new scope which has not been examined extensively in EFL learning situation in Yemen. A mere attention is given to the learning culture impact on the students' English learning as a foreign language. Yet, there has been no research giving a deep focus on the correlation between the three parameters; perceptual learning style preferences and strategies use as well as the learning culture and reading comprehension ability in English among Yemeni EFL learners. Therefore, the study is the first of it's kind since it tries to investigate the relationship between perceptual learning style preferences, strategies use, Yemeni learning culture and reading comprehension ability.

Further, the study is unique as it tries to describe various native cultural aspects in English learning in Yemen. Thus, it tries to investigate the learning culture relationship and impact on reading comprehension ability; besides to the other two factors perceptual learning style preferences and strategies use.

1.5 NEED & SIGNIFICANCE OF THE STUDY:

The study tries to come out with a theoretical explanation of what are the most learning styles do Yemeni EFL learners prefer. The study attempts to organize lists of reading strategies. Shedding light on the learners' learning culture in the EFL classrooms might help to find new aspects for teaching or learning English. It is worth to mention here that for the first time in Yemen, an investigation to the native learning

culture role from three different perspectives in learning English in Yemeni EFL context has been explored. Studies still need to be conducted in this area in relation to learning culture to raise more awareness regarding their learning styles and strategies preferences which develop better cultural understanding of the learning environment.

This study is significant as it tries to contribute to a comprehension of the relationship between perceptual learning styles, use of strategies in reading, role of learning culture and reading comprehension ability among Yemeni EFL undergraduate learners in the second year English majors, Sana'a University.

It seeks to provide useful results in accommodating learners' needs and preferences rather than only concentrating on teaching methods and teachers' role in learning. The study can be helpful for both instructors and EFL learners. Both can gain more knowledge about the ways of learning those better match learners' styles and preferences. For teachers, it helps them in decision-making about the reading activities they select for undergraduate learners as well as improving the methods and approaches they are using for teaching reading and what can improve the level of low readers to cope with the high ones. The findings of the study might help teachers be conscious of some factors which affecting their students' reading comprehension. It provides teachers with information about learning culture's role in enhancing or hindering English learning among the Yemeni students. It tries to shed light on the students' strengths, weaknesses, preference of certain activities, behavior in group work, participation in the classroom, problem-solving based on their learning styles preferences, reading strategies use and learning culture. For learners, the study encourages the modern views of learning. It enhances learner-centered model which helps learners know their own learning styles and choose their appropriate strategies in learning how to read. It also can help them enjoy learning and acquire language easily

as Reid (1995) states that developing an understanding of learning environments and styles "will enable students to take control of their learning and to maximize their potential for learning" (p. xiv).

Moreover, findings of this study aim to help curriculum designers and material producers, syllabus planners, and English teachers to integrate the appropriate activities, aids and drills and applying the communicative approach in order to match with the preferred styles and strategies utilized by Yemeni EFL learners in their local leaning environment.

1.6 STATEMENT OF AIMS & OBJECTIVES OF THE STUDY:

The main goal of the research is to determine the relationship between perceptual learning styles, strategies' use, culture and reading comprehension among the Yemeni undergraduate EFL learners. To achieve this goal, the following objectives have been set;

1. To measure and analyze the levels of English reading comprehension ability among Yemeni EFL learners.
2. To measure and analyze the styles of perceptual learning among Yemeni EFL learners.
3. To measure and analyze the levels of reading strategies' use among Yemeni EFL learners.
4. To measure and analyze the levels of learning culture among Yemeni EFL learners.
5. To study the relationship between perceptual learning styles and reading comprehension ability among Yemeni EFL learners.
6. To study the relationship between reading strategies' use and reading comprehension ability among Yemeni EFL learners.
7. To study the relationship between learning culture and reading comprehension ability among Yemeni EFL learners.
8. To study the difference in the contribution of predictor variables (perceptual learning styles, reading strategies' use and learning culture) in predicating the criterion variable (reading comprehension ability) among Yemeni EFL learners.

1.7 OPERATIONAL TERMS OF THE STUDY:

The researcher adapted the following terms in her study:

- **Perceptual Learning Style Preferences:** They refer to a person's internally based characteristic patterns of strengths, weaknesses and preferences in taking in, processing, and retrieving information using one or more senses. They are visual, auditory, kinesthetic, tactile, group and individual.
- **Reading Strategies' Use**: It refers to the special thoughts, behaviors or techniques that individuals use to help them comprehend, learn, or retain information they read.
- **English Reading Comprehension Ability:** It refers to the actual understanding or performance of EFL Yemeni learners in English Reading texts.
- **Yemeni Learning Culture:** It refers to the local learning environment of EFL learners', who are part of the Yemeni culture, in EFL context. Learning culture is a behavior in language classrooms which is set within taken-for-granted frameworks of expectations, attitudes, values and beliefs about what constitutes good learning in different aspects. It centralizes on how to teach or learn, whether and how to ask questions, what textbooks are for, and how language teaching relates to broader issues of the nature and purpose of education.
- **EFL learners:** They are Yemeni undergraduate English Foreign Language learners.

1.8 SCOPE OF THE STUDY:

The main thrust of the current study is on the correlates of reading comprehension, perceptual learning styles, reading strategies use and learning culture among the EFL learners of Sana'a University, Yemen. The study is targeted to the second year English learners of Sana'a University. However, due to the constraints of

time, money and other factors especially the political instability in the war torn republic of Yemen, the study was restricted only to English Department only to Sana'a University. The content scope covered only the impact of perceptual learning styles, reading strategies use and learning culture on reading comprehension ability of second year EFL English learners, Sana'a University, Yemen.

1.9 LIMITATIONS OF THE STUDY:

The Academic Limitation: Second year English Students in English Department, Faculty of Education in Sana'a University, Yemen

Time and Space Limitation: The study was conducted in the second semester in the academic year 2015-2016 at Sana'a University in Sana'a, Republic of Yemen.

1.10 CONCLUSION:

This chapter has discussed Reading comprehension learning and teaching in the Yemeni EFL context and has explained briefly the importance of investigating perceptual learning style preferences, reading strategies use and learning culture with learning reading in a foreign language. It has presented the outline of the study. Some terms used in the title have been defined. The research objectives and the operational terms of the study have been stated. In the following chapter the research done in the field of reading comprehension, students' learning styles, strategies' use in reading and learning culture was discussed.

CHAPTER – II

THEORETICAL BACKGROUND AND LITERATURE REVIEW

This chapter comprises the following sections:

Section 2.1 This section comprehensively discusses the concept of reading comprehension as well as an extensive literature review with respect to it.

Section 2.2 This section thoroughly clarifies the concept of learning styles and discusses the extensive literature review concerning learning styles in EFL situations.

Section 2.3 This section meticulously elaborates the issue of the use of reading strategies in EFL contexts and the previous studies related to it.

Section 2.4 This section explores different theories of learning culture followed by deep literature review in the field.

Section 2.1 Reading Comprehension: Theoretical Background

This section provides background information on the dependent variable in the present study, reading comprehension. To begin with, the focus will be on the importance of reading in language learning. Then, a brief review on reading and purposes for reading will be presented. After reviewing reading comprehension, Barrett's taxonomy of reading comprehension, models of reading comprehension and reading comprehension levels will be presented. Then, the section continues to discuss the need for improving reading comprehension as well as the literature review regarding reading comprehension in the area of learning English as a second/foreign language.

2.1.1 The Importance of Reading in Language Learning

Reading is an important skill which is the foundation for the improvement of other skills, such as speaking and writing. Reading is a receptive skill, in addition to

listening, in which a learner needs to be exposed to some comprehensible input before using language.

In reading research, researches have approved the importance of reading skills and strategies on language learners. Reading is of vital necessity for second or foreign language learners to acquire information, exposure to other cultures and to learn any other subjects in which most books published in English. Reading is a challenge for most second language readers to comprehend academic texts. It is an extremely difficult task that requires integrated body of skills, acquiring which also does not get easier with the passage of time and the accumulation of experience (Das, 2009). Ling (2011) indicates that many English majors feel that their reading proficiency is far from satisfying though they have studied English for more than ten years. Carrel (1988) claims that for many EFL students, reading is by far the most important of the four skills in learning a second or foreign language.

The present chapter aims to establish the significance of reading ability in SLA. It also attempts to address the issue of the role of reading comprehension in improving the proficiency level in the L2. This study attempt to test the level of English reading ability of college students and examines its relationship with three independent variables; learning styles,the use of reading strategies and learning culture among second-year English majors. The study is based on the assumption that reading is central to learning. In this respect Anderson (1999:1) claims that:

> *'Reading is an essential skill for English as a second/foreign language(ESL/EFL) students; and for many, reading is the most important skill to master. With strengthened reading skills, ESL/EFL readers will make greater progress and attain greater development in all academic areas'*
>
> *(Anderson,1999: p.1)*

2.1.2 A Brief Review on Reading

Reading, as one of the four skills in language learning and teaching, is very important not only as a language skill but also as language input for other skills to develop. Actually, many learners feel that they cannot effectively comprehend what they read. One major reason accounting for this phenomenon is that learners have not mastered and applied effective reading strategies (Oxford,1995; Barentt, 1988; O'Malley & Chamot, 1990; Carrell, 1998; Alderson, 2000).

To teach foreign or second language reading well, Barnett asserts that teachers need to know as much as possible about how the reading process works and how to integrate that knowledge effectively into teaching pedagogy (1988). Researchers and teachers are fortunate to have numerous resources from colleagues studying first language learning. With interdisciplinary insights from such diverse fields as psychology, sociology, education, and theoretical and applied linguistics, second and foreign language researchers and theorists have a new awareness of the mental processes underlying language use and a deepening respect for the complexities of these processes (Barnett, 1989:1).

2.1.3 Purposes for Reading

Reading purposes can be classified under seven headings in which the most important are two; reading to search for key information and for general comprehension and reading to learn from texts (Grabe & Stoller, 2002).

Grabe and Stoller (2002) state that reading to search for simple information is a common part of many reading tasks in which readers typically scan the text for a specific piece of information or word. Similarly, reading to skim is a common part of many reading tasks and a useful skill in its own right. In skimming, a mixture of

strategies for guessing might be in the text, and then using basic reading comprehension skills on those segments of the text until a general idea is formed.

Reading to learn makes stronger inferencing demands than general comprehension to connect text information with background knowledge. It occurs in academic and professional contexts in which a reader needs to learn a considerable amount of information from a text. The reader requires three abilities for this purpose as Grabe and Stoller (2002) have labeled as below;

1) *Remember the main idea as well as a number of details which specify the main idea and supporting ideas in the text.*
2) *Recognize and build rhetorical frames for information organization*
3) *Link the text to the reader's knowledge base*

Grabe & Stoller (2002) indicates that 'reading to put together information requires additional decisions about the relative importance of complementary, mutually supporting or conflicting information from different sources. The reader needs to decide what information is required to be integrated and how to integrate it for the reader's goal. However, reading to write and to critique texts are tasks which need information to be incorporated, too. Composing, selection and criticizing are abilities in reading for integrating information' (p.13).

Thus, Grabe and Stoller (2002) conclude that reading for general comprehension aims at the fluent reader who has strong skills in forming a general meaning representation of main ideas. A reader, here, tries to process words automatically and coordinate other language patterns in a limited time. Thus, for foreign language readers, reading for general comprehension is more difficult to master than reading to learn.

2.1.4 Reading Comprehension

Comprehension is part of the communication process of getting the views that were in the author's mind into the reader's mind (Fry, 1963). Reading comprehension happens when a reader is required to pay attention to and analyze the sequence of the words in a sentence (Das ,2009). Das adds that reading comprehension involves the interaction between the text and the reader. He argues that:

> *'Reading involves decoding words and identifying the sound that must accompany the printed word. Reading as word decoding in used in the translation of spelling to speech.' (Das, 2009:46)*

Fry explains that comprehension is not an easy process as a result of the transmission of the idea which the writer wants to transmit to the reader. The writer uses some words, phrases and sentences to express an idea in his mind. Getting printed and reading to the reader's hands, the reader reads and forms an idea depending on his background, language skills and previous knowledge. Focus on comprehension is in line with the reader's feeling that this is what reading is 'about' i.e. getting information from written texts (Urquhart, 1998). In cognition and educational psychology, it is the goal of the reading process. Likewise, Samuels & Kamil, cited in Urquhart (1998), define comprehension as the process of getting meaning from a page. They add that comprehension is the process of bringing meaning to a text.

On the other hand, Das believes that reading involves single words while comprehension usually involves a sentence, a paragraph or an entire discourse. According to Das, when a reader reads a passage, he breaks it down into meaningful sections, phrases, clauses, and sentences to extract their meaning. As he proceeds, the reader builds his understanding until he comprehends the whole. This kind of syntax analysis (which is the grammatical arrangement of words in a sentence) is called

'parsing'. Parsing, according to Das, is the first cue that helps a reader understands a passage. Another important cue for comprehension is 'word class'. Das explains that words may be nouns, verbs, adverbs, articles, prepositions or conjunctions, which tell the reader about the syntax or the meaning of the sentence. A reader needs to know which class each word belongs to (Das, 2009).

A third cue for comprehension is depending more on logic and knowledge previously given in textbooks that an auto-biographical experience. The other important cue for comprehension that goes beyond the reader's ability to analyze the syntax or the grammar in a statement, is the knowledge of oneself, of personal history, of one's past learning and culture, as well as inferences and reflections. To summarize Das's elements of comprehension, they can be mentioned in 4 points:

1. *Sentence parsing*
2. *Words class*
3. *Knowledge gained in school*
4. *Past experience & culture context*

Urquhart (1987) distinguishes between 'comprehension' and 'interpretations'. He defines 'comprehension' as differences brought among readers due to their different levels of acceptable comprehension. As readers may read for taking an exam or for amusement, their comprehension may differ. 'Interpretation' refers to differences because of understanding differ from one reader to another or from time to time. Urquhart states that interpretations depend on the reader's mind-set. Reading is generally described as a receptive phase of written comprehension. Thus, Fry (1963) again points out that the written language which the author uses to communicate with the reader is not always adequate to the writer as it may not convey his message accurately. In the case of English Foreign language students, those learners face a difficulty with new

words which make comprehension somehow complicated. Furthermore, to learn a language, one should know some of the cultural background and how words are used.

Based on literary theory and critical literacy in reading, two claims are suggested. First, it is claimed that the text is a product of the circumstances of writing and intentions and ideologies of the writer. Second, it is claimed that meaning emerges temporarily in reader's mind as a result of the interactions they make with that text. Those interactions are affected by the experiences and interests of the individual as well as the social intellectual and cultural communities to which those readers belong. Smith argues that understanding 'comprehension' in this way presents a significant challenge to much current practice in teaching and testing reading. In the definition given by Hall et al (2010), Hall et al refer to the term 'value' which is placed in neutral and transferable skills that are thought to be necessary in uncovering meaning in text. Hall et al comment that educationists have mostly followed the cognitive psychologists in seeing comprehension as a series of skills and strategies, in which they have considered comprehension as a function of individual mind (2010:63).

From another side, Hoover and Tunner, cited in Urquhart (1988), define comprehension as;

> *'It is intended to extract complete meanings from presented material as opposed to comprehension aimed at only extracting main ideas, skimming or searching for particular details.' (100)*

Fry (1963) argues that comprehension can be of several kinds which are objective and subjective. The first means the facts and the later indicates what the reader should get from the information. The reader should understand the subjective information. It gives hints about a general idea which is not specifically stated. The

reader can guess through the tone and mood of the story. Urquhart (1988) concludes that comprehension can not be defined simply because it varies according to the reader's background, skills and love of reading. He adds that comprehension can be evaluated as the product or result of a particular reading task.

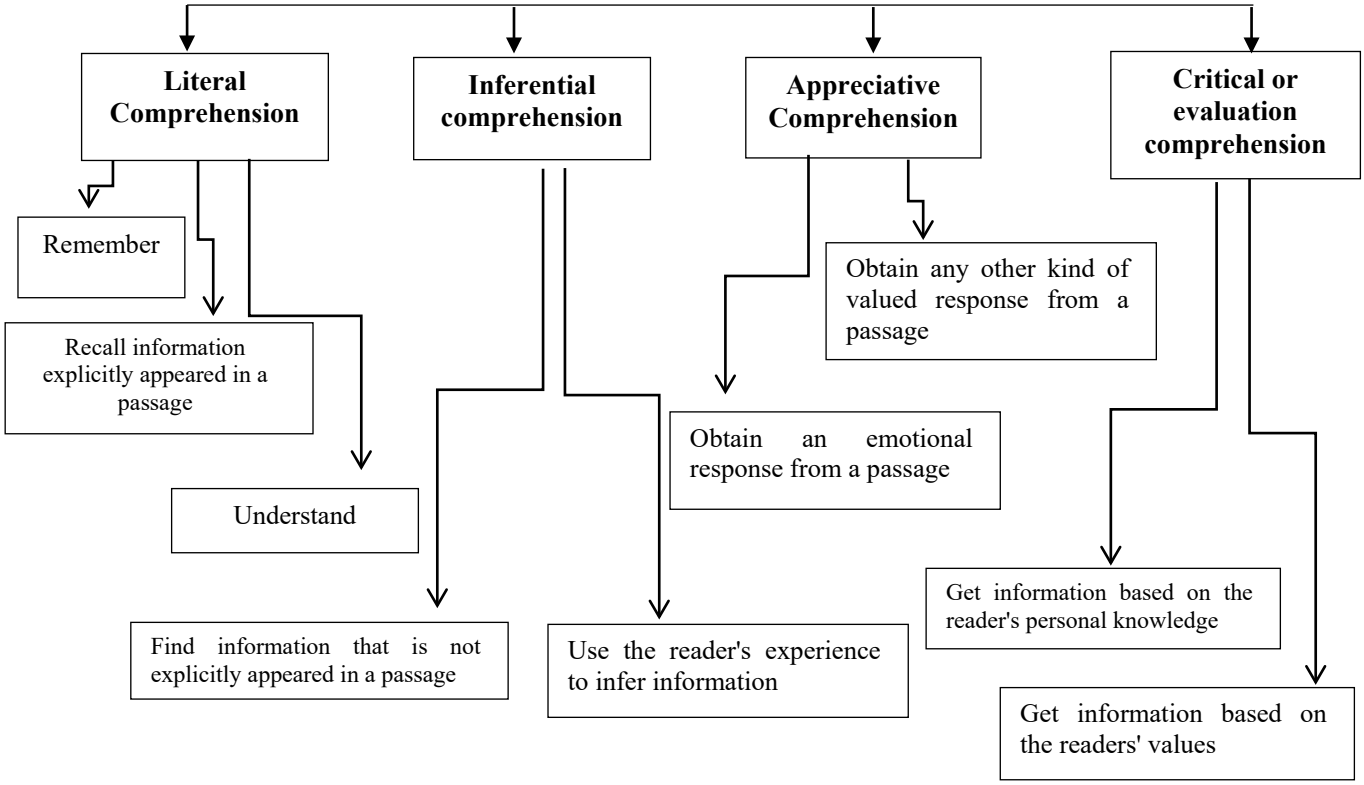
2.1.5 Gunderson 1995 Distribution of Reading Comprehension Levels:

Abdulmajid (2004) mentions in her study three levels of reading comprehension based on Gunderson 1995 distribution of ;

1. **Literal –level comprehension:** it requires readers to read the text and answer based on the information stated obviously in the text. Cognitive functions like inference or giving opinions are not required here.
2. **Inferential-level comprehension:** this level refers to the meaning beyond the surface level of information. Students are required to deal with the authors ideas and answer the tasks which include making generalizations about the text and understanding the writer's purpose of writing. This level focuses on syntactic and semantic functions.
3. **Evaluative level comprehension:** this kind of comprehension requires the reader to be applicator. In other words, readers are supposed to be critical and evaluative. They involve the readers' interpretations and evaluation on the reading material. (p. 47-48).

2.1.6 Barnett's Taxonomy of Reading comprehension:

Taxonomy of reading comprehension has been developed by Barnett in 1979. This taxonomy is based on readers' purposes in reading (cited in Ling, 2011). To illustrate this taxonomy, a brain-map has been developed in this study.



2.1.7 Models of Reading Comprehension

The discussion regarding the nature of reading vary across a scale between the two most paradigmatic approaches termed 'bottom-up' approach and 'top-down' approach as well as a new approach termed 'interactive approach'. To understand a theoretical basis and guidance for learning and teaching reading, it is worthy to have further understanding to the three reading models to comprehend the nature of reading.

- **Bottom-up Approach:**

It assumes that a reader constructs meaning from letters, words, phrases, clauses and sentences by processing the text into phonemic units that represent lexical meaning and then builds meaning in a linear manner (Hudson, 2007).

This model is related to behaviorism. The reader processes meaning from the printed words. This approach is known as a lower-level process. It is based on word recognition, phonological sounds decoding and syntactic parsing. Grabe and Stoller

(2002) suggest that in this model little use of the readers' own background knowledge works along with word-by-word mental translation of the information in the text.

- **Top-down Approach:**

In this model, the reader does not necessarily read each word in the text as it is assumed in the bottom-up approaches. Memory capacity and mental limitations on the speed of information-processing can be working together (Hudson, 2007:33). The reader in this approach applies background knowledge to the text in order to create meaning depending on personal information and context available. Grabe & Stoller (2002) explain that the reader's goals and expectations direct reading comprehension of a text. Top-down model highlights inference and interaction of all processes (lower and higher-level processes) under the control of central processes (p.32).

- **Interactive Approach:**

It is an approach which takes an interactive view of reading purpose. In this model, reading is seen as a bidirectional in nature involving the application of higher order mental processes and background knowledge as well as features of the text itself. In this model, some features are hypothesized such as; 1) vocabulary knowledge and sight word recognition 2) phonetic decoding skills 3) relational knowledge and prediction form context and 4) comprehension skills (Carr, 1982, as cited in Hudson, 2007).

It assumes that if sight word-recognition is successful, then information can be delivered to higher level skills. This approach has been accepted, by most researchers and teachers, for it applies a great deal of communicative between the differing bottom-up and top-down processes. More accurate ways to understand reading comprehension require 'modified interactive models' that focus on a number of

processes bringing the bottom-up manner with little interference from other processing levels or knowledge resources in top-down manner (Grabe & Stoller, 2002).

In other words, Ling (2011) justifies that interactive model can be explained as an interaction between the knowledge stored in the readers' mind and the written language information. Second language readers are encouraged not only to lexical syntactic, semantic and common knowledge, but also to use both careful reading skills and reading strategies to finish different reading tasks or to fulfill different reading purposes.

Reading Comprehension: Literature Review

From last twenty years, quite a number of studies have revealed very little progress in the reading performances of the Yemeni students (Al-Mekhlafi (1995), Albadri (2001), Alwalass (2000), Ba-Matraf (1997), Balfakeh (2009), Habtoor (2004), as cited in Azman et al (2013)). These EFL learners have continuously demonstrated having poor word processing strategies, lack of relevant information processing skills and strategies, including more importantly, limited linguistic knowledge and competence (i.e. vocabulary knowledge, structure and content).

Therefore, it is essential to examine of the reasons behind students' lack of performance in reading comprehension among the EFL learners. Fareh (2010) and Khan (2012), cited in Azman et al (2013), have highlighted similar problems among Jordanian, Saudi, Sudanese, Egyptian and Yemeni EFL learners. They have concluded that there are some vital factors which might impact on the learners' performance and their desire to learn English. Some of these factors are the students' psychological states, boring methods of teaching, improper materials and lack of previous knowledge and teaching

facilities. In a detailed study, Al-Noursi (2014) explains in detail six reasons of Arab learners' poor performance in reading as below;

1. **Lack of motivation:** Al-Noursi (2014) states that the reason for the performance of Arab EFL learners in reading comprehension being still unsatisfactory might be due to lack of students' motivation. Students seem to be not interested in reading and read English for limited purposes. They do their reading tasks only to pass final exam and not for pleasure not being interested to learn or know a foreign language.

2. **Difficulty of the Text:** Al-Noursi (2014) argues that most of the English texts given in students' textbooks or syllabus have been higher than their language level. Students still use their lower-level reading skills to guess the meaning of a word or infer an implied meaning which results in losing the theme or plot of the text. Readers seem to struggle while reading and face comprehension problems as well as lacking of interest to read.

3. **Cultural Barrier:** Learning a foreign language means to learn its culture which is also considered foreign to students. Readers face difficulty to understand the authors' background knowledge. Texts might be unfamiliar to readers when cultural background is different from the author's. Students know very little about the cultural codes which results in poor understanding to the text. It can be concluded that the gap between the content of the passage and the native culture creates more difficulty and confusion for students to comprehend the text (Al-Noursi ,2014).

4. **Lack of Reading Instructions/Strategies Use:** Al-Noursi (2014) asserts that students need to be instructed while reading. They need to be taught how to comprehend the text by using good strategies. Similarly in the Yemeni context, most of Yemeni instructors stick on the same traditional teaching methods and do not develop these methods in

teaching reading texts. They keep on reading the text aloud and explain the new vocabulary, while students try to find the meaning of these words in their mother tongue without understanding the main topic of the passage.

5. Lack of Reading Habit in both Languages:

In Arab world, according to Al-Noursi (2014), students do not get used to the habit of reading either in their mother tongue or the foreign language. Yemeni learners, unluckily, seem to go on the same track where they have very little knowledge and concern for reading in their first language that could improve their reading skills in English. Al-Mahrooqi & Roscoe (2012) states that Omani students' (who are Arabs from Sultanate of Oman) reading skills in their first language are still unsatisfactory which might not affect their reading in their second or foreign language positively. Likewise, Yemeni students need to exert more efforts in order to improve their reading skills. They need to be encouraged to love reading and to be trained how to do reading tasks.

6. Teaching Process:

It is known that most of the existing materials of teaching are out-of-date, boring and teacher-centered. They do not give students opportunities to do activities to further their reading skills. Lectures are given orally in which learners are passive. They are given roles or chances to interact with the teacher or among them. Intensive reading has no place in the teaching process of many schools in Arab countries (AlNoursi, 2014).

Teachers seem to only read the text, explain the meaning of new words as well as answer the questions followed a text. Students are not given more exercises in class to

improve their reading habits and are not instructed how to deal with texts and use effective strategies in reading.

In the Yemeni context, a study carried out by Balfakeh (2009) on some problems which have been found out in reading comprehension skills. Balfakeh (2009) explains that learners of a second or a foreign language have still struggled to understand a given text. Those learners face different problems to comprehend a text, as they are still in the process of acquiring a language which is not their language and used only in classrooms. EFL learners, like Yemenis, may have insufficient training in guessing and using contextual texts or other clues of meaning to comprehend a paragraph (Balfakeh, 2009:276). Balfakeh argues that the EFL Yemeni students are experiencing serious reading problems caused by limited reading practices that are a direct result of the current teaching of reading methodology employed in Yemen. In the study of Azman et al (2003), the authors have suggested that the teaching methodology has to be reviewed and built on the current collection of practices by following new ways in order to teach skills and strategies that will indulge learners in a variety of and complex multimedia texts. Furthermore, Al-Mahrooqi & Roscoe (2014) add some other types of problems which EFL learners encounter such as;

1. *Students exhibit glaring weaknesses in the basic reading skills of skimming and scanning as well as their lack of cohesive devices including reference and linking words.*
2. *Teachers' lack of differentiation between linguistic skills and reading comprehension skills is considered as one of the main conclusions of students' weakness in reading comprehension.*

3. *Students seem to fall back on Arabic when answering reading comprehension questions.*

To sum up, reading requires the integrated use of a number of skills, strategies and awareness of instructors to the effective components which influence reading comprehension in EFL classrooms. The skills of decoding words, vocabulary knowledge and fluency are necessary prerequisites before comprehension strategies can be utilized. Therefore, understanding the other factors that might affect reading performance among EFL students need to be analyzed.

In the past, many teachers did not know how comprehension is actually accomplished and so could do little to help students beyond assigning and encouraging great amounts of reading followed by questions to assess understanding. Research in the last twenty years has significantly been increased to find out other factors which can help students' improvement in reading comprehension. In this study, three elements (perceptual learning styles, strategies use and learning culture) have been studied to investigate if they have any relationship with reading comprehension as well as if they can predict reading comprehension progress in EFL classrooms.

Section 2.2 Learning Styles: Theoretical Background

This section consists of two parts. The first part starts with the definition of learning styles, features of learning styles, learning style categories, general models of learning styles, and then Reid's learning style preferences questionnaire, factors contributing to learning styles and the concept of learning from second language acquisition perspective. The second part presents relevant literature related to learning styles.

2.2.1 Definitions of Learning Styles:

The concept of learning styles (LS) has been defined by various scholars. The word 'style' refers to individual preferences related to intellectual and personality functions. Fischer & Fischer, 1979, cited in Reid (1987), define the word 'style' as a pervasive quality in the learning strategies or the learning behavior of an individual'. For receiving information, Reid (1995) defines learning styles as internally based on traits of learners for intake and perceive of understanding of new information. She describes learning styles as an individual's natural, habitual and preferred ways of grasping, processing and maintaining new information and skills. From another perspective, Keefe (1979) relates learning styles, in his definition, to learning environment. He refers to learning styles as 'the combination of characteristic cognitive, effective, and psychological factors that serve as comparatively stable indicators of how learners perceive, interact with and respond to the learning environment' (p.2).

Oxford and Ehrman (1995) define learning style as a constant innate concept which unifies such elements like cognitive, affective with learning style which is a preference for the way a person learns and remembers what he or she has learned. Later, Oxford

(2003) describes learning styles as 'general approaches which students use to learn language such as; global or analytic, auditory or visual in acquiring a new language or in learning any other subject' (p.2). Dunn and Dunn (1978) state that learning style is a biologically and developmentally imposed set of attributes which make teaching method enjoyable for some learners and terrible for others. According to Liu (2012), some similarities can be inferred from these definitions though they are different in expressions. These similarities can be summarized as below:

- Learning style is the general tendency in every one's learning process and it is the biological characteristics involving cognitive, affective, and psychological traits of an individual.
- Learning style is unique to each individual because the differences in cultural background and learning experience.
- Learning style is relatively stable and it seldom changes with the environment. (p.163)

Since 1980s and early 1990s, the research about learning styles has become more mature and systematic. Some researchers add their own unique perspectives or new understandings into definition. Kinsella (1995) summarizes learning styles as ‘individual, natural, habitual and preferred ways of absorbing, processing and retaining new information and skills which persist regardless of teaching methods and content area’. Recently, some studies define learning styles thus, 'the ways in which an individual characteristically acquires, retains and retrieves information are collectively termed the individual's learning styles (Karthigeyan & Nirmala, 2013).

However, Cassidy (2004) confirms that it is hard to agree on one standardized definition for learning style as the concept of learning style is still not defined accurately.

2.2.2. Features of learning styles

Research on learning styles has provided different terms for learning styles like cognitive style, personality type, sensory preference which have been used interchangeably (Ehrman et al. ,2003). Therefore, it is necessary to list the common features of learning styles in order to make this concept obvious.

- **Learning styles are mostly value-neutral**

According to Kinesella (1995), the concept of learning styles offers a "value-neutral approach'' in order to understand the various individual differences students linguistically and culturally". No specific learning style could be considered more positive than any other learning style. Coming to the real learning context, Reid (1995) explains that this feature of learning style does not apply to all dimensions of learning styles. She states that some learning styles function better than others depending on the desired aspects of language performance to each learner which requires teachers to be aware of this feature and work to deal properly with every individual in order to fulfill their need and realize their diversity in learning.

- **Learning styles are not black and white elements**

Learning styles might work together in one person. They have been often presented as two opposing poles on a track. They are not either/or elements, however; that is, the existence of one style pole (e.g., global) is not necessarily indicative of the absence of its opposite pole (i.e., individual). Similarly, a person might be equally visual and auditory but with lesser kinesthetic and tactile involvement, and "not everyone fits carefully into one or another of these categories to the exception of the other" (Oxford & Ehrman, 1995: 69).

- **Learning styles are relatively stable but can be also modified**

As Reid (1987) states, an individual's preferred learning styles are "moderately strong habits rather than intractable biological attributes" (p.100). However, the possibility of style adjustment exists; learning styles can be extended to include diverse, and often anti preferences (Oxford, 2001b). Thus, teaching styles can play an essential role in learners' learning styles adaptation in which learners might set themselves to it. Ellis (1994) finds out that learners stopped their own preferred learning styles and adjusted themselves to the teaching style they were exposed to. Similarly, researchers suggested that learners should try to adapt themselves to different, especially disfavored, learning styles. Working within multiple learning styles comfortably could maximize learning efficiency (Oxford, 2001b; Reid, 1987). Furthermore, learners do not have only one style of learning. It is true that they might learn more effectively through a specific method of acquiring and processing information, but this does not mean that they cannot function within other styles (Montgomers, 1995).

- **Learning styles are different from abilities**

Both ability and learning style affect task performance. However, the difference between abilities and learning styles concerns their role in cognitive processing (Messick, 1994). Abilities are linked to the content and level of cognition (What? and How much?) while styles refer to the manner or manner of cognition (How?). For example, those who depend on their cognitive abilities are called intelligent and they might produce better work but there are other people who depend on their processing information by means of visual or auditory input based on their learning styles. Learning ability is accompanied by improvement in performance whereas the effect on learning style is dependent upon the nature of the task (Nasarieh,2009).

- **Learning styles are different from cognitive styles**

Although the concepts of learning and cognitive styles are not the same, they have been often used interchangeably. Brown (2000) argues that the core of a learning style is the cognitive style, which can be regarded as a partially biologically determined and consistent way of responding to information and situations. Cognitive styles can be referred as learning styles when they are specifically related to an educational context and are interlinking with a number of effective, physiological, and behavioral factors. Dörnyei and Skehan (2003) explain the distinction between the two terms as follows:

> *"Cognitive styles can be defined as a readiness to process information in a feature manner while learning styles can be defined as a typical preference for approaching learning in general. Cognitive styles are more restricted to information-processing preferences, while learning styles includes all aspects of learning "(p,602).*

- **Learning styles are different from learning strategies**

Learning styles are different from learning strategies. Reid (1998) distinguishes between the term 'learning styles' and the term 'learning strategies'. She defines learning styles as "internally based traits, regularly not perceived or consciously used by learners" whereas learning strategies are "external skills often used consciously by students to improve their learning" (p. ix, emphasis is original). Learning styles function without individual awareness whereas strategies involve a conscious choice of alternatives. Another difference described by Oxford (1989) is that styles refer to a person's general approach to learning and is dependent upon that person's cognitive, affective and behavioral characteristics while learning strategies refers to the actions and behavior an individual uses to learn.

- **Some learning styles are strongly related to personality**

There is no doubt that there is a huge effect of variable personality types on learning. Though learning style is often used interchangeably with personality, many researchers state that it is undoubtedly more variable, whereas personality refers to a stable characteristic of an individual.

Some psychological constructs are sometimes referred to as learning styles and sometimes as personality dimensions. Ehrman (1996) categorizes certain learning styles as personality-based learning styles, which are actually personality dimensions that have strong learning or cognitive style correlates. Troike (2006) states that the most popular personality traits are: "anxious vs. self-confident, risk avoiding vs. risk taking, shy vs. adventurous, introverted vs. extroverted, inner directed vs. other directed, reflective vs. impulsive, imaginative vs. uninquisitive, creative vs. uncreative, empathetic vs. insensitive to others, and finally tolerant of ambiguity vs. closure-oriented." which some other researchers claim that they are learning styles (Brown, 2002 ;Reid, 1998; Oxford, 2003). Dörnyei & Skehan (2003) argue that the nature of some personality types may have some criteria which are not like traditional scales ranging from positive to negative degree but effect. In other words, every type in psychological mode can have positive or negative effects in a specific life domain.

- **Learning styles depends on context**

Studies have shown factors like heredity; environment and past experiences very often have influenced the way people perceive, process and store information. Reid (1987) claims that different modes of thinking, including learning styles, are often characteristic of different cultures. In her study, learners from diverse cultural backgrounds indicated differential patterns of perceptual styles preferences.

Moreover, learning styles may differ by other factors such as age and gender. Learning preferences may change over time as they are developmental and alter with maturity. This could be due to motivational levels, responsibility, and the fact that for many people visual and auditory perceptual elements improve with age. In both children and adults, one of the perceptual styles (auditory, visual, tactile, or kinesthetic) is usually more dominant than the others, influencing the way in which information is received. Regarding gender, females tend to be more auditory and males tend to be visual, kinesthetic and tactile (Naserieh, 2009).

- **Learning styles might conflict with many learning aspects**

There are different areas which might conflict with learning styles that hinder learning process. Ehrman (1996) argues that "learning style mismatches are at the root of many learning difficulties" (p. 50). Teaching style, syllabus, language task, students' beliefs about learning, and/or the learning strategies all can mismatch with learners' learning styles (Ehrman, Oxford & Leaver, 2003). In fact, most of these counterparts could not be easily avoided because of the broad diversity of teachers and students in terms of their teaching and learning styles respectively. Peacock (2001b), having observed an instance of style war, suggested that teachers should adopt a balanced teaching style in which no one learning style is excessively favored or, alternatively, try to accommodate a number of learning styles at the same time.

Thus, the conflicting effects between different learning styles and other areas should be tackled. Oxford & Anderson (1995) points out that accommodating the learning tasks in a way that they are geared to the learners' common learning style preferences can be helpful. Although most of the learners are rarely homogeneous in their style preferences, both students and teachers can work together to identify their

major learning styles prior to the learning program, as Kinsella, indicates, so that such awareness could be advantageous and bring about some style agreement(1995). Consequently, the teacher can help the learners stretch beyond their comfort zone of preferred learning styles (Oxford, 2001b). As learners become aware of their learning style preferences, they start to interact within their likable zones and may gradually mix them with other unflavored zones of this zone (Ehrman, 1996).

2.2.3 Categories of Learning Styles:

Although there is a wide acceptance of the concept of learning styles not only by educators but also by educational psychologists, there is, however, disagreement on how to classify and measure it. Nearly twenty different dimensions of learning styles have been identified so far based on different terminologies which make learning styles research complicated and changeable. Reid (1995) classified learning styles into 3 categories; cognitive learning styles, sensory learning styles and affective/ personality learning style.

- **Cognitive Learning Styles**

Reid (2002) believes that learners here have a habit of information processing which describes a person's typical mode of thinking, perceiving, remembering or problem-solving. In the cognitive domain, some researchers make a distinction between field-dependent and field-independent, reflective and impulsive, analytic and global.

a. **Field-independent/ field-dependent:** Reid refers to learners who prefer to learn depending on the internal frame of reference; they are analytic and perceive information in parts. These kinds of learners are not sociable and cannot make interpersonal relationship. Field-dependent learners prefer to learn relying on the external frame of reference. They are sociable and have good skills in interpersonal

relationship (2002). Oxford (2003) relates field-independent to the ability to separate easily the key detail from an ambiguous context through the use of analysis whereas field-dependent, according to Oxford, are more sensitive to the social context. They are more bold and considerate than their independent peers.

b. **Reflective/impulsive:** Reid explains that reflective learners learn more effectively when they come to consider options before responding, so they are accurate language learners while an impulsive learner responds directly. They are risk-takers and fluent language learners.

c. **Analytical/global:** Reid thinks that global learners are those who have tendencies to process the information and understand them by analyzing each part correspondingly, while analytical learners are those who have tendencies to process the information from the details and obtain a complete understanding by integrating the separate parts into a whole.

- **Sensory Learning Styles**

a. Perceptual learning style (visual, auditory, kinesthetic, tactile)

Dunn and Dunn (1979) define 'perceptual learning styles' as learners' variations in using one or more senses in understanding and perceiving information. Reid states that these learning styles demonstrate the physical and perceptual ways of learning. They are visual in which learners learn through seeing, while auditory who learn through hearing. Kinesthetic learners learn best when actively engaged in doing and touching something. Tactile learners prefer learning through touching. The present study is in favor of Reid's classification particularly perceptual learning styles.

b. Environmental learning style (physical vs. sociological)

Reid points out when learners learn effectively under factors like temperature, sun, food, light, time and classroom management, they are called physical learners. However, those who get motivated by interacting with society and prefer to work within a group or team work or individually are called sociological learners. Even the level of teacher authority can be one of the factors. In a comparative study on the learning style preferences of ESL students as non-native speakers, Reid (1987) demonstrates that ESL/EFL learners have four basic perceptual learning channels; visual, auditory, kinesthetic, tactile, social group and social individual learning.

- **Personality Learning Styles**

Reid (1995) explains that personality learning style is related to a person's sensitivity towards his or her behavior. It comprises of extroversion vs. introversion, sensing vs. perception, thinking vs. feeling, judging vs. perceiving, ambiguity tolerant vs. ambiguity intolerant as well as left-brained vs. right-brained.

2.2.4 Overview of Some Learning Styles:

The scope and depth of learning styles vary because it seems impossible to limit a person's learning style only with a certain dimension. Reid (1988) classifies different learning styles based on; multiple intelligence, perceptual learning styles, field Independent and field dependent (sensitive) learning styles, analytic and global learning styles, Kolb experiential learning model, Myers-Briggs type indicator and right – and left-brained learning styles.

Table (2.1) illustrates the Overview of Learning Styles by Reid (1988)	
The Seven Multiple Intelligences	
Verbal/Linguistic	Ability with and sensitivity to oral and written words Sensitivity to rhythm, pitch, and melody.
Logical/Mathematical	Ability to use numbers effectively and to reason well.
Spatial/Visual	Sensitivity to form, space, color, line, and shape.
Bodily/Kinesthetic	Ability to use the body to express ideas and feelings.
Interpersonal	Ability to understand another person's moods and Intentions.
Intrapersonal	Ability to understand oneself: one's own strengths and Weaknesses.
Perceptual Learning Styles	
Visual	Learns more effectively through the eyes (seeing).
Auditory	Learns more effectively through the ear (hearing).
Tactile	Learns more effectively through touch (hands-on).
Kinesthetic	Learns more effectively through complete body experience.
Group	Learns more effectively through working with others.
Individual	Learns more effectively through working alone.
Field Independent and Field Dependent (Sensitive) Learning Styles	
Field Independent	Learns more effectively sequentially, analyzing facts.
Field Dependent	Learns more effectively in context (holistically) and is sensitive to human relationships
Analytic and Global Learning Styles	
Analytic	Learns more effectively individually, sequentially, linearly.
Global	Learns more effectively through concrete experience and through interaction with other people

Reflective and Impulsive Learning Styles	
Reflective	Learns more effectively when given time to consider options
Impulsive	Learns more effectively when able to respond immediately.
Kolb Experiential Learning Model	
Converger	Learns more effectively when able to perceive abstractly and to process actively.
Diverger	Learns more effectively when able to perceive concretely and to process reflectively.
Assimilator	Learns more effectively when able to perceive abstractly and to process reflectively.
Accommodator	Learns more effectively when able to perceive concretely and to process actively.
Myers-Briggs Type Indicator (MBTI)	
Extraverted	Learns more effectively through concrete experience, contacts with and relationships with others.
Introverted	Learns more effectively in individual, independent learning situations.
Sensing	Learns more effectively from reports of observable facts.
Intuition Thinking	Learns more effectively from meaningful experiences.
Feeling	Learns more effectively from impersonal and logical Circumstances. Learns more effectively from personalized circumstances.
Judging	Learns more effectively by reflection, deduction, analysis, and process that involve closure.
Perceiving	Learns more effectively through negotiation, feeling, and inductive processes that postpone closure.
Right – and Left brained Learning Styles	
Right-Brained	Learns more effectively through visual analytic, reflective, self-reliant learning.
Left-Brained	Learns more effectively through auditory, global, impulsive, interactive learning

2.2.5 Oxford Learning Styles Classification:

On the other hand, Oxford (2003) discusses out of nine style dimensions relevant to L2 learning which are believed to be most strongly associated with second language learning. They are; sensory preferences, personality types, desired degree of generality, and biological differences.

- **Sensory Preferences**: Oxford calls 'perceptual learning styles' as 'sensory preferences'. They are physical, perceptual learning channels with which learners are more relaxed. These are styles mentioned by Reid (1987) before. They focus on four areas; visual, auditory, kinesthetic (movement-oriented), and tactile (touch-oriented). Oxford agrees with Reid that visual learners like to learn by sight. They like to read and obtain a great deal from visual stimulation. Oxford points out that if those students are taught without any visual backup, it will be much confusing for them, unlike, auditory learners who can learn without any visual aids. Auditory learners enjoy oral activities, conversations, listening to lectures and group work. In the case of kinesthetic and tactile learners, they share one feature which is their like to do lots of movements and enjoy working with tangible objects. They sometimes are grouped in a category called 'hands-on or haptic style'. However, tactile learners need to touch, handle objects in which they are happy to make collages, three-dimensional models, shadow boxes and any other artwork that can be related to language learning. Oxford adds that for kinesthetic learners, they require movement and frequent breaks, games, role-plays and moving from their places. They interact with 'Total Physical Response' (2003).
- **Social Preferences:** Oxford explains two styles regarding social context; group and individual to the domain of sensory styles. Group learners like to share ideas and thoughts with friends or classmates. They tend to learn or work in groups. In contrast, individual learners usually pay great attention to their inner world, and they often

stimulated by their own ideas and feelings. They dislike lots of continuous group work in English classes.

In Reid's study whose sample were non-native speakers of English, it was found that ESL students strongly preferred kinesthetic and tactile learning styles. Korean students were shown to be the most visual while Japanese were the least auditory of all learners. Among those ESL learners, Asian learners (Chinese, Arab and Korean) were found to be strong visual unlike native speakers of English who were less tactile in their learning style preferences. These findings are of vital importance to this study as Yemeni learners are originally Arab people and belong to Asia (1987).

- **Personality Types**: Oxford (2003) considers personality or psychological type an important aspect for ESL/EFL learning. It is divided into four parts:

    1. Extroverted vs. introverted
    2. Intuitive-random vs. sensing-sequential
    3. Thinking vs. feeling
    4. Closure-oriented/judging vs. open/perceiving

- **Desired Degree of Generality:** According to Oxford (2003), this strand refers to a learner who can be a global or analytic. Global learners are sociable communicators in which they emphasize the main idea and avoid analysis or details. In contrast, analytic learners like to concentrate on grammatical details and avoid sudden communicative activities. Global learners are risk-takers while analytic learners are more cautious and would like to make sure of accuracy of their responses.

- **Biological Differences:** This term, according to Oxford, refers to the biological factors which affect students' desire in learning. For example, biorhythms show the times of day when students feel good and perform their best, while sustenance refers to the need for food or drink while learning. Nature of environment (location) can affect

learning, too such as; temperature, lighting, sound and even the firmness of the chairs. Oxford believes that biological and environmental factors have an influence on second language learning styles of learners so these factors should be taken into consideration.

From another aspect, Felder and Soloman (2004) classify learning styles into six categories; visual, verbal, active, reflective, sensing and intuitive (American Society for Engineering Education, 2005). In contrast, Kolb's classification of learning styles depends on other six variables; four primary scores that measure an individual's relative emphasis on the four learning orientations, concrete experience, reflective observation, abstract conceptualization and active experimentation and two combination scores that measure an individual's preference for abstractness over concreteness and action over reflection (Kolb & Kolb, 2005).

2.2.6 General Models of Learning Styles:

Learning styles have been classified from a psychological perspective by **Willing (1988)**. William indicates that kinesthetic, visual, auditory or tactile sensory preferences are the means of language input in the receiving phase. Still another part works in the same area which is 'personality factors'. William explains that variables in personality factors such as involved-observing, identity secure and identity insecure and self-directing and authority-oriented are going around the circle of receiving and processing overlap. They determine how information is perceived and grasped in the first phase. He comments that these styles of learning are influenced by culture. In the processing phase, cognitive styles, analytical and concrete tendencies are the ways by which a learner processes information in general. It is the area of what happens inside the head (William, 1988, p.61, as cited in Jhaish, 2012).

Two models of learning styles have been most widely recognized by **Kolb (1984) and Dunn & Dunn (1989).** Alkahtani (2011) examines Kolb's experiential learning model in his study. According to this model, a learner can be one of the four types; converger, diverger, assimilator, accommodator. In Kolb's experiential learning style theory, the learners touch all the bases by a four stage learning cycle. This scale was developed by David Kolb based on his theory (Kolb, 1984). It was designed to identify individual's style preference of learning. This scale is considered different as it is based on a comprehensive theory of learning and development (Kolb & Kolb, 2005). This learning style inventory is created to fulfill two purposes, according to Kolb. The first purpose is to serve as an educational tool to increase individual's understanding of the process of learning from experience and their unique individual approach to learning in order to increase learners' capacity for metacognitive control of their learning process and help them to monitor and select the learning approaches that match their preferences. The second purpose is to provide a research tool for investigating experiential learning theory and the characteristics of individual learning styles. It categorizes four types of learners' divergers, assimilators, convergers and accommodators.

However, **Dunn & Dunn Model of learning styles (1989)** is based on dividing learning styles into five categories; environmental preferences, emotional characteristics, sociological determinants, physiological traits and psychological style. This model anticipates an observable improvement in student and behavior when a match has been achieved between instructional environments and learning styles. It emphasizes the organization of the classroom and the use of a variety of instructional activities and procedures. When instructors are familiar with their own learning styles, and those of their students, they become more skillful at adjusting with lessons and with the learning environment which make it more favorable to the learners. Dunn and Griggs (2000),

cited in Alkahtani (2011), report that about 300 publications have used Dunn and Dunn model as well a large number of research have been applied their model worldwide. On the other hand, Kolb's model of learning styles and experiential learning theory (1984), have been applied in around 1000 studies. Likewise, Felder & Solomon develop the 'Index of learning styles' which was designed to assess preferences on four dimensions of a learning style model formulated by Felder & Silverman (American Society for Engineering Education, 2005). The Index of Learning Style consists of four scales. Each scale consists of 11 items:

- Sensing (concrete, practical, oriented toward facts and procedures)
- Visual (prefer visual representations of presented material such as; pictures, diagrams and flow charts) or verbal (prefer written and spoken explanation)
- Active (learn by trying things out, enjoy working in groups) or reflective (learn by thinking things through, prefer working alone or with one or two familiar patterns)
- Sequential (According to American Society for Engineering Education, the ILS scale has been taken over 100.000 times per year and has been used in a number of published studies.

There are many theories and scales related to learning style preferences. The use of these scales depends on its effectiveness on individuals, content and context in which learning takes place. Survey questionnaires are useful in saving time and effort during the research. They are the most and best instruments which are used to collect quantative data. There are different types of questionnaires for measuring (perceptual learning styles). Instruments chosen to measure a learning style vary from one researcher to another (Reid, 1987; Kolb, 1984; Dunn & Dunn, 1989; Felder & Silverman, 2005).

Every instrument depends on a particular criterion and is proved to be reliable to some degree. Though some of these instruments may not be extremely identical, they still have value (Kirkpatrick, 2011). Kirkpatrick comments that surveys have the advantage of being readily analyzed by statistical methods and hence give apparently solid results with clear and often generalized pattern. However, Oxford (2003) explains that the most common type of assessment tool for second language learning is the written surveys, in which students answer questions that reveal their particular style preferences. Though style surveys vary in reliability and validity, Oxford points out, still these style surveys have been used in the last few decades and provided data from which teachers and students begin to understand second language styles. The most used and popular questionnaires are presented below in different studies are Reid's learning style preferences questionnaire which has been selected as one of this study instruments.

Ehrman and Oxford's (1990) Model shows a great dimension of learning styles, such as sensory preferences (visual, auditory, kinesthetic and tactile), personality types (extroverted vs. introverted, intuitive-random vs. sensing-sequential), and global or holistic vs. analytic learners.

2.2.7 Reid's Learning Style Preferences Questionnaire:

On the basis of on hand learning style instruments with some change suggested by non-native speakers and United States consultants in linguistics, this five-likert questionnaire has been developed. The questionnaire is validated for the non-native speakers' convenience. It measures six LLSP; visual, auditory, kinaesthetic, tactile and group and individual learning (Reid, 1987). The first four dimensions deal with the learning style based on perception and the remaining two make up the social factor. The purpose of developing such a scale is to create a validated instrument that is simple so

that it would be comprehensible to EFL learners. The questionnaire consists of 30 items based on a five-point likert scale. Reid pilots the scale to be normed. She doubles the number of statements for each individual construct to test if the elicited responses matched. Reid indicates that if the reliability of the questionnaire is 60, then it is an acceptable correlation level for a self-reporting questionnaire of perceptual learning style.

Since this scale was developed for non-native speakers and was applied on Arab students in Reid's research, it is considered the most convenient one among the previous scales. Furthermore, this study will focus on perceptual learning styles which was classified by Reid (1995) based on senses (tactile, visual, kinesthetic, and auditory) and social work (group and individual).

Reid comments that the results of the ESL learning style questionnaire seem to match with previous research in several ways;

1. There is a significant difference between the perceptual learning styles of the ESL learners and non-native speakers of English.
2. ESL students from different language, educational and cultural backgrounds sometimes differ considerably from each other in their learning style preferences.
3. Arab learners seem to express different learning style preferences but mostly they prefer auditory learning style due to the English sound system which is somehow similar to their system. (pp.99)

Generally speaking, the results of Reid's (1987) study show that ESL students strongly preferred kinesthetic and tactile learning styles and a negative preference for group learning.

2.2.8 Factors Contributing to Learning styles:

A number of studies have examined factors that have an influence on students' language learning styles. These learners' individual differences include learning strategies, learning aptitude, age, gender, culture and affective domain (motivation, anxiety, self-efficacy, etc.). Among these individual-difference variables, personality traits, gender, fields of study, learning experience, age and cultural background are claimed to be crucial and seem to have a great effect in language learning process.

- **Personality Traits:**

Personality variables called 'affective learning styles' by Oxford (2003) are moderators in the process of EFL learning (p.119). Oxford explains that these type of traits might influence learning either positively or negatively.

In a review of previous studies which attempt to examine the relationship between learning styles, personality and reading comprehension, Sedeghi, Kasim, Tan & Abdullah (2012) find out that results are not always identical in which they do not show which personality traits contribute more to reading comprehension; they seem to be incongruent; however, it is undeniable that personality has an impact on reading comprehension and reading strategies in a way or another. Sedeghi et al. (2012) conclude that studies have implied that learning styles may have worked as moderator/mediator which effects personality and learning achievements.

- **Cultural Background:**

A number of studies have been conducted on the issue of finding out whether there is any relationship between culture and learning. Nelson (1995) investigates Chinese and Japanese students to explore the influence of cultural factors on learning preferences. It

is found that Japanese learners are impressed by 'reflectivity, sensitivity and modeling'. Both nationalities are influenced by an eastern philosophy which has highly valued education. For example, a Japanese student does not begin his work in exam unless all papers have been distributed to his classmates. Moreover, he prefers to learn by watching someone models a new skill. As a Chinese student, he is cooperative with other learners from other nations. Thus, Japanese and Chinese students can be compared to American learners who prefer individualism and competition. (Nelson, 1995).

Reid (1987) examines the perceptual learning style preferences of 1,234 non-native speakers of English studying in US language programmes, and Melton (1990) conducts a follow-up study of 331 university students in China. Both studies confirm that learning style preferences of ESL learners often differ significantly from those of native speakers and those students from different language and cultural backgrounds sometimes differ from one another in their preferences. For example, Japanese speakers, according to Reid (1987), were found to be most frequently different in their preferences which might be due to their cultural tendency.

- **Gender**

Gender can be considered as a factor that determines students' learning styles. According to different studies focusing on the relationship between gender and language learning styles, it is revealed that gender differences in learning style preferences partially exist among learners. Results of most of these studies show that female students reveal learning styles preferences that are associated with their feelings and they are more reflective than males, more field-sensitive and subjective. Male students expressed learning style preferences towards field-independency, analytic, objective and analytically minded in processing the language. For example, Reid (1987) states that

males prefer visual and tactile learning more than females, while Oxford (1995) argues that tactile and kinesthetic learning style learners prefer 'spatial learning tasks' among the males, when auditory learning style might be greater in females than in males. Oxford adds that males, children, teenagers or adults are usually more field-independent (analytical) while females are more field-dependent (global).

Belenky et al (1986), cited in Li (2011), finds that men are more objective and do activities through thinking (abstract analysis), on the other hand; women are more subjective and practice activities through feelings (personality experience). Males might be more thoughtful and focus on rules and facts, while females are more cooperative and empathetic as well as might like the feeling approach. Likewise, Radwan (2014) claims that female learners have proved to be significantly more communicative oriented than male learners though both show all learning styles in varying degrees.

Incongruent with the above studies, the relationship between gender differences and learning styles is not found in some research studies. Tuan (2011) reports that there is no significant difference between Vietnamese EFL male and female students in their auditory learning style Preferences. This means that the use of auditory learning style is equally preferred by both genders.

- **Age:**

Age is one of the most important affective factors in Second Language Acquisition (SLA). There is some agreement among SLA researchers that age is an affective factor that brings about different performance stages in second language learning. They add, on the other hand, that some learning styles are developmental and several people's styles alter as they grow older. These style essentials are: sociological, motivation, responsibility, and internal vs. external structure. For example, children tend

to prefer to work with others instead of working alone and prefer an authoritative versus an associate teacher. For many people, auditory and visual perceptual elements strengthen with age (Dunn & Griggs, 1998).

- **Life Experience:**

This is another significant factor which is claimed to have an influence on the use of learning style. Past life experience as well as the environment where the students learn might have a direct or indirect influence on their learning styles. Reid (1987) investigates the role of length of time studying English in US, as new life experience for students. She finds out that those students who had been in the U.S more than 3 years were significantly more auditory in their learning style preferences than those who had been for shorter time. She supposes that students who had adjusted to life style in US especially in academic classrooms have become more auditory and less tactile or kinesthetic, while students who had spent less than 3 years in US and who still had not been adjusted to it still prove to be visual, kinesthetic, and group learning. Similarly, Tuan (2011) finds that the students' perceptual learning preferences can be influenced by some variables such as fields of learning style and length of tertiary study. In other words, it is found that those proficient students prefer kinesthetic and tactile learning whereas the students with the shortest length of studying English tended prefer different learning styles except individual learning styles.

- **Field of Study:**

It has been shown in different studies that field of study plays a significant role in language learning and the use of learning styles. Some studies have shown the effect of fields of study or different majors on learning style preferences among students, while other studies show to be conflicted. Reid (1987) has found that responses for all six

major fields in her study indicate that kinesthetic learning is a major learning style preference and that group learning is considered a negative learning style except computer science students. For those who study engineering and computer science, they prefer tactile and kinesthetic learning styles. Rossi-Le (1995) and Peacock (2001), cited in Khmakhien, indicate that educational and occupational engagement have a direct effect on students' learning style preferences. Though they belong to the same group of field of study, it is not always the case that they belong to the same learning style preferences.

In sharp contrast, some previous studies indicate that the groups belonging to the same field of study do not coincide in their sensory or perceptual and personality preferences for language learning. The educational and service integration may play an essential role in the learning style preferences of adult language learners (Rossi-Le, 1995 and Peacock, 2001). In short, these studies suggested that, even though the students' groups belong to the same field of study, they did not match in their perceptual and personality preferences for their language learning.

Although research studies on learning styles and fields of study are common, reflecting a distinction in the use of learning styles between students from different majors and fields of study, the relationship between learners' fields of study and learning styles are not explicit due to conflicting results generated by previous studies.

Learning Styles: Literature Review

2.2.9 Studies Link Learning Styles to EFL Performance:

Learning styles influence learning and that learning outcome is higher for students who are able to use multiple learning styles (Reid, 1987; Oxford, 2003; Willing, 1988;

Felder & Silverman, 1995). Learning styles and preferences vary with each student in different situations. People may differ in how they most effectively show their understanding. Some learn by reading while others by interacting with those around them. Some learn affected by what they hear or touch (Reid, 1987). Learning styles are the general approaches that learners perceive in acquiring a new language or learning any other subjects (Oxford, 2003). Understanding the model of learning styles by teachers and educators will help learning process to be much easier in case learning styles match their teaching style and methodologies. Accordingly, it will improve the whole learning process (Willing, 1988). Bidabadi & Yamat (2010) conduct a study on Iranian students to identify their learning styles. Although findings show that communicative approach is the most preferred for them, learners at university level are still passive in classroom and unaware of their learning styles.

In an attempt to investigate the role of preferred learning styles in quality of performance at secondary, intermediate and university level for language students from six different fields, Farooq & Regnier (2011) find that the majority of the students from all the fields in their sample show the diverging style and the accommodating style are the most preferred learning styles by the students. It is worthy mentioning here that Farooq & Regneir used Kolb learning style inventory, while Karthigeyan and Nirmala (2013), in their study, used Reid's learning style preferences questionnaire and find out that the primary learning style of the students is visual followed by auditory learning style as a secondary one. Karthigeyan and Nirmala add that auditory learning style students prefer group and individual learning style; however, kinesthetic learning style is the least preferred one (2013).

Understanding the diversity of learners' differences can help them learn a second or foreign language. Razawi et al (2011) indicates that students diverse learning styles can be classified as global, impulsive, perceiving, extroverted, introverted, ambiguity, tolerant, sociological, auditory, visual and active learners. The results of Razawi's study assert that teachers have to improve their lesson planning to cater to the above mentioned students' diverse learning style. Similarly, Bidabadi & Yamat (2010) conclude in their study that teaching style should be matched to students' learning style as well as the materials which should suit students' learning preferences.

Mulalic (2006) investigates the perceptual learning styles preferences of English as second language students among Malaysian students. The participants of the study are 86 male and 74 female students among the three different ethnic background composition of Malaysia population, Malay, Chinese and Indian. Using the Perceptual Learning Style Preferences Questionnaire (PLSPQ) developed by Reid (1997) to determine the students preferred style of learning, results show that learners favor kinesthetic learning style. Malay students show a strong preference for individual learning styles, while their minor learning styles are group and auditory learning styles. They show negative preferences towards tactile learning styles. The Chinese students show strong preferences for auditory and group learning styles while visual and individual learning styles were their minor learning styles. However, the Chinese students show negative preferences towards tactile and kinesthetic learning styles. The third ethnic group of Malaysia, Indian students, prefer strongly the visual learning and less the kinesthetic and individual learning styles. They reveal strong negative preferences towards group learning style.

2.2.10 Learning Styles and Teaching Styles:

Teaching behavior reflects the beliefs and values that teachers hold about the learner's role in the exchange. Learners' behavior provides insight into the ways learners perceive, interact with, and respond to the environment in which learning occurs. Reid (1987) refers to other research which demonstrated that 90% of traditional classroom instruction is directed to the auditory leaner. Theorists suggest matching teachers' and students' styles in which students can be exposed to teaching styles which are consistent with their learning styles. Teachers should be aware of the importance of applying variety of their teaching styles in accordance to students' different learning style preferences.

2.2.11 Learning Styles among EFL Students in Arab Countries:

In an attempt to investigate the relationship between learning style preferences and gender and language perception and use of Omani EFL learners, Radwan (2014) uses the updated version of Wong and Nunan's (2011) survey which was based on Willing's (1994) learning strategy questionnaire. The questionnaire is a four-point scale of four categories based on students' strategy preferences; concrete learners, analytical learners, communicative learners and authority-oriented learners. Results of the study reveal that the female group was significantly more communication oriented than the male group. Furthermore, results show that female learners are found to be more communicative than males. They like to learn by watching, listening to native speakers, talking to friends in English and watching television in English, using English out of class in shops, trains, etc. The study concludes that female Arab learners are more communicative oriented in their learning styles than their male learners (p.21-32).

On the other hand, Hakim (2015) carries out a study to examine the role of learning styles in the success of task-based language teaching in EFL classrooms in Saudi Arabia. The findings indicate that students prefer some activities rather than others according to the styles of learning they have. Accordingly, students show more interaction with some collaborative tasks which match with their learning styles. For example, those who are visuals prefer to watch a video clip before reading the assigned task, as it is much effective for them than using the traditional activity of scanning. Thus, Hakim asserts that applying task-based language teaching in EFL context enhances the learners' interaction in class as well as increases their motivation to work harder. Through analyzing the students' diaries in order to support the findings, Hakim concludes that students feel more comfortable with the teacher, who understands their learning styles, challenges and problems of learning through dialogues and discussion (2015). In Reid's study on nonnative speakers of English, Arab learners were part of the sample. Reid figures out that due to multiple cultures of those Arab learners, it seems they have multiple major learning styles preferences in general; and more particularly they have to express a strong preference for auditory learning. Reid interprets that it could be because of the Arabic sound system which is most closely parallel to English.

2.2.12 Learning Styles among EFL Students in Different Countries:

A plenty of studies show that teaching styles have to match with learning styles of students to help students interact dynamically in classroom. Phu Hung (2014) tries to prove the importance of teaching and learning styles convergence by applying two questionnaires of learning styles and motivation on 150 Vietnamese EFL students as well as teachers. The results indicate that 60% to 80% of most of the students have tactile, auditory, kinesthetic and group learning styles respectively and fall under the

major category whereas minority of students show minor preference of visual and individual learning styles. The study reveals a close connection between interaction and teaching styles which teachers apply based on the students preferences (p.385).

Coming to the awareness of learning style preferences, Rafique (2016) tests a sample of 30 EFL students in Bangladesh in order to explore their preferences of learning styles as well as their awareness of their own learning styles. Based on Reid's (1987) survey as well as interview, Rafique highlights that the majority of Bangladesh EFL students prefer the auditory style of learning (60%) while the individual styles is the least preferred (43.33%). Interviews emphasize that the Bangladesh EFL learners are more or less aware of their own learning styles and the way they learn English better.

On the other hand, Liu (2012) carries out a practical study on a sample of 146 freshmen Chinese learners and another 4 teachers from Jishou University. The study aims to prove the feasibility of the self-reported multi-dimensional questionnaire as a first step so that it helps the instructors making decisions about course design and methods of Tujia EFL classroom teaching based on the results of first step. Employing the questionnaire as well as the interviews, the results help the Tujia EFL learners know about their own learning style preferences and teachers which fosters their willingness to make decisions about course design and improving the methods of the EFL classroom teaching in Tujia.

2.2.13 Learning Styles in EFL Classrooms:

A variety of researchers have attempted to provide ways in which learning styles can take be employed in the classroom. Dunn and Dunn (1978) argue that “learners are affected by their: (1) direct environment (sound, light, temperature, and design); (2) own emotional mood (motivation, persistence, responsibility, and need for structure or

flexibility); (3) sociological needs (self, pair, peers, team, adult, or varied); and (4) physical needs (perceptual strengths, intake, time, and mobility)". Therefore, Dunn & Dunn (1978) deduce that it is to the educator's advantage to teach and test students in their preferred styles. They add that teachers should try to make changes in their classroom in a way matching with every learning style of each learner. Some of these changes include room redesign, the development of small-group techniques, and the development of 'Contract Activity Packages'.

Dunn & Dunn (1978) suggest that classrooms should be redesigned and arranged creatively, floor area should be cleared as well as learners' ideas on the decoration of their classrooms should taken into account. Small-group activities in which students sit in a circle and discuss a subject collaboratively for encouraging team learning and brainstorming would be very helpful. This explains the project of Dunn & Dunn's contract activity packages. The 'Contract Activity Packages' refers to any educational plans that facilitate learning by using the following elements: 1) clear statement of what the students need to learn; 2) multisensory resources (auditory, visual, tactile, kineasthetic); 3) activities aim to use information creatively; 4) the sharing of creative projects within small groups of classmates; 5) at least 3 small-group techniques; 6) a pre-test, a self-test, and a post-test (1978).

Hung (2014) states that understanding of students' learning styles can positively push students in learning and involve them in class activities. Teachers also have to identify students' motivation levels because it is also another factor which plays a crucial role in the interaction development in EFL classroom. He adds that the matching of teaching and learning styles and the classroom EFL interaction are positively correlated.

2.2.14 Learning Styles and EFL Reading:

Reading starts when a student sees a word or a sentence and understands its meaning. This phase is called 'word recognition' depends on 'visualization' which is a major part of reading process (William, 2010). Visual readers can already create images and mental models, while auditory, kinesthetic and tactile learners may face difficulty. Teachers should create strategies which fill the gap between visualization and comprehending. Teachers should help learners to use some techniques which match with their own learning style. For example, kinesthetic learners can use their fingers to point to words as they read (William,2010) while auditory learners can be allowed to move their lips while reading even if that causes them read slowly. Similarly, Pratiwi & Novita (2012) conduct a correlational study to investigate whether there is a relationship between learning styles and students' reading comprehension. Surprisingly, results reveal that there is no significant correlation between learning style and EFL students' reading comprehension. However, such results might be because the questionnaire used to measure students' learning style in Pratiwi and Novita's study is not a known or standardize on one hand; and it only consists of only 7 statements on another hand.

On the other hand, Nigari & Bargli (2014) work on a research on the relationship between Iranian EFL learners learning style preferences and their reading comprehension ability based on Willing's learning style questionnaire which categorizes learning styles into 'communicative, concrete, authority-oriented, and analytical learned'. Nigari and Bargli find that there is a statistically significant correlation between Iranian EFL learners learning styles and their reading comprehension ability at p>.0/01 significant level.

Anthony (1996) asked Japanese learners of English to assign constructs to each of four learning styles (heart, head, hands, free), in order to indicate which they considered their own style to be, and assess the importance to their own learning of 16 general learning behaviors. Results indicate that these students did not show attributes of the idealized good language learner which reveals lack of personal involvement in the learning process. Results show that they have limited understanding of the learning style concept; and the accuracy in assessing their own learning style was weak.

Learning about the students' styles and increasing the awareness in personal differences in language classrooms is one of the vitally important aims of English language learning and teaching. In the study of Khademi, Motallebzadeh & Ashraf (2013), a focus has been given to the perspectives of teachers' awareness of their students learning styles in relation to the students’ progress in reading comprehension. A random sample of 240 Iranian EFL instructors at tertiary level with three years of experience at least, the teachers' view over students' learning preferences inventory as well as a test of language proficiency plus a semi-structured interview were used as instruments of the study. Khademi et al (2013) find out that there is a significant relationship between teachers' understanding of learning styles and the students' scores of reading comprehension tests (r=.237, n=240, P>.000). The study indicates that considering all learning styles in one classroom is a complicated task that needs very professional teachers. Since the nature of reading is complicated to most of EFL students, the study sets some recommendations to teachers to focus on sensory preferences to guarantee diversities in classrooms as well as improving teaching strategies in reading comprehension classes. Activities which deal with different learning styles of students such as; video, charts, pictures, maps, role-plays, discussion, games, conversation, social task, interactive tasks and group work are recommended to

be most appropriate strategies to teach reading effectively and enhance comprehension among students.

Hsieh and Dwyer (2009) in their study encourage investigation into ways of strengthening online, rereading strategy effects on students' learning comprehension. The study emphasizes that students with different learning styles also need further consideration. It suggests that interviews, questionnaires are ways to examine students other learning styles as well as their reading habits which by knowing them it will be much helpful in facilitating student achievement and their reading comprehension.

‘Learning styles’ is an issue that has been paid great attention in the recent years by many linguists and educationists. Learning styles seem to need a long time to find out its real implication on the learner’ second language acquisition and specify its full and real part in the foreign language. Undoubtedly, it requires the common efforts from most theorists, researchers and teachers to be able to learn more about the learning style of the whole learners clearly and accordingly improve daily teaching methods of teachers in accordance with the students’ needs; in order to better the development of the whole foreign language teaching.

Section 2.3 Strategies' Use: Theoretical Background

This section discusses the strategies used by EFL learners in reading. It is called herein 'use of reading strategies'. It consists of two parts. The first part starts with the definition of language learning strategies particularly reading strategies, characteristics of language learning strategies, factors affecting reading strategies. Then, Oxford's classification of learning strategies, successful and unsuccessful readers and cognitive and metacognitive reading strategies is followed. Then, the second part presents relevant literature related to reading strategies in EFL contexts.

2.3.1 Language Learning Strategies Definitions:

Language learning strategies refers to the procedures that are deliberately arranged to be used by language learners to help them learning the language more effectively (Wikipedia, 2015). Language learning strategies are processes taken by the learner to assist the acquisition, storage and retrieval of information (Oxford and Crookall, 1989, cited in Al-Sohbani, 2013).

Most of the research on learning strategies is related to the notion of successful learners. Chamot & Kupper (1989), cited in Abhakorn (2008), define learning strategies as techniques which students use to comprehend, store and remember new information and skills, while Oxford (1990) refers to learning strategies as specific actions taken by the learner to make learning easier, quicker, more enjoyable, more self-directed, more effective (p.8). O'Mally and Chamot (1990) give a more focused one. They comment that learning strategies are not just techniques that can be observed, but also they are cognitive and metacognitive strategies. In other words, they define 'learning strategies' as the special thoughts or behaviors that individuals use to help them comprehend, learn

or retain new information. Earlier, Chamot (2004) define “strategic learners” as those who have metacognitive knowledge about their own thinking and learning approaches, while ‘learning strategies’ for are thoughts and actions that learners take in order to achieve a learning goal (p.14).

Chamot and Kupper (1989) in another study, explain that when students use techniques to comprehend, store and remember new information and skills, that are called ‘learning strategies’ while Ghani (2003), gives a new dimension to the definition of learning strategies. Ghani explains that learning strategies are facilitators to underlay, store, retrieve or use of new language.

Learning strategies have so many definitions by researchers. These definitions may differ; but all of them imply learners' conscious movement toward a language learning goal (Oxford, 1990; Cohen, 1998; Macaro, 2001; Abhakorn, 2008). The definition by Oxford (1990) also included cognitive, emotional and social aspects of language learning strategies that enhance learners' language learning aptitude and self-assurance.

Cohen (1998) explains that second language learner strategies encompass both second language learning and second language use strategies. Taken together they make up the steps or actions consciously selected by learners either for the learning of a second language, the use of it or both.

It's obvious that though language learning strategies have been defined from different points of view by researchers, all mentioned definitions indicate that learning strategies are the methods which learners use to intake, store, and retrieve during the learning process.

2.3.2 Characteristics of Language Learning Strategies:

Since the seventies, ample of studies have classified learning strategies in various ways (Rubin, 1975; O'Mally & Chamot, 1990; Oxford, 1990; Naiman et al, 1978). Rubin (1987) categorizes three types of strategies used by learners that effect directly or indirectly to language learning. The first category, learning strategies, consists of two main types; cognitive and metacognitive. Cognitive strategies refer to the steps or processes used in learning or problem-solving tasks while metacognitive learning strategies are how learners try to supervise, control or self-direct the language learning situation. The second category is indirect strategies which consist of communication strategies and social strategies. The former are used by speakers when they are confronted with misunderstanding by a co-speaker. The latter, social strategies are occurred when the learners are engaged in tasks that afford them opportunities to be exposed to and practice their knowledge.

On the other hand, O'Mally (1985) divides language-learning strategies into three main subcategories; metacognitive, cognitive and socio-affective ones. O'Malley (1985), as cited in Jhaish, 2010, explains that metacognitive strategies are executive skills and strategies which require planning for learning, thinking about the learning processes that is taking place of one's productive or comprehension. They are strategies such as self-monitoring, self-evaluation, self-management.

O'Malley (1985) differentiates between cognitive and metacognitive strategies by which cognitive strategies are not only more limited to specific learning tasks but also require more direct manipulation of the learning material itself. Examples of cognitive strategies are repetition, elaboration, contextualization, auditory representation given by O'Malley. The third and last subcategory of learning strategies is 'socio-affective

strategies' which involves interaction with others. Learners might be exposed to a real situation in the street to cooperate with a stranger in direction, rephrase, question for clarification and self-talk.

The third classification that should be discussed under this title is 'Oxford's classification of learning strategies'. Oxford (1990) develops a new language learning strategies system. It consists of two main classifications, direct and indirect strategies. Oxford refers to 'cognitive strategies' as ways which enable the learner to tackle the language material directly, such as; reasoning, analysis, note-taking, summarizing, synthesizing and outlining and reorganization information to develop stronger and comprehensive schema. Chamot (2004) comments that through there have been developed different classifications of language learning strategies; little attention has been paid to student's learning goals or teachers' instructional goals. In other words, most of those classifications have only focused on academic context of a learning foreign language, while it lacks some other communicative, social and affective strategies in contextual or cultural situations which would be very helpful for learners (p.17).

2.3.3 Reading Strategies:

Different researchers show different opinions on the definitions of reading strategies. Barnett (1989) defines reading strategies as the intellectual transactions involved when a reader approaches a text effectively and tries to make sense of what he/she reads'.

She argues that reading strategies refer to the tools that are used by the readers for solving problems and acquiring text information. Reading strategies, according to Carrell (1988), are deliberate, conscious techniques that readers use to enhance their

comprehension or retention of the textual information. She comments that it is interested for readers to manage their interaction with the written text by using these strategies in a way related to text comprehension.

Learners need to be trained to list description of strategies of successful language learners in the form of typologies and then to learn in how to use strategies that have been identified as effective. Cohen (1990) defines reading strategies as the psychological process and these strategies are used by the reader consciously when he or she is doing a task.

According to Carrell , reading strategies include the following strategies;

- *Scanning the text to get the main idea of the text*
- *Skimming the text quickly to obtain specific information*
- *Skipping over new words*
- *Using context to guess words*
- *Predicting the text content*
- *Tolerating ambiguity*
- *Confirming or disconfirming inferences*
- *Identifying the main idea*
- *Rereading*
- *Using cognates to comprehend* *(1998:2)*

Yet, Chamot & O'Malley (1994) grouped reading strategies into 'cognitive, metacognitive and social and affective strategies'. Cognitive strategies are used to achieve a specific cognitive task during reading while metacognitive strategies are used to regulate cognitive and social processing. Affective strategies are used to interact considerately with other strategies during reading. Although different researchers define reading strategies in different ways, they agree that reading strategies are part of the language learning strategies which are essential variables of effective reading.

Hudson (2007) describes reading strategies as any interactive process that has the goal of obtaining meaning from connected text which functions to lessen demands on working memory by facilitating comprehension processing.

2.3.4 Factors Affecting Reading Strategies:

For decades, factors affecting language learning strategies, particularly reading strategies have received increasing attention. Abdulamjid (2004) points out to three factors which affect reading strategies. According to Wenden & Rubin (1987:50) the first factor is the reading purpose. A reader may have more than one purpose when reading a text so it affects the strategies he or she applies to comprehend a text. The second factor is the type of reading tasks that the reader is engaged in whether receptively or responsively. When reading receptively, the reader needs to get the main points and general understanding of the text. In reading responsively, the reader needs to read critically to evaluate the text and reflect on it. The third factor is the different types of textual organization.

Dennis (2008) argues that the complexity of the reading text, environmental influences, anxiety during reading comprehension, interest and motivation, decoding or word recognition speed, and medical problems are some factors which might affect reading comprehension skill and students' reading use. Dennis (2008) explains that the complexity of reading text is influenced by the readers' strength and fluency in language and their comprehending of its applications and different meanings (Dennis, 2008). Environmental influences again are other factors which refer to the unorganized, noisy and uncontrolled environment. Students usually lose their concentration in understanding a text when there are noises like televisions or radios. Anxiety is a third factor mentioned by Dennis (2008). She states that examinations, class work, or

homework situations can put more stress on readers' reading than reading for enjoyment. According to Dennis (2008), learners' interest and motivation are very important in developing reading comprehension skill. If readers find the reading material dull, they tend to feel bored or distracted in concentrating on their comprehension. The speed of word decoding or recognition is the next factor. Low proficient readers often read slowly and find it harder to understand the meaning of passages than those without decoding problems. Another factor explained by Dennis is medical condition with some of the students who suffer of poor hearing, speech problems and undiagnosed attention deficit disorder (2008).

2.3.5 Reading Comprehension Strategies:

Since part of the current study deals with reading strategies and reading comprehension, it has been essential to define 'reading comprehension strategies'. Learners of English language learning use some resources for comprehension and indicate how readers conceive a task. They may use some textual devices and try to make sense of what they read. Their resources help them to know what to do when they do not understand a text or a word (Block, 1986). Reading strategies are related to effective reading comprehension in which reading strategies are of interest not only for what they reveal about the ways readers manage their interactions with written text, but also for how the use of strategies is related to effective reading comprehension (Carrell, 1998, p.1).

Husdon (2007) comments that as learners utilize an array of strategies to assist them with the acquisition, storage and retrieval of information in second language, they might use some and not same comprehension strategies they use in their first language. Macaro (2001) refers to some strategies as mental processes. He labels 10

mental/cognitive processes which students might have used in order to make sense of the text as below:

1. They might skim the text and try to get an initial impression.
2. They might look at the text and see if there are any visual clues that might confirm the initial impression (e.g. photos, titles, paragraph headings)
3. They might think of ways of not getting 'uptight' if they think it looks rather difficult (having the right attitude to the text).
4. They might divide the text up into manageable pieces and start analyzing one piece at a time, perhaps by paragraph or by series of sentences.
5. They might scan for all the words or chunks of language that they already know.
6. They might look for words that look like words in their L1, the cognates.
7. They might infer the meaning of some words from the context and from the words they have understood.
8. They might predict some of the language that is going to come up from what they have already understood.
9. They might see if some of the syntactic clues in the text, or the order that the words are in, help them to understand.
10. They might try to sound out the words to see if this brings back memories of having heard the word before (making phoneme-grapheme association)
11. They might simply try to translate the text word for word. *(p.15)*

Related to top-down and bottom-up models of reading, reading comprehension strategies aim to recognize either the texts' structure or its meaning. Block (1986) argues that general comprehension strategies include methods used for 'comprehension-gathering' as the strategies used by the readers and

'comprehension-monitoring' as the strategies either the teacher or the reader uses to follow comprehension, both as part of general strategies; although different from local strategies in which the attempt to understand specific linguistic units is mandatory.

Block (1986) believes that top-down is considered as reader-centered strategies; whereas local linguistic strategies deal with the reader's attempt to understand specific linguistic units, also considered as text-centered strategies and bottom-up strategies, at the same time considered as general comprehension strategies.

2.3.6 Oxford's Classification of Learning Strategies in Relation to Reading Comprehension Strategies:

Looking closely to Oxford's comprehensive classification scheme (1990)of the various strategies used by learner, six strategies can be more appropriately to referred to sub-strategies with the broader context of reading strategies. They are;

- **Cognitive strategies:** which are used by learners to transform or manipulate the language such as; note-taking, practice of sounds and sentence structure, summarizing, paraphrasing, predicting, analyzing and using context clues.
- **Memory strategies:** they can be explained as techniques that help the learner to remember and retrieve information. They include creating mental images through grouping and associating, semantic mapping, using keywords, employing word associations, and placing new words into a context. For example, grouping can help learners to facilitate and understand the meaning of new words.
- **Compensation strategies:** they include skills such as inferencing, guessing while reading or using reference materials such as dictionaries.
- **Metacognitive strategies:** they can be defined as behaviors undertaken by the learners to plan, arrange and evaluate their own learning. Such metacognitive

strategies include directed attention and self-evaluation, organization, setting goals and objectives, seeking practice opportunities, and so forth. Examples for metacognitive strategies are self-monitoring and correction of errors in reading context.

- **Affective strategies:** they might be some techniques to make a control on their feelings or psychological affairs. Students before or while reading, try to lower their anxiety and encourage learning. They may depend on self-encouraging behavior.
- **Social strategies:** these are strategies learners use to cooperate with peers, questioning, asking for correction and feedback. A learner can ask for his classmates' help to correct an error or provide him/her feedback or response.

Those strategies suggested by Oxford (1990) can be used to facilitate reading comprehension. The use of these strategies will vary depending on the language area or skill to be learnt. Researchers have attempted to identify and classify the reading strategies used by readers in various contexts (Oxford, 1990; O'Malley & Chamot, 1990; Barnett, 1988; Wenden, 1985). Comprehension strategies can be classified into two, knowledge based strategies and language based strategies.

- **Knowledge based strategies:** are strategies employed in a top-down processing of any text. They are used for a global comprehension of a text.
- **Language based strategies:** are used by a reader when he performs a bottom-up processing of a text. They assist local comprehension.

Macaro (2009) comments that it is difficult to know whether some or all the students are applying same strategies and it is even more difficult to ascertain how they are applying these strategies. It is because they are mental processes placed in the learner's heads. However, he adds that teaching approach might make it easier to find out the learners strategy use.

2.3.7 The Differences between Learning Styles and Learning Strategies:

In learner-centered classrooms, learners need to know their own learning style and choose strategies which are appropriate to them. Among the individual differences which affect learners' performance are the learning styles and strategies. The two terms indicate to the same meaning. Reid draws a distinction between learning styles and learning strategies by focusing in what way they are distinct from each other. Reid defines 'learning styles' as internally based characteristics which are inherited by birth. Reid adds that these learning styles are not perceived or consciously by learners for the intake and comprehension of new information, whereas learning strategies were 'external skills often used consciously by students to help themselves learn the target language (1998). On the other hand, Oxford (1990) also differentiates between learning styles and language learning strategies. She defines learning styles as the personality characteristics and general approaches of learning a language, while learning strategies are particular behaviors or thought processes that the learners use to help them in second or foreign language learning.

However, for Oxford, 2005, learning strategies are easier to teach and modify. Learning styles are internal traits of learners which are difficult to change while strategies are external techniques consciously or subconsciously used by learners (Pei-Shi, 2012). Baghban (2012) concludes that there is a related connection between types of strategies and learning styles preferences. He finds that the three types of strategies; cognitive, metacognitive and affective have a great connection with auditory style of learning. Metacognitive and most of all memory and social strategies have a significant relationship with the kinesthetic style. Surprisingly, visual learning style does not show any correlation without other factors.

Thus, it can be said that learning styles are stable and not likely to change over time, whereas learning strategies implies that they tend to change over time depending on the materials and assignment used in learning environment. Oxford supports this view when she comments that 'learning styles and personality characteristic are difficult to change'.

2.3.8 Successful and Unsuccessful EFL Readers:

In a second-language study, strategies used by both successful and unsuccessful language learners to improve reading have been investigated (Hosenfeld, 1977; Block, 1986; Macaro, 2001).

Successful readers, according to Macaro (2001) use top-down and bottom-up strategies in combination. They try to overcome the barriers to the comprehension of a text. Obviously, they do all the things that the less successful readers do not do and in much better combination. They apply one or more of the following:

1. They read ahead silently; they read under their breath; they read out aloud.
2. They don't get anxious when they don't understand.
3. They make inferences about the meaning of words based on the 'data' that they have worked out so far.
4. They have doubts about their interpretation.
5. They divide text up into chunks.
6. They use awareness of syntax to check interpretation.
7. They attach the text completely as a problem-solving exercise.

Macaro (2001) thinks that a good reader is the one who uses top-down and bottom-up processing strategies effectively. Doing so, these strategies were called by Macaro as 'intermediary strategies which means linking the two levels (top-down &

bottom-up) cognitive processing. Proficient readers use the following intermediary strategies and allow them to make judgment about.

1. The pace at which to read and how to vary this;
2. Which key words or chunks of language in a text they should select and pause over;
3. What words or language chunks to ignore in a text;
4. When L1 knowledge should be subordinated to L2 knowledge;
5. When the context provided by the text might be called upon to assist with a decoding problem;
6. When world knowledge and common sense might be called upon to assist with a decoding problem;

However, unsuccessful readers might combine the top-down and bottom-up strategies rarely. They lack the strategy of making links between early parts of the text and later-in text evidence. They fail to scan for the important words or phrases. Macaro (2001) sets the characteristics of the less successful readers, those who have a great deal of difficulty in decoding the text as below;

1. They make wild guesses not corroborated by other semantic information in the text.
2. They get stuck to a guess regarding of conflicting evidence; context and syntax.
3. They do not use world knowledge (their general knowledge and common sense).
4. They do not use prior knowledge of lexical items and idiom.
5. They overuse cognates, cognates overrode everything else.
6. They constantly focus on nouns; they neglect verbs or other syntactic features.
7. When verbs are tackled, 'meaning attack' is superficial or formulaic.
8. They lack textual awareness and awareness of writing conversation.
9. They give up easily and lose confidence.

Applying a think-aloud protocol, Hosenfield (1977) and Block (1986) use this procedure to identify relations between certain types of reading strategies and successful or unsuccessful readers as illustrated in the table (2.2) below.

Table (2.2) displays a comparison between the strategies used by successful and unsuccessful readers

Successful Reader	Unsuccessful Reader
Kept the meaning of the passage in mind during reading.	Forget the meaning of sentences as soon as they decoded them.
Read (translated) in 'broad phrases' not 'words'.	Read in short phrases.
Skipped words viewed as unimportant to total phrase meaning.	Seldom skipped words as unimportant and thought around inconsequential words.
Had a positive self-concept as a reader.	Viewing words as 'equal' in terms of their contribution to total meaning.
	Had a negative self-concept as a reader.

2.3.9 Cognitive and Metacognitive Strategies:

Researchers have suggested that reading involves both metacognition and cognition. An analysis of these strategies reveals how each reader accesses textual information, how he makes use of his strategies, how he measures his comprehension.

O'Malley and Chamot (1990) commonly recognize reading strategies as metacognitive, cognitive and social/affective. Metacognitive strategies are higher order executive skills which imply planning for, monitoring or evaluating the success of a reading task. O'Malley & Chamot explain that these metacognitive strategies are used to plan, arrange, evaluate, organize, set goals and objectives, supervise, regulate or self-direct, and they are applicable to almost all types of learning tasks. Cognitive strategies, according to O'Malley & Chamot, refer to the steps or operations used in

learning or problem-solving, which require direct analysis, transformation, or synthesis of learning materials. They operate directly on new information and control it to promote learning. They help a reader understand and produce the new language by repeating, summarizing, reasoning, deductively predicting, analyzing, using context clues, note-taking and participating with the specific aspects of the target language such as; sentence structure and unknown vocabulary. Cognitive strategies unlike metacognitive strategies may not be applied to all types of learning tasks as they seem to be connected to specific learning tasks. Social/affective strategies which are exemplified as cooperating and asking for clarification have to do with the ways in which a learner chooses to interact with other learners and native speakers. They may be applied to a wide range of tasks.

- **Cognitive Strategies:**

Oxford (2003) states that these strategies help learners process and use the language for learning or accomplishing a language task. Phakiti (2003) explains that cognitive strategies are ongoing mental activities students use to help them comprehend language and world knowledge or organizational task. They are, for example, making prediction, translating, summarizing, linking with prior knowledge or experience, applying grammar rules and guessing meaning from contexts (O'Malley & Chamot, 1990; Oxford, 1990).

The strategies used by EFL learners to transform or manipulate the language such as; note-taking, practice of sounds and sentence structure, summarizing, paraphrasing, predicting, analyzing and using context clues are called cognitive strategies (Oxford, 1990).

Research has revealed that the use of cognitive learning strategies in classroom instruction and learning is fundamental to successful learning (O'Malley & Chamot, 1990; Oxford, 1990).

To give more scope to the nature of cognitive reading strategies, O'Malley & Chamot (1990) and Oxford's (1990) have classify them as below:

- **Repetition:** it is a repeating of a chunk of language (a word or phrase) in the course of performing a language task.
- **Grouping:** it is classifying words, terminology or concepts according to their attributes or meaning. Oxford adds that grouping strategy in reading involves classifying or reclassifying what is read into meaningful groups, and reducing the number of unrelated elements.
- **Deduction: i**t means to apply rules to understand or produce the second language or making up rules based on language analysis. According to Oxford, 1990, it is a top-down strategy leading from general to specific.
- **Imagery:** it refers to visual images wither mental or actual to understand to remember information. Oxford states that it is a good strategy to remember what has been read in the new language to create a mental image of it.
- **Getting the idea quickly:** it involves skimming and scanning. Oxford comments that skimming involves searching for the main idea the writer wants to get across while scanning means searching for specific details of interest to the learner.
- **Elaborating:** it refers to relating new information to prior knowledge. It is about how to relate different parts of new information to each other or making meaningful personal associations with the new information.
- **Inferencing:** it means to guess the meaning of new items, predict outcomes or fill missing information. Students attempt to comprehend the text.
- **Note-taking:** readers write down key words and concepts in abbreviated verbal, graphic or numerical form while listening or reading, note-taking makes students' active

participants in their learning, and help them organize important concepts and remember information.

- **Summarizing:** it is a mental, oral or written summary of new information gained through listening or reading. It can be a useful technique.
- **Resourcing:** Oxford states that this strategy may be valuable to better understand what is read, printed resources such as dictionaries, word lists, grammar books, and phrase books as target language reference materials.

➢ **Metacognitive Strategies:**

The basic concept of metacognition is the notion of thinking about thinking (Phakiti, 2003). Oxford (2003) states that metacognitive strategies encompass the planning, organizing, evaluation and monitoring of one's own language learning. For example, organizing, time for learning, checking one's progress, and analyzing one's mistakes and try not to make them again. According to Phakiti, metacognition involves active monitoring and consequent metacognitive strategies which are the reader's deliberate mental behaviors for directing and controlling their cognitive strategy processing for successful performance (2003), while Brown (2000) define metacognitive strategies as those that make a learner decide what skills, strategies and resources are needed to perform a task effectively and which enable a reader to monitor his comprehension and control his comprehension procedures so as to facilitate the successful completion of a task.

The role of metacognitive awareness in reading comprehension has been studied previously. It is agreed that metacognition is one of the most important elements to influence reading comprehension. Brown (2000) has shown significant examples of metacognitive strategies involved in reading comprehension.

- Clarifying the purposes of reading

- Identifying the important aspects of a message
- Monitoring ongoing activities to determine whether comprehension is occurring.
- Engaging in self-questioning to determine whether goals are being achieved; and
- Taking correction action when failures in comprehension are detected. (p.31)

According to Flavell's model, there are four categories in which people monitor their cognitive process by using components described in these four categories (1979); metacognitive knowledge, metacognitive experience, goals & actions or strategies.

- **Metacognitive Knowledge:**

It is the first category in the model of cognitive monitoring. Flavell defines it as a person's knowledge or beliefs about the factors that impact cognitive enterprises. It requires knowledge about one's cognitive process and the diverse 'cognitive tasks, goals, actions, and experiences'. This category interacts with three variables; person, task and strategy.

- Person variable: it includes the ability of a learner to evaluate strengths and weaknesses in reading. It refers to knowledge a learner knows about himself or others'.
- Task variable: it is the knowledge about the nature of the task and its demands. A reader, here, understands the level of difficulty of the task and allocates time to comprehend the text and successfully meet the goal. It constitutes the awareness of the requirements of a task.
- Strategy Task: it involves the strategies which are needed for achieving the goals. A reader can know that taking notes is an effective strategy for the summarization of a passage. It is the knowledge of the nature and utility of strategies to accomplish certain cognitive tasks effectively.

- So, metacognitive ability is when a reader monitors his reading by deciding his purpose for reading, how best to attain that Purpura and how to keep control over cognitive strategies.

- **'Metacognitive experiences,** this is the 2nd category is internal responses that people have regarding their metacognitive processing. Individual's awareness of failure, success, uncertainty or satisfaction about things is included in this category. Flavell refers to this category *'any conscious cognitive or affective experiences that accompany and pertain to any intellectual enterprise.' (p. 906)*
- **'Goals,** the third category is defined by Flavell as 'the objectives of a cognitive enterprise' (p. 907).
- **'Actions' or 'strategies,** the fourth category is which learners use to achieve their cognitive and metacognitive objectives.

Metacognitive strategies have a significant and positive relationship with cognitive strategies. Metacognitive strategies exert an executive role over cognitive strategies. Many empirical studies show that successful learners differ from less successful ones in both the quantity and quality of cognitive and metacognitive strategy use (Chamot et al, 1989; Oxford, 1989).

Research shows that poor readers in general lack effective metacognitive strategies and have little on how to approach reading (Baker and Brown, 1984), in contrast, second language successful readers know how to use appropriate strategies to enhance text comprehension (Chamot et al, 1989). According to Purpura (1999), cognitive and metacognitive strategies are used differently among poor and good readers. Purpura finds that low performers show an extremely high degree of metacognitive strategies in retrieving information from the long-term memory, whereas the high performers use

metacognitive strategies to help them understand and remember. Purpura (1999) points out that the amount of effort to use these strategies seems to depend upon the linguistic abilities needed to complete the tasks, which means that readers, mainly, while doing their reading test, need a certain degree of language knowledge before they can make use of it.

Macaro (2001) have opted an approach based on the idea of a continuous direct strategies at one end and conscious and indirect strategies at the other. These categories of strategies a long a continuous are illustrate in the table (2.3) below.

Table (2.3) shows Cognitive and Metacognitive Strategies

Cognitive	Metacognitive/social/affective
subconscious	conscious
direct	indirect
automatized	controlled
difficult to articulate	easier to articulate
non-evaluative	evaluative
primary	support
natural	taught

The table above illustrates that strategies at one end tend to be deployed in direct relationship to the learning task. The strategies on the other end tend to be deployed in preparation for, or preceding to, a learning task in order to make control of the learning process of the same task.

Strategies' Use: Literature Review

2.3.10 Studies Link Reading Strategies to EFL Performance:

Reading strategies can be essential elements in learning second or foreign languages in which they assist learners improve their reading ability. A large corpus of studies reflecting that instruction in reading strategies is effective in helping students learn reading and develop their language skills (O'Malley & Chamot, 1990; Oxford,

1990; Mokhtari & Sheorey, 2003). As a matter of fact, reading strategies can help learners be aware of the process of conducting efficient reading in which they critically think and reflect upon the text content. Barnett (1988) investigates the impacts of metacognitive awareness and strategy use on reading comprehension. The participants consisted of 278 university students taking a French course. He finds out that those students who were taught strategy use were proven to be more able to read through context than did those who were not taught how to use any strategy. In other words, students who tried to remember context as they read performed better in reading than those students who employed this strategy less. Findings in this study indicate that the relationships among perceived strategy use, actual strategy use and reading comprehension were positive. Metacognitive awareness was noticed to be positively correlated with reading ability.

Anderson (2004) examines the differences between first and second language reading strategies as well as differences between English as a Second Language (ESL) and English as a Foreign Language (EFL) reading strategies. The Survey of Reading Strategies (SORS) by Sheorey and Mokhtari (2001) in two versions were distributed to 396 English learners. The respondents were asked to answer the questions based on their use of metacognitive reading strategies in their L1 and another in their L2. The results reveal a strong relationship between metacognitive reading strategies and learners' self-assessment of English reading ability. Findings also indicate that those with lower levels of reading ability use fewer metacognitive reading strategies.

According to Baker and Brown (1984), to comprehend what one is reading, reading strategies might help in dealing with learning, such as resourcing, deduction, grouping, note-taking, translation and elaboration. Metacognitive strategies are used to monitor or

regulate cognitive strategies, which include checking the outcome of any attempt to solve a problem, planning one's own next move, monitoring the effectiveness of any attempted action, revising, and evaluating one's strategies for learning. Researchers especially focus on identifying the strategies used by high-proficiency readers. Garner (1985) says that this kind of research has been useful to instruct non-proficient first as well as second language learners to increase their awareness of using reading strategies and then improve their reading comprehension proficiency.

Oxford (1990) explains that metacognitive strategies, such as setting goals, planning for a language task and considering the purpose of a language task help learners arrange as well as plan for their language learning in an efficient way.

Mokhtari & Sheorey (2002) through their developed survey of reading strategies try to examine the differences in reading strategy usage between native speakers and non-native speakers of English, find out that ESL students report a higher use of strategies particularly support reading strategies than the native speaker students. That means they need some other mechanisms to comprehend the text such as using a dictionary or underlying textual information. Mokhtari & Sheorey (2002) add that students who report themselves as having a higher level of reading ability are found to use a higher frequency of reading strategies than those readers who give themselves a lower rating.

Meniado (2016) finds out that the selected sixty male students fairly use the different metacognitive reading strategies when reading academic texts particularly the Problem-Solving Strategies which is the most frequently used rather than the other two strategies, global and support strategies.

ALebenazer (2007) conducts a study on trainee teachers' metacognitive awareness of reading strategies to determine the patterns of awareness and application of metacognitive reading comprehension strategies by proficient and less proficient readers. The study is based on a qualitative case-study design. Five different instruments are used in order to answer the research questions; Survey of Reading Strategies, prior knowledge, verbal report data, think aloud protocol, interview and comprehension test. Findings of the study show that there is a significant difference in strategy use among the proficient readers. It is found that the less proficient readers lack procedural and conditional knowledge in using the strategies to aid their comprehension.

On the other hand, Farahian (2016) conducts another case study on 25 (EFL) poor readers who are selected to investigate the reading difficulty of some foreign language (FL) learners who are unsuccessful at English reading comprehension. Through a purposive sampling and questionnaire plus interviews, data shows that the majority of the participants lack or are not aware of the metacognitive awareness necessary for efficient reading (p.272). Findings reveal that since students of foreign language are too much concerned with the language itself, they are not aware of metacognitive strategies.

In an attempt to identify the teachers' awareness regarding the use of metacognitive reading strategies by their high school students, Garmabi & Zareian (2016) work on to examine the teachers' attitudes towards the effectiveness of reading metacognitive strategies which are used by high school students. The participants are 91 teachers holding BA and MA degrees who have an experience of teaching English at different high schools of three Cities in Iran. In order to investigate the teachers' attitudes toward the effectiveness of reading metacognitive strategy use, the participants are asked to complete 34 item thesis questionnaires. The findings show that although teachers

holding MA and BA degrees have the same attitudes about pre-reading metacognitive strategies, they have significantly different attitudes about reading and post-reading metacognitive strategies which are reflected in their teaching styles as well.

Parera (2006) conducts a small-scale study of three educated readers to contribute to the exploration of the process of reading literary texts in a foreign language. Different data collections instruments are used; think-aloud procedure and interviews. Results reveal that the use of a great variety of cognitive, support and metacognitive strategies are less frequent or even disappeared. The study shows that each reader uses different strategies to comprehend the literary text.

Ghezlou, Kordi & Nasrabady (2014) study the exploration of gender differences in Iranian EFL learners from three perspectives; reading strategy use, reading self-efficacy, and their perceptual learning styles. The sample was 127 sophomore English majors who were randomly selected comprising 65 males and 62 females who were given three questionnaires including; Reading Strategy Use Questionnaire, Reading Self-efficacy Questionnaire, and Perceptual Learning Style Questionnaire. Findings indicate that there is no significant difference between female and male participants on compensation reading strategy and perceptual learning styles. Gender, however, proved to play a prominent role in the Iranian EFL learners' metacognitive reading strategy use and their perceived self-efficacy, but has no significant influence on the performance of Iranian high intermediate EFL learners.

2.3.11 Reading Strategies among EFL Students in Arab Countries:

Reading comprehension is a key issue in learning English as a foreign language, and it is critical that teachers determine the reading strategies use in reading classes in order to help students enhance their comprehension.

In a Moroccan EFL learning context, Msaddek (2016) carries on a quasi-experimental study to find out the impact of explicit metacognitive reading strategy instruction (RSI) of the learners' strategy use and reading achievement. A total of 113 participants were selected as an attempt to reveal the perceived correlation existing among the variables of strategy training, strategy use and reading achievement. The elicited data were collected by means of the reading comprehension texts, 'self-report questionnaire' and reading comprehension tests (e.g., pre-test, post-test). The findings show that reading strategy training is found to be an effective medium of enhancing the learners' reading potential as the experimental group reflects a more significant improvement at the level of strategy usage and reading performance than their counterpart, the control group do at post-testing.

However, to apply pre-reading strategies, the question might be raised. Al-Rasheed (2014) conducts a quasi-experimental study to focus on the use of pre-reading strategies. She tries to investigate the use of two pre-reading strategies on Saudi EFL students' performance in enhancing reading comprehension ability. The sample was 46 students at tertiary level in a Saudi college. Twenty three of the students were assigned to the first experimental group that received one pre-reading strategy (vocabulary pre-teaching) while the remaining 23 students received another pre-reading strategy (pre-questioning). Students in both groups were asked to apply the pre-reading strategy and read a passage as a first step, followed by answering comprehension questions. Results indicate that there are no statistically significant differences between the two groups which mean that the use of prior knowledge and schema shows no influence on the students' cognitive reading strategies.

In another Jordanian study, Alghazo (2016) investigates the effect of metcognitive strategies on reading comprehension among Jordanian university students using explicit

instructions. The participants comprised of two classes of English Course, Level one with 60 students (30 in the control group and 30 in the experimental group). According to the placement test of English language, the scores showed that the students had low proficiency in English. Three instruments were used to answer the questions of the study, an achievement reading comprehension test is used as a pre-test and a post-test to both: the experimental and the control group with some modification. The results reveal that the post-test scores of the experimental group are significantly higher than those of the control group. This means that teaching students reading on the basis of the metacognitive strategies instructions is effective to improve the students' reading comprehension ability and enhance their vocabulary.

In Palestinian study to investigate the relationship between the perceptual learning styles and the most strategies used, Jhaish (2012) discovers that the Palestinian EFL learners prefer kinesthetic, tactile and group learning styles respectively which all fall under the major learning styles category. Then under the minor category, they prefer the visual and auditory. The least preferred learning style is individual which falls under negligible learning style category. He also finds that the Palestinian EFL learners use at the first rank, the metacognitive and then the compensation strategies. With respect to gender, he finds that there are no significant differences between male and female in all domains of strategy use, and the total degree of the domains, except Compensation Strategies towards male.

Similarly, Meniado (2016) examines if there is any relationship between and among metacognitive reading strategies, reading motivation, and reading comprehension performance in which there is no strong culture for reading. He as well tries to determine the level of awareness and use of metacognitive reading strategies of the

participants when they read English academic texts, their level of motivation and reading interests, as well as their overall reading performance. Using descriptive survey and descriptive correlational methods with 60 randomly selected Saudi undergraduate EFL students; the results indicate that the students fairly use the different metacognitive reading strategies when reading academic texts. The Problem-Solving Strategies (PROB) is the most frequently used among three categories of metacognitive reading strategies. It is also seen that the learners have high motivation to read in which they particularly like to read humor/comic books. On the level of reading comprehension performance, the respondents perform below average. The findings of this study interestingly contradict previous findings of most studies, as the results show that there is no correlation between metacognitive reading strategies and reading comprehension and there is no relationship between motivation and reading comprehension. However, it is found that there is positive correlation between reading strategies and reading motivation (p.117).

Elkoumy (2004) reviews the recent theoretical and empirical literature relevant to metacognition and reading comprehension. He recommends that English language teachers are in urgent need to develop their students' self-efficacy, build their background knowledge, learn about text structures, be trained how to use reading strategies in everyday lessons, encouraged to prepare for, monitor, and assess their own reading comprehension, as well as enhance a supportive environment of independent and collaborative learning at the end of every reading lesson. (p.69)

2.3.12 Reading Strategies among EFL Students in Different Countries:

Great attention has been paid to reading strategies in English foreign language learning in different countries. Zare-ee (2007) conducted a study to find out the overall

frequency of reading strategy use and how the use of these strategies differs according to gender among Iranian students. The study tries to explore the relationship between reading strategy use and reading comprehension achievement. Eighty Iranian EFL learners were selected through cluster random sampling to participate in the study. The findings of the study indicate that Iranian EFL learners can be classified as average strategy users and that there is no significant difference in the use of reading strategies between male and female EFL learners. It also shows that the use of reading strategies have a strong positive relationship with reading comprehension achievement among the Iranian EFL learners.

On one hand, Fan (2010) investigates the effect of Collaborative Strategic Reading (CSR) on Taiwanese university students' reading comprehension. The sample comprises of 110 students from two classes who had low-intermediate to intermediate level of English. The findings indicate that CSR have a positive effect on the Taiwanese university learners' reading comprehension particularly in relation to the comprehension questions on skimming and scanning. The findings of the study suggest that implementing comprehension strategy instruction for one semester may is necessary to help learners apply some strategic reading behaviors, but it takes long-term hard work and practices for EFL learners to completely construct their strategic reading abilities.

Lai & Luo (2008) conducts a case study on two Taiwanese EFL learners in order to examine their use and understanding of reading strategies during reading. Results show that the struggling readers need to be trained constantly by providing them with a systematic reading strategy instruction which help those readers apply metacognitive strategies to comprehend English texts. For proficient readers, teachers are

recommended to opt various reading materials which go along with the readers' proficiency level.

Abdulmajid (2004) conducts a qualitative case study to determine the influence of adult learners' characteristics which are self-concept, experience and time perspective on their choice and use of the academic reading strategies. Based on student diaries, participant observations and think aloud protocols to gather data, findings show that proficient readers are more self-directing in which they use the metacognitive strategies. They succeed to make meaningful connections between the content and their experiences, in contrast to the less proficient readers who are extrinsically-driven and are unable to make connections. Analyzing the cognitive strategies, the successful readers find to set purpose before reading and scan the text.

In an experimental study to examine the effect of online reading strategies and learning styles on student academic achievement, Hsieh and Dwyer (2009) explore that reading strategies can be applied in web-based or online learning environments to support students with different learning styles for processing information. The study selects three reading strategies; rereading strategy, keyword strategy, and question and answer strategy. Results show that these three strategies, when implemented on the web, have a great improvement on reading comprehension among students. The study recommends enhancing reading strategies online for before and after students learning processes to foster their reading performance results. However, students seem to need to be directed when coming to do reading tasks. Medina (2012) suggests that strategy instruction can be beneficial in an EFL reading comprehension. In a case study, results show that those students who have received reading strategy instruction have become more self-confident and motivated and considerably they use dictionary less (p.79).

In an investigation into the reading strategy use of Turkish EFL prep-class students, Yukselir (2014) states that students tend to report use of about fourteen reading strategies with great frequency. The same study finds another significant difference in using reading strategies in terms of the students' gender and department differences. As for the gender differences, there is no differences between female and male learners in using reading strategies while it is proven that there are differences in using reading strategies from the perspective of their different majors.

Some other psychological perspectives might have influenced the students' use of strategies in reading. Lien (2011) investigates EFL learners' reading strategies use in relation to reading anxiety and gender. Two instruments were applied on the sample who was one hundred and eight EFL college freshmen. They are; a survey of Foreign Language Reading Anxiety Scale (FLRAS), and a modified Survey of Reading Strategies (SORS) which were answered by the sample after eighteen weeks of participation in extensive reading. The results show a negative correlation between reading anxiety and reading strategies. In other words, it is revealed that EFL learners with low anxiety levels tend to use general reading strategies such as guessing, while EFL learners with high anxiety levels make use of basic support mechanisms, such as translation, to help them understand texts. Some reading strategies are more used by high-anxiety level readers than low-anxiety level readers. Additionally, with respect to gender; it is revealed that females tend to be somewhat more anxious than males in doing reading tasks.

2.3.13 Reading Strategies and Reading Comprehension:

The literature on reading strategies emerged from a concern for examining the relationship between them and reading comprehension. Alsamadani (2009) investigates

the rappot between the EFL college students' reading strategies and their EFL reading comprehension. The results show that EFL learners in Saudi Arabia show significantly more perceived use of planning strategies than monitoring and evaluating strategies. Alsamadani points out that the most vital important factor which affects the learners' reading comprehension is the perceived environment around them. However, findings of the study display no significant relationship between Saudi EFL learners' comprehension level and their use of reading strategies. Alsamadani concludes in his study that there might be other factors which might affect the reading comprehension of the students rather than reading strategies. These factors can be their appropriate schemata knowledge, purpose or enthusiasm for reading, intensity of vocabulary and the allocated time given on a task.

Phakiti (2006) examines the nature of cognitive and metacognitive strategies and their direct and indirect relationships to English as a foreign language (EFL) reading test performance, employing the structural equation modeling (SEM) approach. Cognitive strategies are classified into (comprehending, retrieval and memory strategies) and metacognitive strategies are classified into (planning, monitoring and evaluating strategies). The sample was 358 students who took a reading comprehension test and answered a questionnaire on their strategy use. The results show that: (1) EFL reading test performance is enhanced by memory and retrieval strategies via comprehending strategies; (2) monitoring strategies achieve an executive function on memory strategies, whereas evaluating strategies regulate retrieval strategies; (3) planning strategies regulate cognitive strategies via monitoring and evaluating strategies only, but not memory, retrieval or comprehending strategies; and (4) only comprehending strategies are found to directly influence EFL reading test performance.

Zare-ee (2007) explores the relationship between the use of cognitive and metacognitive reading strategy use among EFL learners with respect to their reading comprehension ability. The results show that the test-takers use metacognitive strategies more than cognitive strategies. In addition, the findings indicate that the use of cognitive and, particularly, the use of metacognitive strategies can account for variation on language test performance across different achievement groups. In other words, results show that there is a significant correlation between level of success and use of metacognitive strategies and gender does not have a critical role in the use of cognitive or metacognitive strategies.

Zhang, Goh & Kunnan (2014) study the correlation between the test-takers' strategy use and the instructions given to them on the strategy use and whether they can influence test takers' reading performance. There are two majors instruments used in the study: the reading strategy use questionnaire and the reading subtest (the unitary model, the high-order model & correlated model). The results show that the function of test-takers' strategy use appears to be limited which requires teachers' to make more efforts to enhance students' language proficiency on one hand, and the students need to improve their comprehensive language ability on another hand.

Mijuškovic (2014) investigates the level of reading proficiency of university students of English as a foreign language as well as the metacognitive strategies used by students and the teachers' ways of teaching and acquiring this skill. The participants included in the study are 3 university teachers of textual analysis and 65 university students of EFL, divided into three experimental and three control groups. Detailed research data was collected by means of quantitative analysis of tools including a reading comprehension post-test and a metacognitive strategy questionnaire for students

and a metacognitive strategy questionnaire for teachers. The results of the study reveal that the experimental groups achieve better results in their reading comprehension post-test than the control groups. Also, the experimental groups use more metacognitive strategies than do the control groups. When it comes to the teachers' questionnaire, it is found out they pay particular attention to metacognitive strategy instruction.

Among reading strategies which are suggested to be taught to EFL learners in reading classrooms, there is a term called 'Critical Pedagogy' which was analyzed in Barjesteh et al (2013) study. The critical pedagogy depends on Watson–Glaser Critical Thinking Appraisal-Form A (Watson and Glaser, 2002). The Watson-Glaser critical Thinking Appraisal comprises five subsections which practically measure the five aspects of critical thinking as defined by Watson and Glaser (2002): drawing inferences based on factual statements; recognition of assumptions in a number of assertive statements; making deductions to determine if conclusions follow from information in given statements; interpreting evidence to decide if conclusions are legitimate or not; evaluating arguments as being strong or weak.

Most researchers assert the necessity of teaching effective reading strategies to students so that EFL readers can enhance their reading performance. By understanding what are the best strategies in reading, getting explicit instruction in using them and learning to monitor and check their comprehension while reading, readers can become expert readers of whole text. Thus, the improvement of reading comprehension among EFL students is highly dependent of learning what strategies are and how they can be used and evaluated.

Section 2.4 Learning Culture: Theoretical Background

This section explains theoretical background about culture and different aspects of it particularly in the learning field. It presents definitions of culture, dimensions of learning culture, culturally responsive pedagogy, culture levels, culture and learning styles, sociocultural theory and the major reasons students' native culture as a resource in the EFL Classroom. The second part of this section presents the previous studies which are related to learning culture in EFL classrooms especially EFL reading classes.

2.4.1 Definitions of Culture:

The term 'culture' generally refers to 'the constantly modified values, traditions, ethical, social and political relationships and worldview formed, shared and transformed by a group of people bound together by a mixture of factors that can include a common history, geographic location, language, social class and religion (Neieto, 2010:136), while Bowers (1992) defines 'Culture' as; *'an inherited wealth in which all can share, but it is passed on to us from different sources, and we share it in different parts with different groups to which we belong'* (p.31).

Similarly, Moule (2012) states that

> *'culture is composed of traditional ideas and related values; it is learned, shared, and transmitted from one generation to the next; and it organizes and helps interpret life.' (p.90)*

According to Hinkel (1999:1), 'culture' has diverse and disparate definitions that deal with forms of speech acts, rhetorical structure of text, social organization and knowledge constructs. Hinkel states that culture also can be identified with norms of personal space, appropriate gestures and time. Culture is part of communicative competence which is divided into five aspects; grammatical, sociolinguistic, discourse,

and strategic and intercultural competence. The later concept is related to society effectiveness and appropriateness (Hinkel, 1999).

Cortazzi & Jin, cited in Hinkel 1999, give different meanings for the term 'culture'. One of these meanings is dealt with some language teachers who use the term to refer to cultural products such as literary works. Others use it to refer to background information like historical facts or geography of countries where the target language is spoken. The term 'culture' includes behavior and attitudes, the social knowledge that people use to interpret experience. Cortazzi & Jin think of another concept of culture can be seen as the framework of assumptions, ideas, and beliefs that are used to explain other people's actions, words and patterns of thinking.

2.4.2 Learning Culture:

Coming to define culture in learning context, Neieto (2010) confirms on two issues which should be kept in mind if culture is to have any meaning for educators and instructors who want to understand how it is related to learning. The sociopolitical context of culture needs to be acknowledged. That is, cultures do not exist randomly, but rather are situated in certain historical, social, political, and economic conditions, and therefore they are influenced by issues of power. In foreign language classrooms, learners should be aware of different cultural frameworks, both their own and those of others to be able to deal with any situation in the target language and not interpret it through their own cultural system (Cortazzi & Jin, 1999).

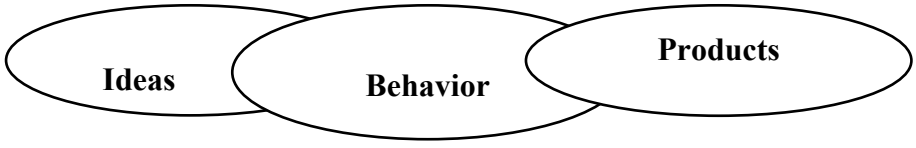
Culture has been categorized into two general types: big “C” culture and little “c” culture (Lee 2009; Peterson, 2004). Lee (2009) defines culture with “Big C” culture as “*the culture which represents a set of facts and statistics relating to the arts, history, geography, business, education, festivals and traditions of a target speech society.”*

Likewise, Peterson (2004), argues that the culture relating to grand themes, is classified under big “C” culture which includes the following themes such as geography, architecture, classical music, literature, political issues, society's norms, legal foundation, core values, history, and cognitive processes. On the other hand, Tomalin & Stempleski (1993) describe 'Big C' as 'achievement culture', but little 'c' as 'behavior culture' which has been broadened to include culturally-influenced beliefs and perceptions especially as expressed through language.

The little ‘c’ culture, according to Lee (2009:78), includes the routine aspects of life and encompasses everything as a total way of life. This type of culture is “the invisible and deeper sense of a target culture” including attitudes or beliefs and assumptions. Peterson (2004) refers to little “c” culture as the culture related to common or minor themes. It includes themes such as opinions, viewpoints, preferences or tastes, gestures, body posture, use of space, clothing styles, food, hobbies, popular music, and popular issues, and certain knowledge like, trivia, facts, etc.

Coming to the learning context, Robinson (1988) reports that teachers answered to the question 'what does culture mean to you?' and divided it into 3 interrelated categories; products, ideas and behaviors.

Referring to the 'little c' as 'behavior culture' in EFL classrooms, it can be shown in the following diagram.



Tomalin & Stempleski (1993) points out that when they, as teachers, apply a co-operative learning task with their students whom find it the most exciting and most absorbing parts in their language lesson. Students are instructed to work together and

share and discuss what they have discovered. They interpret the information within the context of the target culture and in comparison with their own culture. Subsequently, Tomalin & Stempleski conclude that teaching culture with a task-oriented and cooperative learning approach adds a new dimension of achievement and understanding for the students and even for teachers (1993).

Culture, as Moule explains, is the stuff that human paradigms are made of. It provides their content: beliefs, values, norms, expectation and behavior. Culture of learning is a determining factor on what happens in language classrooms and what is judged to be successful language learning. It is an important part of the ideological model of what teachers and learners expect from each other. Cortazzi & Jin define the term 'culture of learning' as a behavior in language classrooms which is set within taken-for-granted frameworks of expectations, attitudes, values and beliefs about what constitutes good learning in different aspects. It centralizes on how to teach or learn, whether and how to ask questions, what textbooks are for, and how language teaching relates to broader issues of the nature and purpose of education.

Since culture is an extensive concept which incorporates many aspects of life, it is difficult to define every aspect of it. Therefore, this part of study will limit itself only on learning culture context in EFL classrooms.

2.4.3 Dimensions or Elements of Culture:

There is a set of culture dimensions along which cultures can differ. The content and specifics of each dimension vary from culture to culture. Moule clarifies that certain cultures share a number of dimensions; however, each culture generates a unique experience of living. In educational and learning situations, the same thing occurs in which the quality of life differs in tone, mood and intensity.

Elements of culture refer to things like the beliefs, values, customs, products, and the communication styles of a given culture or society (Cohen et al., 2003). The *Standards for Foreign Language Learning* (NSFLEP 1999) provides a framework for students to integrate "the philosophical perspectives, the behavioral practices, and the products—both tangible and intangible—of a society" (47). This has become known as the 3P model of culture:

- **Perspectives** (what members of a cul-ture think, feel, and value)
- **Practices** (how members communicate and interact with one another)
- **Products** (technology, music, art, food, literature, etc.; the things members of a group create, share, and transmit to the next generation)

Cohen et al. (2003) make clear that while *products* may be easy to identify because we can often see, touch, taste, or hear them, *perspectives* and *practices* are not as easily recognized because they tend to be deep-rooted in a society. Brooks (1968) makes a - distinction between "formal culture" (literature, fine arts, history, etc.) and "deep culture" (patterns of social interactions, values, attitudes, etc.). Like products, the elements of formal culture are easily observable across cultures. However elements of deep culture are often difficult to identify, as they tend to be worth-based and deeply rooted in the psyches of group members who make up and share a particular culture.

An analogy by Edward T. Hall (1976) can help EFL students conceptualize the elements of culture called "cultural iceberg". Hall develops the analogy to illustrate differences between what we readily see when we enter a new culture (the tip of the iceberg) and the implied aspects of the culture not readily visible (the submerged part of the iceberg). The products of a culture would be examples of things we can readily

see—the surface culture— while cultural practices and social perspectives would be examples of things integrated in society-the deep culture.

Edward T. Hall (1976) "Cultural Iceberg" Analogy

2.4.4 Dimensions of Culture in EFL Classrooms:

As mentioned earlier, Robinson (1988) categorizes culture into three points; ideas, behaviors and products. He states that 'behaviors' and 'products' reflect a notion of culture as observable phenomena, while the category 'ideas' reflects a notion of culture as an internal and not observable thing. Ideas include attitudes, beliefs, values and institutions. Behavior includes language, gestures, customs or habits and foods. Products, in learning situation, are reflected in literature, folkore, art, music and artifacts. In EFL learning context, ideas are attitudes which learners have regarding the whole learning situation. Behavior is the gestures, habits and relationship between teacher and students, while products include the content of English materials and the activities in. The current study relies on these three categories in which the cultural scale is arranged.

- **Behavior:**

This is one of the aspects of culture which is visible. It applies to sociocultural beliefs and assumptions that most people are not even aware of and cannot examine intellectually. Since language and culture are strictly intertwined, our culture affects the way we make sentences and the way we interpret the meaning. In classrooms, roles of students and teachers are defined by the socio-cultural values of the society. In Middle East countries, learning exposes the student-teacher interaction. Students believe that the teacher has completely authority for everything in class and they have no right to speak up or interpret the teacher. In the sociocultural perspective of the classroom environment, the language use of the pupils and the teacher both reflect and construct the social environment (Ulaywi & Khairi, 2013:146).

In EFL classroom contexts, students' language learning happens whenever the culture of learning has been displayed giving students opportunities to think about it and sometimes engage in it. Part of the acquired culture, students' learning behaviors play an essential role in learning a foreign language with its culture. The student's learning behaviors are principally shaped by their pre-existing attitudes, values, and beliefs about what constitutes good learning and effective teaching which make specific cultural properties (Cortazzi, & Jin, 1996).

As for teachers, the fundamental values and tradition in an eastern society resulted in the beliefs such as teachers can do no wrong and the principles of total obedience (Liando, 2010). The actions teachers performed while teaching in class would give positive or negative impact on the students; such as motivating or de-motivating them. Liando (2010) argues in her study that teachers' behaviors and their responsibility could go beyond school walls in which teachers were often considered as role models and

were highly respected figures in the society. In fact, it imposes much pressure on to the teachers in carrying out their duties (Liando, 2010:134).

Coming to the behavior of students, for example in an Asian or Arabic cultural setting, students tend to be familiarized with a particular culture of learning in which teacher's authority is the first judge. The classroom is teacher-centered while students are silent. Liu (2001) points out that teachers' role is to transmit knowledge to learners while students only listen and take notes and very rarely seek clarification. They are not familiar with the principles of communicative approach which depends on interaction and between teacher and students and among students themselves (Liu, 2001).

- **Attitudes:**

Attitudes play an essential role towards our perceptions of this world. Researchers have defined attitudes as social and behavioral product. Others define it as a mentalist view based on cognitive aspect. Attitude of learners towards the target language; the target language's culture; the social value of learning the target language; particular uses of the target language; and themselves as members of their own culture will have either a positive or negative influence on the learner's desire and hence, their ability to achieve proficiency in the TL (Scarcella & Oxford, 1992).

Attitude may also be described as a conceptual unit which is realized in the form of behavior. Attitude not only predicts behavioral patterns (Speilberger, 2004, cited in Jabeen & Shah, 2011), it also causes various signs of behavior. And one of these signs is realized in the form of culture. Effectively attitude and culture are mutually dependent terms. Paige et al. (2003) define culture in terms of positive or negative attitude. But we must not delimit culture to attitudes only as culture is a term made up of distinct structure. Hinkel (1999) classifies culture with “forms of speech acts, social

organizations, notions of personal liberty [and] appropriate gestures" (p.1) while Kramsch (2003) summarizes it as " a membership in discourse society" (p. 10). So, one way or another every discussion of culture is correlated with some aspect of attitude whether it is social, emotional or mental.

- **Products (cultural content):**

Products, in learning situation, are reflected in literature, folkore, art, music and artifacts and cultural activities in EFL textbooks. Haokip (2003) indicates that EFL classrooms should include language and culture. The content of English textbooks has to expose not only the target culture, but also the native culture of the students. She asserts that providing students an understanding of content is at the heart of all teachings. Students can realize the content of the syllabus when they see their local culture is incorporated. Their fear on worries regarding the difficulties in learning a new language can be controlled, and mostly reduced when they are provided with activities or tasks from their own culture. The content related to students' culture let them have an awareness of the value of their native culture which make them automatically confident, positive and willing to learn. Including the students' native culture in the syllabus of English textbooks reflects a culturally responsive pedagogy.

2.4.5 Culturally Responsive Pedagogy:

Culturally Responsive Pedagogy is an approach which emphasizes the importance of incorporating students' cultural references in all aspects of learning. It is essential to relate language learning to the cultural background of learners. Neito (2010) asserts that students of particular backgrounds may be thought of as walking incorporation of specific cultural values and behaviors, with no individual personalities and perspectives of their own (p. 153). In Yemeni EFL learning context, most of the students belong to

the same culture which means the students in this case will be exposed to an essentialist notion of culture that assumes that all students from the same cultural background will be receive learning in the same way.

Neito (2010) claims that the multifaceted, contested and complicated nature of culture has not been taken into consideration in this approach elaborately. On the other hand, it is safe to say that this pedagogy may not be convenient in multicultural classrooms in which the diversity of individual students' experiences and identities may be overlooked or not applied on each individual.

Hesar, Konca & Zarfsaz (2012) explain that culture as an integrative part of language is neglected or deliberately ignored in EFL classes. However, learning a foreign language does not just mean to acquire the structure of the language and how to use language skills perfectly, but how explicitly and implicitly address cultural elements in which learners are pushed to react within the new culture while maintaining their own culture. The main goal of culturally responsive pedagogy is student's academic success. To achieve the goal, teachers can apply technology to their classes. Using technology in EFL classes in order to reveal learners' native culture would create opportunities for them to talk about their culture with others. Teachers can use different tools of reflecting-culture as a means of showing care and interest in students' culture.

With the help of today's technology, teachers can be culturally responsive by fostering the use of culture- reflecting technology like Microsoft movie maker and photo story. A good acculturation in EFL classrooms needs 'cultural scaffolding' which means to let students share their own cultures and experiences. A teacher has to be culturally responsive to the students needs, interests, learning preferences and abilities (Hasar et al , 2012:70). Incorporating one's culture in EFL classrooms can be done through different

tasks like (celebrating national holidays, listening to students personal stories and exchanging experiences).

2.4.6 Culture Levels:

In his essay 'Memories, metaphors, maxis and myths: language learning and cultural awareness', Bowers (1992) points out that there are three levels of cultural engagement**.** At the *international* level, Bowers argues that English is essentially a culture in which it is the medium for subcultures which cut across national and political boundaries. Furthermore, English is the most widespread first foreign language in primary and secondary education throughout Europe and overseas as a result of its universal functional value. Bowers confirms that English is culture, for example, when computer programmers use English, they do so not because of political tendencies or beliefs, but because English is the default medium of the information technology (IT) world. He sets another example of a Taiwanese businessman and a Brazilian manager who converse in English. These two nationalities make no statements about their cultural and linguistic orientations; but they choose often to use a third and common language rather than to communicate through interpreters for sound business reasons or for their own personal comfort and confidence.

The second level, explained by Bowers, is 'the *European* context'. Bowers highlights that English stands alongside the other languages of the widening community as part of that community's cultural heritage. It has to be recognized that the dominance of English and the other 'major' languages in Europe at the first (acultural) level operates against their capacity to adopt an appropriate position within a multilinguistic and multicultural community, hence, the term "*Lingua* programme' has been formed.

The *Lingua* program seeks to promote structured learning experience in another culture abroad where the target language, often a minority language, is spoken (Bowers, 1992).

The third level, set by Bowers, is the '*national* culture', where it is in the interests of a community to promote its own cultural accomplishments and values through its own language or languages. These are at the same time a vehicle for wider cultural expression and also through their literature one of that culture's primary achievements. Wherever English is taught, therefore, the teacher, the learner, and the sponsors of the educational process may be operating simultaneously at all three levels, with different intentions and expectations (Bowers, 1992).

2.4.7 Culture and Learning styles:

The preliminary research undertaken by Reid (1987), demonstrates the ways in which sensory mode dominance varies with native language background pointing to the possible influence of culture on learning style. Reid highlights that there is a possible relationship between learning style in learning a native language such as visual style and culture.

Some students give culturally specific reasons for their choice of learning style, as well as their choice of preferred learning method. Similar to the results on personality as outlined above, the existing literature supports the belief that cultural beliefs and backgrounds may affect the way people prefer to learn or process information (Barmeyer, 2004; Earley & Ang 2003). Barmeyer (2004), for example, finds that ―persons from different cultural backgrounds, such as the French, the German and the Quebecois, may differ in the way they think and act (p. 591); he concludes that for optimal learning progress, instructors need to understand their students' learning styles and their culture (p. 579).

In the same wave to elicit students' learning styles among Saudi EFL learners, Alqahtani (2011) finds that Arab students' perceptions of their learning styles are affected by their personality types, cultural beliefs, and teacher's teaching style.

This study focuses on culture as it applies to language learning and language pedagogy. The notion of culture is united with social norms, worldview, beliefs, assumptions and value system which many of them affect second or foreign language use, teaching and learning.

2.4.8 Culture & First Language:

The integration of language with culture and influence of thinking was first proposed by an American linguist and anthropologist, Edward Sapir (1884-1939) and his student, Benjamin Whorf (1897-1941). Sapir & Whorf argue that language determines thought. They state that the way we think and view the world is determined by our language.

The Sapir-Whorf theory, named after the American linguists Edward Sapir, and Benjamin Whorf, is a mold theory of language. Sapir (1958) argues that human beings do not live in this objective world alone, but they live within a particular language which is the means of communication in a society. Sapir declares that each society develops its own language created by its group. He emphasized that there are no two languages which are satisfactorily similar to be considered as representing the same social reality. They believe that we see and hear the way we do because of the habits and interpretations of our language (Sapir, 1958:69). Whorf, Sapir's student, 1930s extends the idea when he argues that the way people think is strongly affected by their native languages. In other words, Sapir & Whorf believe that any thought by an individual in his native language cannot be understood by those who live in another world. Though

neither of Sapir or Whorf formally wrote their hypothesis, but their writings have been studied thoroughly. Accordingly, researchers have found two main ideas. Orwels (1984) summarizes the strong version as well as the weak one of the Sapir-Whorf hypothesis. The strong version suggests that the language an individual speaks determines the way he/she will interpret the world around oneself which refers to as ‘linguistic determinism’. Sapir explains that the individual is unconscious of the connection between language and culture and he is subjected to it without choice. The weaker version of linguistic relativity has devised by Whorf, Sapir's student. He claims that human beings are introduced to a new principle of relativity, which holds that all observers are not led by the same physical evidence to the same picture of the universe.

This hypothesis is now believed by most linguists only in the weak sense that language can have some small effect on thought due to the vigorous attack from followers of Noam Chomsky in the following decades (Nunan, 2010). The Chomsky theory explains another aspect of language learning based on the question 'how should we teach young children to learn a language?’ or how do we learn our native language?

According to Chomsky (1986), one of the fundamental aspects of human language is its creative nature. An individual can create a limitless number of sentences that have never been produced in the world before and can produce them in the correct way. Chomsky says that the ordinary child can produce great linguistic accomplishments without being influenced by any kind of input from the environment around. Chomsky believes that human beings are born with the basic rules for language intact which make them ready to learn. Children hear only a limited body of speech, much of which is poorly formed, yet they quickly and regularly develop a complicated system of rules for creating an unlimited number of sentences and phrases. Chomsky (1986) argues that

children extend their knowledge far beyond their experience. He explains that something specifically about human language must be innate or natural—that is, available to us by virtue of being human, specified somehow in our genetic structure.

Chomsky believes that experience of one's culture and language does not fill a blank slate, but instead interacts with the innate properties to form "competence" in these different systems of knowledge. Therefore, Wen (2013) comments on parents who have high expectations of their young children, such as Chinese parents, don't need to push their children too hard by engaging them with many training classes or rote learning practices for language skills. On one hand, following Chomsky's theory, Wen (2013) concludes that children have an innate ability to acquire a language and it is not something they can inject into the children with later efforts. Wen concludes that experience of life and culture of the language to acquire is as important as the innate ability for language development. In brief, as Chomsky states, children would pick up the language naturally and practically if they are given the opportunity to try and experience life and culture that interacts with or sparks the innate properties of language acquisition. In other words, Stark (1998) states that, according to Chomsky, a human being can make judgments because he or she possesses an abstract system of unconscious knowledge about his or her language. Chomsky adds that this system of knowledge includes knowledge about sentence structure, word order, meaning and sounds. Chomsky answers the question 'how does a child learn his native language?' by stating that it is not likely that parents explicitly teach kids these rules in cradle. Despite of the abstractness of the rules and the complexity of the samples of languages, Chomsky confirms that there is something specifically about human language which must be innate and available to us by virtue of human being that helps us learn our native language or any other language.

Although researchers and scholars have different views about the extent to which language and culture influence each other, yet today, most researchers acknowledge that both nature and nurture play a role in language acquisition. The behaviorist B.F. Skinner (1904 – 1990) is one of the prominent exponents of this attitude. He thinks that the learners of a particular language acquire words by associating sounds with objects, actions, and events. They also learn words and syntax by imitating others. Children learn language and acquire its skills through contact and interaction with adults of the same culture rather than instinctively and automatically. They acquire it, therefore, in a social and cultural context.

2.4.9 Culture and Second/Foreign Language Acquisition:

A vast amount of research on culture in second language acquisition within and across various perspectives has thus far been conducted. Different models, frameworks, concepts, and aspects of culture can be found. With respect to CALL (Communicative Approach Language Learning), a very small number of studies have thus far been conducted on investigating cultural variables or on incorporating culturally responsive teaching or learning into the CALL context (Brander, 2005). Levy and Stockwell (2006) highlight that the goals of language teaching and learning are changing, which also must be reflected in an increasing focus on culture in language teaching.

One of the language learning theories is Krashens' theory. Krashen formulates a hypothesis in (1985) for using students' culture in the EFL classroom. It is called 'The *Input Hypothesis*', which states simply that a human being acquires (not learns) language by understanding input that is a little beyond his/her current level of (acquired) competence. The Input Hypothesis claims that humans acquire language in only one way -- by understanding messages, or by receiving "Comprehensible Input" (Krashen,

1985:2). Krashen claims that language classrooms help when they are the primary source of comprehensible input.

The Input hypothesis is one of Krashen's hypotheses of language acquisition theories. Krashen (1985:3) indicates that comprehensible input is necessary for acquisition, but it is not sufficient, and that the acquirer needs to be "open" to the input. Krashen conceptualizes a term in human's mind called the ''affective filter''. This affective filter is a mental block that prevents a person from acquiring or fully utilizing from his comprehensible input for language acquisition. Krashen (1985:4) suggests that the filter is lowest when the acquirer is so involved in the message that he temporarily ''forgets'' he is listening to or reading another language. He asserts that,

> *"... Comprehensible input is the essential element for second-language acquisition. All other factors, though to encourage or cause second-language acquisition, work only when they contribute to comprehensible input and/or a low affective filter" (p.4).*

In other words, Krashen wants to say that when we learn our first language, we acquire it as it goes along with us, but when we move onto a second one, it seems there is a barrier. This is partly caused by a change of environment. In our first language we are immersed in the language and so we learn as we go along. In our second language, we are often not immersed – language is pushed to the borders of our life into lessons, revision and so opportunities to learn are reduced. The environment is not the only aspect that changes; however, we also radically change the way we learn a second language – and this is something we can control.

On the relationship between language and culture, Al-Farabi (2015) refers to this relationship with the adjective 'dynamic'. Culture is always at play in language classrooms. The understanding of cultural interference, Al-Farabi points out, in

language learning requires the application of socio-cultural theories rather than cognitive theories. Cognitive theories, therefore, emphasize thinking process occurs in the mind of the individual and socio-cultural theories highlight the ongoing relationship between thinking and the social, cultural, historical and institutional environment.

In his book *Culture and Second Language Acquisition*, Christopher Spackman, in this respect, states that:

> *'Culture is to humans what water is to fish-that which surrounds us and that we are only aware of when it is gone. Culture as a process undermines the idea that culture can be learned through superficial aspects like food, costume holidays. It is experienced through language, because language is inseparable from culture. Learning a new language while living in the culture involves coming to terms with the new ocean you are swimming in. This is acculturation which can have two meanings. The general meaning is just the process or act of adjusting to a new culture. (2009, pp.3-4)*

Skinner (1904 – 1990) is one of the prominent exponents of this attitude .This is evident when he writes in his book *Are Theories of Learning Necessary*, that *"Language is acquired through principles of conditioning, including association, imitation and reinforcement" (1989:145).*

Skinner, thus, thinks that the learners of a specific language acquire words and sentences through integrating sounds with objects, actions, and events. Children learn language and acquire its skills through contact, imitation and interaction with adults of the same culture rather than instinctively and automatically. It means that learning occurs in a social and cultural context. Therefore, culture, can be said that it is a hidden force that provides meaning, trend and mobilization.

Creating a constructive culture is of a great importance to the success of teaching a foreign language (Mohammed, 2015). He explains that this requires the growth of behaviors that develop a positive culture and discourage ones that would support a defensive culture. In fact, the learners of a second /foreign language may experience what is called “cultural shock”. When a person immigrates, visits a new country, or moves between social environments, he may feel a personal disorientation which is called, according to Macionis and Gerber (2010), cultural shock.

Culture plays an integral part of every human’s life. Al-Farabi (2015) points out that each individual is born in a special cultural context which results in acquiring its different aspects in life. In general terms, culture may be defined as a set of social beliefs, values, religions, trust and ideologies accepted by most members in a social community. Some vital cultural factors or barriers may be observed during the process of language learning which seriously hamper the effective learning process.

He defines cultural barriers as those traditions which become blockages in understanding or teaching/learning different languages, among which body language, religious beliefs, etiquette and social habits are significant. Macionis et al (2010), cited in Mohammed (2015), believe that the acquisition of a foreign language passes through different stages. In the learning situation during the first phase, the learner sees the differences between the native language and the foreign one in a dreamy light. He/she appears fascinated by the new language, and associates with those who speak. Yet, differences start to appear giving way to unpleasant feelings of frustration and anger. Macionis et al (2010) explain that the learner might even perceive the foreign language as strange and offensive to his language and culture. Culture, here, changes into a real

barrier which creates a real challenge to both the teacher and the learner. This barrier sometimes leads to behavioral and psychological negative effects.

Culture associations that are part of language, as well as the socio-cultural background of the participants in teaching and learning environment, ultimately affect how well the language is learnt. This is due to the fact that a part of foreign language learning is rooted in culturally-influenced use of language and sociolinguistic rules that underlie it (Soureshjani, 2013: 85). In other words, cultural influence, use of language and sociolinguistic rules all work together in foreign language learning. Iranian EFL learners have shown an interest in learning culture of target language and felt motivated in doing cultural activities in the foreign language. Similarly, teachers are found to be aware of the importance of teaching culture. Soureshjani recommends that teachers should consider the needs of students in learning the target culture as well as putting in minds the suitable techniques and strategies of the culture learning and teaching. (p.63)

2.4.10 Sociocultural Theory:

This theory is developed by Vygostyks (1978), a Russian theorist. He claims that learning process takes place by the influence of individual's parents, peers and the culture of his society. Cherry (2016) thinks that sociocultural theory means to look at the important contributions in a society which work together for individual development. This theory stresses the interaction and activities between developing people and the culture in which they live which deliberately improve their cognitive and mental growth. It is not only the family and friends who affect the individual's learning but also the cultural beliefs and attitudes in which learning takes place. Vygotsky explains that children are born with basic biological constraints on their minds as well as some tools of intellectual process. These tools refer to culture, which they get exposed to, have

formed their basic mental abilities in a way that is adaptive to the culture in which they live.

This theory urges that culture plays an essential role in individual's learning process in general. It emphasizes the integration of social, cultural and biological elements in learning processes and stresses. Sociocultural theory, according to Aimin (2013), facilitates reflection on some of the problems on second language acquisition from a new perspective. Aimin (2013) applies this theory and comes out with some pedagogical implications in foreign language classrooms. Social interaction and social activities like 'story-telling' and 'think-aloud' as well as 'dynamic assessment' as practical approaches are recommended in EFL classrooms to let language learning to take place.

2.4.11 First Language Interference:

For many years, it has been argued that the interference of the mother tongue is one of the main causes of syntactic errors in adult second language performance (Lado, 1957). Researchers claim that first language influence appears to be strongest in complex word order and in word-for-word translations of phrases. In addition to that, it is found that first language influence is weaker in bound morphology and seems to be strongest in "acquisition poor environment".

Second language learners unintentionally transfer some characteristics of their native language into the target language or try to understand and think about the second language using their first language tools (Ellis, 1994: 51). She refers to interference as ‘transfer’, which she says is 'the influence that the learner’s first language overworks on the learning of a second language'. She argues that in learning a target language, learners depend on their L1 knowledge to facilitate a task in the target language in which they build their own rules of transfer as they become proficient in second language. However,

Carrell (1988) claims that the circumstances of learning a second language are similar to those in the learners' mother tongue. She states that in this case the interference and responses from one language will occur unintentionally in the other language. It shows that L1 knowledge may help in L2 learning process.

2.4.12 Intercultural Dimension:

Learning the second language culture may not be sufficient to learn the target language. Learners need to understand themselves in relation to the learning culture. They need to know how one's own culture shapes perceptions of oneself, of the world, and of their relationship with others. Learners have to realize their own culture in comparison to the target culture. If they only have been taught the values and norms of the target culture, it means they only work on the cultural circle and not the intercultural one. What students know about language and its culture remains external. It is not intended to transform the learners' existing identity, practices, values, attitudes and beliefs (Scarino & Liddicoat, 2009).

Learners of second language need to learn the language interculturally. The student should be engaged in the act of learning. Since all human beings interact with each other and are influenced by their different cultures, their communication also involves accepting the others' culture as well as one's culture. Intercultural learning means not only developing knowledge about the second language and its culture, but also involving learners in communication and relationships between two cultures.

In Byram's Model of Intercultural Communicative Competence (1997), it is explained that foreign language teachers are asked to guide learners through the process of acquiring knowledge in attitudes, knowledge, and skills related to both culture information and practice while using a foreign language. Byram recommends that

teachers must lead students through activities in which attitudes about the “other” are considered, and ideally transform the learner. The aim for the students is to start by questioning in advance their ideas before entering into a process of discovery about the “other” with the intent of becoming more willing to find out and engage with others in order to ultimately experience relationships of reciprocity (Byram, 1997).

Ho (2009) states that intercultural language learning is an interdependence of language and culture which should be given importance in language education. Developing learners’ ability to negotiate meanings across languages and cultures and preparing them for living in a multicultural world is highly promoted. The importance of developing intercultural communicative competence alongside linguistic competence has resulted from learners’ needs for acquiring intercultural skills for cross-cultural communication in which they may encounter linguistic and cultural barriers. EFL teachers therefore need to shift from a traditional attitude to intercultural and linguistic one in order to enhance both linguistic and intercultural competences of learners by developing in them critical cultural awareness of their own world view, behaviors as well as the skills and attitudes to understand and successfully interact with people from other cultures.

In EFL learning situation, intercultural competence should be raised. Baker (2011) explains how implementing intercultural awareness can assist in the development of intercultural awareness in particular environment. He suggests six different elements to do that:

1) **Contextualizing local cultures** – the learner here will start to discover how people of diverse and complex cultures group together, locally and nationally. This allows the learner to be exposed to multi- uttered aspects which identifies the nature of the culture.

2) Elaborating language learning materials – ELT textbooks which illustrate images of different cultures could be an effective practice to illustrate differences in culture.

3) Exploring the traditional media and arts through English – in order to get the learners visualize different aspects of the second language, it is very beneficial to use multi-materials such as newspapers, novels, magazines, and exposure to television and radio.

4) Exploring IT/electronic media through English – resources such as the internet, chat rooms, instant messaging (IM), or group learning are also good sources in helping students acquiring intercultural awareness.

5) Cultural informants – Local and non-local teachers, who have previous experience in intercultural interaction, and with other cultures, can use their experiences as part of a discussion topic in the classroom for example.

6) Face-to-face intercultural communication – students and teachers in a similar way can bring their experiences to share in the classroom to discuss and reflect upon, and therefore express their thoughts.

Baker (2011) concludes that the most crucial elements when exploring culture are in this case, the knowledge, skills, and attitudes anticipated, in intercultural awareness.

2.4.13 Major Reasons for Using Students' Native Culture as a Resource in the EFL Classroom

Abundant examples exist in the previous studies on how familiar schemas facilitate foreign language acquisition and, in particular, comprehension. For instance, Pincas (1963), as cited in Mulugeta (2008), calls for English reading materials to be prepared

on subjects familiar to the learner and set in the learner's native environment. She stresses that this is particularly important for studying English as a lingua franca, in their home environment only.

Mulugeta (2008) explains in her study the essential reasons behind students' preference of using native culture rather than the target culture in EFL classrooms. She relies on the research of schema theory which points to the necessity of using content familiar to students, rather than unfamiliar content to influence student comprehension of a second language. Mulugeta asserts that familiarity in the context refers to schemas based chiefly on the learner's own culture which consequently allows the learners to make efficient use of their top-down processing in helping their bottom-up processing in the handling of reading tasks.

Mulugeta asserts two other factors which foster the use of native culture in foreign language acquisition. They are students' motivation and self-expression. The use of students' native culture provides for them to interact with the learning process and increase their ability in expressing their experience. The students indicated that when their local culture is included in classroom, they feel they have enough ideas to talk about themselves.

On the other hand, Khwaileh (2000:286) discusses that a cultural gap is usually created between the two groups: the teachers and their learners. While it is a problem in ELT especially Arab universities, this gap can be created by the higher status of English as an international language. This situation forces EFL learners to operate in two cultures; their national culture and the target culture.

The first one is their Arab way of life outside their classroom. The second is the way of life of English language usage inside their classroom within the national society. That is to say, those EFL learners go to classrooms to learn English while they belong to their national Arab culture, which is brought to the classroom and which has overlapped with English language culture. Likewise, non-Arab learners need to be incorporated in Arab culture to learn Arabic language. In a study conducted on Non-Arab learners who wish to acquire Arabic, Al-Osaimi & Wedell (2014) indicate to the policies and Saudi Arabia's institutions for teaching Arabic to Non-Arab are impressed by the culture of the university which is part of the wider culture of education of the country. For those non-Arab learners who are Muslim, they need to interact with Arab native speakers to acquire the Arabic language which is the key to learn about Islam. To do so, they need to know about the culture of the Arabic language and culture to be engaged in it (p.7-8).

Learning Culture: Literature Review

2.4.14 Cultural Barriers in EFL Classrooms

To understand learning process, one should deal with questions about the relationship among the learner, the teacher, the context, and the purposes for learning certain knowledge or skills. Pai, Adler & Shadiow, (2006) state that such questions lead to other questions regarding the role of social relationships among a wide range of individuals related to the learning environment relationships among a wide range of individuals related to the learning environment.

According to a study conducted by Philips, 2001, cited in Pai et al, 2006 among Native American and non-Native American youngsters' classroom participation patterns, it was found that Native American children tended to become involved more effectively in classroom activities which did not need a great deal of teacher control on a result of

growing up in a cultural environment in which peer relationships were more important that adult-young relationship. In contrast, the non-native American students interact differently in classroom as they wait for their roles assigned by the teacher. Their participation is limited due to the fact that they grow up with role-differentiated relationships between children and their elders (p. 201).

The concept of social structure is that complex of formal and informal role relationships that exists among students, teachers, counselors, administrators and other school personnel. The social structure in school displays what is its function in society outside the school. It defines and rewards culturally approved values, skills, attitudes as well as opportunities for the young to follow the adults and learn their roles in society (Pai et al, 2006).

In the same wave, Al-Farabi (2015) points out to the cultural problems faced in EFL classrooms. Focusing on grammar translation in exams is considered the first problem. Learning is driven by the exam and students only study for the sake of passing the exam. Under the influence of traditional culture especially when the English teacher is from the same cultural group, less attention is paid for learners to be expressing themselves and be more creative and critical.

The second problem in EFL culture of teaching is teachers' attitude toward communication in classroom. Al-Farabi comments on the Indian teachers, as an example, who feel that communicative methods were good for teaching those students who plan to go to English-speaking countries to live and study, but not for other students of English. They also believe that their traditional methods such as teaching grammar is good to some extent because it provides enough knowledge for living and studying in an English-speaking country and suited their students' purposes (2015).

Third, communication resistance in Asian students is the result of upbringing and educational experiences. Because of social harmony which is one of the key priorities applied firstly in educational environment, Indian children, as an example, are taught not to argue with their seniors or express their own feelings in personal ways. It is considered to be rude to challenge teachers with questions in classroom as well as outside class. Students keep quiet and feel afraid to raise a hand and ask or answer unless permission is given to him by his teacher. Thus, this kind of social harmony becomes a tradition which is essential in the educational systems in EFL contexts in most of Indian schools, and so far there has not been a movement to change this (AlFarabi, 2015).

Another problem, mentioned by AlFarabi (2015), is that in EFL Classrooms, culturally inappropriate parts of the content are used. The first difficulty is about the culturally inappropriate materials which might be offensive as well as being outside of established socio-pragmatic use. Although a good percentage of increased awareness of issues of English materials content has been spread lately, culturally inconvenient content is still considered as a problem. Therefore, it might hinder the local teachers' confidence to teach a particular topic.

2.4.15 Second Language Influence on Students' Native Culture in Arab Countries:

It is claimed that integrating culture in the language classroom is a necessity in learning process. However, many problems arise when implementing culture of the target language in the foreign language classroom in Arab schools or universities. Some of those problems are; teachers' limited foreign experiences, limited knowledge of the target culture, lack of methods and materials, lack of time, and fear of controversy over

teaching values and attitudes. Such factors have been determined as obstacles to culture teaching in some communities in Arab countries.

- **Native Culture in Saudi EFL Classrooms:**

Some opponents of English language teaching in Arab countries have expressed their fears of teaching English in Arab world especially when English has been taught at the primary level. They claim that English can have a negative impact on Arab nation's ideology and culture in general and on Arab learners' orientation and beliefs in particular. They think that learning English language at primary schools might weaken the status of Arabic language, which is their mother tongue and their holy book language (Qur'an). Alqhatani explains that teaching English at the time of globalization might make Arab EFL learners lose their identity due to the fact that English has become the first language in our daily lives.

On the other hand, other supporters defend the teaching of English language by saying that there are no fears about students' behavior and values as they learn the target language for their knowledge and communication only and not for practicing it in their daily lives. These advocates claim that learning English language has become essential in the time of technology revolution and communication world, as it is necessary to learn different sciences and cope with technology and scientific progress in the world.

Alghamedi (2003) asserts that English language cannot be taught in separation from its culture as they are intertwined. He argues that teaching students' a foreign language does not mean the loss of their native culture, as the aim of teaching a target culture, which comes along with its language, is to let the learners know about the culture and not practice it. Alrasheed carries out a study on male and female learners and their parents in private and government schools in Kuwait to find out their points of

view on learning English language. The findings show that there is a good satisfaction among the sample on the process of English language teaching in Kuwait. It also reveals that English learning has no negative effect on Arab learners' social interaction and it doesn't teach them those values or habits which are not harmonious with their own values. Conversely, English language learning provides them with cognitive and social skills which enable them to be successful in their future career.

Alghamedi (2003) indicates that teaching English is of vital value at the primary level as well as the secondary level in order to further learners' cognitive abilities as well as their language skills in both their Arabic, mother tongue and English language. He adds that learning English language provides students to acquire good communication skills, in addition to updating them with the latest accomplishments in cognitive and scientific fields. Students will be able to use new techniques such as global internet and electronic techniques like computers.

Al-harthi (2011) explains that learning English language can be done safely, only when determining when and what to teach and how the environment of learning looks like. English learning can be taught without harming the students' native culture and values in which environment plays a crucial role in English language learning (p.3).

- **Large-and-small-class Cultures in Egyptian University Classrooms: A Cultural Justification for Curriculum Change**

Holliday (1991-1994) conducts an observational study in Arab universities. He visits 18 faculties in Egyptian universities with an attempt to develop curriculum. He argues that curriculum development task in Egyptian EFL classroom is still problematic in that they could not escape cultural bias. Understanding the social context in small and large EFL classes is essential to change the whole learning process, Holliday (1991 and

1994) observes that the EFL learning process in small and large classes in Egyptian faculties of Education. He states in large-class culture, there was a distance between lecturer and students which causes tension and less or communication. However, in small-class the situation seems to be totally different in which the classroom behavior was influenced by a 'high contact' national culture where a sense of harmony and a good relationship can be found between the teacher and students. One more aspect which has been observed is that an Egyptian teacher does not repeat instructions to students as they consider that might insult their intelligence.

Another aspect of culture in Arabic classrooms is that how communication takes place in the classes of Egyptian lecturers which was hard for the observer to understand. Holliday points out that it was culturally normal to be talking and listening at the same time, both for lecturer and students. In large classes, though the connection between teacher and students seems unavailable, still students showed a kind of closeness between themselves exactly as if they are doing in any other aspect of life in their society. Students cooperated to take turns sitting down, for example, and solving each other problems. They also preferred to sit close together despite there being plenty of space in the rest of the room. For a local teacher, he can manage the situation culturally with students, but he still uses the traditional approach in teaching.

Yet, the case with a foreign teacher like a British one might be different as the teacher here is an outsider to the small-class culture. The foreign teacher cannot participate in the traditional communication and he could damage the situation culturally. Holliday concludes that this expatriate teacher needs to rationalize his approach to deal with Arab EFL learners in their local environment which is controlled by their native culture.

Since the Egyptian lecturer's traditional approach was found no longer working and the native speaker lecturers approach is not appropriate with the classroom culture, Holliday hypothesizes that only a new, rationalized-traditional approach could be formed which should be convenient to the local culture of Egyptian university large classes (p.100). Byem (1956), cited in Holliday (1991-1994), has taught English in one of the male teacher training colleges in Cairo. He comes to know that in order to understand the problems encountered in the framework of English as a foreign language in Egyptian schools, it is essential to discuss briefly the methods of teaching their mother tongue, Arabic. He reports that the background of classical Arabic, first language of learners has strongly influenced the traditions of teaching English as a foreign language. Students, in learning Arabic, have been given texts and following it questions to be answered. This becomes a tradition to study English literary forms the same way they learn Arabic which indicates the impact of habits and way of life (which means culture) on their learning (p.69).

- **Cultural Barriers of Language Teaching in Jordanian University :**

In a society which lives on a perceived strong link between the Arabic language and Islam, the religion of the participants, teaching English as a Western language with different culture might show somehow some barriers in EFL learning context. Khwaileh (2000) addresses the issue of cultural barriers of language teaching in an EFL context. The study is of great importance as it was conducted in Jordan, an Arab country. The study investigates the linguistic aspects that can be affected by certain cultural dimensions (e.g., taboo words, religion, social factors, etc.). Through a questionnaire, interviews with university professors as well as students plus classrooms observations, data are collected and analyzed. Findings show that the learning process of Jordanian

EFL learners studying English for academic purposes could be hindered by certain cultural dimensions. It is found that a cultural gap has been created between EFL Jordanian university learners and their teachers who were educated in the west.

Khuwaliah explains in details that there are several levels of factors at work when bringing taboo topics into the classroom including what is considered taboo or extremely forbidden in the society, how both teachers and students feel about discussing the topics in class, and what may happen if the topics are brought into class. The sample of this study, female students, has refused to write about AIDS, sexual diseases, homosexuality, and heterosexuality. Moreover, they have asked why they should use words like these which are not related to their style of life, their personalities, their religion, or their ideas of what is appropriate for women to talk about in their society. Teachers, either western or who have been educated in the west, also have been found to face difficulty or embarrassment while teaching such sensitive topics to female learners. Khuwalilah concludes that teachers need to create their own culturally specific teaching materials to lessen the gap between Western English language teaching/English as a foreign language (ELT/EFL) theory and overseas practice.

2.4.16 Second Language Influence on Students' Native Culture in Other Countries:

- **Cultures of Learning: Language Classrooms in China**

Crotazzi & Jin (1993) state that there is a general agreement that Chinese students ask far fewer questions in the classroom than Western students do, although previous data by same researchers demonstrate that asking questions is definitely part of a Chinese way of learning. The most frequent reason given for not asking questions is that Chinese students are too shy and are afraid of making mistakes. Crotazzi & Jin explain

that Chinese students are afraid to lose face in the classrooms. They need outside help to have the courage to open their mouths as they are not extroverts like Western students.

Due to this cultural difference, Chinese students do not like to initiate a question; however, they like to be asked to answer a question. The Chinese culture is of a collective nature in which students avoid risk of shame in front of others; while Western students come from an individualistic culture and the concept of face loss is different. A Chinese student may not ask because he thinks whether the question is in everybody's mind before asking. Another thought comes to the Chinese student's mind is that there is not enough time for questions. Showing respect to the teacher, the student prefers to ask individually after the lesson. In Chinese EFL classrooms, students have only to obey orders and rules, accept what is written in books or said by teachers, show no disrespect or challenge to authority (teachers), not cause a face-loss to the teacher in case he couldn’t answer their questions. Again students should only wait and not ask unless it is guaranteed the question is in everybody’s mind.

In the same study, Cortazzie & Jin conducted a survey for which they interviewed some Western teachers to find out the cultural differences among Chinese students from their points of view. Western teachers think that Chinese students are hardworking and friendly, but passive. Chinese students seem to expect the teacher to instruct them from the front of the class. They do not ask questions or show their opinions. When coming to elicit students' views and reactions regarding being taught by Western teachers and Chinese teachers. Cortazzie & Jin find that students think that Western teachers have different styles and influences from their Chinese teachers. Western teachers are seen as good models for pronunciation and are superior to teach the English culture, customs and history. Chinese students think that Western teachers have different ways of

thinking in which they ask them to work in pairs or groups to develop their thought skills. However, Chinese students think that their native teachers are better in teaching vocabulary, grammar and intensive reading (p. 191-192).

- **Learner Resistance in EFL Classrooms in Pakistan**: **Cultural barriers**

In an attempt to innovate a new learning methodology in EFL classrooms, Shamim (1996), points out that the traditional style does not allow learners to be creative and independent in their thinking. Learners are passive listeners and only writers of every word said by their instructor. Shamim tries to apply the new approach which is to engage learners in group work in order to let them speak and work in workshop session. When students were asked to be involved in a seminar, they showed no readiness to do so. They couldn't be convinced to work without explicit direction from the teacher. Accordingly, students started complaining about the lack of time and the heavy demands made on them by the course. Shamim finds out that students themselves seemed to prefer the traditional method of teaching and learning and the reason behind that is due to a mismatch between the local culture and the culture of the imported methodology. She also figures out that it is difficult to appreciate the cultural forces on learner's beliefs and assumptions about authority structure. Shamim highlights the essential cultural aspects which influence the way learners perceive, classify, judge and reject the innovative methodology. The cultural patterns; authority of the elders and conceptualization knowledge of, as Shamim explains, start from the home and family, school institution and society, all cause learners resistance to change the old approach.

Investigating the learning environment which is the EFL classrooms, Shamim argues that learners keep silent as their participation is a culturally indicator of disruptive behavior and a lack of teacher control. The main reason behind learners'

resistance to change is related to the cultural orientation of the learners which is derived from the culture of their Pakistani society. Eventually, Shamim concludes that the new methodological innovation should be adapted to the local culture before being introduced; otherwise even enthusiastic teachers will feel frustrated, too.

On the other hand, another attempt was done to examine the use of native English culture to enhance the Pakistani learners of English as a second language, Akhtar (2014) explains that as a result of the difference between the Pakistani's cultural values and English ways of living, teaching some English norms like festivals and Christmas may not be interesting for Pakistani students to learn and even teachers to teach. However, other English values like attitudes, behaviors, beliefs and free time activities might be interesting to Pakistani learners as they are similar to their native values and activities. Akhtar finds out that Pakistani learners of EFL cannot explore the current native English speaking culture and improve their intercultural communication aptitude and comprehension of the English language because ESL textbooks include only 50% of the native English culture. Still, ESL in Pakistan shows more attempts in using authentic materials, pair work, small group activities in which they reflect the cultural aspects with their daily life. The study recommends that ESL teachers in Pakistan need to look for creative ways to prepare the Pakistani learners for their future goals like further education, employment and migration to native English speaking countries.

- **Cultural barriers with EFL Iranian, Taiwanese and Bangladesh students:**

There are different challenges faced by EFL students while they learn English. One of those challenges occurs when they experience cultural barriers in their process of adjustment to the host educational environment. Talley & Hui-ling (2014) state that

these cultural barriers can be found in three significant ways: (a) acculturation, (b) culture shock, and (c) social distance.

Inclusion of culture into a language teaching and learning textbooks has been discussed in many studies. Rajabi & Ketabi (2012) assure that societal values, attitudes and cultural elements should be integrated with the communicative approach to enhance the success of second language learning. In their study, four English teaching textbooks are examined to find out the most used cultural dimensions displaced in them. Results show that the content of these textbooks is local culture which made up of the cultures of the various ethnic groups. The EFL context in Iran is found to be extended to English as an international language context as it is used to describe local culture and values to other global speakers of English. It is found that the content of these EFL textbooks used English to describe one's own culture and concerns to others and not only describe the culture of the people who speak it as a first language. However, it can be concluded that since English is only localized to the Iranian local culture, it means that intercultural communication and behavior have no place in these textbooks.

- **Culture and Reading in Foreign Language Classrooms:**

Different studies have shown that culture can play a crucial role in EFL context particularly reading classes and highlighted some of the facilitating factors that affect reading comprehension in EFL learning context. In his study, Mohammed (2007) sets some of these factors; the first factor that is identified is cultural background. Muhammed refers to what researchers found earlier about the influence of cultural background on understanding texts. Cultural schemata are integral component of content schemata. Cultural specific values found in certain texts could be different from the readers' culture. Similarly, Almahrooqi (2014) finds out that lack of the cultural literacy

assumed by the writer also adds to the difficulty of a foreign language reader. This happens when students do not have access to the author's background knowledge, allusions, and general knowledge the author assumes is present in the target audience. Cultural codes are essential for readers to make meaning of the text. Also, when the text topic is unfamiliar to the reader, whose background is totally different from the author's, it is hard to make sense of the text. The gap between the student general and cultural knowledge and that found in the authentic text was reported to undermine the activation of global strategies and made the readers tend to use text-bound and local strategies.

In the issue of the role of culture in reading comprehension in EFL classrooms, Nelson (1987) points out to the importance of schema theory (background experience or knowledge in reading comprehension) which is a vital factor in comprehension. However, Nelson reports that the ESL textbooks content still contain little or no of their own culture. These books reveal the culture of American and British literature magazines, famous people and their culture only. Nelson (1987:425) finds out that ESL or EFL students recall was significantly higher when reading articles from their own culture. Testing Egyptian students, it was found that these students' performance was significantly higher on the Egyptian passages which are from their own culture. Eventually, Nelson (1987) concludes that reading materials should be related to the culture of the students who learn the language to maximize reading comprehension in EFL classrooms (p.425). On the other hand, Pardo (2004) explains that the reader brings four factors (text, context, social culture and transaction) which work together to come up with comprehension. Yet, meaning emerges only from the engagement of that reader with that text at that particular moment in time with the other three factors. Among these factors, Prado asserts that comprehension is affected by a reader's culture, based on the degree to which it matches with the writer's culture or the culture espoused in the text

(2004:1). Hudson (1982) explains that the area of background knowledge has been neglected in ESL reading comprehension.

Culture is also associated with knowledge and beliefs. It is sometimes defined as a set of attitudes based on one's beliefs, perceptions and responses. Ilter and Guzeller (2005) use the term culture to refer to the belief system of a community which might affect learning a target culture as Jabeen & Shah (2014) declared. The two researchers apply a study to examine the students' acceptance to the content of the target culture. They advocate the incorporation of learners' responses and attitudes in consideration while designing curriculum and prescribing syllabus for them. However, they find that learners accept some of the target culture aspects while some other negative norms should be avoided or at least kept to the minimum in order to get the students' approval and interest to learn a second language. Eventually, they recommend that the target language should be taught in the local cultural context which will lead to learners' positive response to the language and the act of learning itself (p.611).

It is essential to keep in mind the students' beliefs and goals about learning a second or foreign language. Al-Osaimi & Wedell (2014) examine the beliefs of non-Arabic learners towards learning Arabic. They conclude that the main aim of learning a foreign language is not only the development of communicative competence but also might be a different one such as a religious motivation. In Osaimi & Wedell's study, it is proved that Non-Arabic Muslims have attitudes of Arabic learning in Saudi Arabia in order to fulfill roles linked to religious faith (p.18).

On testing two new strategies in teaching culture, Ulaywi & Khairi (2013) conduct a study on the effect of using culture awareness strategies on Iraqi EFL students in tertiary level. The two strategies of cultural awareness are cultural capsule and cultural clusters

for providing cultural knowledge and developing their language skills (reading and writing). They find out that using cultural strategies in teaching students' reading and writing performance are of great importance. Recognition skills and production skills can be achieved through applying cultural strategies. Ulaywi & Khairi (2013) conclude that teachers should set clear and achievable goals. Strategies and techniques should be selected culturally to foster students' cultural knowledge and awareness (p. 163).

Teaching culture is considered the fifth control skill in language teaching/learning for many educational instructors. They claim that a deep understanding of learning culture is crucial for students though the subject must be addressed carefully. The relationship of the values of the culture in which student are currently living, or from which students have roots, and the learning expectations and experiences in the classroom is directly related to the learning context success from different perspectives. Therefore, an awareness of FL culture should be viewed as an important component of EFL learning/teaching. It involves a gradually inner sense of the equality of cultures and an increased understanding of one’s native and target cultures. Therefore, it is a necessity for teachers to include cultural components of both languages in the teaching of English language to maximize students’ learning and indulge them in EFL classroom activities.

2.5 Conclusion:

This chapter has four main sections. The first section is concerned with the theoretical background with issues related to reading comprehension as well as the previous studies on reading comprehension in learning situations. The second section discusses the concept of learning styles and issues related to them; in addition, it deals with the literature review with respect to the relationship between learning styles and

reading comprehension. The third section reports theories related to reading strategies and explore the previous studies on the relationship between reading strategies and reading comprehension. The fourth section presents the meaning and different theories related to culture in EFL classrooms. Moreover, it discusses the relevance of the present study to the previous studies in the fields of the relationship between learning culture in EFL contexts and reading comprehension.

The next chapter presents the practical part of the study. It elaborates the methodology used in conducting the study. It describes how sampling was done and how data collection instruments were developed. It presents procedures of checking validity and reliability as well as administration of the tools.

CHAPTER - III
RESEARCH METHODOLOGY AND PROCEDURES

This chapter presents a comprehensive discussion regarding the research methodology in the current study in the following steps:

- Highlighting research design, operational definitions, objectives and hypotheses of the study.
- Elaborating sampling techniques.
- Exploring data collection instruments:
  - Adaption of Perceptual Learning Style Preferences Questionnaire
  - Adaption of Survey of Reading Strategies
  - Development of Learning Culture Questionnaire
  - Development of Reading Comprehension Test
- Exploring piloting and interviewing of the sample.

3.1 Research Design

In order to satisfy the objectives of the research and verify the set hypotheses, the study employs both exploratory and descriptive research design. Exploratory research design has been used to generate basic knowledge on reading comprehension, learning styles, reading strategies and learning culture. Descriptive research design has been used to find out the relationship/association between dependent and independent variables by using correlation analysis and linear regression model.

The descriptive statistics are used to explore, describe and analyze the data collected from the questionnaires of perceptual learning styles, reading strategies' use, culture and reading comprehension test.

3.2 Variables of the Study:

In the present study entitled "The Relationship between Learning Styles, Strategies' Use, Culture and Reading Comprehension: A Study of Yemeni EFL Learners". The various variables used in this study are;

1. Perceptual Learning Styles

2. Reading Strategies' Use

3. Learning Culture

3.3 Operational Terms of the Study:

The operational definitions of these variables are presented below:

- **Perceptual Learning Styles:** They refer to a person's internally based characteristic patterns of strengths, weaknesses and preferences in taking in, processing, and retrieving information using one or more senses. They are visual, auditory, kinesthetic, tactile, group and individual.
- **Reading Strategies' Use**: It refers to the special thoughts, behaviors or techniques that individuals use to help them comprehend, learn, or retain information they read.
- **English Reading Comprehension Ability:** It refers to the actual understanding or performance of English Foreign Language (EFL) Yemeni learners in English Reading texts.
- **Yemeni Learning Culture:** It refers to the local learning environment of EFL learners', who are part of the Yemeni culture, in EFL context.
- **Yemeni EFL learners:** They are Yemeni undergraduate English as Foreign Language learners.

3.4 Objectives of the Study:

The main goal of the research is to determine the relationship between perceptual learning styles, use of strategies, culture and reading comprehension among the Yemeni undergraduate EFL learners. To achieve this goal, the following objectives have been set;

1. To measure and analyze the levels of English reading comprehension ability among Yemeni EFL learners.
2. To measure and analyze the styles of perceptual learning among Yemeni EFL learners.
3. To measure and analyze the levels of reading strategies' use among Yemeni EFL learners.
4. To measure and analyze the levels of learning culture among Yemeni EFL learners.
5. To study the relationship between perceptual learning styles and reading comprehension ability among Yemeni EFL learners.
6. To study the relationship between reading strategies' use and reading comprehension ability among Yemeni EFL learners.
7. To study the relationship between learning culture and reading comprehension ability among Yemeni EFL learners.
8. To study the difference in the contribution of predictor variables (perceptual learning styles, reading strategies' use and learning culture) in predicating the criterion variable (reading comprehension ability) among Yemeni EFL learners.

3.5 Hypotheses of the Study:

To achieve the main goal and the above objectives, the following hypotheses are structured in null form;

Hypothesis (1):

H_0: There is no significant relationship between perceptual learning styles (visual, auditory, kinesthetic, tactile, group and individual) and reading comprehension ability among Yemeni EFL learners.

Hypothesis (2):

H_0: There is no significant relationship between the use of reading strategies (global, problem-solving and support) and reading comprehension ability among Yemeni EFL learners.

Hypothesis (3):

H_0: There is no significant relationship between learning culture (behavioral, attitudinal and contextual aspects of learning culture) and reading comprehension ability among Yemeni EFL learners.

Hypothesis (4):

H_0: There is no significant difference in the contribution of predictor variables; perceptual learning styles, reading strategies' use and learning culture and their subscales in predicting the criterion variable reading comprehension ability among Yemeni EFL learners.

3.6 Sampling:

Population refers to any group of individuals that have one or more characteristics in common that are of interest to the researcher. The total population of the present study is 2000 comprising of the Yemeni undergraduate students in English faculties in Sana'a University, Yemen. The sample has been selected randomly with a specific criteria based on three parameters relevant to the objectives of the current study; educational level (Undergraduates), age (19-23) and educational specialization (English Language). For the computation of the sample size, the researcher has used the online sample calculator to calculate the minimum sample for the defined population of 2000 students. According to Calculator, the ideal sample size is 140 at 95% of significance level. According to the students' record, 150 students are registered in the second semester for the year 2015-2016. Due to the political situation and instability in the area, some of the students were unable to attend the tests. Only 134 could cooperate and were requested to come on

the day and time specified. The sample (134) was present in the first session and took the three questionnaires and the same number of students was present in the second session and took the reading test. The participating students were all native speakers of Arabic and were all Yemeni.

3.6.1 Homogeneity of the sample:

- **Locality:**

The participants in this study are second level students in the department of English, Faculty of Education, Sana'a University. This University attracts people from all over the Republic of Yemen due to its location in the capital of the country. Given this, it is hoped that the study sample represented a range of Yemeni EFL college-level students who share same middle class, mother tongue (Arabic), religion (Islam) and culture (Yemeni) with similar aspirations.

- **Language Background:**

The participants share the same mother tongue. They all speak Arabic as their first language, which is the monolingual language all around the country.

- **Class:**

Under law all citizens are equal. The traditional social structure in Yemen has consists of 4 classes: Sayyids, Qabilis, the Middle class, subaltern but not given special privileges by the government as they are all equal under law and constitution. All the participants come from the same middle class who share same privileges.

- **Culture:**

The sample shares the same culture such as same religious habits, customs, ceremonies and holidays, food and entertainment means.

- **Ambitions and Aspirations:**

The students in English departments are quite ambitious and have high aspirations. In spite of the current miserable condition of war, they take concrete steps to pursue

some of their goals by joining departments where English is major. The sample of this study shares the same aspirations and goal of getting a proper job after graduation.

3.6.2 Demographic Distribution of Respondents:

The demographic distribution of homogeneous sample of the current study is presented in table (3.1) below:

Table (3.1) shows the Demographic Distribution of Respondents

Age	F	%	Gender	F	%	Mother tongue	F	%	Religion	F	%
19	4		Male	1	0.75	Arabic	1	0.75	Islam	1	0.75
		2.99%	Female	3	2.24	Arabic	3	2.24	Islam	3	2.24
20	64		Male	7	5.22	Arabic	7	5.22	Islam	7	5.22
		55.22%	Female	57	42.54	Arabic	57	42.54	Islam	67	50
21	27		Male	3	2.24	Arabic	3	2.24	Islam	3	2.24
		20.15%	Female	24	17.91	Arabic	24	17.91	Islam	24	17.91
22	23		Male	14	10.45	Arabic	14	10.45	Islam	4	2.99
		9.70%	Female	9	6.72	Arabic	9	6.72	Islam	9	6.72
23 and above	16		Male	3	2.24	Arabic	3	2.24	Islam	3	2.24
		11.94%	Female	13	9.7	Arabic	13	9.7	Islam	13	9.7
Total	134	100	Total	134	100	Total	134	100	Total	134	100

Although the demographic data categories are not primarily related to the research questions of this study, it was decided to include these data in the questionnaire in order to create a clear picture of the sample for this research. It is evident from the table (3.1) above that the sample selected for the current study comprises mostly of the homogeneous demographic features that include (gender, mother tongue, religion, culture) except the age that shows the minor deviation.

Of 134 participants in this research, 28 (20.90%) identified themselves as men and 106 (79.10.56%) as females. The ages of the participants are ranged among five age groups: (19-years old), (20 years old), (21 years old), (22 years old) and (23 and above).

The largest group of participants (64) fall under the second group (20 years old) represented the largest percentage (55.22%) which is consistent to the population of second year students. The third group comes second (f=27, p= 20.15%). The first, fourth and fifth age groups represented (2.99%, 9.70%, 11.94%) of the sample and consisted of (4, 23, 16) participants respectively.

3.7 Data Collection Instruments:

For the sake of fulfilling the research objectives, the researcher used two standardized questionnaires for the first two variables; Perceptual Learning Styles Questionnaire and the Survey of Reading Strategies. The researcher as well designed a reading comprehension test (RCT) and a Learning Culture Questionnaire (LCQ). To test reliability, the four tests have been piloted on a sample on two phases.

Among the three questionnaires, two questionnaires regarding 'Perceptual Learning Styles' and ' Use of Reading Strategies' are based on standardized structure questionnaires developed by Reid (1987) and Mokhtari & Sheorey (2002) respectively. However, the third questionnaire regarding learning culture has been developed by the researcher as no standardized questionnaire regarding the learning culture has been developed so far especially with respect to the English learning teaching in Yemen. The fourth tool is a test also arranged by the researcher to measure the Yemeni EFL learners' performance in reading comprehension. The data collection instruments are elaborated as following in table (3.2):

Table (3.2) shows the Tools Used for Data Collection

	Name of the tool	Developed by	Cornbach Alpha
1	The Perceptual Learning Style Preferences Questionnaire	Reid (1987)	0.88
2	The Survey of Reading Strategies	Mokhtari & Sheorey (2002)	0.88
3	Learning Culture Questionnaire	Researcher	0.86
4	Reading Comprehension Test	Researcher	0.90

3.7.1 The Perceptual Learning Style Preference Questionnaire developed by Joy Reid (1987):

The Perceptual Learning Style Preferences Questionnaire developed by Reid (1987) was administered to explore the ways in which different Non-native learners specify their preferred styles for learning. Developed at Colorado State University, the self-reporting questionnaire was patterned after existing learning style instruments, the Center for Innovative Teaching Experiences (C.I.T.E.). Reid (1987) states that the modifications were added to the perceptual learning style preferences questionnaire after reviewing it by non-native speakers' informants and U.S. consultants in the fields of linguistics, education, and cross-cultural studies.

The questionnaire consists of six learning style preferences; visual, auditory, kinesthetic, tactile, individual and group in which each includes five groups of statements randomly arranged. Students have to respond to each statement on a 5-point scale ranging from "Strongly Agree" to "Strongly Disagree".

- **Dimensions/subscales of Perceptual Learning Styles:**
  - **Visual Learning Styles Preference:** Visual learners learn well when they see information in front of them, e.g. information presented in whiteboard or projectors. They prefer to read instructions and tasks like jotting down points, drawing, reading books, etc. make their learning better.
  - **Auditory Learning Style Preference:** Theses learners learn from hearing spoken words and oral explanations. They remember information by reading aloud especially when learning a new material. Hearing audio tapes, lectures, and class discussion benefit these learners to a great extent.

- **Kinesthetic Learning Style Preference:** Those who are kinesthetic learners, learn best by experiencing the situation and being involved physically in classroom activities, by actively participating in field trips and role-playing in the classroom.

- **Tactile Learning Style Preference:** These learners learn best when they have the opportunity to do "hands-on" activities with materials. For example, touching and working with materials, writing notes or instructions, and physical involvement in class related activities, et.

- **Group vs. Individual Learning Style Preference:** Group learners learn more effectively when they study with other students. They prefer group interaction and discussion while individual learners think well when they work alone. Thus, working with a group often makes learning difficult for the individual learners.

Table (3.3) describes the various items in dimensions/subscales of Perceptual Learning Styles

Dimensions	**Total No. Items**	**Numbers of items**
Visual Learning Style Preference	5	6,10,12,24,29
Auditory Learning Style Preference	5	1,7,9,17,20
Kinesthetic Learning Style Preference	5	2,8,15,19,26
Tactile Learning Style Preference	5	11,14,16,22,25
Group Learning Style Preference	5	3,4,5,21,23
Individual Learning Style Preference	5	13,18,27,28,30
Total	30	

- **Scoring Procedure:**

The responses to the statements of the questionnaire are to be given on the booklet itself. Against each item of the scale, five alternatives are given in forms of cells indicating the intensity of the responses. There are 5 questions for each learning category in this questionnaire. The questions are grouped below according to each learning style. Each question has a numerical value as shown in table (3.4) below:

Table (3.4) shows Five-point scale continuum				
5	**4**	**3**	**2**	**1**
Strongly agree	agree	Undecided	disagree	Strongly disagree

The numerical values for each style has to be multiplied by 2 to get a total between 0-50 to determine the respondent's major learning style preference(s), minor learning style preference(s), and those learning style(s) that are negligible. Table (3.5) indicates the rating scale of the perceptual learning style preferences according to Reid (1987).

Table (3.5) explains the Perceptual Learning Style Preferences Rating Scale	
Categories	**Range**
Major Learning style preference	38-50
Minor learning style preference	25-37
Negligible learning style preference	0-24
Based on Joy Reid's (1987) Rating scale	

- **Piloting the Questionnaire:**

The questionnaire was modified to some extent to match the Yemeni environment. It was firstly tried out on a sample of 12 first year EFL students as a first phase. After the pilot study, the items 18, 19, 20, 21 and 22 were slightly modified. In the second phase, the modified tool was tried out on 42 third year EFL students to check the internal consistency among all sets of the items including the modified ones.

- **Reliability of the questionnaire:**

The Perceptual learning style preferences questionnaire was piloted with a group of 12 first year EFL students on the first phase. Having done the necessary modifications, the questionnaire was tried again on another sample of 42 third year EFL students on a second phase. The standardized survey on the first phase of piloting was found to be

reliable at 0.77. However, after being modified in order to fit the Yemeni EFL context of learning, Cronbach's Alpha reliability found to be 0.88.

- **Validity of the questionnaire:**

The perceptual learning style preferences questionnaire has been found to possess content validity as measured with the help of views expressed by judges especially after modification. Rather, the questionnaire is considered valid due to the fact that it has been used by a quite big number of studies for its reliability, validity and usefulness in second/foreign language learning context.

To keep the safe side and to minimize the probability of statement misunderstandings among participants, the questionnaire was translated into Arabic. The translated questionnaire was then checked against any possible comprehension problems by some experienced English teachers.

- **Rationale of selecting the Perceptual Learning Style Preferences by Reid(1987):**

1. The instrument was chosen because it is the only one of its kind created specifically for adult non-native speakers of English.
2. It has been applied on Arab learners in Reid's (1987) study and this study is conducted on Yemeni students who are Arabs.
3. The instrument is developed to measure the learning styles based on senses which is one of the objectives of the study.
4. It has been used by a quite big number of studies for its reliability, validity and usefulness in second language learning context.
5. The instrument comes from research demonstrating that students, particularly educated adults, can accurately predict their dominant learning modalities (Dunn & Dunn,1987).

(Tool presented in Appendix I).

3.7.2 The Survey of Reading Strategies (SORS) developed by Mokhtari and Sheorey (2002):

The development of the SORS was initially inspired by the review and use of another instrument; Metacognitive Awareness of Reading Strategies Survey (MARSI), which was developed by Mokhtari & Riechard (2002) as a measure to the metacognitive awareness of reading strategies of native speaker students. The SORS was designed to assess non-native adolescent and adult readers' metacognitive awareness and perceived used of reading strategies while reading academic texts in English language. The survey was developed after reviewing recent research literature on metacognition and reading comprehension. Mokhtari & Sheorey (2002) followed standard criteria for developing valid and reliable measures. The categories of the scale were set after an extensive body of work on metacognition and reading comprehension by several researchers.

The SORS focuses on metacognitive strategy use within the context of academic reading. It measures three categories of reading strategies: global reading strategies (13 items), problem solving strategies (8 items), and support strategies (9 items). Mokhtari and Sheorey report reliability for the MARSI but not for the SORS.

- **Survey of Reading Strategies Dimensions/subscales:**

This instrument used by Mokhtari & Sheorey (2002) which according to them is 'intended to measure the type and frequency of reading strategies that adolscent and adult ESL students perceive they use while reading academic materials in English'. The survey of reading strategies consists of 30 items using three individual subscales:

- **Global reading strategies**: it refers to 'international, carefully planned techniques by which learners monitor or manage their reading '.
- **Problem-Solving strategies**: are related to 'actions and procedures that the readers use while working directly with the text'.

- **Support strategies:** are a set of mechanisms 'intended to aid the reader in comprehending the text such as using a dictionary, taking notes, underlying, or highlighting textual information'.

Table (3.6) describes the various items in Survey of Reading Strategies		
Dimensions/subscales	**Total No. Items**	**Numbers of items**
Global Reading Strategies (GLOB Subscale)	13	1. 3. 4. 6. 8. 12. 15. 17. 20. 21. 23. 24. 27.
Problem Solving Strategies (PROB Subscale)	8	7. 9. 11. 14. 16.19. 25.28.
Support Reading Strategies (SUP Subscale)	9	2. 5. 10. 13. 18. 22. 26. 29. 30
Total	30	

- **Scoring Procedure:**

The responses are to be given on the booklet itself, against each item of the survey five alternatives are given in forms of cells indicating the intensity of the responses. Assign 4 marks to 'Always', 3 marks to 'usually', 2 marks to 'Sometimes', 1 marks to 'occasionally l/ and zero to never responses. Then, it was essential to divide the subscale score by the number of statements in each column to get the average for each subscale. Finally, the average can be calculated for the whole inventory by adding up the subscale scores and dividing by 30. Scores are to be ranged between (2.4 or lower and 3.5 or higher).

Table (3.7) shows the Reading Strategies Survey Rating Scale	
Categories	**Range**
high	(3.5 or higher)
Medium	(2.5-3.4)
Low	(2.4 or lower)
Bases on Mokhtari & Sheorey's (2002) Rating scale	

- **Piloting the Survey:**

The survey was, on a first phase, tried out on a sample of 12 first year students. As a result of the first phase of piloting, the questionnaire was modified to some

extent to match the Yemeni environment. Then, a second pilot study was conducted on a sample of 42 third year students in the same department and found that items 4, 12, 23 and 27 needed to be slightly modified.

- **Reliability of the Survey:**

The standardized survey on the first phase of piloting was found to be reliable at 0.79. However, after being modified in order to fit the Yemeni EFL context of learning, reliability found to be 0.88.

- **Validity of the Survey:**

The survey of reading strategies (SORS) has been found to possess content validity as measured with the help of views expressed by judges especially after modification. In addition, the scale is considered valid due to the fact that it has been used by a quite big number of studies for its reliability, validity and usefulness in second language learning context.

- **Rationale for Selecting the Survey of Reading Strategies developed by Mokhtari & Sheorey (2002):**

1. The survey scored good content validity as measured with the help of views expressed by judges.
3. The tool is having a fair standard and relevant in its use for EFL learners.
4. The tool is easy to administer, hence it is found the best way to judge the studnets' reading strategies.
5. The survey provides the students ample opportunities to ascertain which metacognitive skills they use.

By taking into account of the above provisions, the scale has been selected for the present study.

(Tool presented in Appendix II).

3.7.3 The Development of Learning Culture Questionnaire (LCQ):

The development of Learning Culture questionnaire (LCQ) was guided by several efforts including a) reviewing literature review on culture and language learning, b) going through other instruments in culture regarding format and content.

Following standard measurement criteria for developing valid, reliable, and sensitive measures, the items have been subjected in the (LCQ) to successive cycles of development, field-testing, validation, and revision. The (LCQ) has gone through different steps to be eventually used for the purpose of this study as mentioned below.

- **Planning the Questionnaire**

The questionnaire has to gone through consultation of a wide variety of sources to gather information related to learning culture. Based on this, it is decided to construct the items in the following dimensions of learning culture questionnaire namely; **behavior, attitude, content** as shown in the table (3.8) below.

Table (3.8) reveals the distribution of subscales under Learning Culture Questionnaire

Si.No	Dimensions	Total of items in each subscale	No of items
1	Behavior	9	1,4,7,10,13,16,19,22,25
2	Attitude	15	2,5,8,11,14,17,20,23,26,28,30,32,34,36,38
3	Content	15	3,6,9,12,15,18,21,24,27,29,31,33,35,37,39
Total		39	

- **Behavior (behavioral aspect of learning culture):** it is the students' way they act or behave in EFL learning context which are principally shaped by their pre-existing attitudes, values, and beliefs about what constitutes good learning and allowed or not allowed actions to be shown or done in classroom (from the point of view of the learners) which all make specific cultural properties.

- **Attitude (attitudinal aspect of learning culture):** it is the attitude of learners towards the target language; the target language's culture; the social value of learning the target language; particular uses of the target language; and themselves as members of their own culture.

- **Content (contextual aspect of learning culture):** another term can be used is **(**Products), in learning situation, are reflected in literature, folkore, art, music and artifacts and cultural activities in EFL textbooks. Haokip (2003) indicates that EFL classrooms should include language and culture. The content of English textbooks has to expose not only the target culture, but also the native culture of the students.

The construction of learning culture is at the age group of 19-23 years of undergraduate EFL learners at tertiary level in a Yemeni environment. Further the investigator decided to construct statements of responses are given with five modes (strongly Agree, Agree, Undecided, Strongly disagree, disagree). These items are classified into positive and negative as in table (3.9).

Table (3.9) indicates the distribution of positive and negative items in Learning Culture questionnaire

	Items numbers	**Strongly agree**	**Agree**	**Undecided**	**Strongly disagree**	**disagree**
Positive items	2,3,6,7,8,9,11,12,14,15,16,17,20,21,23,24,26,27,29,30,31,32,33,34,35,36,37,38,39	5	4	3	2	1
Negative items	1,4,10,13,5,18,19,22,25,28	1	2	3	4	5

- **Preliminary Form of the Questionnaire:**

All these items were pooled in an order and printed in the form of a 5 point response. The questionnaire has been given for consultation by some experts in educational and psychological majors and requesting to check about each item like its grammatical correctness, structure of the statements, distractors, and appropriateness of students. All the experts have worked enough to examine the questionnaire and returned it. By considering the suggestions made by those experts, about 16 (sixteen) items out of 55 were dropped as they are seen to be weak. Thus only 39 items were retained and considered for pilot study.

- **Piloting the Questionnaire:**

a) Try out of the Questionnaire: The final draft thus prepared was tried out on two stages on 12 students from the first year as a first stage, then in the second stage 42 third year Yemeni EFL students studying at English Department, Sana'a University in Sana'a city.

Each copy of questionnaire was scored referring to the scoring key. Each dimension was scored separately and finally total score from all the three dimensions were considered for further analysis. After the pilot study, items not stable or consistent were modified or deleted.

b) Item Analysis: Cronbach Alpha is a measure of squared correlation between observed scores and true scores. A good analysis of test items should take the whole test into consideration.

- **Selection of Items:**

It also had construct validity as items were selected having the Corrected Item-Total Correlation values more than 0.30 (If this correlation is weak de Vaus suggests anything less than 0.30 is a weak correlation for item-analysis purposes [de Vaus [2004], Surveys

in Social Research, Routledge, p. 184]), Corrected Item-Total Correlation was found to be range from 0.384 to 0.862. In order to form the final scale, the total 30 out of 39 statements have been chosen according to 'r' value which are greater than 0.30. An individual score in this scale is the sum total of the scores for all the statements by the subject. The higher the score in this scale, the greater will be the indicator of learning culture. Table (3.10) indicates the accepted and non-accepted items according to 'r' value in the learning culture questionnaire.

Table (3.10) shows the Accepted and Non-accepted Items in Learning Culture by the Cronbach's Alpha Method

Serial No.	Items	Corrected Item-Total Correlation	Accepted/Non-accepted
1	Item1	.687	Accepted
2	Item4	.758	Accepted
3	Item7	.811	Accepted
4	Item10	.811	Accepted
5	Item13	.905	Accepted
6	Item16	.900	Accepted
7	Item19	.885	Accepted
8	Item22	.885	Accepted
9	Item25	-.481	Non-accepted
10	Item02	.387	Accepted
11	Item05	-.047	Non-accepted
12	Item08	.479	Accepted
13	Item11	.393	Accepted
14	Item14	.393	Accepted
15	Item17	.076	Non-accepted
16	Item20	.076	Non-accepted
17	Item23	.076	Non-accepted
18	Item26	.386	Accepted
19	Item28	.342	Accepted
20	Item30	.365	Accepted
21	Item32	.384	Accepted
22	Item34	.405	Accepted
23	Item36	.323	Accepted
24	Item38	.330	Accepted
25	Item03	-.185	Non-accepted
26	Item06	-.054	Non-accepted

27	Item09	.402	Accepted
28	Item12	.316	Accepted
29	Item15	.316	Accepted
30	Item18	-.008	Non-accepted
31	Item21	-.008	Non-accepted
32	Item24	.432	Accepted
33	Item27	.432	Accepted
34	Item29	.327	Accepted
35	Item31	.454	Accepted
36	Item33	.421	Accepted
37	Item35	.417	Accepted
38	Item37	.393	Accepted
39	Item39	.900	Accepted

- **Scoring of Learning Culture Questionnaire:**

The questionnaire is a five point scale. The items can be responded to by choosing from options; strongly agree, agree, undecided, strongly disagree, disagree. The minimum score on the scale is 0 and the maximum score is 150. The higher the score in this scale, the greater will be the learning culture indicator one's has.

Table (3.11) describes Five-point scale continuum				
5	**4**	**3**	**2**	**1**
Strongly agree	agree	Undecided	disagree	Strongly disagree

The descriptive statistics regarding the overall assessment and categorization of Yemeni EFL learners on the basis of three subscales of the learning culture is classified in this study into 3 categories based on quartile deviation as indicated in table (3.12):

Table (3.12) indicates the Learning Culture Rating Scale based on Quartile Deviation		
Subscales	**Categories**	**Range**
Behavior	Unaware	(0-23.25)
	Rationalist	(24-32)
	Stereotype	(33-40)
Attitude	Unaware	(0-24)
	Rationalist	(25-41)

	Stereotype	(42-55)
Content	Unaware	(0-76)
	Attitude	(77-113)
	Stereotype	(114-150)
Author's source computation		

- **Establishing Reliability:**

Cronbach's Alpha method:

The reliability score for the entire tool was found in pilot study to be 0.86. 30 items were retained, in that 8 items of behavior subscale with reliability 0.95, attitude subscale of 11 items with reliability 0.84 and content subscale of 11 items with reliability 0.86 which have been taken for further evaluation process. Table (3.13) reveals the distribution of items over three areas of Learning Culture Questionnaire with the reliability of each.

Table (3.13) shows the description of Cornbach Alpha regarding reliability of three subscales of the Learning Culture Questionnaire

No.	Dimensions	Numbers of items before piloting	Numbers of items retained after piloting	Items retained	Cronbach Alpha Reliability
1	Behavior	9	8	1,4,7,10,13,16,19,22	0.95
2	Attitude	15	11	2,8,11,14,26,28,30,32,34,36,38	0.84
3	Content	15	11	9,12,15,24,27,29,31,33,35,37,39	0.83
Total		39	30		0.86

- **Establishing Validity:**

Content and Items Validity:

For the sake of ensuring validity, the questionnaire was first given to the research guides, educational as well as cultural experts in the area. Based on their suggestions and comments, the statements were improved to make sure they are all related to the area of the study and each one independently focuses on what it claims to measure.

Second, the tool was refined depending on the results of the item analysis done. Third, since reliability is a necessary condition of validity and based on the result of piloting the tool, the reliability or measurement of the internal consistency of the test items showed that it was reliably measured 0.86 while Cronbach's alpha corrected item-total correlation was found to range from (316-901). Finally, the validators' comments were taken into account while finalizing the tool for administration.

(Tool presented in Appendix III).

3.7.4 The Development of Reading Comprehension Test:

It is a test which aims to assess the reading comprehension ability of the Yemeni EFL learners. A multiple-choice question (MCQ) test which comprises of a stem with a question line under it, followed by 4 alternatives, was adapted for this study.

- **Multiple-Choice Question (MCQ) Test :**

A multiple-choice question (MCQ) comprises of a stem with a question line underneath it, followed often by a number of 3 to 5 alternatives. One of the alternatives is the correct or appropriate response known as the key, while the others are described as distractors. A salient characteristic of distractors is that all options shall present credible answers and if possible none shall be incorrect (Saudi Commission for Health Specialties, 2015). Distractors are set to attract students who do not know the correct answer while students who know the correct answer are supposed to ignore them. Tests using MCQs can be used to examine students' difficulties if the incorrect options are designed to reveal common misconceptions and they can provide a more comprehensive sampling of the subject material because of wider coverage. They are objective and easily adapted for computer delivery. Moreover, this type of test is often more valid and reliable than essay tests because discrimination between performance levels is easier to determine and scoring consistency is virtually guaranteed when carried out by machine (Hotiu, 2006).

However, some instructors believe that MCQs are “multiple-guess” items or that MCQs are only capable of testing factual information and so are less appropriate for testing higher-order cognitive skills. But this type of test is now accepted if well-constructed multiple-choice items have been prepared in order to test many of the higher cognitive skills of Bloom’s taxonomy such as knowledge, application, analysis and synthesis. University of Washington (2015) explains that an item in a MCQs test can be considered as a single element which can be formed as a multiple-choice question. Multiple-choice question (MCQ) is an efficient tool for evaluation; however, this efficiency solely rests up on the quality of MCQ which is best assessed by item and test analysis. Item analysis is a statistical process which examines student responses to individual test items in order to identify the effectiveness of their test items and of the test as a whole. Item analysis can help in identifying potential mistakes in scoring, ambiguous items, and alternatives (distractors) that don’t work. In order to go through item analysis, difficulty index, discrimination index, distractors analysis and reliability have to be done statistically.

- **Multiple Choice Questions Adapted to Assess the Reading Comprehension Ability of Yemeni EFL Learners**

I. Developing the test:

The researcher adopted a complete version of the TOEFL test similar to TOEFL Practice Tests (2015). The test contained two passages with multiple-choice questions. The first passage was a bit longer followed by 17 questions. The second passage was shorter followed by 14 questions, too. Every question aimed to test one of the students’ skills in reading comprehension. To answer each question, the students had to choose one option among four alternatives. The scoring of the reading comprehension test was done in the following way. One mark was awarded for each correctly chosen answer and zero for the wrong answer.

II. Preliminary form of the test:

The entire test was arranged and sent to 5 educational and English professors who are experts in the field. The juries were requested to amend and refine each question along with its multiple-choice answer from different perspectives such as the right grammatical correctness, structure of the statements, distractors, and appropriateness for students. By considering the suggestions made by those experts, the two passages were agreed to be considered with a number of 13 questions for the first passage and 12 for the second. (Two) items in the two selected passages were dropped out as they are writing-questions which are not needed to test the students' reading comprehension. Thus, the two passages finally comprise only 23 questions as a total were retained and considered for pilot paper.

III. Try out the test:

The pilot paper was carried on a sample of 12 first year EFL students. Then, it was again carried on a number of 42 First third EFL students to make sure of the consistency among the items to all students as well as the exact required time to finish answering all items of the test.

Instructions were given twice to them to make it clear. After inserting pilot study data in SPSS software program, reliability found to be 0.88 which means the items are consistent. However, it has found that students hardly did the test in the allocated time in which they require more than two hours.

IV. Modification of the test:

It was noticed that the students could not do the whole test due to the test length. They hardly had to do with two passages only in one hour and a half. So, the questions in the two passages were agreed to be eliminated to 10 questions for each taking into account the rigor system of the test as well as considering the limited time.

V. Settings and test scoring

The study was conducted in the department of English Department of Sana'a University for second year EFL students 2015-2016. The test comprising twenty MCQs was administered to 134 EFL students. The time allocated was one hour and a half (90 minutes). After each passage, the items comprised of single stem and four answer options, having a single stem and four answer options, one of them being correct and the other three being 'distractors'. The students were required to darken the correct choice. Each correct response was awarded 1 mark and each incorrect response was awarded 0, range of total score being 0 to 20.

VI. Statistical Analysis

Scores of 134 students were entered in order of merit in MS Excel and simple proportions, mean, standard deviations were calculated. Items were categorized according to their difficulty index (p-value), discrimination index (DI) and distractor efficiency (DE) and actions such as discard/ review /revise and store were proposed. Reliability of the test was checked using Kuder-Richardson 20 coefficient (KR20).

VII. Item Analysis

To assess the MCQs and test its quality, the difficulty and discrimination indices are among the tools which are used for this purpose. Another tool used for further analysis is the distractor efficiency which analyses the quality of distractors and is nearly associated with difficulty and discrimination indices. Reasons for negative DI can be wrong key, ambiguous framing of questions or generalized poor preparation of students. The items with negative DI can reduce the validity of MCQs validity so it is important to delete them from the collection of questions.

Difficulty index and discrimination index are often inversely related except for extreme situations where the difficulty index is either too high or too low. It has been seen that

the relationship between them is not linear, but predicted as dome shaped (Karelia, Pillai, Vegada, 2013).

Analyzing the distractors is done to determine their relative usefulness in each item. If students consistently fail to select certain multiple choice alternatives, it may be that the options are probably totally implausible and therefore of little use as traps in multiple choice items. Therefore, designing of plausible distractors and reducing the NFDs is important aspect for framing quality MCQs (Haladyna & Downing, 1989).

The idea behind using three techniques to carry out item analysis is to assess the performance of students with greatest precision and develop a test paper that serves the international standards and quality. It should be kept in mind if there is a conflict among the three techniques of item analysis, the preference should be given to the discrimination index due to its effectiveness in discriminating on the basis of performance among the students. This inculcates the meritocracy among the students or academicians rather than bias and favoritism.

Thus, item wise analysis was conducted using the following procedures.

VIII. Difficultly Index:

Difficulty index (**p)** is expressed as the proportion of the students who answer the items correctly. The term actually is a misnomer as it should have been easiness index. The formula for computing difficulty index is given below.

$$\textit{Difficulty}\ \text{Index} = \frac{\text{Students with correct answers}}{\text{Total Number of Students}} \times 100$$

The p-value statistics ranges from 0-1 or 0-100%. The higher p-value, the easier is the question. As a general convention, items with p-value between 20-90% are considered good and acceptable, whereas the p-value between 40-60 is considered excellent and items with p-value less than 20% are considered difficult. Finally, the items with p-value more than 90% are considered easy and might need modification or elimination.

IX. Discrimination Index (DI):

It is the major of effectiveness of an item in discriminating between high and low scores. As a general convention, in order to compute discrimination index, the test takers are divided into two group; high and low. The formula for calculating discrimination index is given below.

$$\text{Discrimination Index} = \frac{H - L}{27\% \text{ of Total Students}} \times 100$$

H= Number of correct answers from top 27% of the students

L= Number of correct answers from bottom 27% of the students

The values of item discrimination index ranges from -1 to +1. The higher the value of DI, the more effective the item is. When DI is 1, all test takers in the upper group and no test takers in the lower group answered the item correctly. Conversely, if none of the high group but all of the low group answered an item correctly; the DI value would be -1.00. In general, the DI value (0.40) and greater are considered excellent items; Items with DI (between 0.30 to 0.39) is considered reasonably good but possibly subject to improvement; those with DI (0.20 to 0.29) are considered marginal items and should be reviewed while those with DI (below 0.19) are considered poor items and should be eliminated.

X. Distractor Analysis:

Distractor analysis is a statistical technique used to check the quality of each option in a multiple choice question and describes the degree of attraction of examinees or test-takers towards each option. Distractor analysis can be a useful tool in evaluating the effectiveness of these distractors in which they reveal if students do guessing and not really know the right answer. There is a greater possibility that students will be able to select the correct answer by guessing as the options have been reduced. There are two types of distractors; non-functional and functional. Non-functional distractors (NFDs)

are options that are selected infrequently (<5%) by examinees and functional or effective distractor is the option selected by 5% or more students. As such, NFDs should be revised, removed or be replaced with a more plausible option.

Distractor efficiency (DE) is determined for each item on the basis of the number of NFDs in it and ranges from 0 to 100%. If an item contains three or two or one or nil NFDs, then DE will be 0, 33.3, 66.6, and 100%, respectively. The formula for calculating distractors efficiency is given below.

$$Distractor\ Efficiency(DE) = \frac{Total\ \text{number of distractors}\ (TD) - \text{Number of nonfunctional Distractors}\ (NFD)}{Total\ \text{number of distractors}\ (DT)} \times 100$$

$$DE = \frac{TD - NFD}{TD} \times 100$$

Non-Functional Distractors NFD= options which are selected infrequently (<5%)by students

FD= options which are selected by 5% of the students

TD= Total number of distractors

XI. Test of Reliability:

In order to check the internal consistency of the given test, Kuder-Richardson 20 coefficient was applied. The formula for computation of this test is given below;

$$r = \frac{k}{k-1}\left[1 - \frac{\sum_{i=1}^{k} pq}{\sigma^2 x}\right]$$

where, *pi* is the proportion of correct responses to test item i, qi is the proportion of incorrect responses to test item i (so that pi + qi = 1), and the variance for the denominator is

$$\sigma_x{}^2 = \frac{\sum_{i=1}^{n}\left(x_i - \bar{x}\right)^2}{n}$$

where, n is the total sample size, Xi is the score of individual students and X is the mean total score. The value of KR20 can range from 0 to 1, with numbers closer to 1 reflecting greater internal consistency indicating that the items are all measuring the same thing or general construct. The widely-accepted cut-off value of KR is greater than or equal to 0.7 (Al-Ariqi, Dange & Mir, 2017).

XII. Selection or Rejection of items on the basis of various indices used:

To assess and analyze the reading comprehension ability of Yemeni EFL learners, difficulty index, discrimination index and distractors efficiency statistics were conducted and the following results were observed:

Total 20 MCQs and 60 distractors were analyzed. The scores of the 134 students ranged from 2 to 19 marks out of total 20 marks. The mean score achieved is 9.49 with S.D is 5.03. The mean score according to the groups i.e. top 27% (36) is 16.08 with S.D 2.82 and bottom 27% (36) is 3.33 with S.D 1.96 respectively. Means and Standard deviations for difficulty index, discrimination index and distractor efficiency were (M=47.43, S.D=16.96),(M=0.61, S.D=0.46) and(48.33,27.51) respectively. The results are shown in following table (3.14):

Table (3.14) shows the Descriptive Statistics of Various Indices Used

Difficulty index	47.43	16.96
Discrimination index	0.61	0.46
Distractor efficiency	48.33	27.51

The descriptive statistics of distractor efficiency is provided in the following tables (3.15) and (3.16):

Table (3.15) reveals the distribution of selection of various options by examinees in high & low groups in corresponding items				
Item No.	Option A	Option B	Option C	Option D
Item1	1	11	59	1
Item2	36	33	2	1
Item3	32	2	36	2
Item4	1	36	2	33
Item5	36	1	33	2
Item6	33	36	1	2
Item7	33	2	1	36
Item8	36	1	1	34
Item9	34	36	1	1
Item10	34	1	1	36
Item11	35	2	33	2
Item12	8	26	32	6
Item13	16	20	34	2
Item14	10	7	48	7
Item15	2	1	33	36
Item16	33	2	36	1
Item17	35	2	33	2
Item18	36	25	5	6
Item19	20	7	36	9
Item20	40	1	29	2
Total	**511**	**252**	**456**	**221**
Average	**25.55**	**12.6**	**22.8**	**11.05**

It is evident from the above table (3.15) that majority of the students from both groups (top & bottom) selected option (A) average 25.55. The average selection of options A, B, C and D by the Yemeni EFL learners is 25.55, 12.6, 22.8 and 11.05 respectively. The proportionate usage of all the options is provided in the below table.

Table (3.16) shows the proportionate distribution of selection of various options selected by high & low examinees in corresponding items				
Option	**A**	**B**	**C**	**D**
Item1	0.01	0.15	0.82	0.01
Item2	0.50	0.46	0.03	0.01
Item3	0.44	0.03	0.50	0.03
Item4	0.01	0.50	0.03	0.46
Item5	0.50	0.01	0.46	0.03
Item6	0.46	0.50	0.01	0.03
Item7	0.46	0.03	0.01	0.50
Item8	0.50	0.01	0.01	0.47
Item9	0.47	0.50	0.01	0.01
Item10	0.47	0.01	0.01	0.50
Item11	0.49	0.03	0.46	0.03
Item12	0.11	0.36	0.44	0.08
Item13	0.22	0.28	0.47	0.03
Item14	**0.14**	**0.10**	**0.67**	**0.10**
Item15	**0.03**	**0.01**	**0.46**	**0.50**
Item16	0.46	0.03	0.50	0.01
Item17	0.49	0.03	0.46	0.03
Item18	0.50	0.35	0.07	0.08
Item19	0.28	0.10	0.50	0.13
Item20	0.56	0.01	0.40	0.03

It is evident from table (3.16) that maximum percentage of Yemeni EFL learners selected in items 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20 options C,A,C,B,A,B,D,A,B,D,A,C,C,C,D,C,A,A respectively.

The distribution of difficulty and discrimination indices of the items and their corresponding distractor efficiency are shown in the following table (3.17):

Table (3.17) shows the distribution of difficulty and discrimination indices of the items and their corresponding Distractor Efficiency			
Items	**Difficulty Index**	**Discrimination Index**	**Distractor Efficiency**
Item1	90.30	0.36	0.33
Item2	70.15	0.95	0.33
Item3	50.75	0.96	0.33
Item4	40.30	0.91	0.33
Item5	40.30	0.92	0.33
Item6	40.30	0.92	0.33
Item7	40.30	0.94	0.33
Item8	40.30	0.93	0.33
Item9	40.30	0.95	0.33
Item10	50.75	0.94	0.33
Item11	35.07	0.92	0.33
Item12	37.31	0.28	1.00
Item13	37.31	0.28	0.67
Item14	**68.66***	**-0.67***	**1.00***
Item15	**84.33***	**-0.08***	**0.33***
Item16	35.07	0.92	0.33
Item17	35.07	0.92	0.33
Item18	37.31	0.28	1.00
Item19	37.31	0.28	1.00
Item20	37.31	0.28	0.33

The descriptive statistics of using all the three test statistics are represented in Table (3.18):

Table (3.18) reveals the descriptive statistics using all the three test statistics				
Difficulty Index	**Interpretation**	**No. of Items (%)**	**Distractor Efficiency**	**Proposed Action**
20-90	Good	19	48.89	Store
<20	Too Difficult	0	0	-
>90	Too easy	1	33.33	Store/review
Discrimination Index				
>=0.40	Excellent	12	33.00	Store
0.30-0.39	Good	1	33.33	Store/Review
0.20-0.29	Marginal	5	80.0	Store
<=0.19	Poor	2	66.66	Discard

The tables (3.18) reveals that out of total 20 items, 19 have acceptable level of difficulty with p-value within the range of 20% to 90% whereas one item among them had p value >90%. Distractor efficiency values corresponding to difficulty index are 48.89, 0 and 33.33 respectively. The Difficulty Index was noted to be maximum at p-value range between 40% and 60%. Combining the two indices, 19 items could be called 'good' having a p-value from 20% to 90%, as well as a DI ≥ 0.40. Overall 75% items had 2 non-functional distractors (NFDs), while 20% items had 3 functional distractors and 5% had only 1 functional distractor. Mean DE was 80.00 ± 33.00%. Excellent discrimination (DI = 33.00) was achieved with 12 items having two NFD respectively while good discrimination was achieved with only 1 item with one NFD had lower DI (33.33). Two items with p-value ranged <0.19 have 1 FD and another with 2 NFD are found to be poor because they were answered correctly by the low group while they were not by the high group (Al-Ariqi et al, 2017).

Similarly, majority of items (12) have excellent discrimination indexes (DI≥0.40), one item has good discrimination indexes (DI between 0.30 to 0.39), 5 items have marginal discrimination indexes and 2 items having poor DI respectively. Likewise, the

Distractor efficiency corresponding to this discrimination index is 33.00%, 33.33%, 80.00% and 66.66% respectively (Al-Ariqi et al, 2017). Combining all the three item analysis statistics, it can be inferred that items no. 14 & 15 should be discarded as shown in figure (3.1) below.

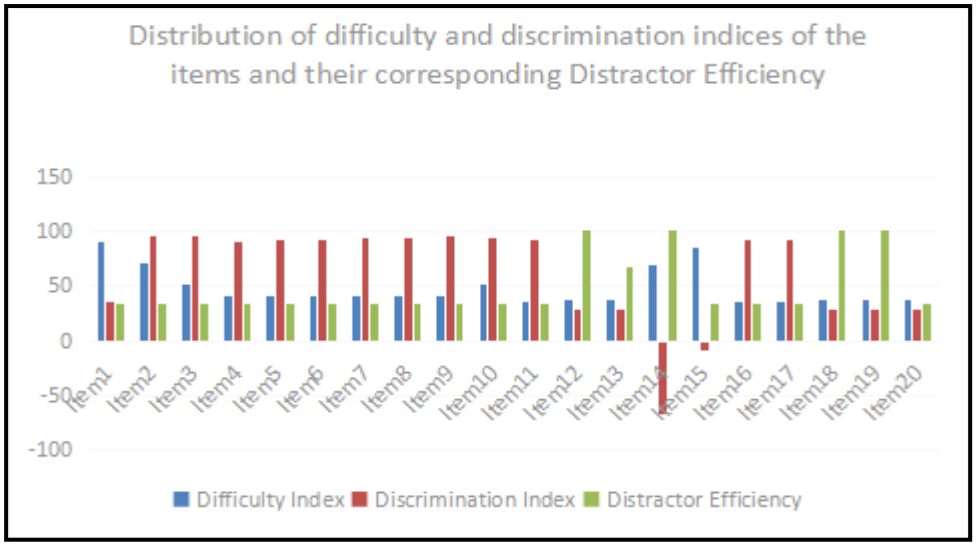


Figure 3.1 illustrates diagrammatic representation of the distribution of difficulty and discrimination indices of the items and their corresponding Distractor Efficiency

- **Establishing Validity:**

Content & Items Validity:

For the sake of ensuring validity, the reading comprehension test was first given to the research guides and English language instructors who are experts in the area. Based on their suggestions and comments, the questions were reviewed and improved to make sure they are all related to the area of the study and each one independently focuses on what it claims to measure.

Second, the tool was refined depending on the results of the item analysis done. Third, since reliability is a necessary condition of validity and based on the result of piloting the tool, the reliability or measurement of the internal consistency of the test

items showed that it was reliably measured 0.88. Finally, the validators' comments were taken into account while finalizing the test for administration.

(Tool presented in Appendix IV).

3.8 Piloting the tools:

All data-gathering instruments should be piloted to test how long it takes subjects to complete them, to check that all statements and instructions are clear and easy to follow, and to enable the researcher to remove any items or questions which do not yield usable data (Wallace, 1998). This means that it is worthwhile trying the three surveys and the test out on the subjects beforehand to get some feedback from them. The four data collecting instruments of the study were piloted on two phases as shown in table (3.19).

Table (3.19) indicates the descriptive statistics regarding the pilot study

Pilot Study Number	Respondents selected for pilot study	Total number of respondents	Percentage
Phase 1	12	60	20%
Phase 2	42	210	20%
Total sample	54	270	40%
Source Author's computation			

Because the whole number of EFL students in the second year in the English department was selected as the main sample of the study, the sample for piloting was chosen from another two levels in the same department. The first pilot study was applied on 12 students at the first year EFL students which were selected randomly to participate in the study. After reviewing, editing and deleting to the items of each questionnaire/test, the second phase of the pilot study on a bigger sample was conducted. Another 42 third year EFL students were selected randomly and piloted to see whether they would work as planned and reviewed after the first pilot study as shown in table (3.19).

The duration between the two pilot studies were one month. Another month was a gap the piloting and the day of administering the main tests to the whole sample. Both were conducted at the end of the first term of the academic year 2015-2016.

3.9 Administration of the tests:

Baker (1989) points out that to guarantee the test to be reliable and valid, the administration of the test should be well administered. The 20-item reading comprehension test includes the reading sub-skills which were set to be investigated. One hundred and forty three students participated in the administration of the test. They started the test at 11:00 a.m. and finished at 12:30 p.m. in three classrooms on the three blocks of the Faculty of Education (Department of English), Sana'a University, Yemen.

Clear instructions were given to the participants about how to go through the test in only one hour and a half. Every effort was made to ensure that all participants became familiar with the test formats. Furthermore, they were instructed not to take more than one hour and a half to answer the reading comprehension test. Moreover, the participants were told that they could get their marks after the test was scored, the thing that many test-takers really asked for. Done with the test, they were asked to respond to the three questionnaires in 15 minutes for each and finished at 1.15 p.m as planned.

3.10 Interview:

In order to strengthen data in this research and provide more credibility and validity to the findings, data triangulation has been used. Data triangulation helps in verifying the information collected from different methods of primary research like interviews, questionnaires or surveys, observations and documents. The triangulation of data provides research with verification and validity while complementing similar data and make it more comprehensive to draw conclusions and outcomes.

Interviews which are one of the qualitative methods of collecting data were used in this research as part of triangulation methodology. They are believed to provide a 'deeper' understanding of social phenomena after answering to questionnaires. Interviews are considered an appropriate method for discussing sensitive topics particularly with

participants who are introverted to talk within a group. Conversational interview was used to explore the views, experiences, beliefs and/or motivations of individuals on specific matters. It is believed this type of interview is convenient to primary research.

- **Interview Design:**

Similar to other instruments used in the study, the questions of the interview were designed on the basis of the questionnaires/test items, the students' opinions/experience while answering the items/test and the researcher as a teacher in the field of English language teaching. The design started by giving general information about the interview. This helps the researcher to organize the interviews to be conducted.

The interviewees were asked some questions based on their answers stated in the questionnaires. The questions focused only on the subscales of each questionnaire in the study and the challenges which the students have faced while trying to answer the test. The interviews were carried out to gather extra information in relation to the research questions. The advantage of the interviews is that the researcher can use the interview data to arrive at useful explanations for some quantitative findings. First, the participants were asked about their reading difficulties in learning English. They were then asked to report on their preferences in learning styles and strategies they used when attempting to complete the reading comprehension test in their final examination. At this stage, test takers were provided with the reading comprehension test designed to stimulate a test situation and help remind them of how they thought. They were then asked about learning culture aspects and some cultural background which might be apparent in EFL classroom. The interview questions are related to their answers on the questionnaires to find more reasons which can support the quantitative results gathered through the questionnaires. The semi structured interview in this study; thus, was adapted with each

participant replied to the same research questions, and more information were explored based on their responses.

- **Interview Administration:**

Interview sessions were held at the participants' department. A comfortable and suitable place was arranged to conduct the interview. Only 40 students of the whole sample were requested for the interview. After greeting and thanking the interviewee, the researcher explained the purpose of the interview and how it would be conducted and how the results would be dealt with. The interviews were conducted in Arabic and lasted about 15 minutes. The names were kept secret. The rationale of using this approach is to understand the respondent's point of view rather than make generalizations in order to shed more light on new perspectives which can be mentioned in the discussion of the study findings.

3.11 Conclusion:

This chapter provides detailed explanation of the research design, sampling and the methods employed to collect the data concerning the objectives of this study. It tries to expose the processes of adapting or developing of data collection instruments and the verifications of reliability and validity of these instruments.

The next chapter deals with descriptive and inferential statistical analysis with respect to current research. It tries to examine the relationship between learning styles, reading strategies, learning culture and reading comprehension. The impact of the first three variables on reading comprehension has been studied as well in the next chapter.

CHAPTER - IV

DATA ANALYSIS AND INTERPRETATIONS

This chapter comprehensively explains descriptive and inferential statistical analysis of data analysis in three sections:

Section 4.1: Descriptive Analysis

4.1.1: Descriptive Analysis with regard to Reading Comprehension

4.1.2: Descriptive Analysis with regard to Perceptual Learning Styles

4.1.3: Descriptive Analysis with regard to Strategies' Use

4.1.4: Descriptive Analysis with regard to Learning Culture

Section 4.2: Correlation Analysis

4.2.1: Correlation Analysis between Perceptual Learning Styles and Reading Comprehension

4.2.2: Correlation Analysis between Reading Strategies' Use and Reading Comprehension

4.2.3: Correlation Analysis between Learning Culture and Reading Comprehension

Section 4.3: Regression Analysis

4.3.1 Regression Analysis between Perceptual Learning Styles & Reading Comprehension

4.3.2 Regression Analysis between Strategies' Use & Reading Comprehension

4.3.3 Regression Analysis between Learning Culture & Reading Comprehension

4.3.4 Regression Analysis between Perceptual Learning Styles, Strategies' Use, Learning Culture & Reading Comprehension

Dependent variable:

- Reading Comprehension

Independent variables:

- Perceptual Learning Styles
- Reading Strategies Use
- Learning Culture

Two parameters/statistics - mean and standard deviations have been computed to carryout descriptive analysis and infer the results from the available/collected data

accordingly. The relationship/association between dependent and independent variables is determined with the help of correlation and regression analysis. In order to carry out correlation Pearson Coefficient correlation has been computed.

To find out the impact of various independent variables on dependent variable, linear regression has been applied. Finally, a model based on linear regression has been developed. All the values and test statistic have been worked out with the aid of SPSS and Excel software.

4.1 Descriptive analysis

4.1.1 Descriptive analysis regarding Reading Comprehension among Yemeni EFL Learners

Reading is to get information from written texts. It involves decoding words and identifying the sound that must accompany the printed word (Das, 2009). Comprehension is a part of the communication process of getting the thoughts that were in the author's mind into the reader's mind (Fry, 1963). Simply, reading comprehension is the ability to read text, process it, and understand its meaning.

Objective-1: to measure and analyze the levels of the Yemeni EFL learners in reading comprehension.

In order to assess the performance of students in reading comprehension, a test comprising of two passages which in turn comprise of 18 questions - 10 questions in the first passage and 8 in the second were developed and administered to the target respondents i.e. Yemeni EFL learners. The descriptive statistics with respect to comprehension test using in the current study is illustrated below.

Question 1: what does the author say about the presence of a blow hole in cetaceans?

- This question aims to assess the students' understanding of the author's ideology described in the given passage

Table (4.1.1) presents descriptive statistics regarding the performance of the Yemeni EFL students : question 1		
Answer	Frequency	Percentage
A	1	0.75
B	11	8.21
C*	121	90.30
D	1	0.75
correct	121	90.30
incorrect	13	9.70
Total	134	100
* *correct option*		

It is evident from the table (4.1.1) above that majority of the learners i.e. 121 (90.30%) have correctly answered this question, whereas 13 (9.70%) have answered incorrectly. The distribution of selection of various options (A, B, C, D) by the examinees is 1 (0.75%), 11 (8.21%), 121 (90.30%), 1 (0.75%) respectively. This means the Yemeni EFL learners in this question are able to understand the author's ideology described in the given text. As per descriptive statistics, it can be inferred that majority of the Yemeni EFL learners have answered this question correctly.

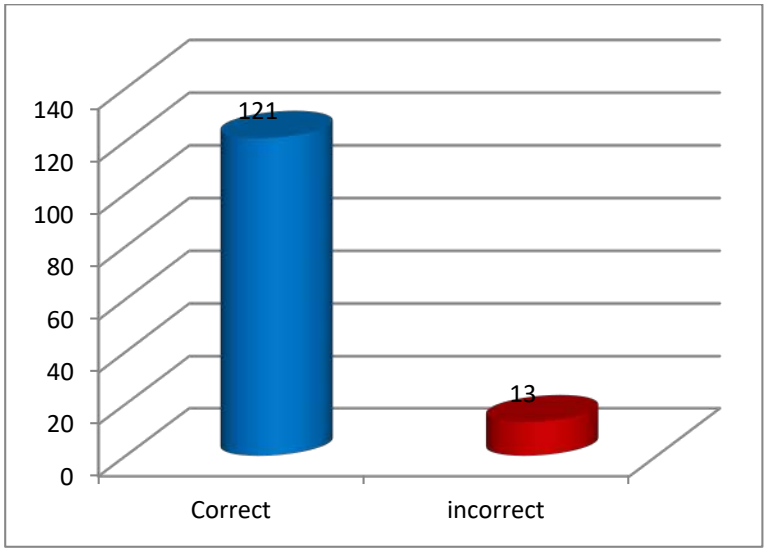


Figure (4.1.1) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No. 1.

Question 2: Which of the following can be inferred from paragraph 1 about early sea otters?

- This question aims to assess the students' ability in making analysis and inference.

Table (4.1.2) presents descriptive statistics regarding the performance of the Yemeni EFL students : question 2		
Answer	Frequency	Percentage
A*	94	70.15
B	37	27.61
C	2	1.49
D	1	0.75
correct	94	70.15
incorrect	40	29.85
Total	134	100
* *correct option*		

It is apparent from the table (4.1.2) above that major proportion of the learners i.e. 94 (70.15%) have correctly answered this question, whereas 40 (29.85%) have answered incorrectly. The distribution of selection of various options (A, B, C, D) by the examinees is 94 (70.15%), 37 (27.61%), 2 (1.49%), 1 (0.75%) respectively. The data shows that the Yemeni EFL learners are good in making analysis and inference. Thus, it is evident from the descriptive statistics that substantial proportion of Yemeni EFL learners has correctly answered this question.

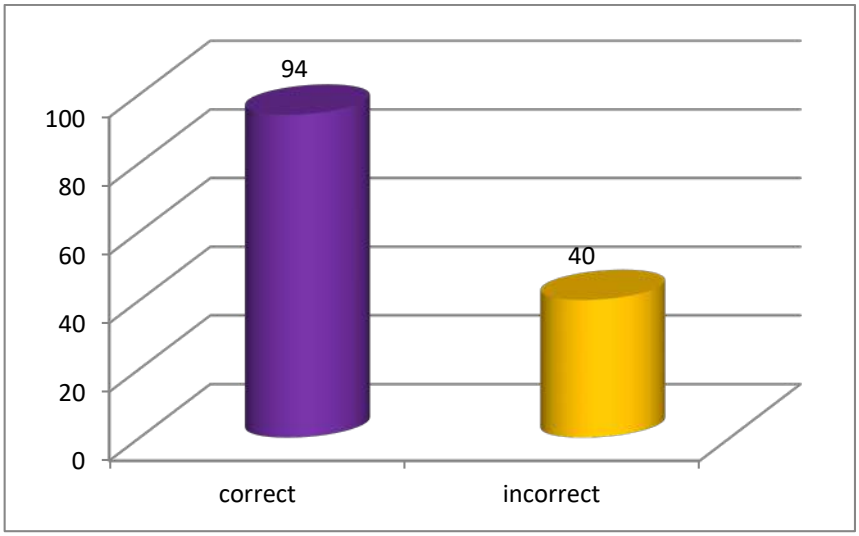


Figure (4.1.2) shows the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No. 2.

Question 3: The word 'precious' in the passage is closest in meaning to…..

This question aims to assess the students' vocabulary use and intensity.

Table (4.1.3) presents descriptive statistics regarding the performance of the Yemeni EFL students: question 3

Answer	Frequency	Percentage
A	32	23.88
B	19	14.18
C*	68	50.75
D	15	11.19
correct	68	50.75
incorrect	66	49.25
Total	134	100

* *correct option*

It is apparent from the table (4.1.3) above that half of the learners i.e. 68 (50.75%) have correctly answered this question, whereas 66 (49.25%) have answered incorrectly. The distribution of selection of various options (A, B, C, D) by the examinees is 32 (23.88%), 19 (14.18%), 68 (50.75%), 15 (11.19%) respectively. The descriptive statistics reveal that level of vocabulary use and intensity is mediocre among Yemeni EFL learners.

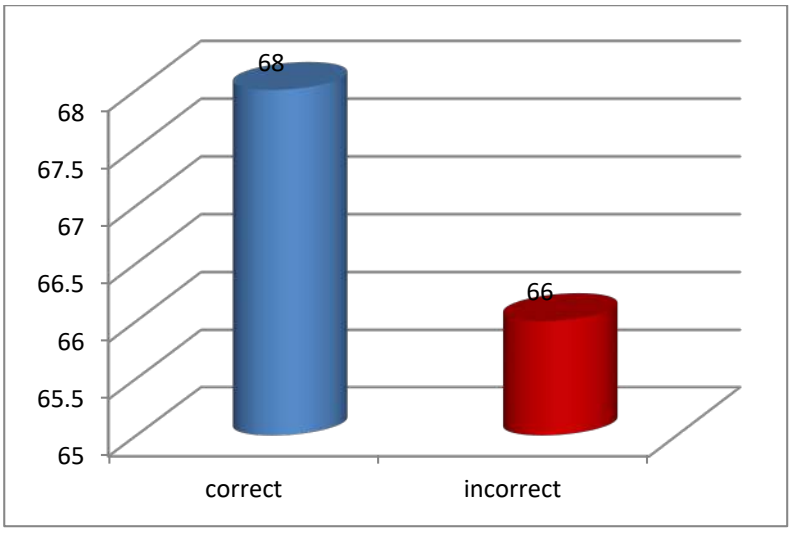


Figure (4.1.3) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.3

Question 4: Pakicetus and modern cetaceans have similar…..

This question aims to assess the students' aptitude in making comparison and contrast.

Table (4.1.4) presents descriptive statistics regarding the performance of the Yemeni EFL students : question 4		
Answer	Frequency	Percentage
A	17	12.69
B*	54	40.30
C	10	7.46
D	53	39.55
correct	54	40.30
incorrect	80	59.70
Total	134	100
* *Correct Option*		

It is obvious from the table (4.1.4) above that substantial portion of the learners i.e. 80 (59.70%) were unable to answer this question correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 17 (12.69%), 54 (40.30%), 10 (7.46%), 53 (39.55%) respectively. However, 54 (40.30%) have answered it correctly. It seems from the descriptive statistics that the Yemeni EFL learners in this question find difficulty in making contrast given in the text. It might be because they face difficulties in comprehending the whole text and finding the required information in this passage or not understanding what the whole text is about.

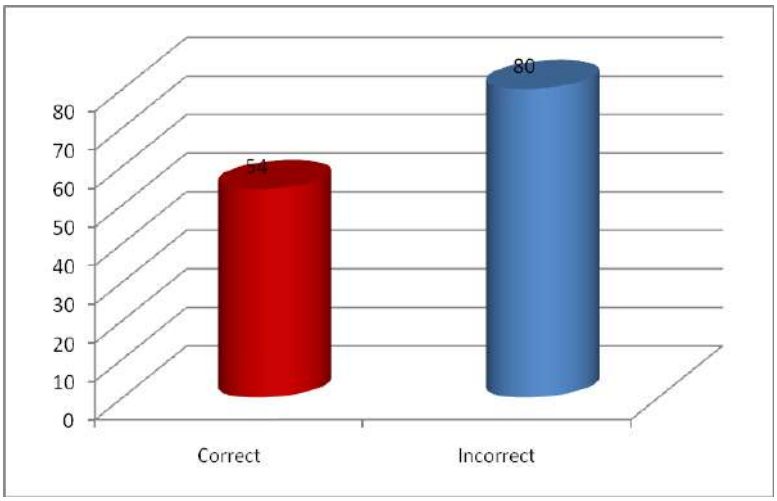


Figure (4.1.4) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.4

Question5: The word "It" in the passage refers to…..

This question aims to assess the students' aptitude in understanding the transition between ideas by using pronoun references.

Table (4.1.5) presents descriptive statistics regarding the performance of the Yemeni EFL students : question 5

Answer	Frequency	Percentage
A*	54	40.30
B	3	2.24
C	33	24.63
D	44	32.84
correct	54	40.30
incorrect	80	59.70
Total	134	100

* *Correct Option*

It is shown in table (4.1.5) above that major proportion of the learners i.e. 80 (59.70%) answered this question incorrectly. The distribution of selection of various options (A, B, C, D) by the examinees is 54 (40.30%), 3 (2.24%), 33 (24.63%), 44 (32.84%) respectively. However, 54 (40.30%) answered it correctly. The descriptive statistics indicates that Yemeni EFL learners face difficulty in connecting ideas in the text as they cannot refer the pronouns to its reference mentioned earlier in the text.

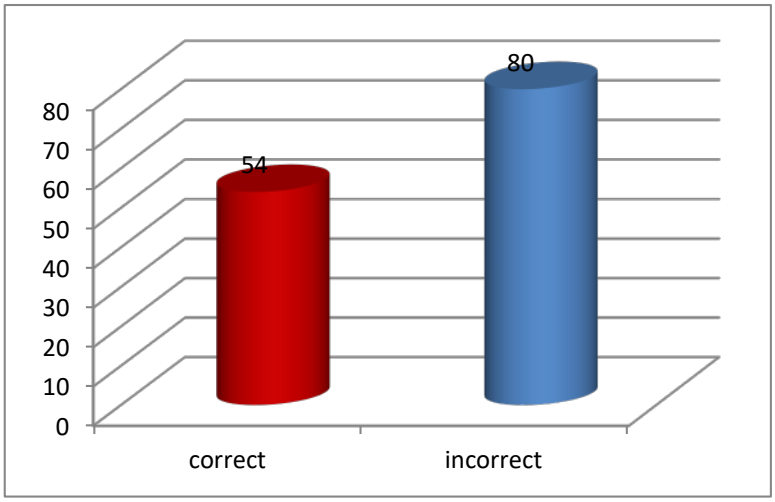


Figure (4.1.5) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.5

Statement/Question 6: The word 'exposed' in the passage is closest in meaning to…

This question aims to test the students' ability to guess meaning of new words/synonyms.

Table (4.1.6) presents descriptive statistics regarding the performance of the Yemeni EFL students : question 6

Answer	Frequency	Percentage
A	45	33.58
B*	54	40.30
C	14	10.45
D	21	15.67
correct	54	40.30
incorrect	80	59.70
Total	134	100
* *Correct Option*		

It is observed from the table (4.1.6) above that formidable portion of the learners i.e. 80 (59.70%) could not answer this question correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 45 (33.58%), 54 (40.30%), 14 (10.45%), 21 (15.67%) respectively. However, 54 (40.30%) have answered it correctly. It can be deduced from the descriptive statistics that guessing meaning of new words might be uneasy for Yemeni EFL learners in this question.

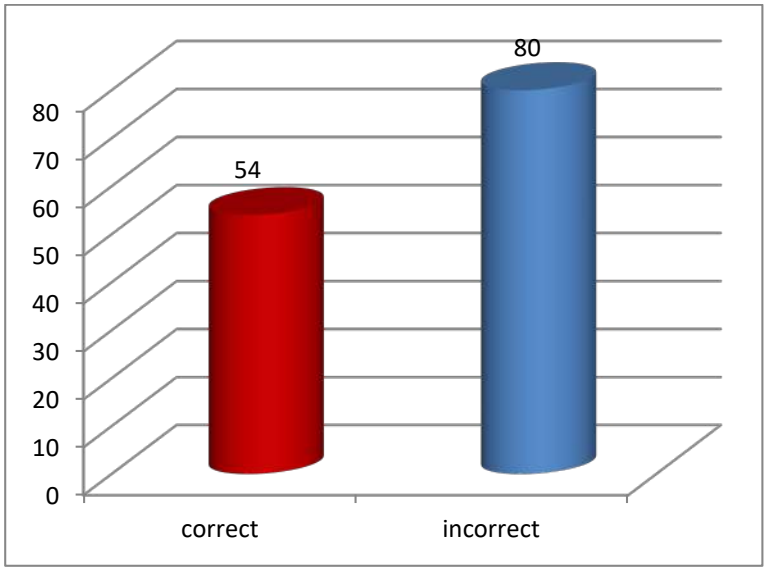


Figure (4.1.6) illustrates the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.6

Question 7: The hind leg of Basilosaurus was a significant finding because it showed that Basilosaurus……

This question tries to assess the students' ability in skimming the whole passage and find information.

Table (4.1.7) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 7		
Answer	Frequency	Percentage
A	55	41.04
B	14	10.45
C	11	8.21
D*	54	40.30
correct	54	40.30
incorrect	80	59.70
Total	134	100
* *Correct Option*		

It is evident from the table (4.1.7) above that most of the learners i.e. 80 (59.70%) did not answer this question correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 55 (41.04%), 14 (10.45%), 11 (8.21%), 54 (40.30%) respectively. However, 54 (40.30%) have answered it correctly. The descriptive statistics suggests that the most of Yemeni EFL learners are unable to skim or get the main idea in the text.

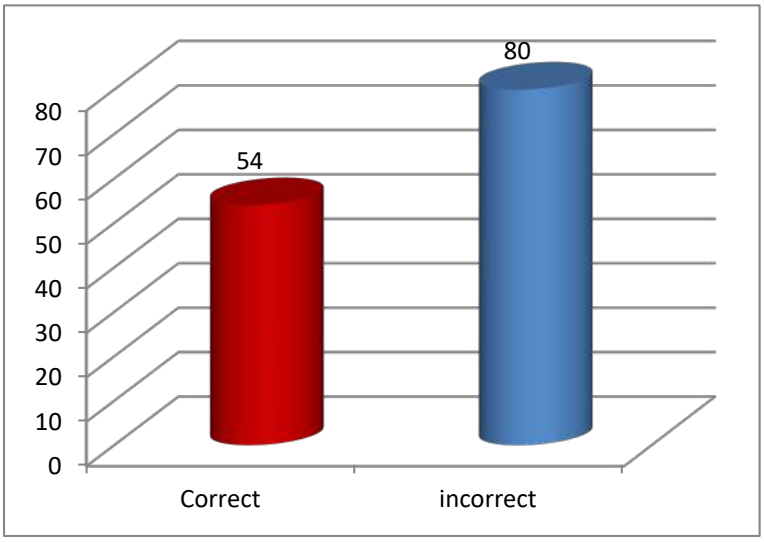


Figure (4.1.7) shows the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.7

Question 8: It can be inferred that Basilosaurus bred and gave birth in which of the following locations?

This question attempts to test the students' ability in making inference and understanding the implied meaning.

Table (4.1.8) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 8		
Answer	Frequency	Percentage
A*	54	40.30
B	24	17.91
C	13	9.70
D	43	32.09
correct	54	40.30
incorrect	80	59.70
Total	134	100
* *Correct Option*		

It is clear from the table (4.1.8) above that majority of the learners i.e. 80 (59.70%) did not answer this question correctly while 54 (40.30%) were able to answer it correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 54 (40.30%), 24 (17.91%), 13 (9.70%), 43 (32.09%) respectively. It can be deduced from the descriptive statistics above that Yemeni EFL learners could not make inference in this question. Therefore, as per the descriptive statistics, it can be opined that to infer the implied meaning Yemeni EFL learners are unable to use required effective strategies.

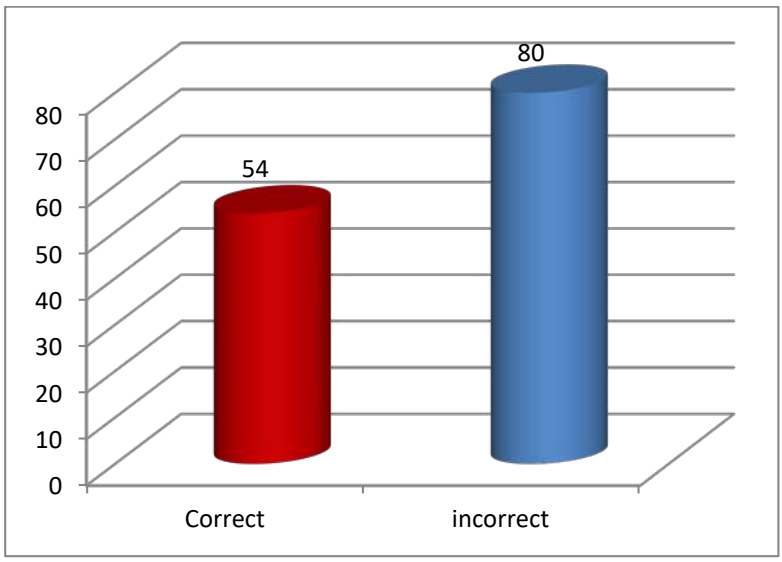


Figure (4.1.8) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.8

Question 9: Why does the author use the word 'luckily' in mentioning that the Ambulocetus natans fossil included hind legs?

This question's aim to assess the students' ability in understanding the author's skill of selection of words and phrases.

Table (4.1.9) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 9		
Answer	Frequency	Percentage
A	47	35.07
B*	54	40.30
C	12	8.96
D	21	15.67
correct	54	40.30
incorrect	80	59.70
Total	134	100
* *Correct Option*		

It is distinct from the table (4.1.9) above that significant portion of the learners i.e. 80 (59.70%) answered this question incorrectly whereas 54 (40.30%) answered it correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 47 (35.07%), 54 (40.30%), 12 (8.96%), 21 (15.67%) respectively. Thus, it can be observed from descriptive statistics that Yemeni EFL learners find it difficult to comprehend the author's aim of using certain words to convey a certain meaning in the text.

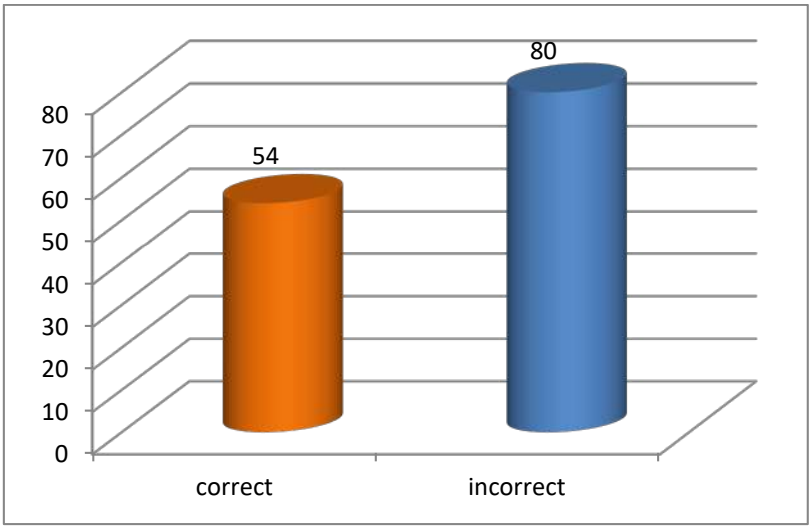


Figure (4.1.9) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.9

Question 10: The word 'propulsion' in the passage is closest in meaning to….

This question aims to test the students' ability in comprehending the unknown words depending on context.

Table (4.1.10) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 10		
Answer	Frequency	Percentage
A	45	33.58
B	11	8.21
C	10	7.46
D*	68	50.75
correct	68	50.75
incorrect	66	49.25
Total	134	100
* *Correct Option*		

It is manifest from the table (4.1.10) above that half of the learners i.e. 68 (50.75%) have correctly answered this question, whereas 66 (49.25%) have answered it incorrectly. The distribution of selection of various options (A, B, C, D) by the examinees is 45 (33.58%), 11 (8.21%), 10 (7.46%), 68 (50.75%) respectively. The descriptive statistics reveals that Yemeni EFL learners show an average level in vocabulary knowledge in this question. Therefore, it can be perceived that EFL learners are unable to connect ideas to comprehend all the details in the text which can help in guessing the meaning of new or unknown words to them.

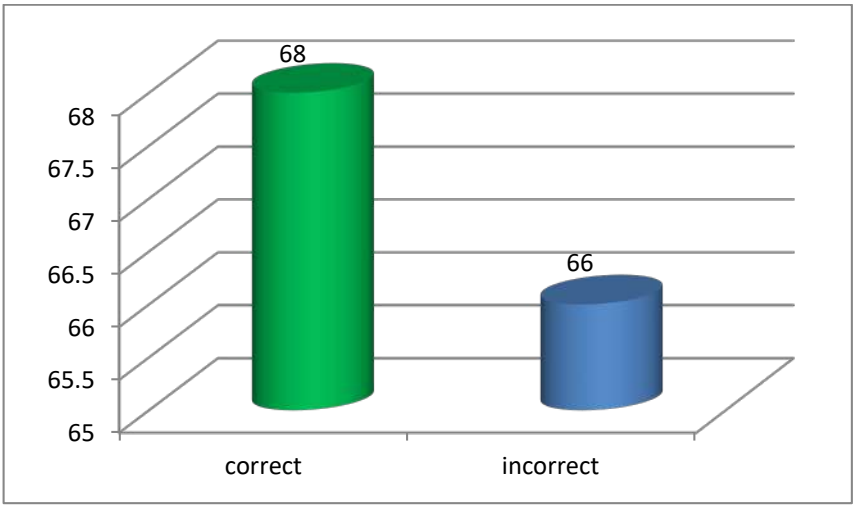


Figure (4.1.10) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.10

Question 11: According to paragraph 1, all the following were true of viewing films in Kinetoscope parlors EXCEPT: …….

This question tries to check the students' ability in recalling and filtering information mentioned in the text.

Table (4.1.11) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 11		
Answer	Frequency	Percentage
A	78	58.21
B	1	0.75
C*	47	35.07
D	8	5.97
correct	47	35.07
incorrect	87	64.93
Total	134	100
* *Correct Option*		

It is can be manifested from the table (4.1.11) that most of the learners i.e. 87 (64.93%) have not correctly answered this question, while 47 (35.07%) have answered it correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 78 (58.21%), 1 (0.75%), 47 (35.07%), 8 (5.97%) respectively. It might be concluded from the descriptive statistics above that Yemeni EFL learners are highly proficient in recalling information and filtering it. Therefore, from the descriptive statistics that Yemeni EFL learners lack proper training that would have enable them to use strategies effectively.

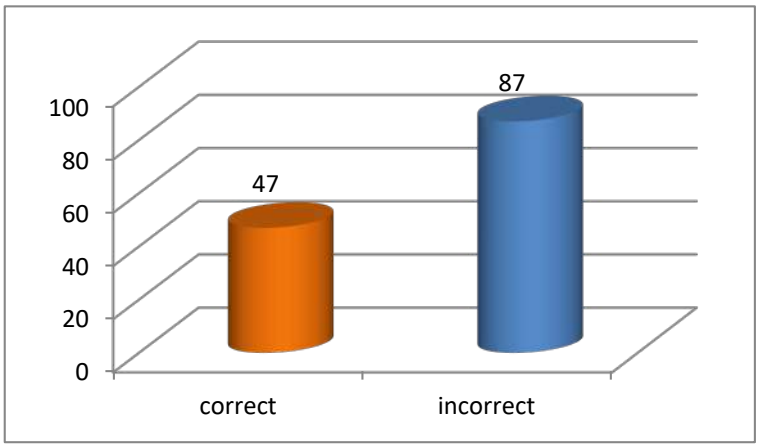


Figure (4.1.11) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.11

Question 12: The Author discusses phonograph parlors in paragraph 2 in order to……
This question aims to assess the students' aptitude in using prior knowledge to connect between the ideas mentioned in the text.

Table (4.1.12) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 12		
Answer	Frequency	Percentage
A	18	13.43
B*	50	37.31
C	47	35.07
D	19	14.18
correct	50	37.31
incorrect	84	62.69
Total	134	100
* *Correct Option*		

It is visible from the table (4.1.12) above that majority of the learners i.e. 84 (62.69%) were unable to answer this question correctly. However, 50 (37.31%) have answered it correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 18 (13.43%), 50 (37.31%), 47 (35.07%), 19 (14.18%) respectively. The descriptive statistics shows that Yemeni EFL learners can not connect ideas to be able to find reasons in the text. Thus, descriptive statistics manifests that most of Yemeni EFL learners have no prior knowledge about the given texts.

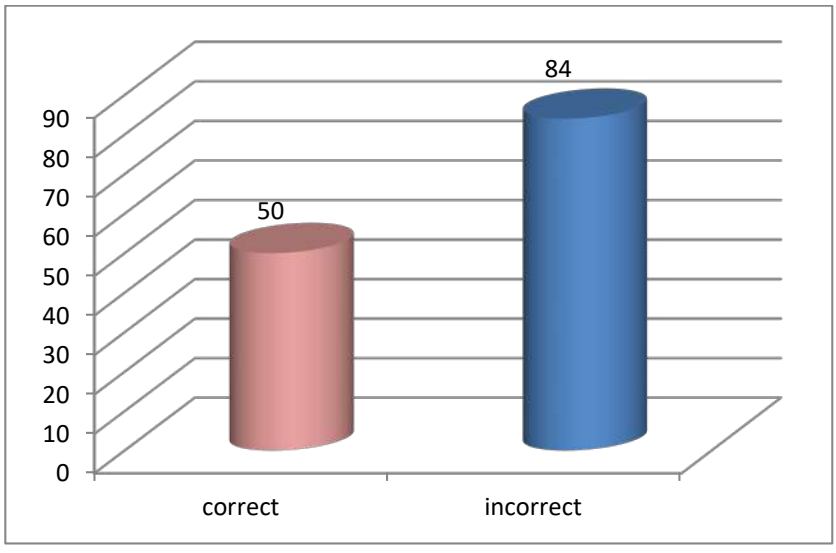


Figure (4.1.12) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.12

Question 13: The word 'readily' in the passage is closest in meaning to….

This question tries to assess the students' ability in guessing the meaning of words through comprehending the context.

Table (4.1.13) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 13

Answer	Frequency	Percentage
A	37	27.61
B*	50	37.31
C	47	35.07
D	0	0
correct	50	37.31
incorrect	84	62.69
Total	134	100

* *Correct Option*

Table (4.1.13) above indicates that substantial portion of the learners i.e. 84 (62.69%) were unable to answer this question correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 37 (27.61%), 50 (37.31%), 47 (35.07%), 0 (0%) respectively. However, 50 (37.31%) have answered it correctly. The descriptive statistics above reveals that the Yemeni EFL learners demonstrate low level in guessing meaning of unfamiliar words. Based on the descriptive statistics, it can be opined that the ability of the Yemeni EFL learners in comprehending the theme of the whole text to guess meanings of new words is below standard.

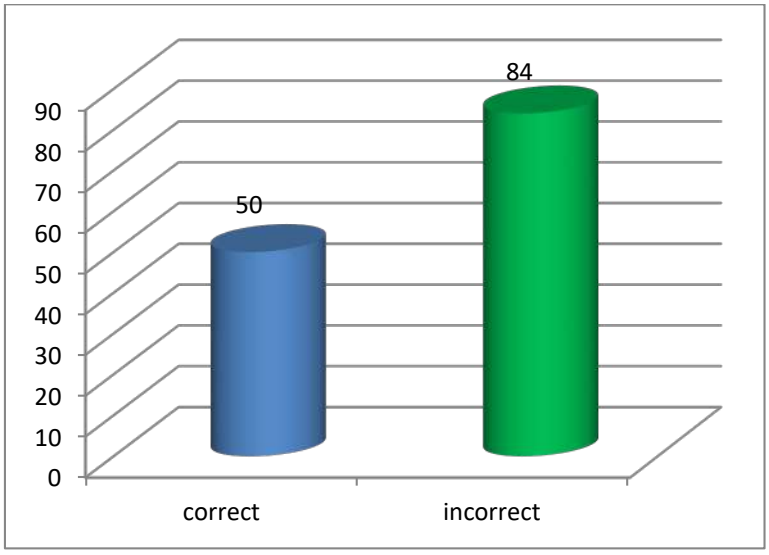


Figure (4.1.13) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.13

Question 14: According to paragraph 5, what role did early exhibitors play in the presentation of movies in theaters?

This question tries to measure the students' ability in scanning the details in text.

Table (4.1.14) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 14

Answer	Frequency	Percentage
A*	47	35.07
B	11	8.21
C	39	29.10
D	37	27.61
correct	47	35.07
incorrect	87	64.93
Total	134	100

* *Correct Option*

It is evident in table (4.1.14) above that a major portion of the learners i.e. 87 (64.93%) answered this question incorrectly. The distribution of selection of various options (A, B, C, D) by the examinees is 47 (35.07%), 11 (8.21%), 39 (29.10%), 37 (27.61%) respectively. However, only 47 (35.07%) have answered it correctly. The descriptive statistics indicates that Yemeni EFL learners show low score in this question. Thus, based on descriptive statistics, it can be deduced that Yemeni EFL learners possess schemata knowledge about theaters and their ability to scan the important details in the passage is not per international standards.

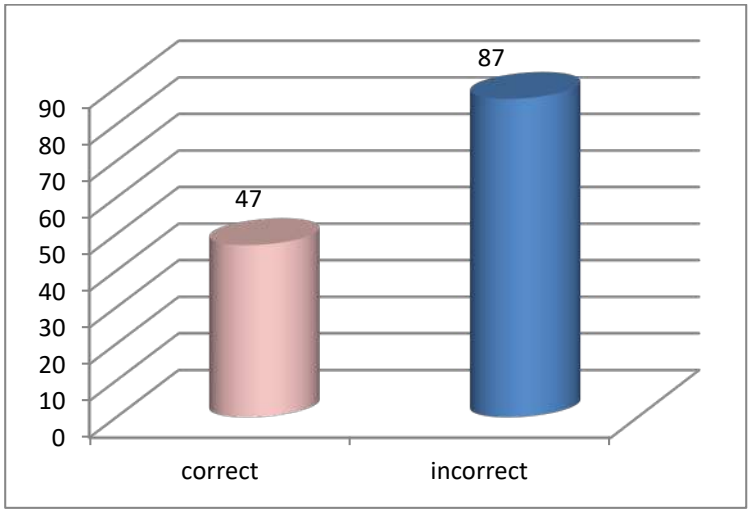


Figure (4.1.14) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.14

Question 15: Which of the following is mentioned in paragraph 6 as one of the ways the Mutoscope differed from the Kinetoscope?

This question tries to assess the students' ability in going through the complexity of the text.

Table (4.1.15) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 15		
Answer	Frequency	Percentage
A	50	37.31
B	22	16.42
C*	47	35.07
D	15	11.19
correct	47	35.07
incorrect	87	64.92
Total	134	100
* *Correct Option*		

It is obvious from table (4.1.15) above that most of the learners i.e. 87 (64.92%) could not answer this question correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 50 (37.31%), 22 (16.42%), 47 (35.07%), 15 (11.19%) respectively. However, only 47 (35.07%) have answered it correctly. It can be concluded from the descriptive statistics above that Yemeni EFL learners reveal low level in scanning details in the text in this question. The descriptive statistics also hints that the students' lack training in using effective reading strategies to handle with the text complexity.

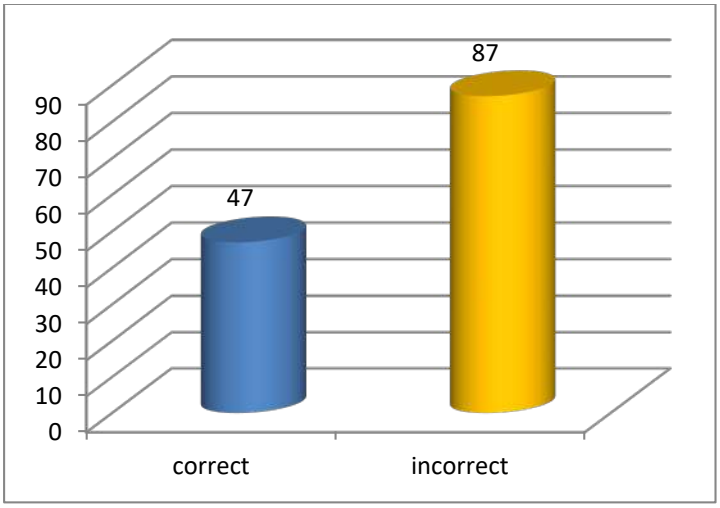


Figure (4.1.15) exemplifies the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.15

Question 16: The word 'It' in the passage refers to….

This question's aims to check the students' ability in using pronouns and connect them to their reference.

Table (4.1.16) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 16		
Answer	Frequency	Percentage
A	36	26.87
B*	50	37.31
C	29	21.64
D	19	14.18
correct	50	37.31
incorrect	84	62.69
Total	134	100
* *Correct Option*		

It is displayed in table (4.1.16) that majority of the learners i.e. 84 (62.69%) could not answer this question correctly. The distribution of selection of various options (A, B, C, D) by the examinees is 36 (26.87%), 50 (37.31%), 29 (21.64%), 19 (14.18%) respectively. On the other hand, the rest of the learners 50 (37.31%) have answered it correctly. The descriptive statistics above displays that Yemeni EFL learners show difficulty in connecting between pronouns and their references. Therefore, it can be observed from the descriptive statistics that Yemeni EFL learners are unable to make coherence between pronouns and references or connect between pronouns and their antecedents.

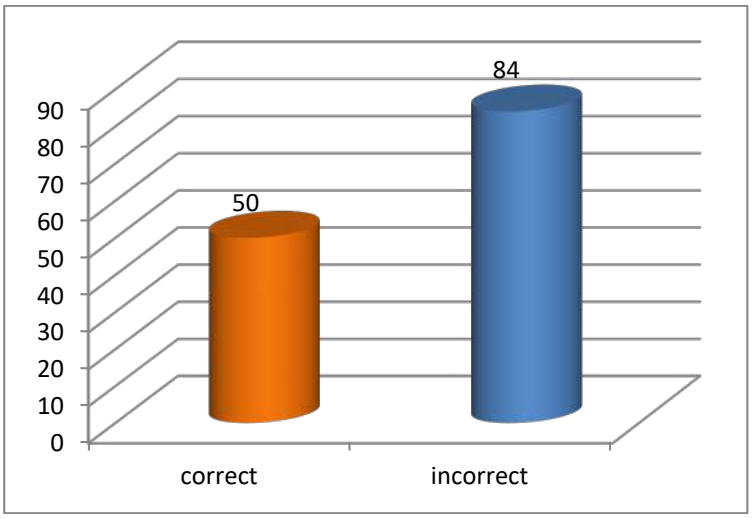


Figure (4.1.16) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.16

Question 17: According to paragraph 6, the images seen by viewers in the earlier peepshows, compared with the images projected or the screen, were relatively…..

This question attempts to assess the students' ability in linking known knowledge with the knowledge in texts.

Table (4.1.17) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 17		
Answer	Frequency	Percentage
A*	50	37.31
B	22	16.42
C	53	39.55
D	9	6.72
correct	50	37.31
incorrect	84	62.69
	134	100
* *Correct Option*		

It is clear in table (4.1.17) that majority of the learners i.e. 84 (62.69%) answered this question incorrectly. The distribution of selection of various options (A, B, C, D) by the examinees is 50 (37.31%), 22 (16.42%), 53 (39.55%), 9 (6.72%) respectively. On the other hand, the rest of the learners 50 (37.31%) have answered it correctly. The data points that Yemeni EFL learners show low level in making contrast and comparison in this question. It might be due to the limited knowledge of Yemeni learners in cinema as the question here is about cinema popularity in which most of Yemeni people are not familiar with. The Yemeni EFL learners show less ability in linking their previous knowledge with the knowledge in texts.

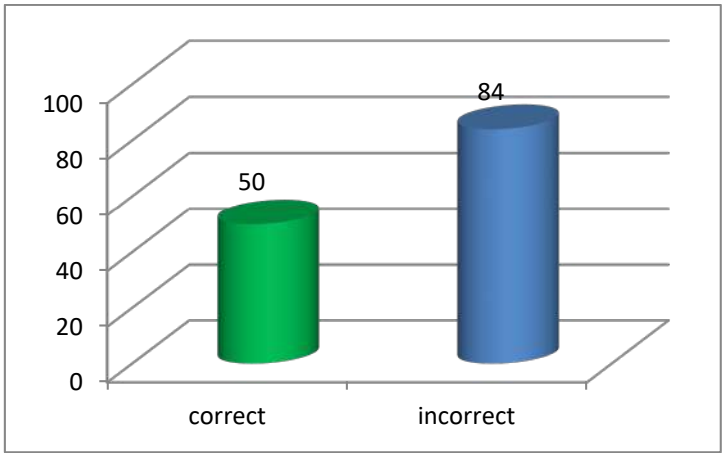


Figure (4.1.17) provides the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.17

Question 18: The word 'expanded' in the passage is closest in meaning to……

This question seeks to test the students' aptitude in decoding words in the context.

Table (4.1.18) presents descriptive statistics regarding the performance of the Yemeni EFL students regarding question 18		
Answer	Frequency	Percentage
A*	50	37.31
B	16	11.94
C	46	34.33
D	22	16.42
correct	50	37.31
incorrect	84	62.69
Total	134	100
* *correct option*		

It is apparent in table (4.1.18) that majority of the learners i.e. 84 (62.69%) answered this question incorrectly. The distribution of selection of various options (A, B, C, D) by the examinees is 50 (37.31%), 16 (11.94%), 46 (34.33%), 22 (16.42%) respectively. However, the rest of the learners 50 (37.31%) have answered it correctly. The descriptive statistics in this question reveals that the Yemeni EFL learners' are unable to decode the meaning of some words/synonyms used in the text. On the basis of descriptive statistics, it can be concluded that the performance in decoding meaning of new words of Yemeni EFL learners is downward. Thus, descriptive statistics provides the impression that Yemeni EFL learners have little knowledge of second language and majority of communication is via mother tongue.

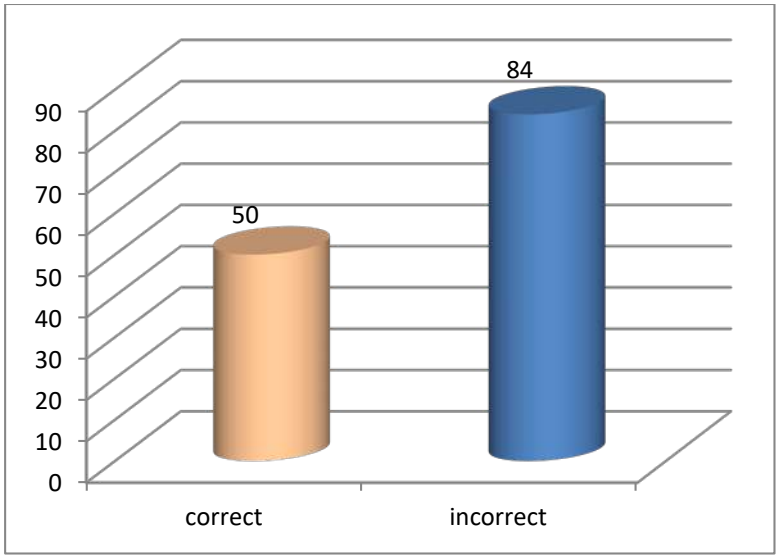


Figure (4.1.18) illustrates the graphical representation of performance of Yemeni EFL learners in reading comprehension test/question No.18.

In order to ascertain the different levels of reading comprehension among Yemeni EFL learners, a composite score, using quartile deviation, of Yemeni EFL Learners' with respect to reading comprehension has been computed and is depicted in table below:

Table (4.1.19) presents descriptive statistics of the composite performance of Yemeni EFL Learners' with respect to reading comprehension						
Reading Comprehension	**Levels**	**Range**	**frequencies**	**Percentage**	**Mean**	**S.D**
	Low	(0-34)	40	29.85		
	Medium	(35-66)	61	45.52		
	High	(67-100)	33	24.63	44.20%	29.79%
Total			134	100		
Source: Author's computation						

It is apparent from table (4.1.19) that Yemeni EFL learners show; 40 (29.85%), 61 (45.52%) and 33 (24.63%) respectively in the range of low, medium and high respectively. The average score of this test has been found to be 44.20 with a standard deviation 29.79. The maximum and minimum score in this test among the Yemeni EFL learners have been found to be 18 (100%) and 0 (0%) respectively. Therefore, it is evident from the descriptive statistics above that majority of the Yemeni EFL learners based on the quartile deviation maximum fall in the second quartile 61 (45.52%).

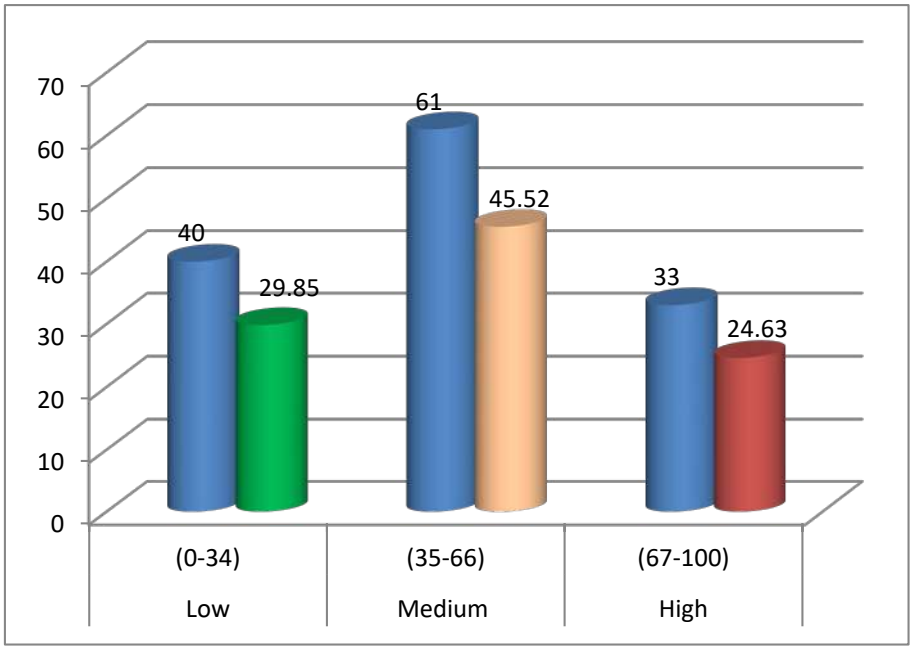


Figure (4.1.19) provides the graphical representation of different levels of Yemeni EFL learners in reading comprehension No.19

Discussion of findings:

Based on the findings above and the interview held with 40 students of the sample of the study, majority of the students explain that they face difficulties in using good reading strategies to facilitate the complexity of a text. Some of them report that they have little and sometimes no prior knowledge/schemata about the text which hinder them to figure out the meaning of unfamiliar or new words in the text or the main theme. They also show very little ability to monitor a text or connect some pronouns to their references. Besides this, the dominance of mother tongue and preconceived notion that reading is complicated and boring was explained by some of them to be essential notions in their reading learning. Furthermore, most of the students point out to the cultural connotations and boring topics in reading all are considered as other reasons behind their poor performance in reading comprehension. Most of these learners claim that they rarely use English as a result of the teachers' ongoing conventional English teaching methods. Some of them suggest that teachers have to use innovative approaches to teach English. Others explain that their meager exposure to innovative and instructional media in English classes might be accepted as other reasons behind their fall back in reading comprehension. In addition to these reasons, some of those students relate their low level in reading to some anxiety, frustration and lack of motivation and confidence when coming to answer questions/tasks and their discomfort to language learning as a result of the individual differences they feel.

It is found that these findings are similar to the descriptive statistics findings deduced among the Yemeni EFL learners. Majority of the Yemeni EFL learners do not do well in making comparison and contrast as well as using pronoun preferences. Similarly, it has been noticed that Yemeni EFL learners are unable to describe main theme in the passage as they seem to be less trained to understand the author's skill of

selection of words and phrases. They also lag in recalling and filtering information and connecting ideas mentioned in the text and connecting between ideas. The results also indicate that the Yemeni EFL learners hardly use review process in order to skim details in the passage. A similar pattern can be discovered regarding the complexity of the text and linking knowledge schemata with the new information and decoding words in the text. Some of the good answers to some of the test questions might be due to guessing among alternative answers or little ability to make some analysis which varies among EFL Yemeni students. According to the researcher's experience in teaching reading, it can be concluded that Yemeni EFL learners are unaware of how to use reading strategies as well as they have preconceived myths that reading is complicated and boring. The students seem not to give try to comprehend the text and learn some strategies in order to understand the text. Most of them depend on guessing as reading comprehension test is usually comprises of multiple choice alternatives.

4.1.2 Descriptive analysis regarding Perceptual Learning Styles among Yemeni EFL Learners

Learning styles are internally based on characteristics of learners for intake of understanding of new information (Reid, 1995). In this study, perceptual learning styles are classified based on senses (tactile, visual, kinesthetic, and auditory) and social work (group and individual).

Objective-2: to measure the styles of perceptual learning among Yemeni EFL learners.

In order to determine perceptual learning style preferences among the learners, a standardized questionnaire developed by Reid (1995) which is classified into 6 subscales (visual, auditory, kinesthetic, tactile, group and individual) has been used. Against each

statement, five alternative responses namely, strongly agree, agree, undecided, disagree and strongly disagree were scored 5, 4, 3, 2, 1 respectively as shown in table (4.2.1).

Table (4.2.1) describes Five-point scale continuum				
5	**4**	**3**	**2**	**1**
Strongly agree	agree	Undecided	disagree	Strongly disagree

To carry out the item analysis, a five-point continuum has been applied on a structured questionnaire consists of 30 statements. The details of the scale arranged and the class interval developed are provided below.

Table (4.2.2) describes Five-point scale continuum with computed class intervals	
(1.0-1.80)	strongly disagree
(1.81-2.60)	disagree
(2.61-3.40)	undecided
(3.41-4.20)	agree
(4.21-5.0)	strongly agree
Note: The class interval was calculated using following formula; Ci= High-low/5.	

Table (4.2.2) shows that five-point scale continuum with computed class intervals. The class interval was calculated using following formula; Ci=High-low/5. Each alternative response has a class interval, strongly disagree (1.0-1.80), disagree (1.81-2.60), undecided (2.61-3.40), agree (3.41-4.20) and strongly agree (4.21-5.0).

The six subscales with the statements are as the following:

1. **Auditory Learning Style: (5 items: 1,7,9,17,20):** For these learners, they get information through hearing words spoken and oral explanations.

Table (4.2.3) describes descriptive Statistics regarding the auditory learning style preferences among the Yemeni EFL students										
Statements		**Strongly agree**	**agree**	**Undecided**	**disagree**	**Strongly disagree**	**Total**	**Mean**	**S.D.**	**Remark**
1. When the teacher tells me the instructions I understand better.	F	13	30	30	30	31	134	2.73	1.30	Moderate
	%	9.70	22.39	22.39	22.39	23.13	100			
7. When someone tells me how to do something in class, I learn it better.	F	56	26	33	10	9	134	3.82	1.24	high
	%	41.79	19.40	24.62	7.46	6.71	100			
9. I remember things I have heard in class better than things I have read.	F	42	31	22	10	29	134	3.35	1.52	high
	%	31.34	23.13	16.41	7.46	21.64	100			
17. I learn better in class when the teacher gives a lecture.	F	18	17	17	33	49	134	2.41	1.43	Moderate
	%	13.43	12.69	12.69	24.63	36.57	100			
20. I learn better in class when I listen to someone.	F	36	28	17	23	30	134	3.12	1.53	Moderate
	%	26.87	20.90	12.69	17.16	22.39	100			

Table (4.2.3) presents the descriptive statistics regarding the students' preference of auditory perceptual learning styles. To assess the same on five-point scale continuum, five statements have been asked to the respondents. These questions have tried to analyze quality of auditory learning styles preferred by Yemeni EFL learners. The following results have been observed.

In statement No.1 , 13 (9.70%), 30 (22.39%), 30 (22.39%), 30 (22.39%) & 31 (23.13%) of Yemeni EFL learners strongly agree, agree, undecided, disagree & strongly

disagree respectively regarding the understanding of instructions. In statement No.7, 56(41.79%), 26 (19.40%), 33 (24.62%), 10 (7.46%) & 9 (6.71%) of Yemeni EFL learners strongly agree, agree, undecided, disagree & strongly disagree respectively regarding the peer's help. In statement No.9, 42 (31.34%), 31 (23.13%), 22 (16.41%), 10 (7.46%) & 29 (21.64%) of Yemeni EFL learners strongly agree, agree, undecided, disagree & strongly disagree respectively regarding the memorization of instructions provided. In statement No.17, 18 (13.43%), 17 (12.69%), 17(12.69%), 33 (24.63%) & 49 (36.57%) of Yemeni EFL learners strongly agree, agree, undecided, disagree & strongly disagree respectively with respect to lecturing method of teaching. In statement No.20, 36 (26.87%), 28 (20.90%), 17 (12.69%), 23 (17.16%) & 30 (22.39%) of Yemeni EFL learners strongly agree, agree, undecided, disagree & strongly disagree respectively referring to understanding through listening to others.

In order to ascertain the overall performance of auditory learning style preferences among the Yemeni EFL learners, the scoring system in the perceptual Learning Style Preferences developed by Joy Reid (1987) has been adapted. Based on this instrument, the descriptive statistics regarding the auditory learning style is illustrated below.

Table (4.2.4) describes descriptive Statistics regarding the overall level of auditory learning style preferences among the Yemeni EFL students based on scale developed by Reid (1987)

	F	%	M	S.D	Level
Major Learning Style Preference (38-50)	34	25.37	30.90	7.87	Minor
Minor Learning Style Preference (25-37)	80	59.70			
Negligible Learning Style reference (0-24)	20	14.92			
Total	134	100			

Source: Author's computation based on Reid's Scoring system in PLSQ

Table (4.2.4) displays that 34 have major auditory learning style preference (25.37%), 80 have minor auditory learning style preference (59.70%) and only 20 have negligible auditory learning style preference (14.92%). The average score of the learners in this statement is 30.90 with Standard deviation of 7.87. It can be concluded from the above descriptive statistics that most of the Yemeni EFL learners show a minor preference of auditory learning style.

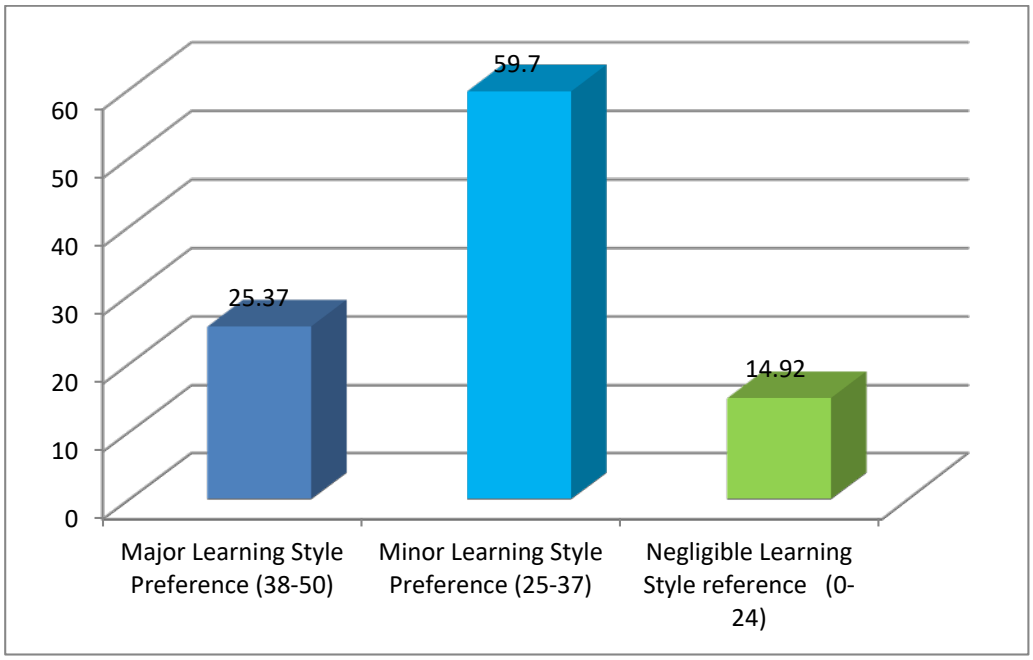


Figure (4.2.1) describes the level of auditory learning style preferences among Yemeni EFL learners

Visual Learning Style: (5 items: 6, 10, 12, 24, 29): for these learners, information is easily understood when using pictures, graphs, concept maps and other visual representations.

Table (4.2.5) describes descriptive Statistics regarding the Visual learning style preferences among the Yemeni EFL students

Statements		Strongly agree	agree	Undecided	disagree	Strongly disagree	Total	Mean	S.D	Remarks
6: I learn by reading what the teacher writes on the chalkboard.	F	56	26	33	10	9	134	3.82	1.24	high
	%	41.79	19.40	24.63	7.46	6.72	100			
10: When I read instructions, I remember them better.	F	42	31	22	10	29	134	3.35	1.52	high
	%	31.34	23.13	16.41	7.46	21.64	100			
12: I understand better when I read instructions.	F	42	31	22	10	29	134	3.35	1.52	high
	%	31.34	23.13	16.41	7.46	21.64	100			
24: I learn better by reading than by listening to someone.	F	32	31	18	39	14	134	3.21	1.37	Moderate
	%	23.88	23.13	13.43	29.10	10.45	100			
29: I learn more by reading textbooks than by listening to lectures.	F	2	2	2	2	126	134	2.30	1.31	high
	%	1.49	1.49	1.49	1.49	94.02	100			

Table **(4.2.5)** presents the descriptive statistics regarding the students' preference of visual perceptual learning styles. To assess the same on five-point scale continuum, five statements have been asked to the respondents. These questions have tried to analyze quality of visual learning styles preferred by Yemeni EFL learners. The following results have been observed. In statement No.6, 56 of the Yemeni EFL learners strongly agree (41.79%), 26 agree (19.40%), 33 undecided (24.63%) and 10 students disagree (7.46%), 9 strongly disagree (6.72%) respectively regarding understanding through reading from the chalkboard. In statement No.10, 42 of the Yemeni EFL learners strongly agree (31.34%), 31 agree (23.13%), 22 undecided (16.41%), 10 disagree (7.46%) & 29 strongly disagree (21.64%) respectively regarding recalling information through reading instructions. In

statement No.12, 42 (31.34%), 31 (23.13%), 22 (16.41%), 10 (7.46%) & 29 (21.64%) of the Yemeni EFL learners strongly agree, agree, undecided, disagree and strongly disagree respectively regarding understanding through reading instructions. In statement No.24, 32 of of the Yemeni EFL learners strongly agree (23.88%), 31 agree (23.13%), 18 undecided (13.43%), 39 disagree (29.10%) and 14 strongly disagree (10.45%) respectively regarding understanding through reading rather than listening. In statement No.29, 126 the Yemeni EFL learners strongly disagree (94.02%) while only 2 (1.49%), 2 (1.49%), 2 (1.49%), 2 (1.49%) are strongly agree, agree, undecided and disagree respectively regarding understanding through reading textbooks.

In order to ascertain the overall performance of visual learning style preferences among the Yemeni EFL learners, the scoring system in the perceptual Learning Style Preferences developed by Joy Reid (1987) has been adapted. Based on this instrument, the descriptive statistics regarding the various visual learning styles is illustrated below.

Table (4.2.6) describes descriptive Statistics regarding the overall level of visual learning style preferences among the Yemeni EFL students on scale developed by Reid (1987)

	f	%	M	S.D	Level
Major Learning Style Preference 38-50	30	22.39	29.46	7.27	Minor
Minor Learning Style Preference 25-37	52	38.80			
Negligible Learning Style Preference 0-24	52	38.80			
Total	134	100			

Source: Author's computation based on Reid's Scoring system in PLSQ

Table **(4.2.6)** displays that 30 of the students have major visual learning style preference (22.39%), 52 have minor learning style preference (38.80%) and only 52 have negligible learning style preference (38.80%). The average score of the learners in this statement is 29.46 with standard deviation of 7.27. It can be concluded from the above descriptive analysis that most of the Yemeni EFL learners show a minor preference of visual learning style.

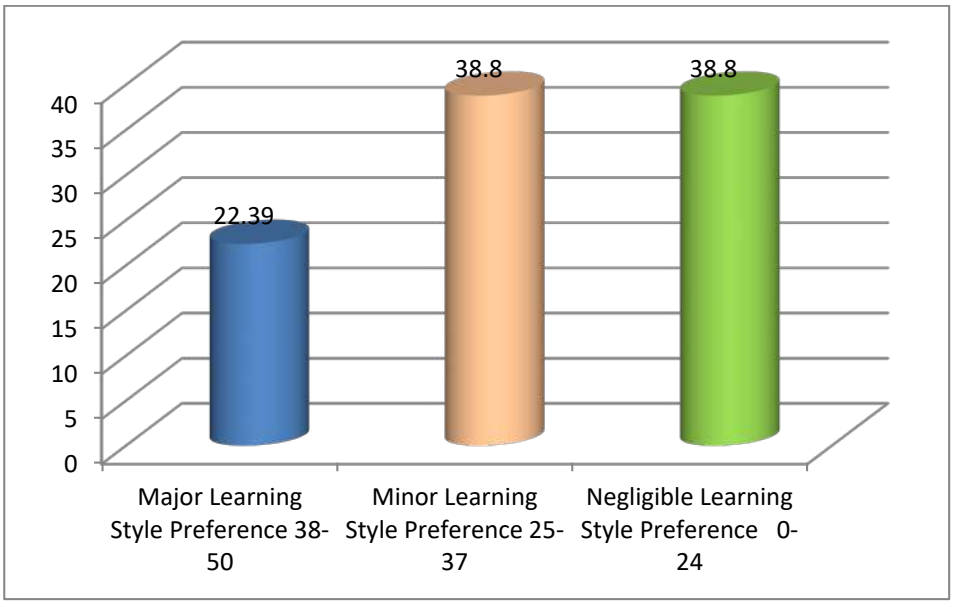


Figure (4.2.2) describes the level of visual learning style preferences among Yemeni EFL learners

2. **Kinesathetic Learning Style Preferences (items 2,8,15, 19 & 26):** Those learners like lots of hands on movement and enjoy working. They favor to move and use body and hands.

Table (4.2.7) describes descriptive Statistics regarding the Kinesthetic learning style preferences among the Yemeni EFL students										
Statements		**Strongly agree**	**agree**	**Undecided**	**disagree**	**Strongly disagree**	**Total**	**Mean**	**S.D.**	**Remarks**
2: I prefer to learn by doing something in class.	F	120	3	3	3	5	134	4.72	0.92	Very high
	%	89.55	2.24	2.24	2.24	3.73	100			
8: When I do things in class, I learn better.	F	56	26	23	1	28	134	3.60	1.54	high
	%	41.80	19.40	17.16	0.75	20.90	100			
15: I enjoy learning in class by doing experiments.	F	31	9	33	22	39	134	2.78	1.51	Moderate
	%	23.13	6.71	24.63	16.42	29.10	100			
19: I understand things better in class when I participate in role-playing.	F	37	27	17	23	30	134	3.13	1.54	Moderate
	%	27.61	20.15	12.69	17.16	22.39	100			
26: I learn best in class when I can participate in related activities.	F	30	34	17	39	14	134	3.20	1.35	Moderate
	%	22.39	25.37	12.69	29.10	10.45	100			

Table **(4.2.7)** presents the descriptive statistics regarding the students' preference of kinesthetic perceptual learning styles. To assess the same on five-point scale continuum, five statements have been asked to the respondents. These questions aim to analyze quality of kinesthetic learning styles preferred by the Yemeni EFL learners. The following results have been observed:

In statement No.2, 120 of the students strongly agree (89.55%). However, only 3 agree (2.24%), 3 undecided (2.24%), 3 disagree (2.24%) and 5 strongly disagree (3.73%) respectively regarding students' like to do things in class. In statement No.8, 56 of the students strongly agree (41.80%), 26 agree (19.40%), 23 undecided (17.16%), 1 disagree (0.75%) and 28 strongly disagree (20.90%) respectively regarding students' getting the

chance to do some activities in class. In statement No.15, 31 of the students strongly agree (23.13%), 9 agree (6.71%), 33 undecided (24.63%), 22 disagree (16.42%) and 39 strongly disagree(29.10%) respectively regarding students' preference to be indulged in direct movement in class. In statement No.19, 37 of the students strongly agree (27.61%), 27 agree (20.15%), 17 undecided (12.69%), 23 disagree (17.16%) and 30 strongly disagree (22.39%) respectively regarding doing role-plays in class. In statement No.26, 30 of the students strongly agree (22.39%) and 34 agree (25.37%). However, 17 undecided (12.69%), 39 disagree (29.10%) and 14 strongly disagree (10.45%) respectively regarding participation and doing activities in class.

In order to ascertain the overall performance of Kinesthetic learning style preferences among the Yemeni EFL learners, the scoring system in the perceptual Learning Style Preferences developed by Joy Reid (1987) has been adapted. Based on this instrument, the descriptive statistics regarding the various kinesthetic learning styles is illustrated below.

Table (4.2.8) describes descriptive Statistics regarding the overall level of kinesthetic learning style preferences among the Yemeni EFL students on scale by Reid (1987)

	f	%	M	S.D	Level
Major Learning Style Preference 38-50	52	38.81	34.88	7.09	Minor
Minor Learning Style Preference 25-37	82	61.19			
Negligible Learning Style Preference 0-24	0	0			
Total	134	100			

Source: Author's computation based on Reid's Scoring system in PLSQ

Table **(4.2.8)** displays that 52 have major kinesthetic learning style preference (38.81%), 82 have minor kinesthetic learning style preference (61.19%) and negligible kinesthetic learning style preference (0). The average score of the learners in this statement is 34.88 with Standard deviation of 7.09 It can be concluded from the above descriptive analysis that most of the Yemeni EFL learners show a minor preference of kinesthetic learning style.

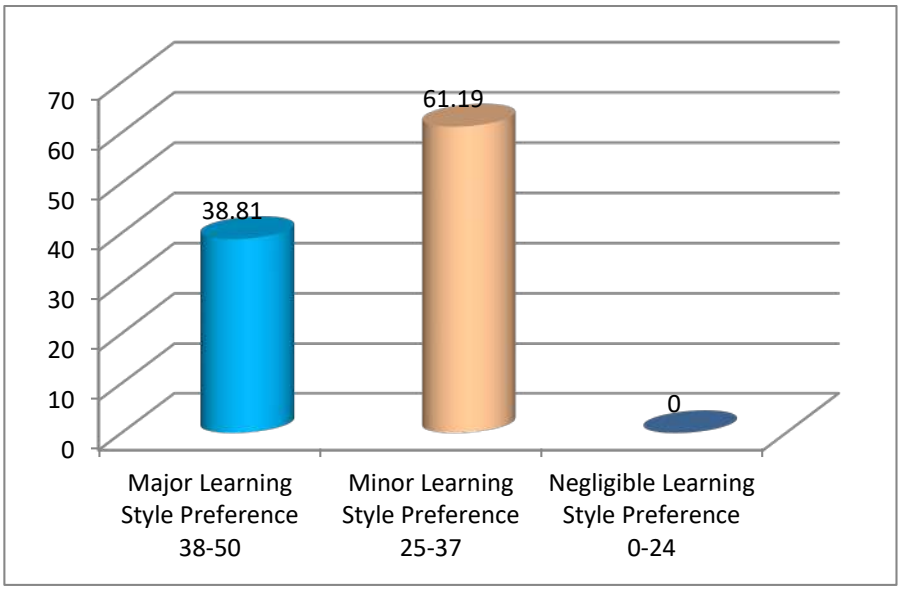


Figure (4.2.3) describes the level of kinesthetic learning style preferences among Yemeni EFL learners

3. **Tactile Learning Styles (items 11, 14, 16, 22 &25):** Those learners like to learn with one's hands through manipulation or resources, such as writing, drawing, building a model, or conducting a lab experiment.

Table (4.2.9) describes descriptive Statistics regarding the Tactile learning style preferences among the Yemeni EFL students

Statements		Strongly agree	agree	Undecided	disagree	Strongly disagree	Total	Mean	S.D.	Remark
11: I learn more when I can make a model of something.	F	42	31	22	10	29	134	3.36	1.52	high
	%	31.34	23.13	16.42	7.46	21.64	100			
14: I learn more when I make something for a class project.	F	42	25	25	10	32	134	3.36	1.52	Moderate
	%	31.34	18.66	18.66	7.46	23.88	100			
16: I learn better when I make drawings as I study.	F	31	9	33	22	39	134	3	1.51	Moderate
	%	23.13	6.72	24.63	16.42	29.10	100			
22: When I build something, I remember what I have learned better.	F	34	30	17	39	14	134	3.23	1.38	Moderate
	%	25.37	22.39	12.69	29.10	10.45	100			
25: I enjoy making something for a class project.	F	31	32	18	39	14	134	3.20	1.36	Moderate
	%	23.13	23.88	13.43	29.10	10.45	100			

Table **(4.2.9)** presents the descriptive statistics regarding the students' preference of tactile perceptual learning styles. To assess the same on five-point scale contium, five statements have been asked to the respondents. These questions aimed to analyze quality of tactile learning styles preferred by the Yemeni EFL learners. The following results have been determined:

In statement No.11, among the Yemeni EFL learners 42 strongly agree (31,34%) and 31 agree (23.13%). However, 22 undecided (16.42%), 10 disagree (7.46%) and 29 strongly disagree (21.64%) in learning through touching and feeling. In statement No.14, 42 of the Yemeni EFL learners strongly agree (31.34%) and 25 agree (18.66%), 25 undecided (18.66%). However, 10 disagree (7.46%) and 32 strongly disagree (23.88%) regarding learning through doing projects. In statement No.16, 31 the Yemeni EFL learners strongly agree (23.13%) and 9 agree (6.72%), 33 undecided (24.63%). However, 22 disagree (16.42%) and 39 strongly disagree (29.10%) in learning through drawing. In statement No.22, 34 the Yemeni EFL learners strongly agree (25.37%) and 30 agree (22.39%), 17 undecided (12.69%). However, 39 disagree (29.10%) and 14 strongly disagree (10.45%) respectively regarding recalling information through touching or building something in class. In statement No.25, 31 the Yemeni EFL learners strongly agree (23.13%) and 32 agree (23.88%), 18 undecided (13.43%). However, 39 disagree (29.10%) and 14 strongly disagree (10.45%) regarding being enjoyed when doing a project in class.

In order to ascertain the overall performance of Tactile learning style preferences among the Yemeni EFL learners, the scoring system in the perceptual Learning Style Preferences developed by Joy Reid (1987) has been adapted. Based on this instrument, the descriptive statistics regarding the various tactile learning style is illustrated below.

Table (4.2.10) describes descriptive Statistics regarding the overall level of Tactile learning style preferences among the Yemeni EFL students on scale developed by Reid (1987)					
	f	%	M	S.D	Level
Major Learning Style Preference 38-50	40	29.85	31.66	8.11	Minor
Minor Learning Style Preference 25-37	91	67.91			
Negligible Learning Style Preference 0-24	3	2.24			
Total	134	100			
Source: Author's computation based on Reid's Scoring system in PLSQ					

The table **(4.2.10)** above illustrates that 40 (29.85%) of the students show a major tactile learning style, 91 (67.91%) have minor tactile learning style preference while only 3 (2.24%) show a negligible tactile learning style. Thus, it can be concluded that majority of the Yemeni EFL learners show minor learning style preferences regarding tactile learning style.

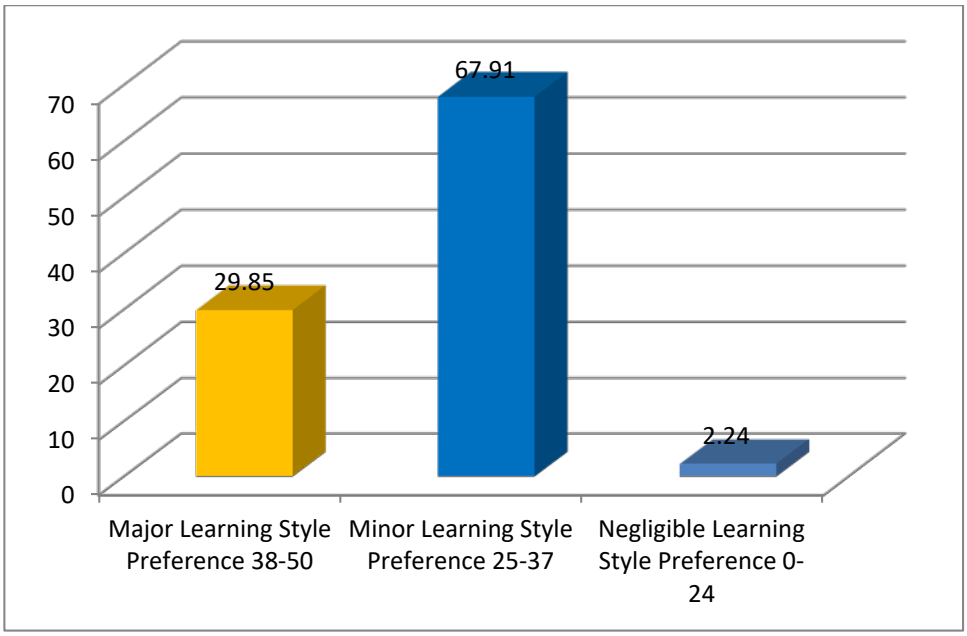


Figure (4.2.4) describes the level of tactile learning style preferences among Yemeni EFL learners

5. Group Learning Styles (items No. 3, 4, 5, 21 & 23): Those learners learn more effectively when they study with other students. They prefer group interaction and discussion.

Table (4.2.11) describes descriptive Statistics regarding the Group learning style preferences among the Yemeni EFL students										
Statements		**Strongly agree**	**agree**	**Undecided**	**disagree**	**Strongly disagree**	**Total**	**Mean**	**S.D.**	**Remark**
3: I get more work done when I work with others.	F	40	23	23	14	34	134	3.16	1.57	Moderate
	%	29.85	17.16	17.16	10.45	25.37	100			
4: I learn more when I study with a group.	F	40	23	23	14	34	134	3.16	1.57	Moderate
	%	29.85	17.16	17.16	10.45	25.37	100			
5: In class, I learn best when I work with others.	F	40	23	23	14	34	134	3.16	1.57	Moderate
	%	29.85	17.16	17.16	10.45	25.37	100			
21: I enjoy working on an assignment with two or three classmates.	F	35	29	17	39	14	134	3.24	1.39	Moderate
	%	26.11	21.64	12.69	29.10	10.45	100			
23: I prefer to study with others.	F	33	30	18	39	14	134	3.22	1.37	Moderate
	%	24.63	22.39	13.43	29.10	10.45	100			

Table **(4.2.11)** presents the descriptive statistics regarding the students' preference of group perceptual learning styles. To assess the same on five-point scale continuum, five

statements have been asked to the respondents. These questions seek to analyze quality of group learning styles preferred by the Yemeni EFL learners. Following results have been noticed:

In statement No.3, 40 of the students strongly agree (29.85%) and 23 agree (17.16%), 23 undecided (17.16%). However, 14 disagree (10.45%) and 34 strongly disagree (25.37%) regarding communication with peers. In statement No.4, 40 of the students strongly agree (29.85%) and 23 agree (17.16%), 23 undecided (17.16%). However, 14 disagree (10.45%) and 34 strongly disagree (25.37%) in their preference in group work. In statement No.5, 40 of the students strongly agree (29.85%) and 23 agree (17.16%), 23 undecided (17.16%). However, 14 disagree (10.45%) and 34 strongly disagree (25.37%) with respect to their like to work with others. In statement No.21, 35 of the students strongly agree (26.11%) and 29 agree (21.64%), 17 undecided (12.69%). However, 39 disagree (29.10%) and 14 strongly disagree (10.45%) referring to sharing to do assignments with classmates. In statement No.23, 33 of the students strongly agree (24.63%) and 30 agree (22.39%), 18 undecided (13.43%). However, 39 disagree (29.10%) and 14 strongly disagree (10.45%) regarding learning with friends in class.

In order to ascertain the overall performance of group learning style preferences among the Yemeni EFL learners, the scoring system in the perceptual Learning Style Preferences developed by Joy Reid (1987) has been adapted. Based on this instrument, the descriptive statistics regarding the various group learning styles is illustrated below.

Table (4.2.12) reveals descriptive Statistics regarding the overall level of group learning style preferences among the Yemeni EFL students on scale developed by Reid (1987)					
	f	%	M	S.D	Level
Major Learning Style Preference 38-50	29	21.64	31.85	6.68	Minor
Minor Learning Style Preference 25-37	97	72.39			
Negligible Learning Style Preference 0-24	8	5.97			
Total	134	100			
Source: Author's computation based on Reid's Scoring system in PLSQ					

The table **(4.2.12)** above illustrates that 29 of the students reveal a major group learning style (21.64%), 97 show minor group learning style preference (72.39%) while only 8 show a negligible group learning style (5.97%). Thus, it can be deduced from the descriptive statistics that majority of the Yemeni EFL learners show minor learning style preferences regarding group learning style.

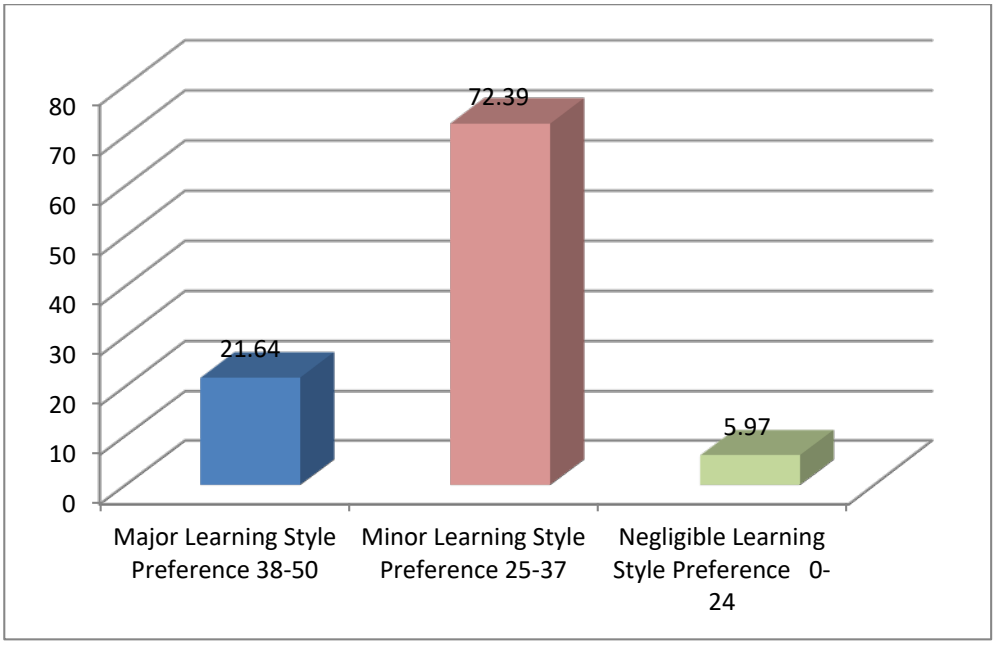


Figure (4.2.5) describes the level of group learning style preferences among Yemeni EFL learners

6. Individual Learning Style (items 13, 18, 27,28 &30): These learners prefer to work alone and to be self readers.

Table (4.2.13) shows descriptive Statistics regarding the Individual learning style preferences among the Yemeni EFL students

Statements		Strongly agree	agree	Undecided	disagree	Strongly disagree	Total	Mean	S.D.	Remarks
13: When I study alone, I remember things better.	F	33	30	18	39	14	134	3.22	1.37	Moderate
	%	24.63	22.39	13.43	29.10	10.45	100			
18: When I work alone, I learn better.	F	37	27	17	23	30	134	3.13	1.54	Moderate
	%	27.61	20.15	12.69	17.16	22.39	100			
27: In class, I work better when I work alone.	F	29	34	18	39	14	134	3.19	1.34	Moderate
	%	21.64	25.37	13.43	29.10	10.45	100			
28: I prefer working on projects by myself.	F	29	24	18	39	24	134	2.96	1.44	Moderate
	%	21.64	17.91	13.43	29.10	17.91	100			
30: I prefer to work by myself.	F	2	2	2	2	126	134	1.15	0.65	Very high
	%	1.49	1.49	1.49	1.49	94.02	100			

Table (4.2.13) presents the descriptive statistics regarding the students' preference of individual perceptual learning styles. To assess the same on five-point scale continuum, five statements have been asked to the respondents. These questions try to analyze the quality of individual learning styles preferred by the Yemeni EFL learners. The following results have been shown.

In statement No.13, 33 of the Yemeni EFL learners strongly agree (24.63%) and 30 agree (22.39%), 18 undecided (13.43%). However, 39 disagree (29.10%) and 14 strongly disagree (10.45%) with respect to depending on themselves in memorization. In statement No. 18, 37 of the Yemeni EFL learners strongly agree (27.61%) and 27 agree (20.15%), 17

undecided (12.69%). However, 23 disagree (17.16%) and 30 strongly disagree (22.39%) in their preference to work alone. In statement No. 27, 29 of the Yemeni EFL learners strongly agree (21.64%) and 34 agree (25.37%), 18 undecided (13.43%). However, 39 disagree (29.10%) and 14 strongly disagree (10.45%) regarding their like to learn using their own ways. In statement No. 28, 29 of the Yemeni EFL learners strongly agree (21.64%) and 24 agree (17.91%), 18 undecided (13.43%). However, 39 disagree (29.10%) and 24 strongly disagree (17.91%) referring to doing projects by their own. In statement No. 30, (126) of the Yemeni EFL learners do not favor to work by themselves (94.02%) while strongly agree 2 (1.49%), agree 2 (1.49%), undecided 2 (1.49%), disagree 2 (1.49%)respectively with resepct to work alone in class.

In order to ascertain the overall performance of individual learning style preferences among the Yemeni EFL learners, the scoring system in the perceptual Learning Style Preferences developed by Joy Reid (1987) has been adapted. Based on this instrument, the descriptive statistics regarding the various individual learning style is illustrated below.

Table (4.2.14) describes descriptive Statistics regarding the overall level of Individual learning style preferences among the Yemeni EFL students on scale developed by Reid (1987)

	f	%	M	S.D	Level
Major Learning Style Preference 38-50	0	0	27.09	6.51	Minor
Minor Learning Style Preference 25-37	81	60.45			
Negligible Learning Style Preference 0-24	53	39.55			
Total	134	100			

Source: Author's computation based on Reid's Scoring system in PLSQ

The table (4.2.14) above illustrates that 0 of the students reveal a major individual learning style(0), 81 show minor individual learning style preference (60.45) while only 53 show a negligible individual learning style (39.55). Thus, it can be verified from the

descriptive statistics that majority of the Yemeni EFL learners show minor learning style preferences regarding individual learning style.

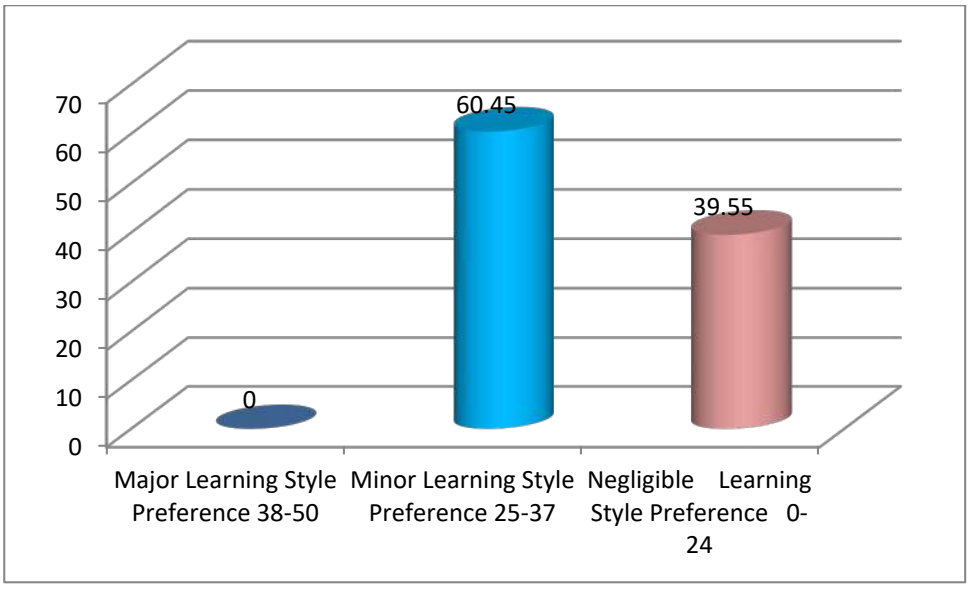


Figure (4.2.6) illustrates the level of individual learning style preferences among Yemeni EFL learners

The table below reveals the most preferred learning style among the Yemeni EFL students:

Table (4.2.15) describes Mean score Analysis of Perceptual Learning Style Preferences among Yemeni EFL learners		
Type of learning style	**M**	**S.D**
Auditory	30.90	7.87
Visual	29.46	7.27
Kinesthetic	**34.88**	7.08
Tactile	31.66	8.11
Group	31.85	6.68
Individual	27.09	6.51

Table (4.2.15) demonstrates the mean and standard deviations of students' perceptual learning style preferences by six subcategories: auditory, visual, kinaesthetic, tactile, group and individual learning style preference and also item wise mean and standard deviation scores are tabulated. The overall mean value of kinesthetic learning style was

34.88 with a standard deviation of 7.08 which is the highest mean value among the six learning style categoriess. Thus, as for the descriptive statistics it is safe to conclude that the Yemeni EFL learners' most preferred learning style is kinesthetic. The two second learning styles which are preferred by the Yemeni EFL learners are the group and tactile learning styles (M=31.85, S.D=6.68 and M=31.66, S.D=8.11) respectively. Then, followed auditory learning style (M=30.90,S.D=7.87) and visual learning style (M= 29.46, S.D=7.27). Students' least preferred learning style is individual learning style (M=27.09, S.D= 6.51).

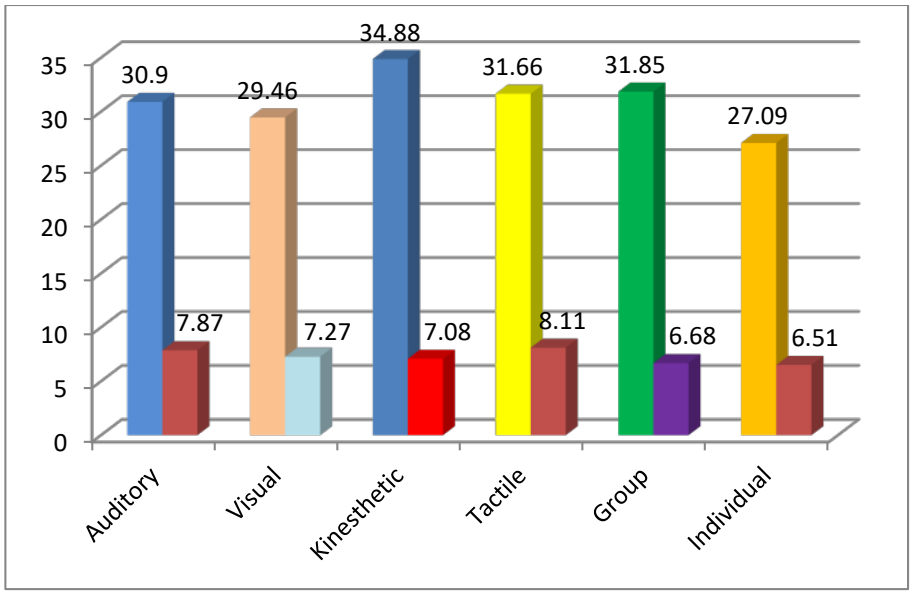


Figure (4.2.7) describes the diagrammatic representation of descriptive statistics regarding the mean score and standard deviation of perceptual learning style preferences among Yemeni EFL students

It is indicated from the data above table (4.2.15) and figure (4.2.7) that Yemeni EFL learners' most preferred learning style is kinesthetic. The qualitative data which was collected through interviewing some of the sample shows that majority of the learners prefer the kinesthetic and tactile learning styles. They explain that they like to communicate, move and touch objects to make learning enjoyable and easier. They favor to learn through experience and physical activity. They also explain that they would like

to learn through demonstration, games and role plays which are impractical in EFL learning contexts in Yemen. They express that being allowed to move and blend in with other peers in class can really help them in learning, however, the big number of students in one class and lack of other facilities stand as an obstacle in front of them. Most of the learners say that they boredom in reading classes should be broken by applying new approaches in learning. They also comment that they tend to group learning styles once they encounter a difficult activity as they need some help from each other. However, it is surprising that few of those learners explain that they prefer to work out some of the activities individually, like scanning a text; as such activities need quietness and individual efforts. Others explain that it might be really good for them if the textbooks are colorful and be full of drawings and figures which exemplify the questions for them. It is found that the Yemeni EFL learners pay more concern only to exams and think how to get ready to do them.

4.1.3 Descriptive Aanalysis regarding Reading Strategies' Use among Yemeni EFL Learners

Reading strategies, here, are the metacognitive reading strategies which are notions of thinking about thinking that help students to regulate or monitor their cognitive or mental strategies. They are defined as planned, intentional, goal directed, and future-oriented mental processing that can be used to accomplish cognitive tasks (Phakiti, 2003).

Objective-3: to measure and analyze the levels of the reading strategies' use among Yemeni EFL learners.

In order to examine the use of reading strategies among Yemeni ELF learners, a survey of Reading Strategies (SORS) was developed based on the similar questionnaire adapted

by Mokhtari & Sheorey (2002). The SORS consists of 30 items using three individual subscales:

-Global reading strategies

-Problem-solving reading strategies

-Support reading strategies

To carry out the item analysis, a five-point continuum has been applied on a structured questionnaire consists of 30 statements. The details of the scale arranged and the class interval developed are provided in table (4.3.1) below;

Table (4.3.1) shows the five-point continuum				
1	**2**	**3**	**4**	**5**
Never	**Occasionally**	**Sometimes**	**Usually**	**Always**

Five intervals (never, occasionally, sometimes, usually, always) are used as five-point continuum with computed class intervals using formula Ci=High-low/5 as shown in table (4.3.2):

Table (4.3.2) describes the five-point scale continuum with computed class intervals	
(1.0-1.80)	never
(1.81-2.60)	occasionally
(2.61-3.40)	sometimes
(3.41-4.20)	usually
(4.21-5.0)	always
Note: The class interval was calculated using following formula; Ci= High-low/5	

Table (4.3.2) shows that five-point scale continuum with computed class intervals. The class interval was calculated using following formula; Ci=High-low/5. Each alternative response has a class interval, never (1.0-1.80), occasionally (1.81-2.60), sometimes (2.61-3.40), usually (3.41-4.20) and always (4.21-5.0).

1. **Global Reading Strategies (13 items):** refer to "intentional, carefully planned techniques by which learners monitor or manage their reading".

Table (4.3.3) describes the descriptive Statistics regarding the global reading strategies among the Yemeni EFL Learners (13 items)

Strategy		always	usually	sometimes	occasions sally	never	Total	Mean	S.D.	Level
1. I have a purpose in mind when I read.	F	13	30	30	30	31	134	2.73	1.30	sometimes
	%	9.70	22.39	22.39	22.39	23.13	100			
3. I think about what I know to help me understand what I read.	F	40	23	23	14	34	134	3.16	1.57	sometimes
	%	29.85	17.16	17.16	10.45	25.37				
4. I take on overall view of the text to see what it is about before reading it.	F	40	23	23	14	34	134	3.17	1.57	sometimes
	%	29.85	17.16	17.16	10.45	25.37	100			
6. I think about whether the content of the text fits my reading purpose.	F	67	37	11	10	9	134	4.07	1.22	usually
	%	50	27.61	8.21	7.46	6.72	100			
8. I review the text first by noting its characteristics like length and organization	F	67	37	11	10	9	134	4.07	1.22	usually
	%	50	27.61	8.21	7.46	6.72	100			
12. When reading, I decide what to read closely and what to ignore.	F	29	0	40	31	34	134	2.69	1.43	sometimes
	%	21.64	0	29.85	23.13	25.38	100			
15. I use tables, figures, and pictures in text to increase my understanding.	F	29	0	27	31	47	134	2.5	1.51	occasionally
	%	21.64	0	20.15	23.13	35.07	100			
17. I use context clues to help me better understand what I am reading.	F	24	5	27	31	47	134	2.47	1.45	sometimes
	%	17.91	3.73	20.15	23.13	35.07	100			
20. I use typographical features like bold face and italics to identify key information	F	36	15	14	46	23	134	2.96	1.49	sometimes
	%	26.87	11.19	10.45	34.33	17.16	100			
21. I critically analyze and evaluate the information presented in the text.	F	35	16	14	39	30	134	2.90	1.54	sometimes
	%	26.12	11.94	10.45	29.10	22.39	100			
23. I check my understanding when I come across new information.	F	33	30	34	13	24	134	3.26	1.40	sometimes
	%	24.63	22.39	25.37	9.70	17.91	100			
24.I try to guess what the content of the text is about when I read.	F	32	31	34	13	24	134	3.25	1.40	sometimes
	%	23.88	23.13	25.37	9.70	17.91	100			
27. I check to see if my guesses about the text are right or wrong.	F	29	34	34	13	24	134	4.23	1.38	always
	%	21.64	25.37	25.37	9.70	17.91	100			

It is evident from the table (4.3.3) above that 13 (9.70%), 30 (22.39%), 30(22.39%), 30 (22.39%), and 31 (23.13%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 1 (setting a purpose in mind while reading). 40 (29.85%), 23 (17.16%), 23 (17.16%), 14 (10.45%) and 34 (25.37%) Yemeni EFL learners always, usually, sometimes and never respectively use strategy 3 (using prior knowledge). 40 (29.85%),23 (17.16%), 23 (17.16%) and 14 (10.45%), 34 (25.37%) Yemeni EFL learners always, usually, sometimes and never respectively use strategy 4 (previewing text before reading). 67 (50%), 37 (27.61%), 11 (8.21%) and 10 (7.46%), 9 (6.72%) Yemeni EFL learners always, usually, sometimes and never respectively use strategy 6 (checking how text content fits purpose). 67 (50%), 37 (27.61%), 11(8.21%) and 10 (7.46%), 9 (6.72%) Yemeni EFL learners always, usually, sometimes and never respectively use strategy 8 (skimming to note text characteristics). 29 (21.64%), 0 , 40 (29.85%), 31 (23.13%), and 34 (25.38%), always, usually, sometimes, occasionally and never respectively use the strategy 12: determining what to read. 29 (21.64%), 0 , 27 (20.15%), 31 (23.13%), and 47 (35.07), always, usually, sometimes, occasionally and never respectively use strategy 15 (Using text features). 24 (17.91%), 5 (3.73%), 27 (20.15%), 31 (23.13%) and 47 (35.07%) always, usually, sometimes, occasionally, never respectively use strategy 17 (using context clues). 36 (26.87%), 15 (11.19%), 14 (10.45%), 46 (34.33%) and 23 (17.16%), always, usually, sometimes, occasionally and never respectively use this strategy 20 (using typographical aids). 35 (26.12%), 16 (11.94%), 14 (10.45%), 39 (29.10%) and 30 (22.39%) always, usually, sometimes, occasionally and never respectively use strategy21 (critically evaluating what is read). 33 (24.63%), 30 (22.39%), 34 (25.37%), 13 (9.70%) and 24 (17.91%) always, usually, sometimes, occasionally and never respectively use strategy 23 (resolving conflicting information). 32 (23.88%), 31 (23.13%), 34 (25.37%),

13 (9.70%) and 24 (17.91%) always, usually, sometimes, occasionally and never respectively use strategy 24 (predicting or guessing text meaning). 29 (21.64%), 34 (25.37%), 34 (25.37%), 13 (9.70%) and 24 (17.91%) always, usually, sometimes, occasionally and never respectively use strategy 27 (confirming prediction).

In order to ascertain the overall performance of global reading strategies used among the Yemeni EFL learners, a survey was conducted using a structured questionnaire. The overall assessment was carried out with the help of questionnaire and scale developed by Kouider Mokhtari & Ravi Sheorey (2002). The descriptive statistics regarding the assessment of overall global reading strategies is illustrated below in table (4.3.4).

Table (4.3.4) describes the descriptive statistics regarding global reading strategies used among the Yemeni EFL students based on scale developed by Mokhtari & Sheory (2002)

	f	%	M	S.D	level
high (3.5 or higher)	29	21.64	3.11	0.78	medium
Medium (2.5 -3.4)	78	58.21			
low (2.4 or lower)	27	20.15			
Total	134	100			

Source: Author's computation based on Mokhtari & Sheorey's (2002) Scoring System in SORS

Table (4.3.4) displays that 29 of the Yemeni EFL learners fell in the high usage category mean (3.5 or higher) of using reading strategies (21.64%), 78 place in the medium usage category of mean (58.21%) and only 27 show low level (20.15%). The average score in these global reading strategies is 3.11 with standard deviation of 0.78. It can be concluded from the above information that Yemeni EFL learners adopt the global reading strategies in a medium level within the range of international standards.

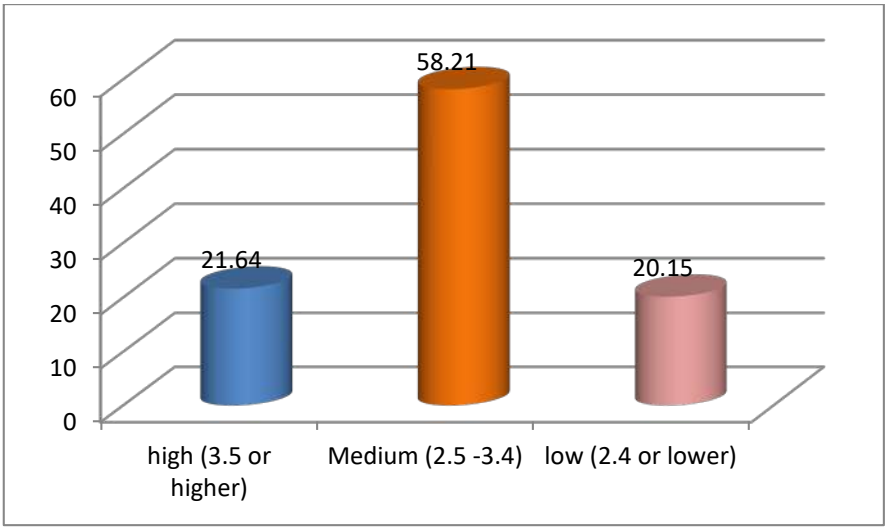


Figure (4.3.1) illustrates the diagrammatic representation of descriptive statistics regarding the global reading strategies used of Yemeni EFL students

It can be manifested from the descriptive statistics above that Yemeni students use of global reading strategies is well within the global benchmark. This might be because of the following factors. First, setting purpose for reading which means Yemeni EFL learners come from different socioeconomic backgrounds that makes them ambiguous regarding their purpose of reading (strategy No 1). They also use prior knowledge to improve their understanding while reading (strategy No. 3).

Previewing text before reading to find out the main theme of the available reading material or the text provided and try to manage their allocated time for the exam (strategy No.4). Checking how context fits purpose to make a match between their purpose of reading with the context in order to make the text easier to comprehend (strategy No. 6). Determining what to read in order to select the important points in the text and ignore the redundant material (strategy No. 12). Using context clues helps them read the reading text at a greater pace (strategy No. 17). Using typographical and various formatting styles are aiding them to analyze information swiftly (strategy No. 20). Critically evaluating what to read may so that they can set their points of views and express both creativity and curiosity

(strategy No. 21). Resolving conflicting information to answer the text questions and put the new information in mind (strategy No. 23). Predicting or guessing text meaning so that they can grasp the whole theme of the text for improving their comprehension (strategy No. 24). Confirming prediction to check the correctness of their guessing while they are reading in order to make sure of the appropriateness between what they guess and what the text about (strategy No. 27).

2. **Problem-solving Reading Strategies: (**8 items) are related to "actions and procedures that the readers use while working directly with the text" (p. 4).

Table (4.3.5) describes the descriptive statistics regarding the problem-solving reading strategies used among the Yemeni EFL students

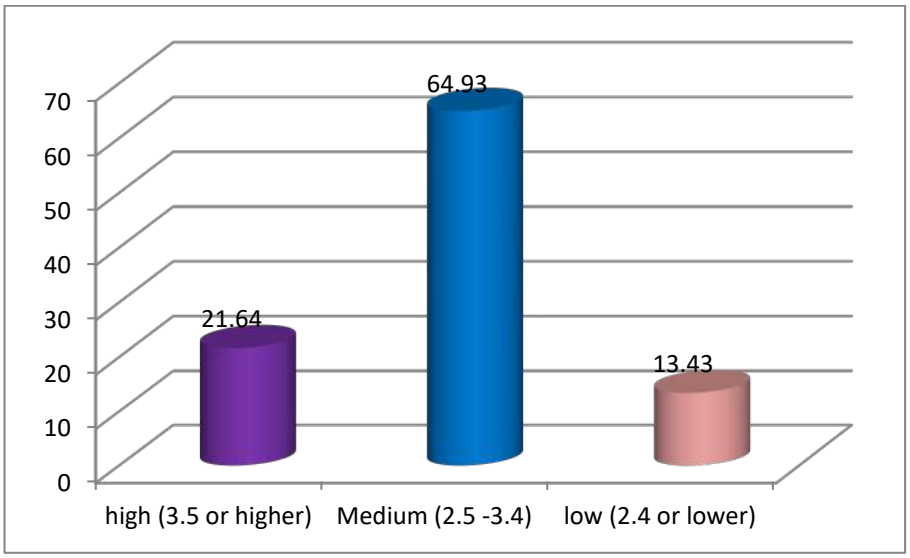
Statements		always	usually	sometimes	occasionally	never	Total	Mean	S.D	Remark
Item 7: I read slowly and carefully to make sure I understand what I am reading.	F	67	37	11	10	9	134	4.07	1.22	usually
	%	50	27.61	8.21	7.46	6.72	100			
Item 9: I try to get back on track when I lose concentration.	F	29	0	40	31	34	134	2.69	1.43	sometimes
	%	21.64	0	29.85	23.13	25.37	100			
Item 11: I adjust my reading speed according to what I am reading.	F	29	0	40	31	34	134	2.69	1.43	sometimes
	%	21.64	0	29.85	23.13	25.37	100			
Item 14: When text becomes difficult, I pay closer attention to what I am reading.	F	29	0	27	31	47	134	2.50	1.51	occasionally
	%	21.64	0	20.15	23.13	35.07	100			
Item 16 : I stop from time to time and think about what I am reading.	F	29	0	27	31	47	134	2.50	1.51	occasionally
	%	21.64	0	20.15	23.13	35.07	100			
Item 19: I try to picture or visualize information to help remember what I read.	F	37	14	14	46	23	134	2.97	1.50	sometimes
	%	27.61	10.45	10.45	34.33	17.16	100			
Item 25: When text becomes difficult, I re-read it to increase my understanding.	F	37	14	14	46	23	134	2.97	1.50	sometimes
	%	27.61	10.45	10.45	34.33	17.16	100			
Item 28: When I read, I guess the meaning of unknown words or phrases.	F	29	21	34	13	37	134	2.94	1.50	sometimes
	%	21.64	15.67	25.37	9.70	27.61	100			

It is evident from the table (4.3.5) above that 67 (50%), 37 (27.61%), 11 (8.21%), 10 (7.46%) and 9 (6.72)Yemeni EFL learners always, usually, sometimes and never respectively use strategy 7 (reading slowly & carefully). 29 (21.64%), 0 , 40 (29.85%), 31 (23.13%) and 34 (25.37) Yemeni EFL learners always, usually, sometimes and never respectively use strategy 9 (trying to stay focused on reading). 29 (21.64%), 0,40 (29.85%), 31 (23.13%) and 34 (25.37) Yemeni EFL learners always, usually, sometimes and never respectively use strategy11 (adjusting reading rate). 29 (21.64%), 0, 27(20.15%), 31 (23.13%) and 47 (35.07) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 14 (paying close attention to reading). 29 (21.64%), 0, 27(20.15%), 31 (23.13%) and 47 (35.07) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 16 (pausing and thinking about reading). 37 (27.61%), 14 (10.45%), 14 (10.45%) and 46 (34.33%) and 23 (17.16%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 19 (visualizing information read). 37 (27.61%), 14 (10.45%), 14 (10.45%) and 46 (34.33%) and 23 (17.16%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 25 (rereading the text). 29 (21.64%), 21 (15.67%), 34 (25.37%), 13 (9.70%), 37 (27.61%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 28 (guessing meaning for unknown words).

In order to ascertain the overall performance of problem-solving reading strategies used among the Yemeni EFL learners, the scale as well as the survey of reading strategies which was developed by Kouider Mokhtari & Ravi Sheorey (2002) was adopted. The descriptive statistics regarding the assessment of overall problem-solving reading strategies is illustrated below in table (4.3.6).

Table (4.3.6) describes the descriptive Statistics regarding problem-solving reading strategies used among the Yemeni EFL students based on scale developed by Mokhtari & Sheory (2002)					
	f	%	M	S.D	level
high (3.5 or higher)	29	21.64	2.95	0.82	medium
Medium (2.5 -3.4)	87	64.93			
low (2.4 or lower)	18	13.43			
Total	134	100			
Source: Author's computation based on Mokhtari & Sheorey's (2002) Scoring System in SORS					

Table (4.3.6) displays that 29 of the Yemeni EFL learners show high level of using reading strategies (21.64%), 87 show medium level (64.93%) and only 18 show low level (13.43%). The average score in these global reading strategies is 2.95 with Standard deviation of 0.82. It can be concluded from the above information that Yemeni EFL learners adopt the problem-solving reading strategies in a medium level within the range of international standards.



Graph (4.3.2) describes the descriptive Statistics regarding problem-solving reading strategies used among the Yemeni EFL students based on scale developed by Mokhtari & Sheory (2002)

It can be manifested from the descriptive statistics above that Yemeni student problem-solving learning strategies is well within the global benchmark. This might be because the Yemeni EFL learners when reading slowly and carefully, this might help them check their understanding in order to solve the problems (strategy No.7). They also try to review and remind the lessons consistently so that they can sort out the given problems with a great ease. In addition, when adjust speed rate, this might assist them solve any problem according to the standard method (strategy No.11). Furthermore, when visualizing information, this could aid them draw a picture on the theme of the text in their minds in order to recall information while reading (strategy.No19). It could be said that respondents try to guess the meaning of unknown words or phrases in order to figure out the meaning of unfamiliar vocabulary for better comprehension (strategy No.28).

3. **Support Reading Strategies:** are a set of mechanisms "intended to aid the reader in comprehending the text such as using a dictionary, taking notes, underling, or highlighting textual information".

Table (4.3.7) describes the descriptive statistics regarding support reading strategies used among the Yemeni EFL students

Statements		always	usually	sometimes	occasionally	never	Total	Mean	S.D	Level
Item 2: I take notes while reading to help me understand what I read.	F	120	3	3	3	5	134	4.72	0.91	always
	%	89.55	2.24	2.24	2.24	3.73	100			
Item 5: When text becomes difficult, I read aloud to help me understand what I read.	F	13	50	23	14	34	134	2.96	1.38	sometimes
	%	9.70	37.31	17.16	10.45	25.37	100			
Item 10: I underline or circle information in the text to help me understand what I read.	F	29	0	40	31	34	134	2.69	1.43	sometimes
	%	21.64	0	29.85	23.13	25.37	100			
Item 13: I use reference materials (e.g. a dictionary) to help me understand what I read.	F	29	0	40	31	34	134	2.69	1.43	sometimes
	%	21.64	0	29.85	23.13	25.37	100			
Item 18: I paraphrase (restate ideas in my own words) to better understand what I read.	F	24	5	27	31	47	134	2.46	1.45	occasionally
	%	17.91	3.73	20.15	23.13	35.07	100			

Item 22: I go back and forth in the text to find relationships among ideas in it.	F	34	30	28	18	24	134	3.24	1.43	sometimes
	%	25.37	22.39	20.90	13.43	17.91	100			
Item 26: I ask myself questions I like to have answered in the text.	F	30	34	33	13	24	134	3.25	1.38	sometimes
	%	22.39	25.37	24.63	9.70	17.91	100			
Item 29: When reading, I translate from English into my native language.	F	121	0	0	0	13	134	4.61	1.19	always
	%	90.30	0	0	0	9.70	100			
Item 30: When reading, I think about information in both English and my mother tongue.	F	121	0	0	0	13	134	4.61	1.19	always
	%	90.30	0	0	0	9.70	100			

It is evident in table (4.3.7) that 120 (89.55%), 3 (2.24%), 3 (2.24%) and 3 (2.24%) and 5 (3.73%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 2 (taking notes while reading). 13 (9.70%), 50 (37.31%), 23 (17.16%) and 14 (10.45%) and 34 (25.37%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 5 (reading aloud when text becomes hard). 29 (21.64%), 0 , 40 (29.85%), 31 (23.13%) and 34 (25.37%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 10 (underlying or circling text information). 29 (21.64%), 0 , 40 (29.85%), 31 (23.13%) and 34 (25.37%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 13 (using reference materials). 24 (17.91%), 5 (3.73%), 27 (20.15%) and 31 (23.13%) and 47 (35.07%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 18 (paraphrasing for better understanding). 34 (25.37%), 30 (22.39%), 28 (20.90%) and 18 (13.43%) and 24 (17.91%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 22 (going back and forth in text). 30 (22.39%), 34 (25.37%), 33 (24.63%) and 13 (9.70%) and 24 (17.91%) of Yemeni EFL learners always, usually, sometimes and never respectively use strategy 26 (asking oneself question). 121 (90.30%) and 13 (9.70%) of Yemeni EFL learners always and never respectively use strategy 29 (translating into mother tongue). 121 (90.30%) and 13

(9.70%) of Yemeni EFL learners always and never respectively use strategy 30 (thinking in both languages).

In order to measure the overall performance of support reading strategies used among the Yemeni EFL learners, the scale as well as the same survey of reading strategies which was developed by Kouider Mokhtari & Ravi Sheorey (2002) was adapted. The descriptive statistics regarding the assessment of overall support reading strategies is illustrated below in table (4.3.8).

Table (4.3.8) describes the descriptive statistics regarding the support reading strategies used among the Yemeni EFL students based on scale developed by Mokhtari & Sheory (2002)

	f	**%**	**M**	**S.D**	**level**
high (3.5 or higher)	58	43.28	3.5	0.46	medium
Medium (2.5 -3.4)	76	56.72			
low (2.4 or lower)	0	0			
Total	134	100			

Source: Author's computation based on Mokhtari & Sheorey's (2002) Scoring System in SORS

Table (4.3.8) displays that 58 (43.28%) of the Yemeni EFL learners show high level of using reading strategies while 76 show medium level (56.72%) and none shows low level (0). The average score in this support reading strategies is 3.5 with standard deviation of 0.46. It can be concluded from the above information that Yemeni EFL learners adopt the support reading strategies in medium level within the range of international standards.

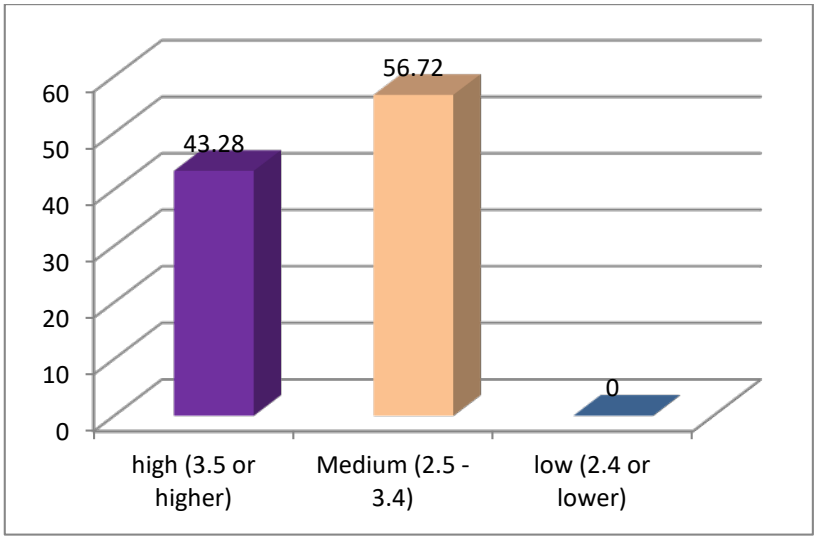


Figure (4.3.3) describes the diagrammatic representation of descriptive statistics regarding the support reading used of Yemeni EFL students

It can be manifested from the descriptive statistics that Yemeni students overall reading strategies is medium within the global benchmark. This might be because the Yemeni EFL learners think that note-taking helps them capture the main points and get easy to recall them (strategy No.2), while reading aloud when text becomes hard helps them understand some of what they read because they are paying attention to their pronunciation and thus they have better chance for comprehension (strategy No.5). They sometimes underline information in the text to assist themselves doing scanning and paying more attention to understand the text (strategy No.10). The students also might us reference materials to help them to do direct translation to the unfamiliar words or phrases for better comprehension(strategy No.13).To connect ideas and find some clues for more comprehension, they restate ideas in their own words (strategy No.18) or they go back and forth in text (strategy No.22). Then, they go to ask themselves questions to help monitor their reading comprehension in order to derive meaning from text (strategy No26). For translation into the mother tongue, this strategy might make the text more comprehensible

(strategy No.29). Finally, the Yemeni EFL learners when trying to analyze information in both languages, they might do to understand the text (strategy No.30).

Overall Reading Strategies:

In order to ascertain overall performance of reading strategies among Yemeni EFL learners, a composite score has been computed using following parameters that are essential to examine the reading strategies used by Yemeni EFL learners. The composite performance of Yemeni EFL Learners' with respect to overall **reading strategies** is depicted in the following table:

Table (4.3.9) describes the descriptive Statistics regarding the overall reading strategies used among the Yemeni EFL students based on scale developed by Mokhtari & Sheorey (2002)

	f	%	M	S.D	level
high (3.5 or higher)	0.00	0.00	2.12	0.44	low
Medium (2.5 -3.4)	29.00	21.64			
low (2.4 or lower)	105.00	78.36			
Total	134	100			

Source: Author's computation based on Mokhtari & Sheorey's (2002) Scoring System in SORS

It is apparent from table (4.3.9) that Yemeni learners show low level in reading strategies (f=105, p=78.36%). However, only 29 of the learners display a medium level (p=21%) and 0 show high level. The average score of the learners in this question is 2.12 with standard deviation of 0.44. It can be concluded that majority of Yemeni EFL learners belong to low level of reading strategies' use.

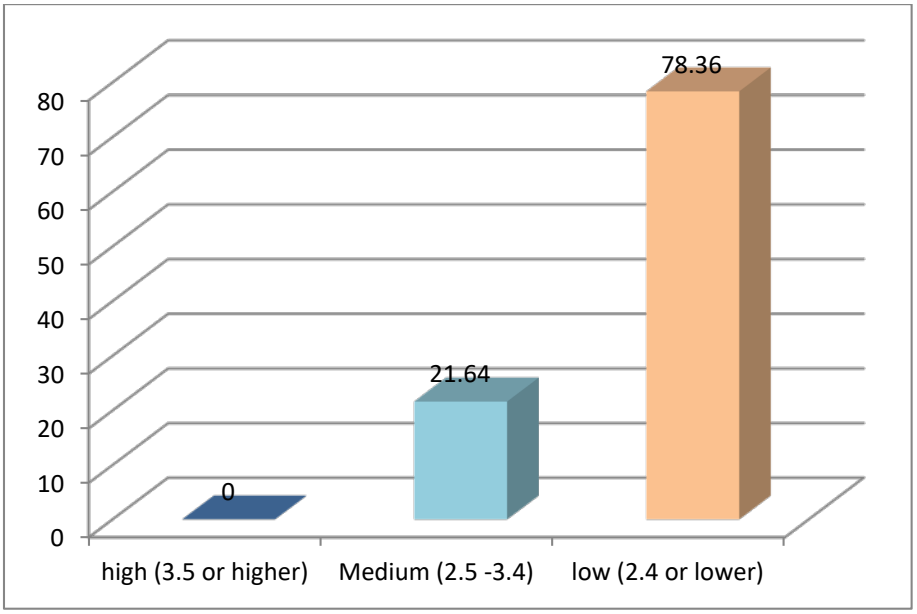


Figure (4.3.4) describes the diagrammatic representation of descriptive statistics regarding the overall reading strategies used of Yemeni EFL students

It is apparent from the descriptive statistics that Yemeni students overall reading strategies use is low within the global benchmark (Mean =2.12, S.D=0.44). The findings of interview with Yemeni EFL learners are similar to the statistical findings for different reasons. The Yemeni EFL learners explain that they are unaware of the benefit of these reading strategies, as they get less instruction and knowledge on how to use them. They add that if they are told to get some previous preparation, this might help them to overcome the complexity of the texts and topics given to them in reading. The Yemeni EFL learners think that teachers do not consider their different learning styles and not engage them in effective activities in reading as well as not teaching them how to improve their reading skills. Some of the interviewees comment that there is a lack of connection between the teacher and them and they get frustrated once the reading period starts. Others explain that the reading topics given to the students are long or boring especially if their themes entitle politics or uninterested ideas. The use of translation and

mother tongue as well as lack of cultural codes knowledge of the target language could be other causes behind their low level in using reading strategies according to some of the students.

It could be argued that the low category which the Yemeni EFL learners fall under shows consistency with the most of previous studies which reveal that majority of the learners have less knowledge in or pay little attention to use effective strategies while reading a text. Among the three categories of metacognitive reading strategies, the support strategies are the most frequently used by the Yemeni EFL learners. The findings both present important contribution to the less proficient EFL learners in a Yemeni context and pedagogical implication on the importance of strategy training.

4.1.4: Descriptive analysis regarding Learning Culture among Yemeni EFL Learners

Culture of learning refers to a particular behaviour in language classrooms which is set within taken-for-granted frameworks of expectations, attitudes, values and beliefs about what constitutes good learning in different aspects. It centralizes on how to teach or learn, whether and how to ask questions, what textbooks are for, and how language teaching relates to broader issues of the nature and purpose of education (Cortazzi & Jin, 1999).

Objective-4: to measure and analyze the levels of learning culture among Yemeni EFL learners.

In the current study the culture questionnaire here has been developed first time, therefore care has been taken while carrying out the descriptive analysis. The questionnaire has been divided into three subscales (behavior, attitude, content) in order to

discriminate between various cultural aspects prevailing among Yemeni EFL learners. A detailed and comprehensive descriptive statistics regarding each item is elucidated below. To carry out the item analysis, a five-point continuum has been applied on a structured questionnaire consists of 30 statements. The details of the scale arranged and the class interval developed are provided below in tables (4.4.1) and (4.4.2).

Table (4.4.1) shows the five-point scale continuum				
5	4	3	2	1
Strongly agree	agree	Undecided	disagree	Strongly disagree

Table (4.4.2) shows the five-point scale continuum with computed class intervals	
(1.0-1.80)	Strongly disagree
(1.81-2.60)	disagree
(2.61-3.40)	Undecided
(3.41-4.20)	agree
(4.21-5.0)	strongly agree
Note: The class interval was calculated using following formula; Ci= High-low/5.	

Table (4.4.2) shows that five-point scale continuum with computed class intervals. The class interval was calculated using following formula; Ci=High-low/5. Each alternative response has a class interval, strongly disagree (1.0-1.80), disagree (1.81-2.60), undecided (2.61-3.40), agree (3.41-4.20) and strongly agree (4.21-5.0).

Dimensions of Learning Culture:

1. Behavioral aspect of Learning Culture
2. Attitudinal aspect of Learning Culture
3. Contextual aspect of Learning Culture

1. Behavioral Aspect of Learning Culture:

Statement 1: I think it is rude to tell the teacher if he/she makes an error even if the teacher lets me do so.

Table (4.4.3) reveals the descriptive statistics regarding the behavioral learning culture used among the Yemeni EFL students: statement 1					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	13	9.70	2.73	1.30	Undecided
AGREE (3.41-4.20)	30	22.39			
UNDECIDED (2.61-3.40)	30	22.39			
DISAGREE (1.81-2.60)	30	22.39			
STRONGLY DISAGREE (1.0-1.80)	31	23.13			
Total	134	100			

The table (4.4.3) above explains that 13 (9.70%), 30 (22.39%), 30 (22.39%) ,30 (22.39%), 31 (23.13%), strongly agree, agree, undecided, disagree and strongly disagree respectively to this statement. The mean score in this statement is 2.73 and standard deviation is 1.30. It is evident from the descriptive statistics that Yemeni EFL students do not know if it is impolite to pay the teacher's attention to his/her error or not even in case the teacher permits it. Based on the descriptive statistics, it can be deduced that Yemeni EFL learners are introvert.

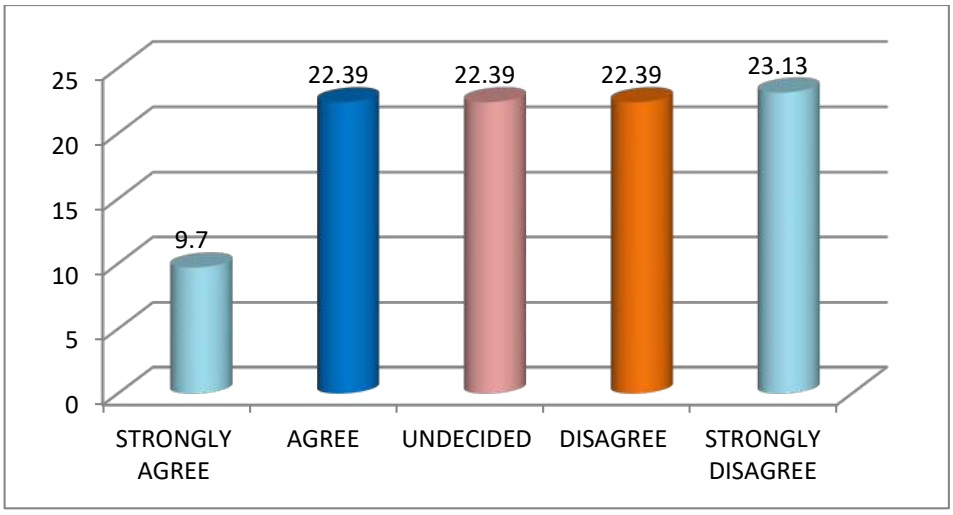


Figure (4.4.1) shows the diagrammatic representation of descriptive statistics regarding the behavioral learning culture of Yemeni EFL students: statement No.1

Statement 4: I can't express my ideas during reading class because I think it is not an acceptable behavior.

Table (4.4.4) shows the descriptive Statistics regarding the behavioral learning culture used among the Yemeni EFL students: statement 4					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	13	9.70	2.91	1.36	Undecided
AGREE (3.41-4.20)	44	32.84			
UNDECIDED (2.61-3.40)	29	21.64			
DISAGREE (1.81-2.60)	14	10.45			
STRONGLY DISAGREE (1.0-1.80)	34	25.37			
Total	134	100			

The table **(**4.4.4**)** above reveals that 13 (9.70%), 44 (32.84%), 29 (21.64%), 14 (10.45%), 34 (25.37%), strongly agree, agree, undecided, disagree and strongly disagree respectively to this statement. The mean score in this statement is 2.91 and standard deviation is 1.36. The descriptive statistics indicates that Yemeni EFL students are not sure if expressing their thoughts in class would be right or not. On the basis of descriptive statistics, it can be said that prevailing cultural environment demotivates the Yemeni EFL learners to express their ideas.

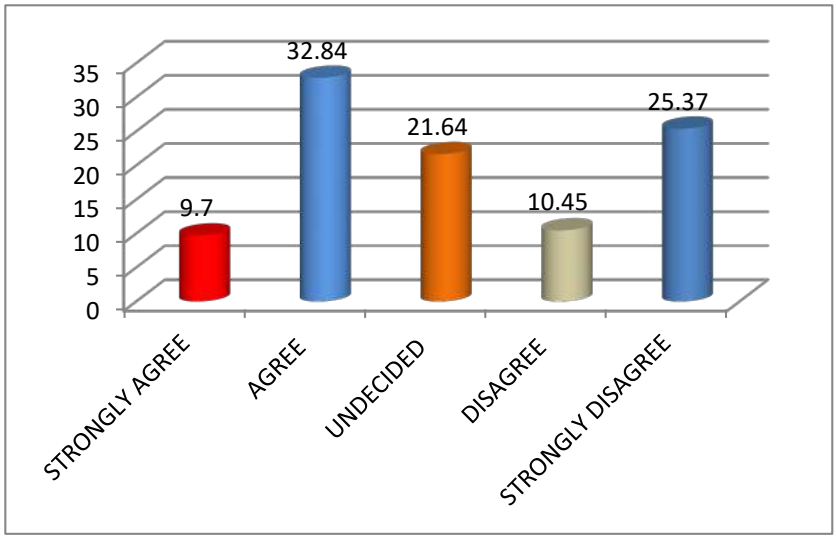


Figure (4.4.2) shows the diagrammatic representation of descriptive statistics regarding the behavioral learning culture of Yemeni EFL students: statement No.4

Statement 7: I think it is polite to be silent in class without asking questions even if the teacher allows me to do.

Table (4.4.5) displays the descriptive Statistics regarding the behavioral learning culture used among the Yemeni EFL students: statement 7					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	44	32.84	3.68	1.20	agree
AGREE (3.41-4.20)	31	23.13			
UNDECIDED (2.61-3.40)	40	29.85			
DISAGREE (1.81-2.60)	10	7.46			
STRONGLY DISAGREE (1.0-1.80)	9	6.72			
Total	134	100			
Source: Author's computation					

The table (4.4.5**)** above reveals that 44 (32.84%), 31 (23.13%), 40 (29.85%),10 (7.46%), and 9 (6.72%), strongly agree, agree, undecided, disagree and strongly disagree respectively to this statement. The mean score in this statement is 3.68 and standard deviation is 1.20. The descriptive statistics indicates that Yemeni EFL students think it is polite to be silent in class. Therefore, on the basis of descriptive statistics it can be declared that Yemeni EFL learners are polite and sensitive towards the teachers' stature.

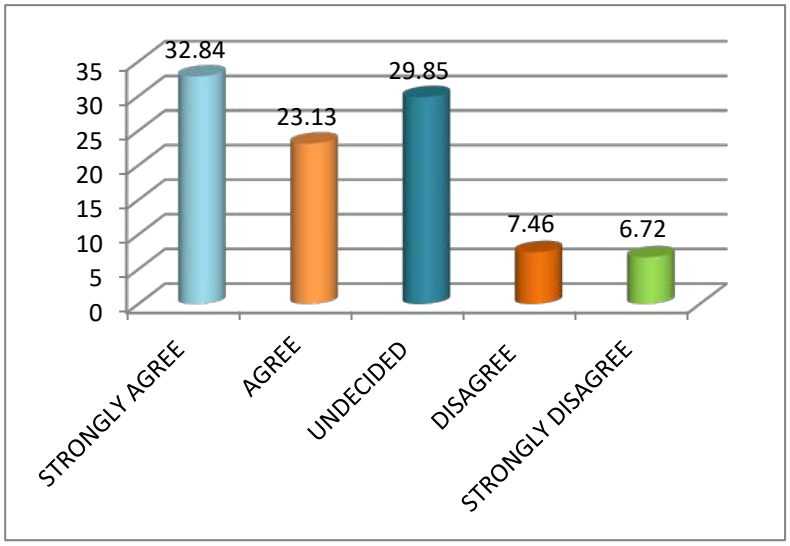


Figure (4.4.3) shows the diagrammatic representation of descriptive statistics regarding the behavioral learning culture of Yemeni EFL students: statement No.7

Statement 10: I don't like if the teacher highlights my mistake in reading.

Table (4.4.6) shows the descriptive Statistics regarding the behavioral learning culture used among the Yemeni EFL students: statement 10					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	44	32.84	3.68	1.20	agree
AGREE (3.41-4.20)	31	23.13			
UNDECIDED (2.61-3.40)	40	29.85			
DISAGREE (1.81-2.60)	10	7.46			
STRONGLY DISAGREE (1.0-1.80)	9	6.72			
Total	134	100			
Source: Author's computation					

The table **(**4.4.6**)** above reveals that 44 (32.84%), 31 (23.13%), 40 (29.85%), 10 (7.46%), 9 (6.72%), strongly agree, agree, undecided, disagree and strongly disagree respectively to this statement. The mean score in this statement is 3.68 and standard deviation is 1.20. The descriptive statistics indicates that Yemeni EFL students don't like the teacher to pin point their mistakes in front of their peers.

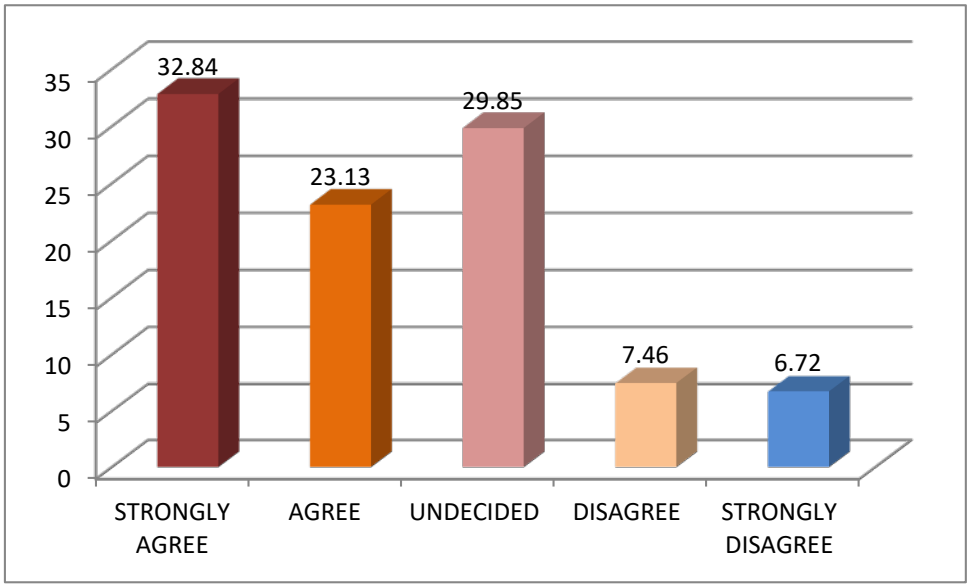


Figure (4.4.4) shows the diagrammatic representation of descriptive statistics regarding the behavioral learning culture of Yemeni EFL students: statement No.10

Statement 13: I consider it a pressure to be directly instructed by the teacher.

Table (4.4.7) shows the descriptive Statistics regarding the behavioral learning culture used among the Yemeni EFL students: statement 13					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	30	22.39	3.46	1.17	agree
AGREE (3.41-4.20)	36	26.87			
UNDECIDED (2.61-3.40)	44	32.84			
DISAGREE (1.81-2.60)	14	10.45			
STRONGLY DISAGREE (1.0-1.80)	10	7.46			
Total	134	100			

The table (4.4.7) above displays that 30 (22.39%), 36 (26.87%), 44 (32.84%), 14 (10.46%), 10 (7.46%), strongly agree, agree, undecided, disagree and strongly disagree respectively in this statement. The mean score in this statement is 3.46 and standard deviation is 1.17. The descriptive statistics indicates that Yemeni EFL students dislike it if the teacher instructs them directly and individually. Based on the descriptive statistics, it is clear that Yemeni EFL learners are anxious about direct and sudden instructions given by teacher.

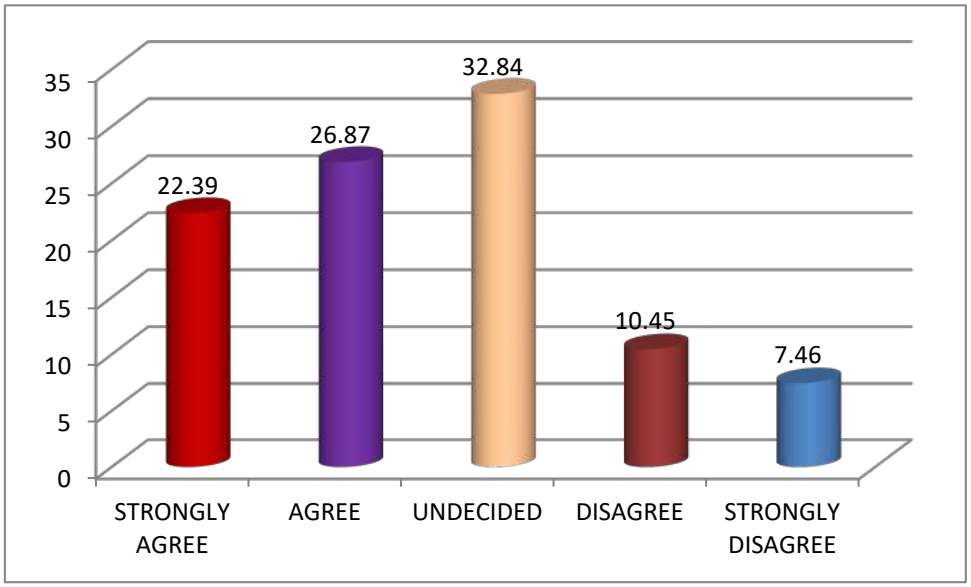


Figure (4.4.5) shows the diagrammatic representation of descriptive statistics regarding the behavioral learning culture of Yemeni EFL students: statement No.13

Statement 16: It is fine to use the first name of the teacher in class.

Table (4.4.8) shows the descriptive Statistics regarding the behavioral learning culture used among the Yemeni EFL students: statement 16					
	Frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	53	39.55	3.81	1.27	agree
AGREE (3.41-4.20)	36	26.87			
UNDECIDED (2.61-3.40)	21	15.67			
DISAGREE (1.81-2.60)	14	10.45			
STRONGLY DISAGREE (1.0-1.80)	10	7.46			
Total	134	100			

The table **(**4.4.8**)** above displays that 53 (39.55%), 36 (26.87%), 21 (15.67%) 14 (10.46%), and 10 (7.46%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score in this statement is 3.81 and standard deviation is 1.27. The descriptive statistics above shows that Yemeni EFL learners are comfortable to use the first name of the teacher in class. Descriptive statistics reveals that there is a high permissibility in the Yemeni society to call teachers' with their real names.

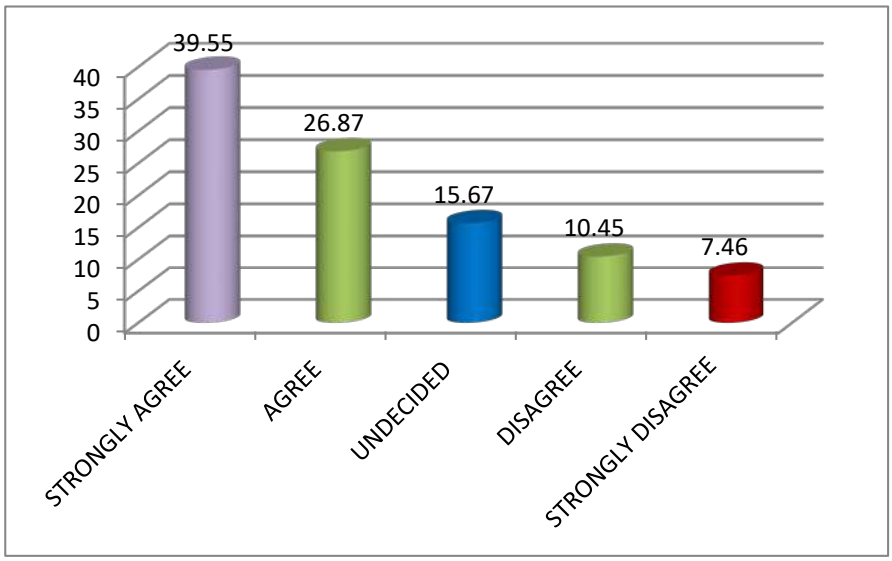


Figure (4.4.6) shows the diagrammatic representation of descriptive statistics regarding the behavioral learning culture of Yemeni EFL students: statement No.16

Statement 19: I usually whisper to a classmate for clarification in class because I can't ask the teacher.

Table (4.4.9) displays the descriptive statistics regarding the behavioral learning culture used among the Yemeni EFL students: statement 19					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	59	44.03	3.90	1.28	agree
AGREE (3.41-4.20)	36	26.87			
UNDECIDED (2.61-3.40)	15	11.19			
DISAGREE (1.81-2.60)	14	10.45			
STRONGLY DISAGREE (1.0-1.80)	10	7.46			
Total	134	100			

It is obvious in table **(**4.4.9**)** that 59 (44.03%), 36 (26.87%), 15 (11.19%), 14 (10.45%) and 10 (7.46%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.90 and standard deviation is 1.28. Descriptive statistics reveal that Yemeni EFL learners prefer to inquire their peers rather than the teacher. It might be due to their fear of conceptual misunderstanding.

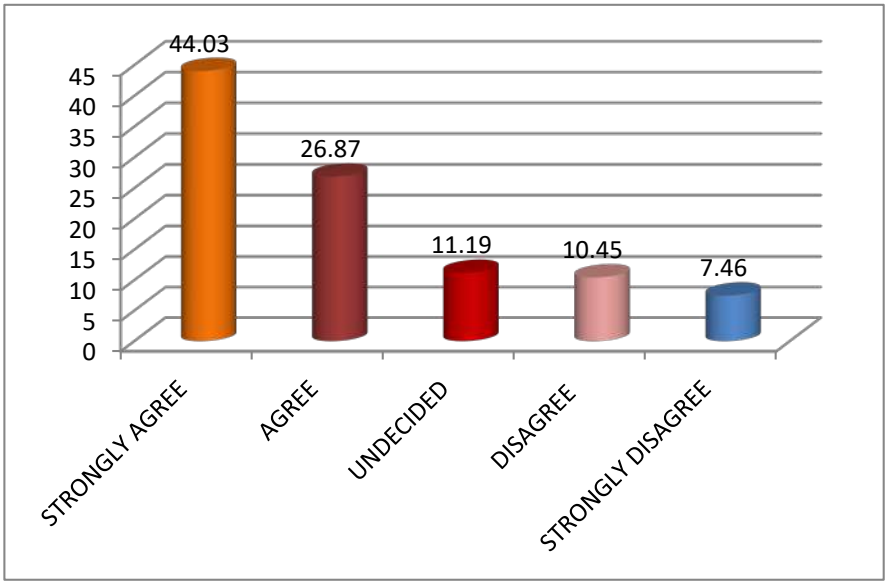


Figure (4.4.7) shows the diagrammatic representation of descriptive statistics regarding the behavioral learning culture of Yemeni EFL students: statement No.19

Statement 22:I speak only when the teacher speaks to me first.

Table (4.4.10) shows the descriptive statistics regarding the behavioral learning culture used among the Yemeni EFL students: statement 22					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	59	44.03	3.90	1.28	agree
AGREE (3.41-4.20)	36	26.87			
UNDECIDED (2.61-3.40)	15	11.19			
DISAGREE (1.81-2.60)	14	10.45			
STRONGLY DISAGREE (1.0-1.80)	10	7.46			
Total	134	100			

It is evident in table **(**4.4.10**)** that 59 (44.03%), 36 (26.87%), 15 (11.19%), 14 (10.45%) and 10 (7.46%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.90 and standard deviation is 1.28. The descriptive statistics shows that majority of Yemeni EFL learners do not speak to the teacher in class unless the teacher starts.

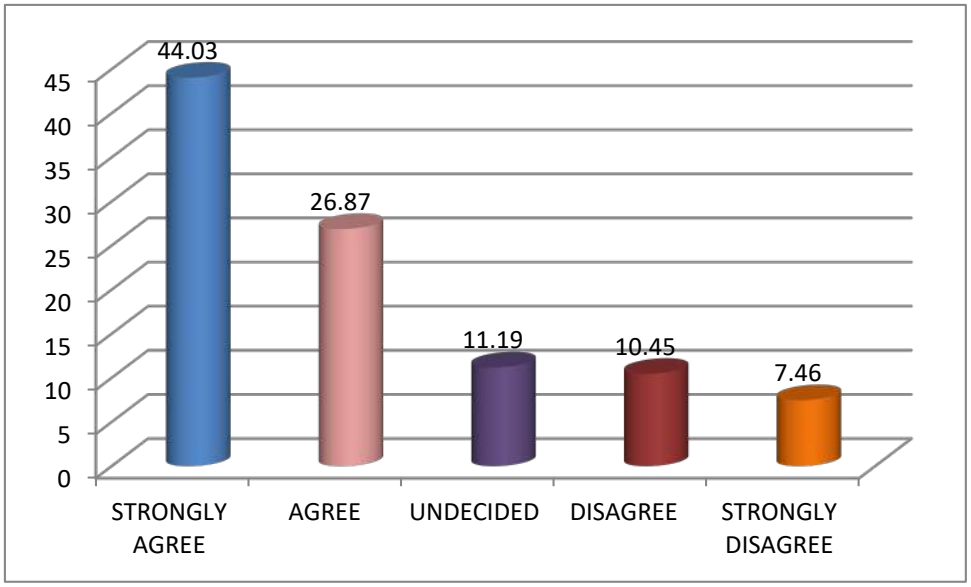


Figure (4.4.8) shows the diagrammatic representation of descriptive statistics regarding the behavioral learning culture of Yemeni EFL students: statement No.22

The descriptive statistics regarding the overall assessment and categorization of Yemeni EFL learners on the basis of behavioral aspect under the learning culture is described below. The students have been classified into 3 categories:

- Unaware
- Rationalist
- Stereotype

Table (4.4.11) shows the descriptive statistics regarding the behavioral aspect of learning culture among the Yemeni EFL students

	range		f	%	M	S.D	Remark
Quartile1	23.25	Unaware(0-23.25)	34	25.37	28.06	8.88	rationalist
Quartile2	31.00	rationalist(24-32)	70	52.24			
Quartile3	32.00	stereotype(33-40)	30	22.39			
Total			134	100			

It is evident in table (4.4.11) that 34 (25.37%), 70 (52.24%) and 30 (22.39%) are unaware, rationalists and stereotypes respectively regarding their culturally behavior in classrooms. The mean score is 28.06 and Standard deviation is 8.88. The descriptive statistics indicates that the overall level of the Yemeni EFL students in behavioral aspect of learning culture is that they are rationalists..

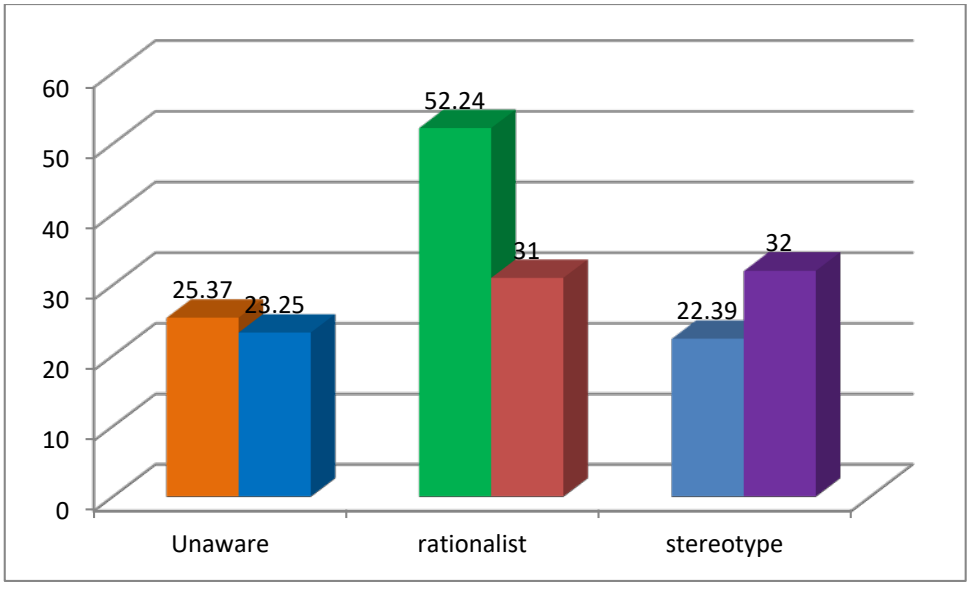


Figure (4.4.9) shows the diagrammatic representation of descriptive statistics regarding the behavioral learning culture subscale of Yemeni EFL students

2. Attitudinal Aspect of Learning Culture:

Statement 2: I think there are many differences between values found in English texts and our values.

Table (4.4.12) shows the descriptive statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 2					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	114	85.07	4.63	0.98	Strongly agree
AGREE (3.41-4.20)	3	2.24			
UNDECIDED (2.61-3.40)	9	6.72			
DISAGREE (1.81-2.60)	3	2.24			
STRONGLY DISAGREE (1.0-1.80)	5	3.73			
Total	134	100			

It is shown in table (4.4.12) that 114 (85.07%), 3 (2.24%), 9 (6.72%), 3 (2.24%) and 5 (3.73%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 4.63 and standard deviation is 0.98. The descriptive statistics reveals that Yemeni EFL learners can observe the ample cultural differences between the values of the two cultures.

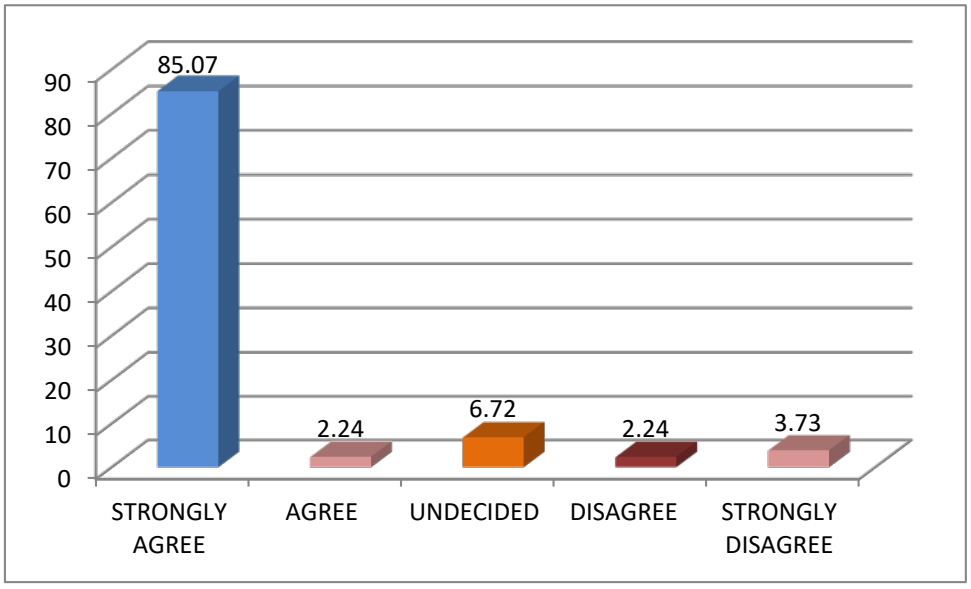


Figure (4.4.10) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No.2

Statement 3: I like to share my own regional customs with my classmates in English class.

Table (4.4.13) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 3					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	44	32.84	3.68	1.20	agree
AGREE (3.41-4.20)	31	23.13			
UNDECIDED (2.61-3.40)	40	29.85			
DISAGREE (1.81-2.60)	10	7.46			
STRONGLY DISAGREE (1.0-1.80)	9	6.72			
Total	134	100			
Source: Author's computation					

It is clear in table (4.4.13) that 44 (32.84%), 31 (23.13%), 40 (29.85%), 10 (7.46%) and 9 (6.72%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.68 and standard deviation is 1.20. The descriptive statistics points out that Yemeni EFL learners feel proud to expose their local culture to others and not only receive the other.

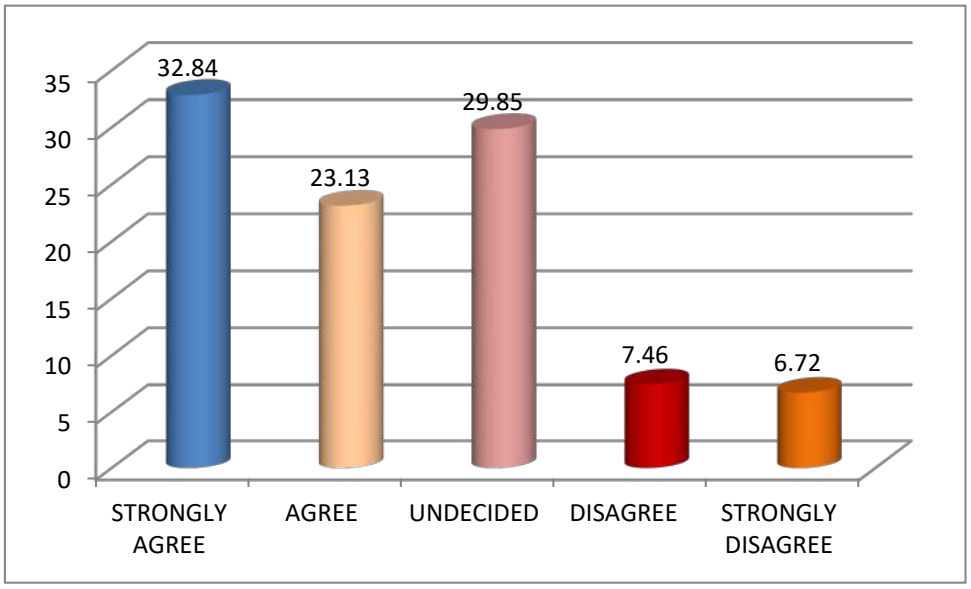


Figure (4.4.11) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No.3

Statement 11: The more cultural differences I find between my mother tongue and English, the worse I learn English.

Table (4.4.14) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 11					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	30	22.39	3.46	1.17	agree
AGREE (3.41-4.20)	36	26.87			
UNDECIDED (2.61-3.40)	44	32.84			
DISAGREE (1.81-2.60)	14	10.45			
STRONGLY DISAGREE (1.0-1.80)	10	7.46			
Total	134	100			

It is shown in table (4.4.14) that 30 (22.39%), 36 (26.87%), 44 (32.84%), 14 (10.45%), 10 (7.46%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.46 and standard deviation is 1.17. The descriptive statistics indicates that Yemeni EFL learners may not feel comfortable when finding new cultural differences between the two languages that, in turn, might hamper their progress in learning English language or its culture.

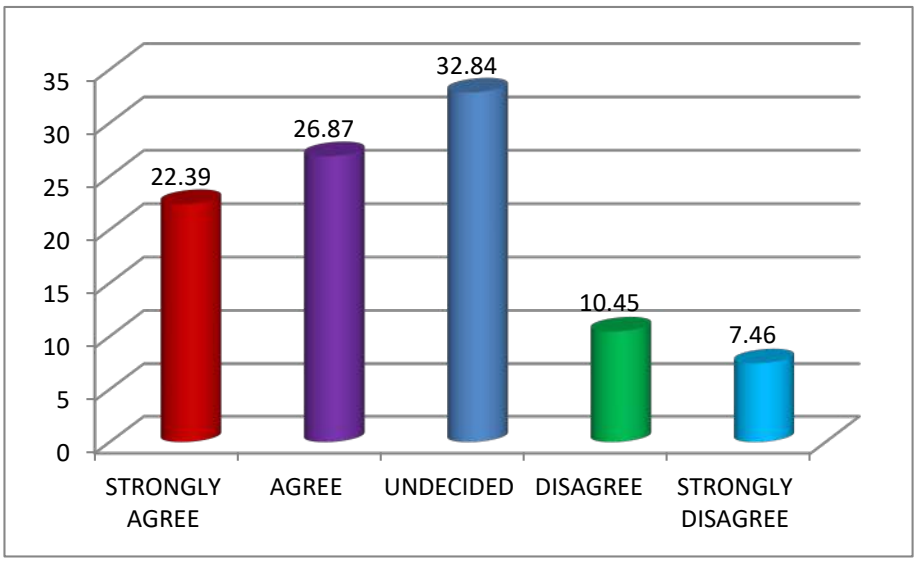


Figure (4.4.12) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No.11

Statement 14: Reading English stories helps me broaden my knowledge of the target culture.

Table (4.4.15) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 14					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	30	22.39	3.46	1.17	agree
AGREE (3.41-4.20)	36	26.87			
UNDECIDED (2.61-3.40)	44	32.84			
DISAGREE (1.81-2.60)	14	10.45			
STRONGLY DISAGREE (1.0-1.80)	10	7.46			
Total	134	100			

It is shown in table (4.4.15) that 30 (22.39%), 36 (26.87%), 44 (32.84%), 14 (10.45%), 10 (7.46%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.46 and standard deviation is 1.17. The descriptive statistics indicates that Yemeni EFL learners find interest in reading English stories. From the descriptive statistics, it is evident that Yemeni EFL learners are convinced that reading English stories provides them enough room to understand the target culture.

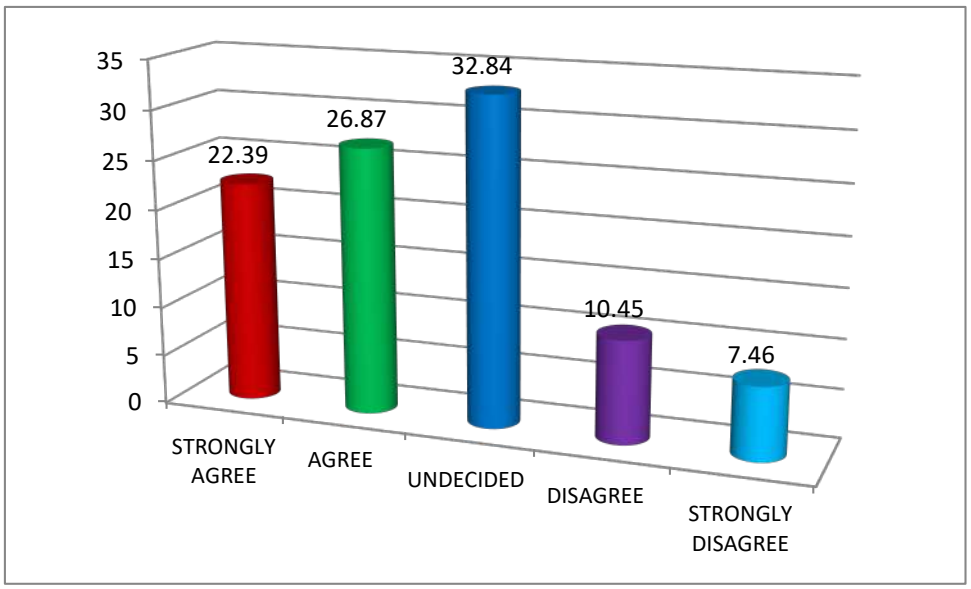


Figure (4.4.13) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No.14

Statement 26: When a reading passage carries some cultural aspects of my society, my participation in class discussion increases.

Table (4.4.16) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 26					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	37	27.61	3.37	1.41	Undecided
AGREE (3.41-4.20)	33	24.63			
UNDECIDED (2.61-3.40)	27	20.15			
DISAGREE (1.81-2.60)	16	11.94			
STRONGLY DISAGREE (1.0-1.80)	21	15.67			
Total	134	100			

It is evident in table (4.4.16) that 37 (27.61%), 33 (24.63%), 27 (20.15%), 16 (11.94%), 21 (15.67%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.37 and standard deviation is 1.41. The descriptive statistics displays that Yemeni EFL learners might feel uncertain of their ability to participate in class discussion even if the passage contains some of their native cultural aspects.

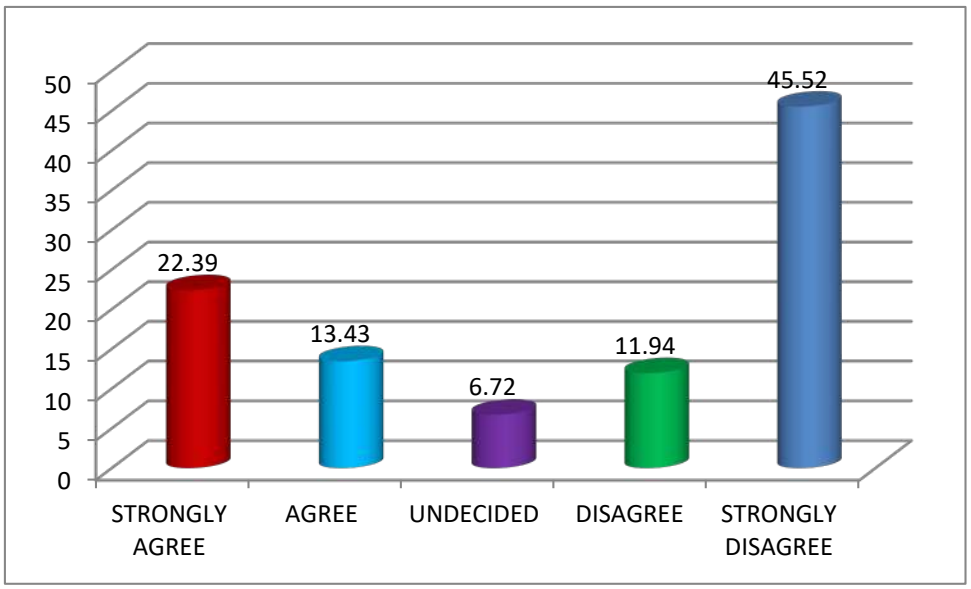


Figure (4.4.14) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No.26

Statement 28: I think learning about the target culture will affect my own culture negatively.

Table (4.4.17) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 28					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	37	27.61	2.99	1.68	Undecided
AGREE (3.41-4.20)	30	22.39			
UNDECIDED (2.61-3.40)	6	4.48			
DISAGREE (1.81-2.60)	16	11.94			
STRONGLY DISAGREE (1.0-1.80)	45	33.58			
Total	134	100			

It is shown in table **(**4.4.17) that 37 (27.61%), 30 (22.39%), 6 (4.48%), 16 (11.94%), 45 (33.58%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.99 and standard deviation is 1.68. The descriptive statistics clarifies that Yemeni EFL learners cannot judge if learning about the target culture will affect their own culture negatively or not. Therefore, as for descriptive statistics, it can be affirmed that Yemeni EFL learners are neutral regarding the impact of other cultures on their own native culture.

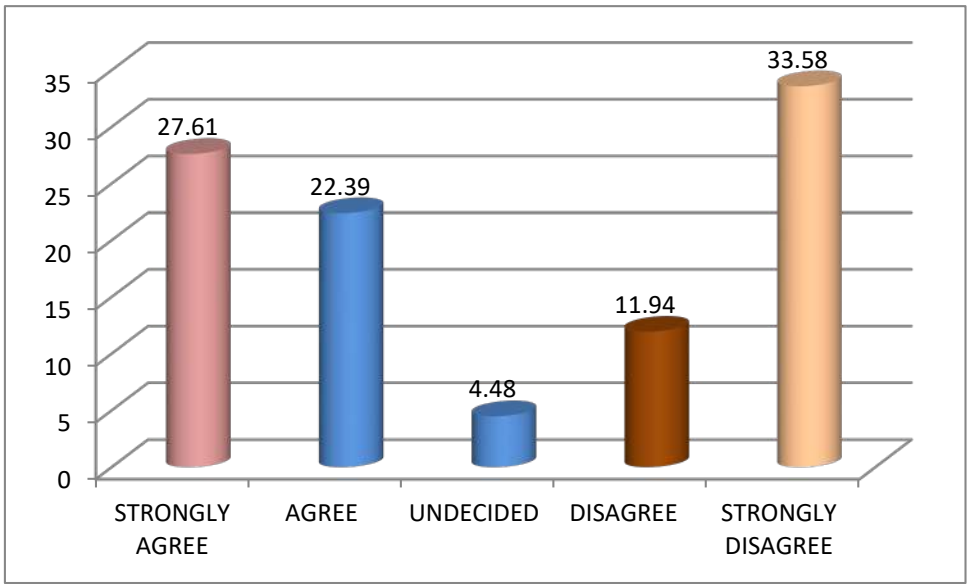


Figure (4.4.15) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No.28

Statement 30: I like to learn English with its attitudes and norms however strange or different they look.

Table (4.4.18) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 30					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	32	23.88	2.77	1.71	Undecided
AGREE (3.41-4.20)	28	20.90			
UNDECIDED (2.61-3.40)	9	6.72			
DISAGREE (1.81-2.60)	7	5.22			
STRONGLY DISAGREE (1.0-1.80)	58	43.28			
Total	134	100			

It is apparent in table (4.4.18) that 32 (23.88%), 28 (20.90%), 9 (6.72%), 7 (5.22%), 58 (43.28%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.77 and standard deviation is 1.71. The descriptive statistics indicates that Yemeni EFL learners are not sure if they like to learn about the target culture whatever strange it looks to them as they are unable to discriminate between positive and negative impact of target culture on their own culture.

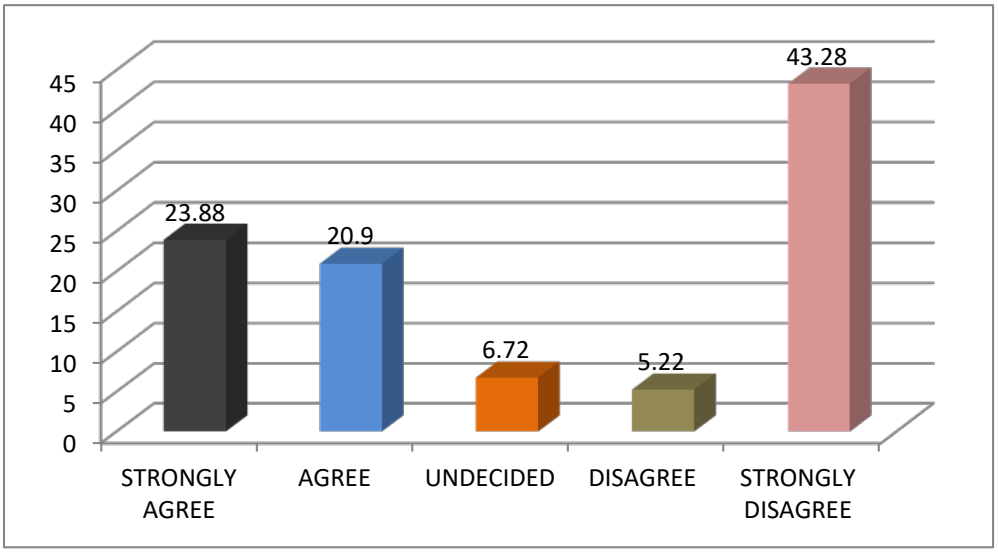


Figure (4.4.16) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No.30

Statement 5: I think English classes should focus only on English grammar and usage.

Table (4.4.19) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 5					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	30	22.39	2.55	1.67	disagree
AGREE (3.41-4.20)	18	13.43			
UNDECIDED (2.61-3.40)	9	6.72			
DISAGREE (1.81-2.60)	16	11.94			
STRONGLY DISAGREE (1.0-1.80)	61	45.52			
Total	134	100			

It is apparent in table (4.4.19) that 30 (22.39%), 18 (13.43%), 9 (6.72%), 16 (11.94%), 61 (45.52%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.55 and standard deviation is 1.67. The descriptive statistics points that Yemeni EFL learners do not think that learning English should only include its grammar and usage. However, they perceive that English classes can shed light on other English skills (writing, listening and speaking) and communicative aspects.

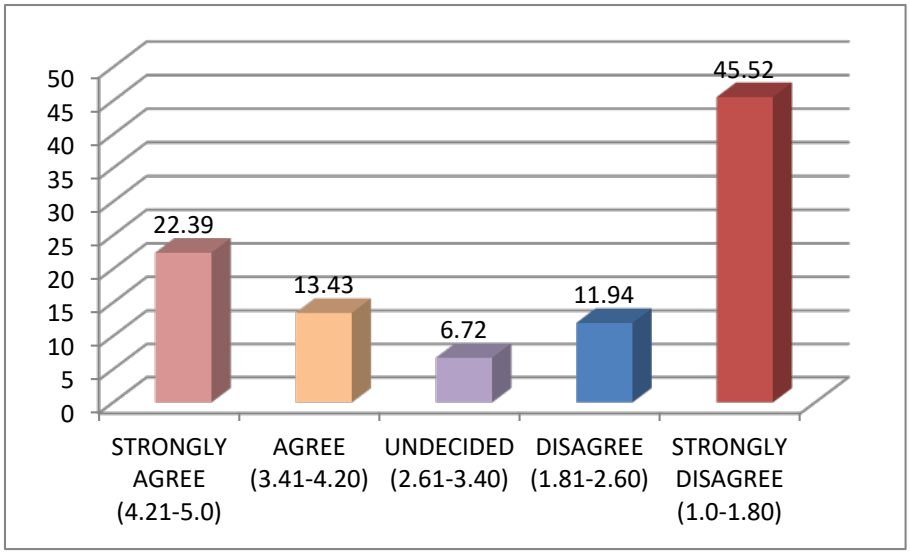


Figure (4.4.17) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No.5

Statement 8: I think my native values should be presented in English learning texts.

Table (4.4.20) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 8					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	20	14.93	2.45	1.51	disagree
AGREE (3.41-4.20)	18	13.43			
UNDECIDED (2.61-3.40)	22	16.42			
DISAGREE (1.81-2.60)	16	11.94			
STRONGLY DISAGREE (1.0-1.80)	58	43.28			
Total	134	100			

It is evident in table (4.4.20) that 20 (14.93%), 18 (13.43%), 22 (16.42%), 16 (11.94%), 58 (43.28%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.45 and standard deviation is 1.51. The descriptive statistics reveals that Yemeni EFL learners do not think that English learning textbooks should include their own cultural aspects as well. Based on descriptive statistics, it is can be inferred that Yemeni EFL learners are interested in learning English only because of the economic reasons as there is a global perception that good English is door to plenty of employment opportunities.

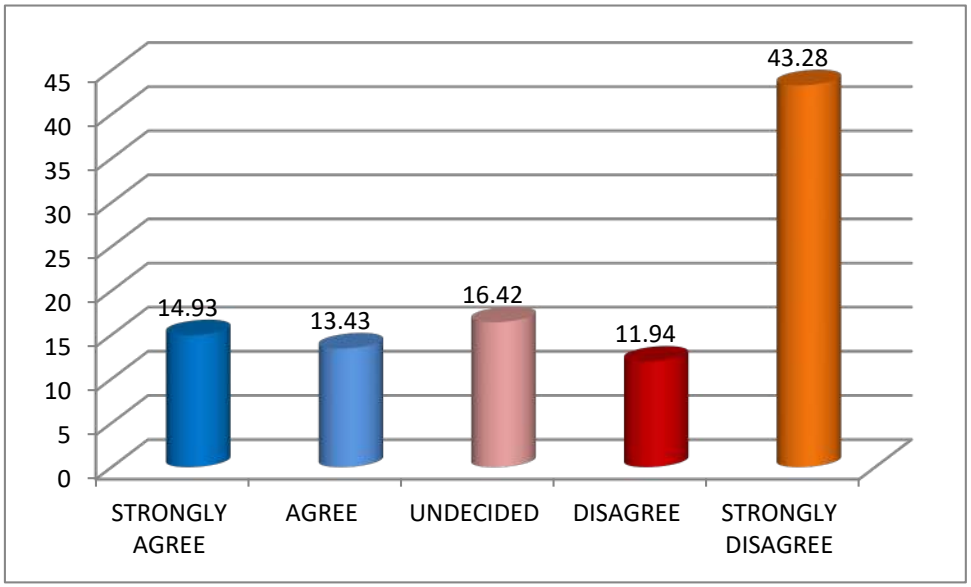


Figure (4.4.18) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No. 8

Statement 17: I think if my thoughts are integrated in English class, it will enhance my motivation to learn more.

Table (4.4.21) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 17					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	18	13.43	2.35	1.51	disagree
AGREE (3.41-4.20)	18	13.43			
UNDECIDED (2.61-3.40)	22	16.42			
DISAGREE (1.81-2.60)	11	8.21			
STRONGLY DISAGREE (1.0-1.80)	65	48.51			
Total	134	100			

It is apparent in table (4.4.21) that 18 (13.43%), 18 (13.43%), 22 (16.42%), 11 (8.21%), 65 (48.51%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.35 and standard deviation is 1.51. The data indicates that Yemeni EFL learners do not think it is required to participate with their thoughts in English class. It might be because they are hesitated to express their ideas or because of their belief or perception that their ideas might not get proper attention or it might be that integration of their thoughts in class have meager chances of inclusion.

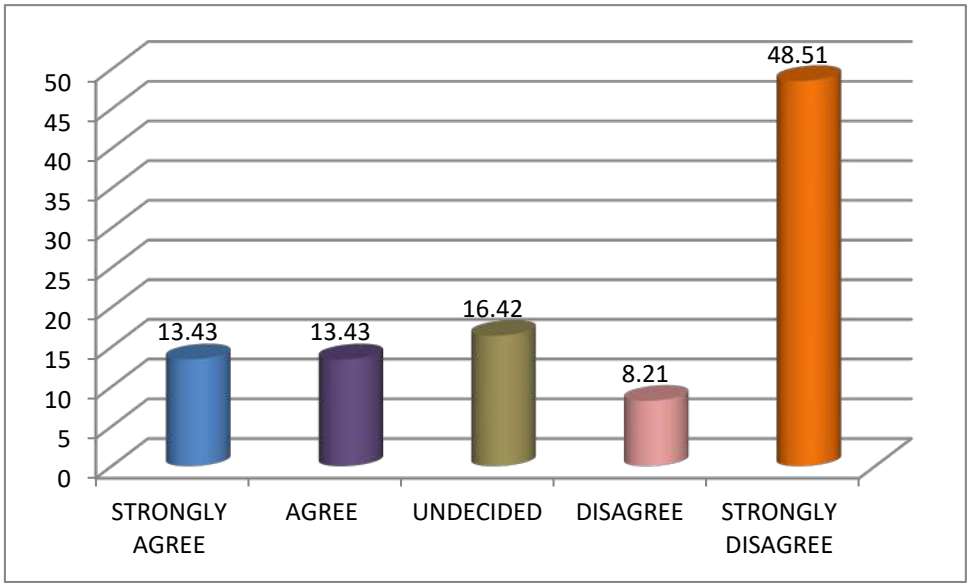


Figure (4.4.19) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No.17

Statement 18: I prefer English reading classes to cover the English life and their social problems.

Table (4.4.22) shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students: statement 18					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	11	8.21	2.19	1.38	disagree
AGREE (3.41-4.20)	18	13.43			
UNDECIDED (2.61-3.40)	22	16.42			
DISAGREE (1.81-2.60)	17	12.69			
STRONGLY DISAGREE (1.0-1.80)	66	49.25			
Total	134	100			

It is obvious in table (4.4.22) that 11 (8.21%), 18 (13.43%), 22 (16.42%), 17 (12.69%), 66 (49.25%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.19 and standard deviation is 1.38. The descriptive statistics displays that Yemeni EFL learners do not believe that the social life of the British has to be displayed in reading classes. It might be due to some of the unacceptable norms in the British life to the Yemeni students.

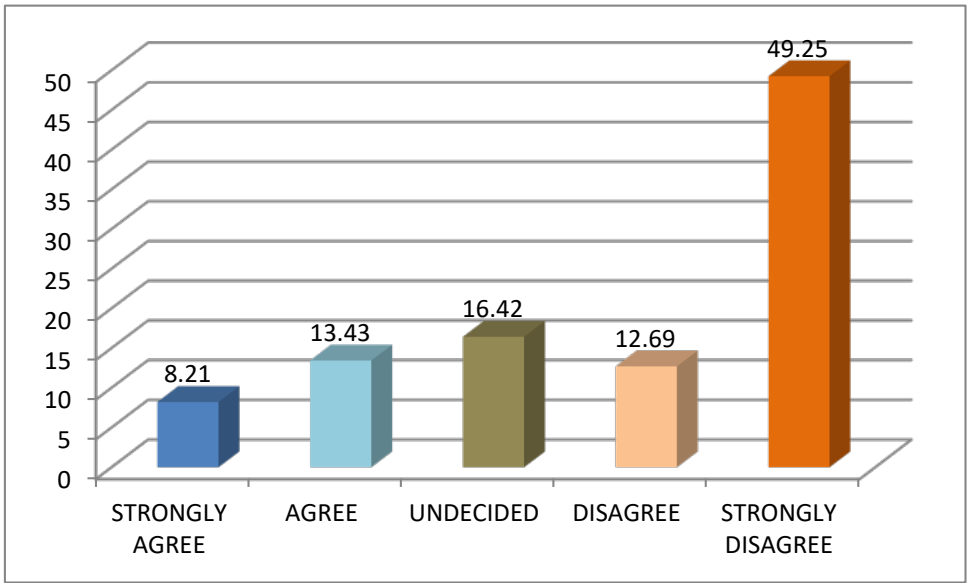


Figure (4.4.20) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students: statement No. 18

The descriptive statistics based on three point-scale continuum regarding the overall role of attitudinal aspect of learning culture among the EFL Yemeni students based on the three aforementioned categories is elucidated below:

Table (4.4.23*)* shows the descriptive Statistics regarding the attitudinal aspect of learning culture used among the Yemeni EFL students

		range	frequency	Percentage	Mean	S.D	
Quartile 1	24	Unaware(0-24)	44	32.84			
Quartile 2	35	rationalist(25-41)	61	45.52			rationalist
Quartile 3	41	stereotype(42-55)	29	21.64	33.89	9.10	

It is evident in table (4.4.23) that 44 (32.84%), 61 (45.52%) and 29 (21.64%) are unaware, rationalists, stereotypes respectively. The mean score is 33.89 and Standard deviation is 9.10. The descriptive statistics shows that the overall level of the students in attitudinal aspect of learning culture among Yemeni EFL learners fall in the rationalist category.

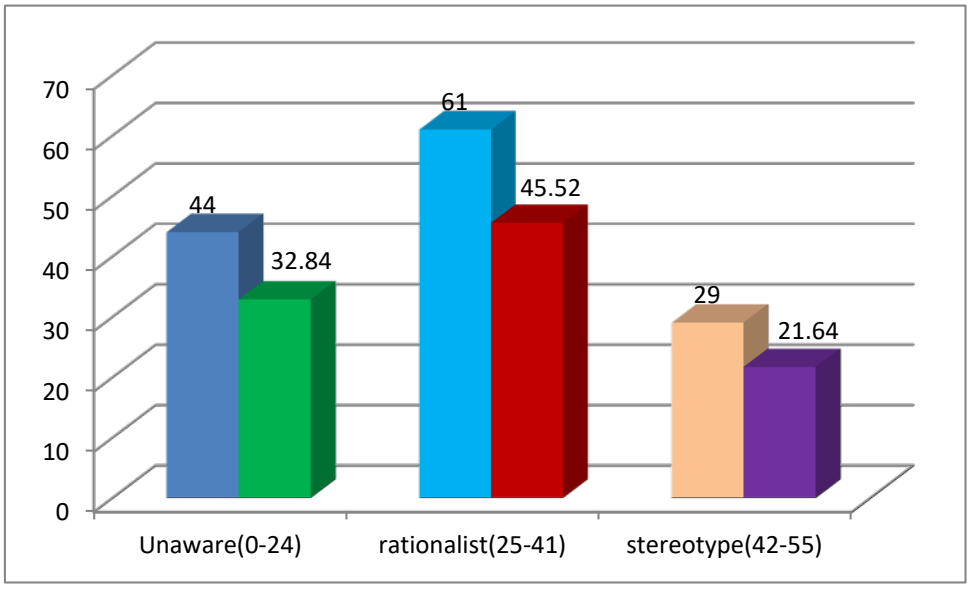


Figure (4.4.21) shows the diagrammatic representation of descriptive statistics regarding the attitudinal aspect of learning culture of Yemeni EFL students

3. Contextual Aspect of Learning Culture:

Statement 6: I think that cultural activities help me prepare for my professional career.

Table (4.4.24) reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 6					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	44	32.84	3.68	1.20	agree
AGREE (3.41-4.20)	31	23.13			
UNDECIDED (2.61-3.40)	40	29.85			
DISAGREE (1.81-2.60)	10	7.46			
STRONGLY DISAGREE (1.0-1.80)	9	6.72			
Total	134	100			

It is evident in table (4.4.24) that 44 (32.84%), 31 (23.13%), 40 (29.85%) , 10 (7.46%), 9 (6.72%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.68 and standard deviation is 1.20. The descriptive statistics shows that Yemeni EFL learners like to practice some cultural activities of the foreign language. Based on the descriptive statistics, it can be perceived that Yemeni EFL learners think that if they are exposed to some activities related to the target culture, this will increase their experience which accordingly will be reflected positively in their career.

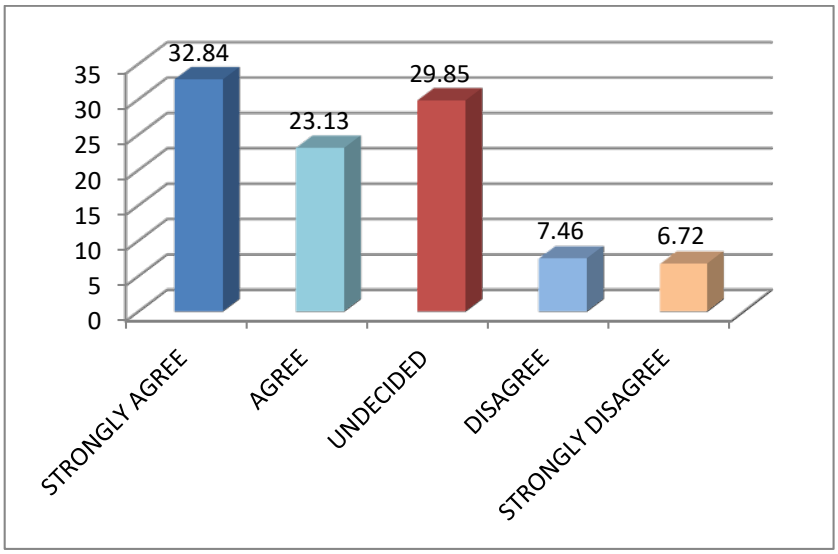


Figure (4.4.22) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No.6

Statement 12: Family life, education, holiday, etc…in my country should be illustrated in the English books being taught to us.

Table (4.4.25): Descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 12					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	30	22.39	3.46	1.17	agree
AGREE (3.41-4.20)	36	26.87			
UNDECIDED (2.61-3.40)	44	32.84			
DISAGREE (1.81-2.60)	14	10.45			
STRONGLY DISAGREE (1.0-1.80)	10	7.46			
Total	134	100			

It is evident in table (4.4.25) that 30 (22.39%), 36 (26.87%), 44 (32.84%), 14 (10.45%), 10 (7.46%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.46 and standard deviation is 1.17. The descriptive statistics indicates that Yemeni EFL learners think that their local culture should be included in the learning English textbooks. On the basis of descriptive statistics, it can be deduced that Yemeni EFL learners feel satisfaction of their culture which makes them favor their local culture to be emphasized and displayed to foreign cultures.

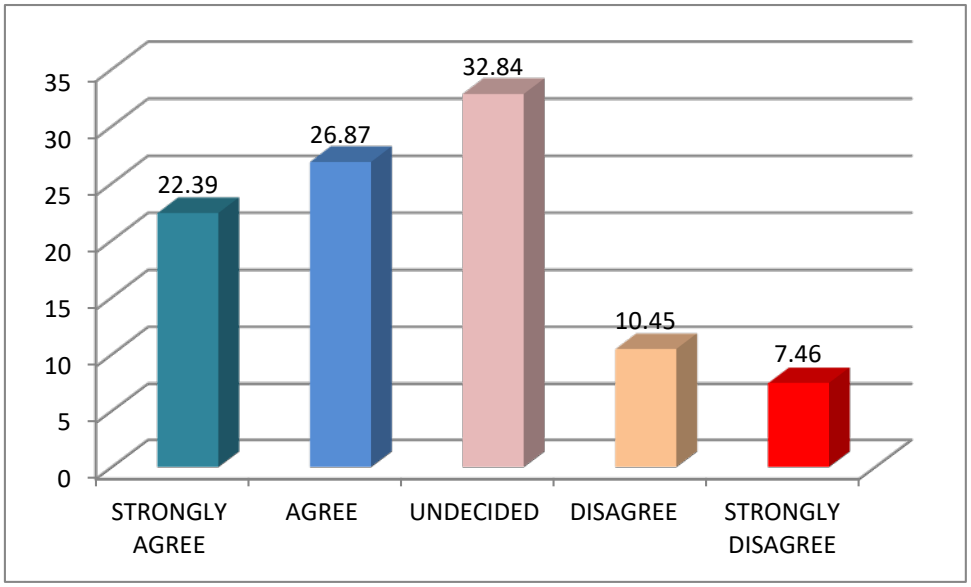


Figure (4.4.23) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No.12

Statement 15: While practicing a presentation or one of English skills, I sometimes need to tell my classmates about an assigned item from my native culture and contextualize the knowledge I have.

Table (4.4.26) reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 15

	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	30	22.39	3.46	1.17	agree
AGREE (3.41-4.20)	36	26.87			
UNDECIDED (2.61-3.40)	44	32.84			
DISAGREE (1.81-2.60)	14	10.45			
STRONGLY DISAGREE (1.0-1.80)	10	7.46			
Total	134	100			

It is clear from table (4.4.26) that 30 (22.39%), 36 (26.87%), 44 (32.84%), 14 (10.45%), 10 (7.46%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.46 and standard deviation is 1.17. The descriptive statistics points out that the Yemeni EFL learners would like their native culture to be involved in English classes..

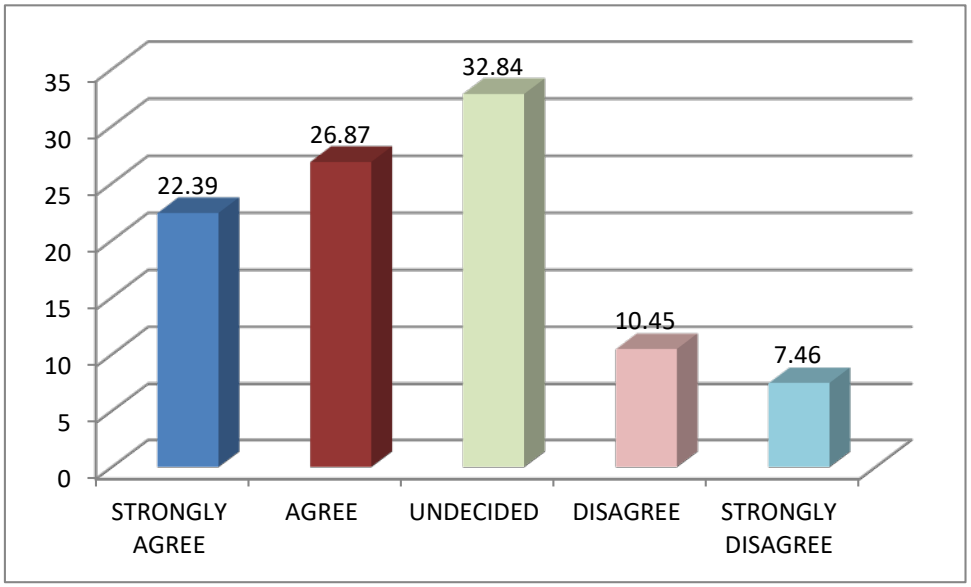


Figure (4.4.24) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No.15

Statement 24: I would like some of English customs to be replaced by Yemeni or Arabic ones in the stories we read in reading classes.

Table (4.4.27) reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 24					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	37	27.61	3.37	1.41	undecided
AGREE (3.41-4.20)	33	24.63			
UNDECIDED (2.61-3.40)	27	20.15			
DISAGREE (1.81-2.60)	16	11.94			
STRONGLY DISAGREE (1.0-1.80)	21	15.67			
Total	134	100			

Table (4.4.27) displays that 37 (27.61%), 33 (24.63%), 27 (20.15%), 16 (11.94%), 21 (15.67%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.37 and standard deviation is 1.41. The descriptive statistics states that Yemeni EFL learners like the English syllabus to include some of the Yemeni or Arab aspects of life.

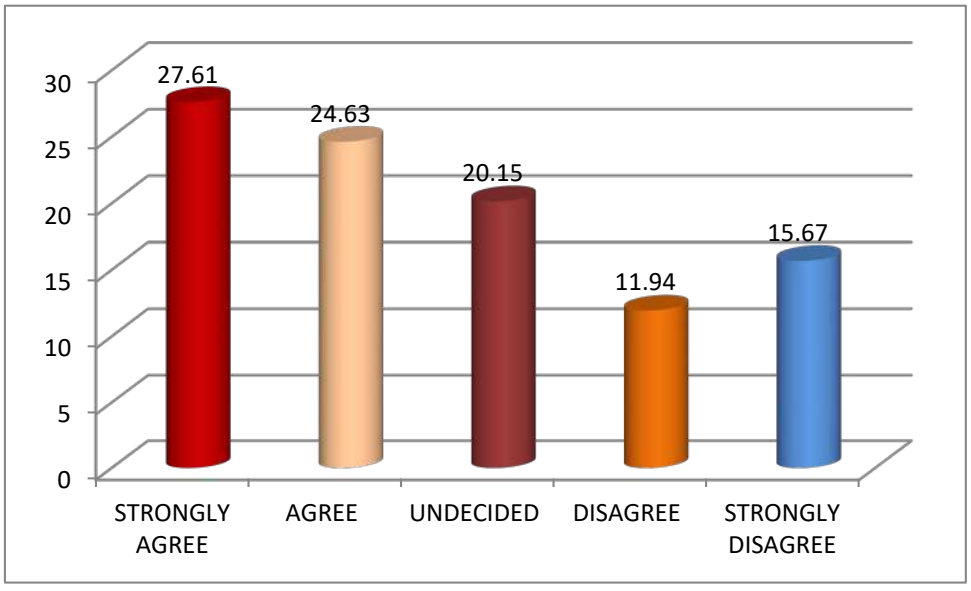


Figure (4.4.25) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No.24

Statement 27: I would like the text or story more if the dates and months were in Arabic.

Table (4.4.28*)* reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 27					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	37	27.61	3.37	1.41	undecided
AGREE (3.41-4.20)	33	24.63			
UNDECIDED (2.61-3.40)	27	20.15			
DISAGREE (1.81-2.60)	16	11.94			
Total	134	100			

Table (4.4.28) exhibits that 37 (27.61%), 33 (24.63%), 27 (20.15%), 16 (11.94%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 3.37 and standard deviation is 1.41. The descriptive statistics states that Yemeni EFL learners do not know if dates and months are much better to be written in Arabic in English stories. The descriptive statistics states that Yemeni EFL learners might find difficulty to discriminate between Arabic and English timing systems.

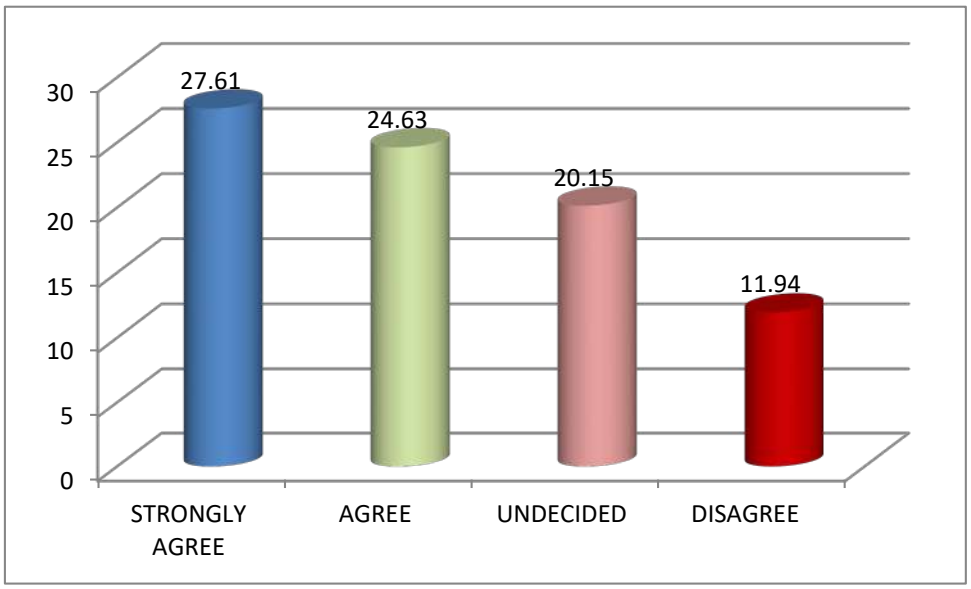


Figure (4.4.26) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No.27

Statement 29: I would like the story or text more if the names of the characters were in Arabic.

Table (4.4.29) reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 29					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	37	27.61	2.94	1.68	Undecided
AGREE (3.41-4.20)	28	20.90			
UNDECIDED (2.61-3.40)	5	3.73			
DISAGREE (1.81-2.60)	18	13.43			
STRONGLY DISAGREE (1.0-1.80)	46	34.33			
Total	134	100			

Table (4.4.29) exposes that 37 (27.61%), 28 (20.90%), 5 (3.73%), 18 (13.43%), 46 (34.33%) strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.94 and standard deviation is 1.68. The descriptive statistics states that Yemeni EFL learners do not think characters in stories should be named in Arabic. The descriptive statistics suggest that English names are also common among EFL Yemeni learners.

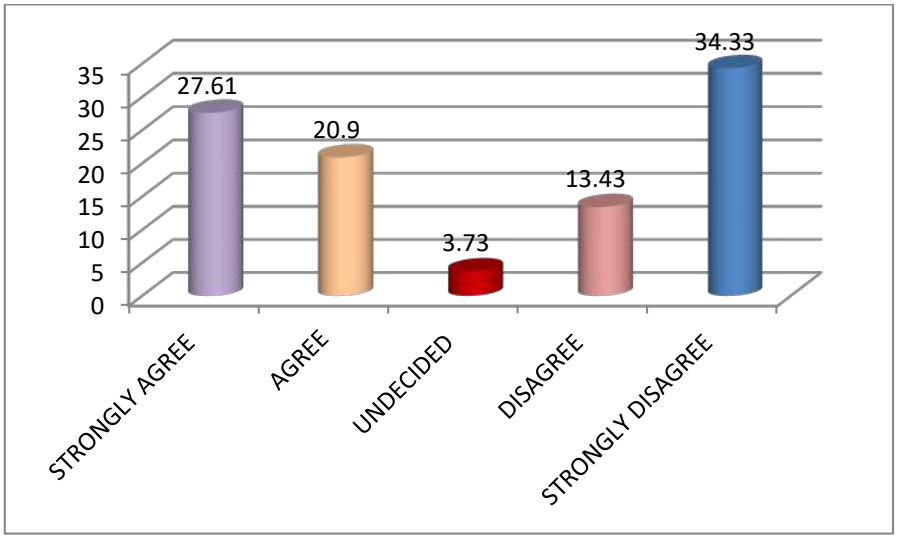


Figure (4.4.27) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No.29

Statement 20: The stories or texts would be more interesting if all the English drinks changed to halal ones. e.g. wine-orange juice.

Table (4.4.30) reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 20					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	31	23.13	2.75	1.70	Undecided
AGREE (3.41-4.20)	28	20.90			
UNDECIDED (2.61-3.40)	9	6.72			
DISAGREE (1.81-2.60)	8	5.97			
STRONGLY DISAGREE (1.0-1.80)	58	43.28			
Total	134	100			

Table (4.4.30) indicates that 31 (23.13%), 28 (20.90%), 9 (6.72%), 8 (5.97%), 58 (43.28%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.75 and standard deviation is 1.70. The descriptive statistics states that Yemeni EFL learners are uncertain if the English drinks should be replaced with halal ones in their textbooks of English. Based on descriptive statistics, it can be said that Yemeni EFL learners know that these drinks are prohibited in their native culture, they still can understand the difference in the target culture as the names of most of the intoxicating drinks are already reported or informed among the public.

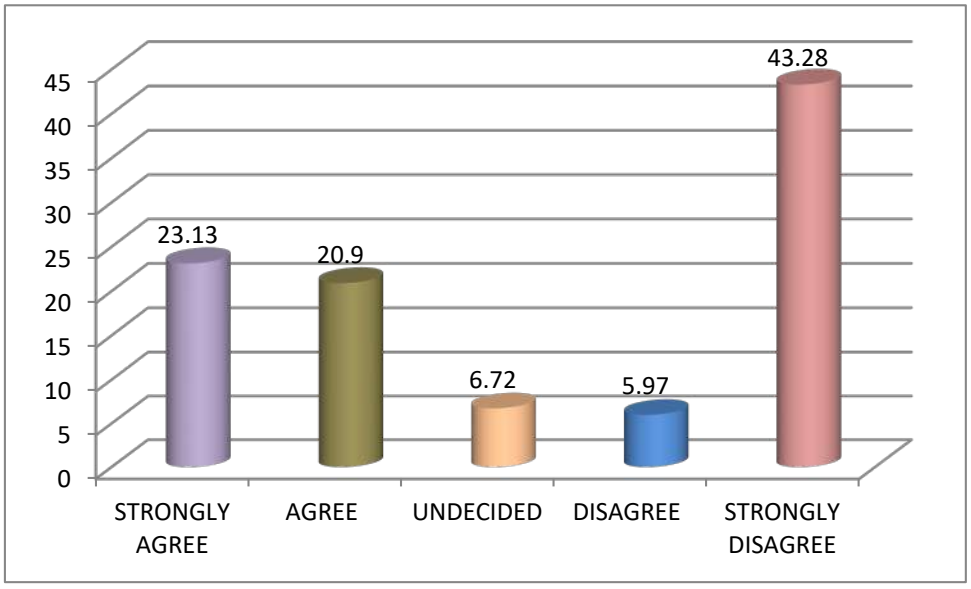


Figure (4.4.28) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No. 20

Statement 21: I would enjoy the story more if the currencies were in Yemeni rials.

Table (4.4.31) reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 21					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	29	21.64	2.56	1.64	Undecided
AGREE (3.41-4.20)	18	13.43			
UNDECIDED (2.61-3.40)	9	6.72			
DISAGREE (1.81-2.60)	21	15.67			
STRONGLY DISAGREE (1.0-1.80)	57	42.54			
Total	134	100			

It is shown in table *(*4.4.31*)* that 29 (21.64%), 18 (13.43%), 9 (6.72%), 21 (15.67%), 57 (42.54%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.56 and standard deviation is 1.64. The descpritive statistics states that Yemeni EFL learners do not think that currency should be in the national pattern. The descriptive statistics suggests that the currency names of different countries are common in Yemeni society and they accept the currency names in the target culture.

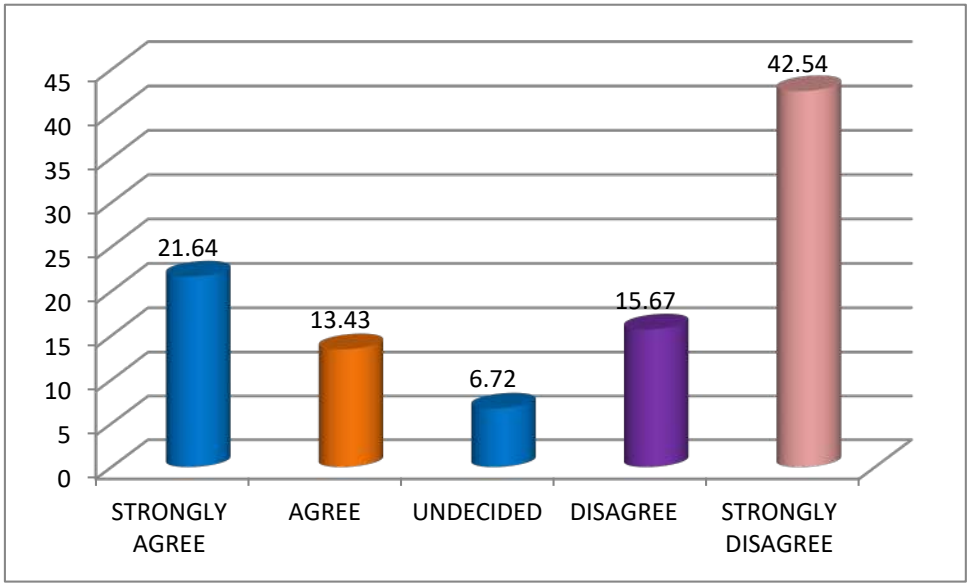


Figure (4.4.29) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No. 21

Statement 23: I think it would be better if all the English idioms changed to Arabic ones.

Table (4.4.32) reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 23					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	14	10.45	2.40	1.45	disagree
AGREE (3.41-4.20)	22	16.42			
UNDECIDED (2.61-3.40)	27	20.15			
DISAGREE (1.81-2.60)	12	8.96			
STRONGLY DISAGREE (1.0-1.80)	59	44.03			
Total	134	100			

It is obvious in table *(4.4.32)* that 14 (10.45%), 22 (16.42%), 27 (20.15%), 12 (8.96%), 59 (44.03%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.40 and standard deviation is 1.45. The descriptive statistics states that Yemeni EFL learners don't think that idioms should be changed into Arabic ones. The descriptive statistics suggests that Yemeni ELF learners like to learn idioms in English language to improve their vocabulary usage in the target culture.

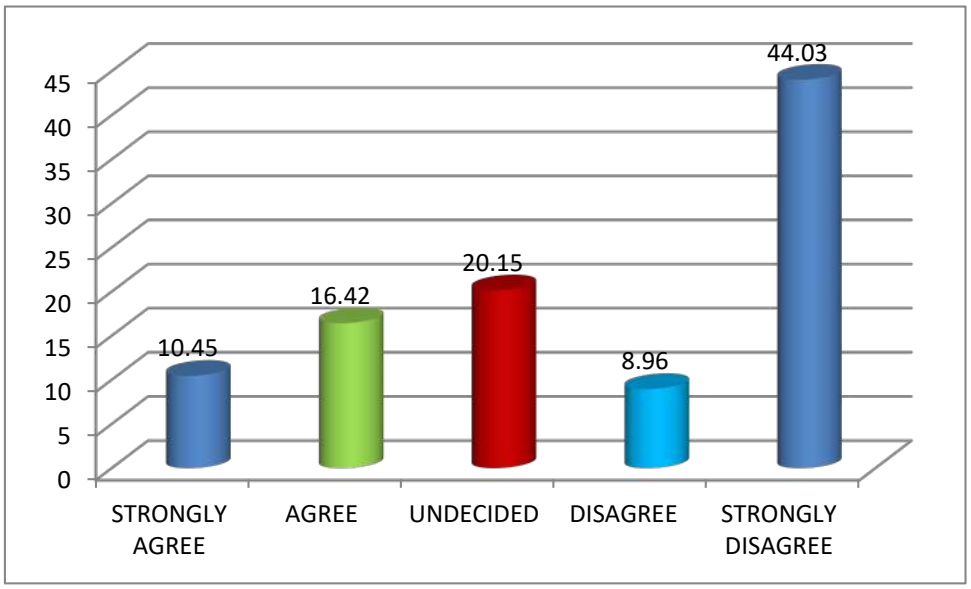


Figure (4.4.30) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No. 23

Statement 25: I think some Arabic should be used in some cases in reading classes.

Table (4.4.33*)* reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 25					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	13	9.70	2.24	1.42	disagree
AGREE (3.41-4.20)	18	13.43			
UNDECIDED (2.61-3.40)	22	16.42			
DISAGREE (1.81-2.60)	16	11.94			
STRONGLY DISAGREE (1.0-1.80)	65	48.51			
Total	134	100			

It is exhibited in table (4.4.33) that 13 (9.70%), 18 (13.43%), 22 (16.42%), 16 (11.94%), 65 (48.51%), strongly agree, agree, undecided, disagree and strongly disagree respectively on this statement. The mean score is 2.24 and standard deviation is 1.42. The descriptive statistics states that Yemeni EFL learners do not think that Arabic has to be used in English class. The descriptive statistics indicates that Yemeni EFL learners refer to avoid hotchpotch of the both languages.

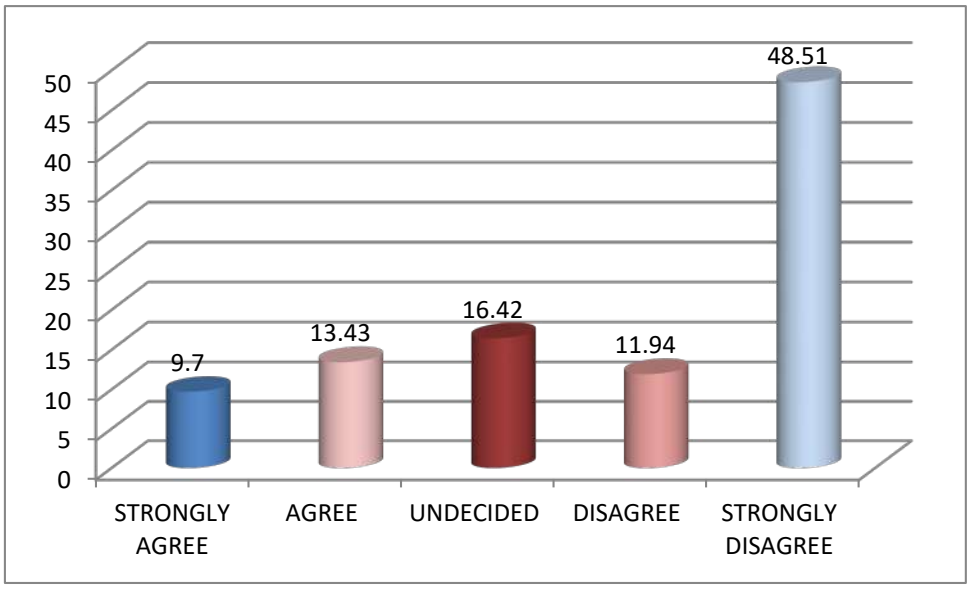


Figure (4.4.31) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No. 25

Statement 9: Being familiar with the topic, ideas and assumptions will help me comprehend the English text.

Table (4.4.34) reveals the descriptive Statistics regarding the contextual aspect of learning culture used among the Yemeni EFL students: statement 9					
	frequency	Percentage	Mean	Standard Deviation	level
STRONGLY AGREE (4.21-5.0)	134	100	1	0	Strongly agree
AGREE (3.41-4.20)	0	0			
UNDECIDED (2.61-3.40)	0	0			
DISAGREE (1.81-2.60)	0	0			
STRONGLY DISAGREE (1.0-1.80)	0	0			
Total	134	100			

It is exhibited in table (4.4.34) that 134 (100%), 0 , 0 , 0 , 0 are strongly agree, agree, undecided, disagree and strongly disagree with this statement respectively. The mean score is 1 and standard deviation is 0. The descriptive statistics states that Yemeni EFL learners would like the topics of texts to be familiar. The descriptive statistics indicates that the Yemeni EFL learners feel that the availability of information and prior knowledge help to enhance their comprehension skills.

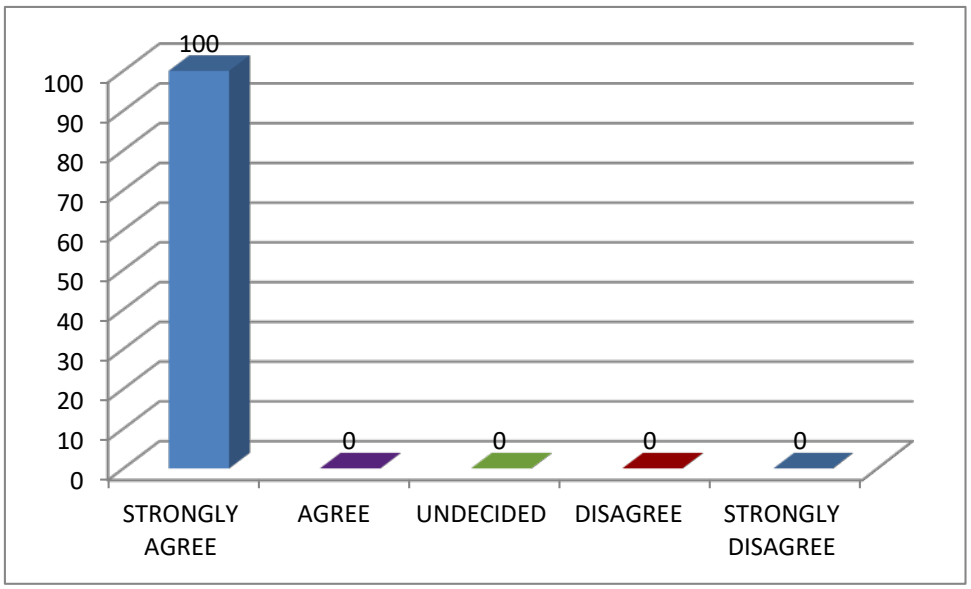


Figure (4.4.32) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL students: statement No. 9

Table (4.4.35) reveals the descriptive statistics regarding the overall contextual aspect of learning culture used among the Yemeni EFL students							
		Range	**Frequency**	**Percentage**	**Mean**	**S.D**	**Level**
Quartile 1	21	Unaware(0-21)	44	32.84	31.22	9.19	rationalist
Quartile 2	33	rationalist(22-39)	65	48.51			
Quartile 3	39	stereotype(40-55)	25	18.66			
Total			134	100			

It is evident in table (4.4.35) that 44 (32.84%), 65 (48.51%), 25 (18.66%) are unaware, rationalists, stereotypes respectively. The mean score is 31.22 and standard deviation is 9.19. The overall descriptive statistics regarding the contextual aspect of learning culture of Yemeni EFL learners reveal that they can be generalized as rationalists.

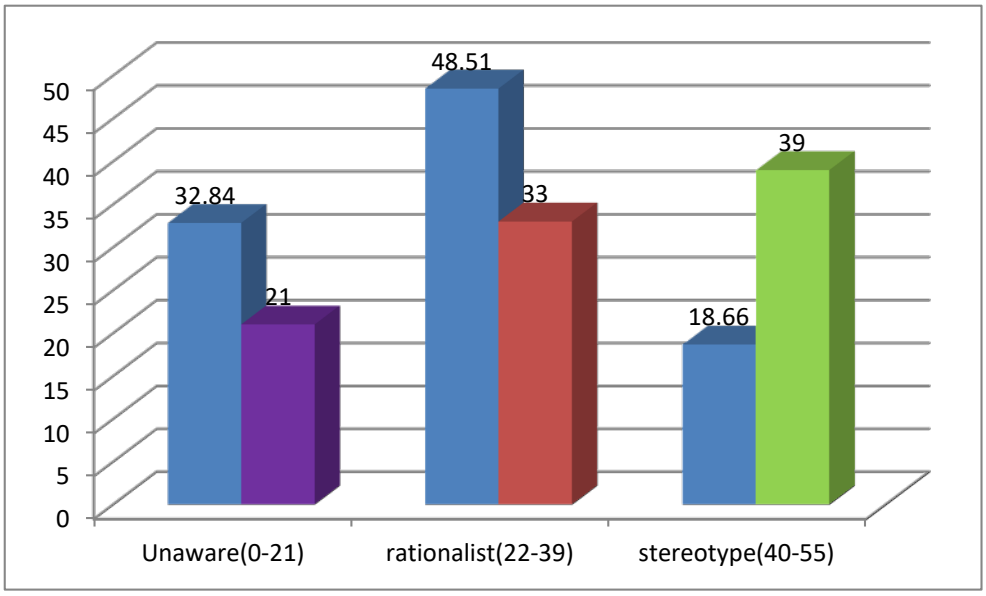


Figure (4.4.33) reveals the diagrammatic representation of descriptive statistics regarding the contextual aspect in learning culture of Yemeni EFL students

Overall Learning Culture:

The descriptive statistics regarding the overall assessment and categorization of Yemeni EFL learners on the basis of learning culture is described below:

Table (4.4.36) reveals the descriptive Statistics regarding the three levels of learning culture used among the Yemeni EFL students							
		Range	**Frequency**	**Percentage**	**Mean**	**S.D**	**Level**
Quartile 1	76	Unaware(0-76)	44	32.84	93.17	18.38	rationalist
Quartile 2	90	rationalist(77-113)	59	44.03			
Quartile 3	113	stereotype(114-150)	31	23.13			
			134	100			

It is evident from the table (4.4.36) above that the learning culture levels of the Yemeni EFL learners range between 44 (32.84%), 59(44.03%) and 31 (23.13%) being unaware, rationalist and stereotype respectively. The average percentage score with respect to learning culture among Yemeni EFL learners is 93.17 with a standard deviation of 18.38. The overall descriptive statistics regarding the overall assessment of learning culture of Yemeni EFL learners reveal that they can be generalized as rationalists.

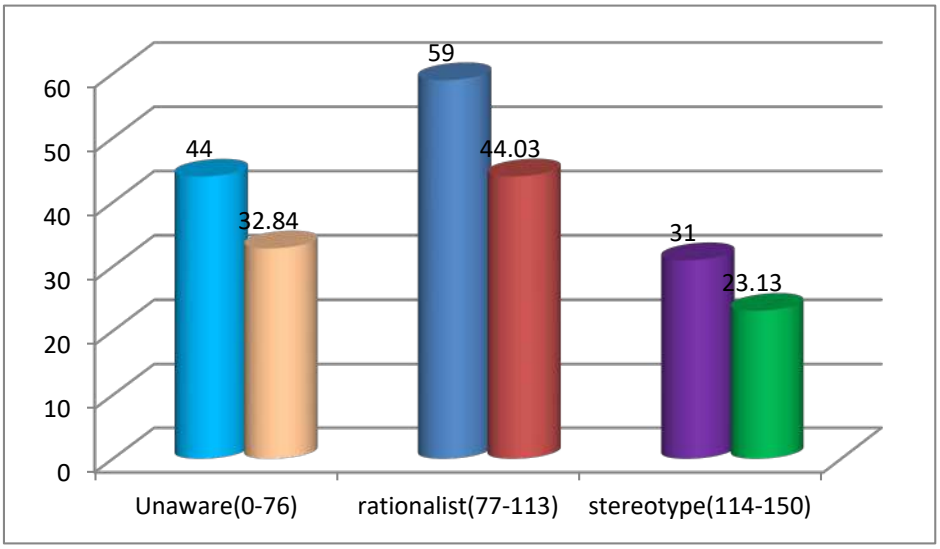


Figure (4.4.34) reveals the diagrammatic representation of descriptive statistics regarding the three levels of learning culture of Yemeni EFL students

The rational behavior of the Yemeni EFL learners could be interpreted according to the findings of interview with 40 sample. Some of the Yemeni EFL learners list that there are some factors prevailing in the Yemeni culture which hinder or strengthen their target culture learning. First, their urge to know about other cultures beside their own culture, second, awareness about their preferences and perceived opportunities, third, openness and tolerance towards other cultures. Other students point out to the socio-economic interactions to optimize their standard of living which encourages them towards the target culture. Besides, their love and pride towards their own culture as well as their enthusiasm to learn other cultures makes them rationalists. Few of the interviewees explain that they like to learn about the target culture in order to avoid the boredom caused by cultural inertia. Majority of the Yemeni EFL learners in the interview express that by learning a new language they try to assimilate the positive aspects of its culture. The Yemeni EFL learners know that they need to broaden their cross-cultural awareness/competence in order to learn English language. They also think that they need to cope with the increasing competition and be at par with globalization. Most of them are eager to know about other cultures while maintaining the fondness of their native culture. Finally, after analyzing the answers of interview with the Yemeni EFL learners, it is found that the Yemeni EFL learners perceive that mingling with other cultures can add value to their personalities.

4.2: Correlation Aanalysis:

This section systematically provides detailed statistical analysis and interpretation with respect to measure of relationship between dependent and independent (exploratory) variable using correlation and regression analysis.Various variables used in this study are;

Dependent variable: Reading Comprehension

Independent variables:

1. Perceptual Learning Styles

i. Auditory Learning style
ii. Visual Learning style
iii. Kinesthetic learning style
iv. Tactile learning style
v. Group learning style
vi. Individual learning style

2. Reading Strategies' Use

i. Global reading strategies
ii. Problem-solving reading strategies
iii. Support reading strategies

3. Learning Culture

i. Behavioral aspect of learning culture
ii. Attitudinal aspect of learning culture
iii. Contextual aspect of learning culture

In order to measure the association between the dependent and independent variables and find statistical dependence between them, Pearson correlation has been applied to find out the strength of relationship between perceptual learning styles, reading strategies' use, learning culture and reading comprehension. The detailed account of correlation analysis is illustrated below;

Objective-5: To study the relationship between perceptual learning styles and reading comprehension ability among Yemeni EFL learners.

To achieve this objective, a hypothesis has been formed in a null structure.

Hypothesis (1):

H_0 : There is no significant relationship between perceptual learning styles (visual, auditory, kinesthetic, tactile, group and individual) and reading comprehension among Yemeni EFL learners.

4.2.1 Correlation Analysis between Perceptual Learning Styles and Reading Comprehension

The correlation between the reading comprehension and perceptual learning styles (visual, auditory, kinesthetic, tactile, group and individual) and statistical significance of the Hypothesis (1) is presented in the following table (4.5.1);

Table (4.5.1) shows the Coefficient of Correlation between perceptual learning styles (visual, auditory, kinesthetic, tactile, group and individual) and reading comprehension among Yemeni EFL learners

		Perceptual learning styles						
		Visual	**auditory**	**Kinesthetic**	**Tactile**	**Group**	**Individual**	**Overall**
Reading Comprehension	**Pearson Correlation**	0.687**	0.667**	0.233**	0.441**	0.868**	-0.457**	0.911**
	Sig. (2-tailed)	0.000	0.000	0.007	0.000	0.000	0.000	0.000
Total	**134**							

The following results can be inferred from the table (4.5.1);

First, that the value of Pearson Correlation between visual learning style and reading comprehension is 0.687 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be inferred that reading comprehension and visual learning styles among Yemeni EFL learners are positively correlated. The result reveals a statistically significant and positive strength of relationship between reading comprehension and visual learning styles which means that if EFL learners' visual learning style altered, their reading comprehension will be enhanced as well.

Second, the value of Pearson Correlation between reading comprehension and auditory learning style is 0.667 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be derived that reading comprehension and auditory learning styles among Yemeni EFL learners are positively correlated. The result reveals a statistically significant and positive strength of relationship between reading comprehension and auditory learning styles which means that if EFL learners' auditory learning styles verified, their reading comprehension will be increased. The result displays a significant and positive strength of relationship of the auditory learning style and reading comprehension.

Third, the value of Pearson Correlation between kinesthetic learning style and reading comprehension is 0.233 with p value = 0.007 i.e. < α (@significance level of 0.05). Therefore, it can be concluded that reading comprehension and kinesthetic learning styles among Yemeni EFL learners are positively correlated. The result indicates a statistically significant and positive strength of relationship between reading comprehension and kinesthetic learning styles which means that if EFL learners' kinesthetic learning styles are converted, their reading comprehension will be raised.

Fourth, the value of Pearson Correlation between tactile learning style and reading comprehension is 0.441 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be induced that reading comprehension and tactile learning styles among Yemeni EFL learners are positively correlated. The result reveals a statistically significant and positive strength of relationship between reading comprehension and tactile learning styles which means that if EFL learners' tactile learning styles are altered, their reading comprehension will be increased.

Fifth, the value of Pearson Correlation between group learning style and reading comprehension is 0.868 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be inferred that reading comprehension and group learning styles among Yemeni EFL learners are positively correlated. The result shows a statistically significant and positive strength of relationship between reading comprehension and group learning styles which means that if EFL learners' group learning styles are altered, their reading comprehension will be inhanced.

Sixth, the value of Pearson Correlation between individual learning style and reading comprehension is -0.457 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be concluded that reading comprehension and individual learning styles among Yemeni EFL learners are negatively correlated. The result reveals a statistically significant and negative strength of relationship between reading comprehension and individual learning styles which means that if EFL learners' individual learning styles are altered, their reading comprehension is impacted negatively.

Finally, the value of Pearson Correlation between overall perceptual learning styles and reading comprehension is 0.911 with p value = 0 i.e. < α (@significance level of

0.05). Therefore, it can be inferred that reading comprehension and perceptual learning styles among Yemeni EFL learners are positively correlated. The result reveals a statistically significant and positive strength of relationship between reading comprehension and perceptual learning styles which means that if EFL learners' learning styles are improved, their reading comprehension will be enhanced. Hence, the research rejects the hypothesis which states that there is no significant relationship between reading comprehension and perceptual learning styles among Yemeni EFL learners. Consequently, **(Hypothesis 1) is rejected.**

Objective-6: To study the relationship between reading strategies' use and reading comprehension among Yemeni EFL learners.

To achieve this objective, a hypothesis has been formed in a null structure.

Hypothesis (2):

H_0: There is no significant relationship between the reading strategies' use (global, problem-solving and support) and reading comprehension among Yemeni EFL learners.

4.2.2 Correlation Analysis between Reading Strategies' Use and Reading Comprehension

The correlation between the overall use of reading strategies as well as subscales of reading strategies' use (global, problem-solving and support) and reading comprehension and statistical significance of the Hypothesis (2) is presented in the following table (4.5.2);

Table (4.5.2) shows the Coefficient of Correlation between reading strategies (global, problem-solving and support) and reading comprehension among Yemeni EFL learners					
		Use of Reading Strategies			
		Global	Problem-solving	Support	Overall
Reading Comprehension	Pearson Correlation	0.681**	0.382**	0.231**	0.865**
	Sig. (2-tailed)	0.000	0.000	0.007	0.000
Total	134				

The following results can be inferred from the table (4.5.2);

First, the value of Pearson Correlation between global reading strategies and reading comprehension is 0.681 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be deduced that reading comprehension and use of global reading strategies among Yemeni EFL learners are positively correlated. The result reveals a statistically significant and positive strength of relationship between reading comprehension and global reading strategies use which means that if EFL learners' global reading strategies' use increase, their reading comprehension will be enhanced as well.

Second, the value of Pearson Correlation between problem-solving reading strategies and reading comprehension is 0.382 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be inferred that reading comprehension and use of problem-solving reading strategies among Yemeni EFL learners are positively correlated. The result reveals a statistically significant and positive strength of relationship between reading comprehension and problem-solving reading strategies' use

which means that if EFL learners' problem-solving reading strategies use is varied, their reading comprehension will be increased.

Third, the value of Pearson Correlation between support reading strategies and reading comprehension is 0.231 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be inferred that reading comprehension and use of support reading strategies among Yemeni EFL learners are positively correlated. The result reveals a statistically significant and positive strength of relationship between reading comprehension and use of support reading strategies which means that if EFL learners' support reading strategies use is altered, their reading comprehension will be increased.

Finally, the value of Pearson Correlation between reading strategies and reading comprehension is 0.865 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be understood that reading comprehension and use of overall reading strategies among Yemeni EFL learners are positively correlated. The result reveals a statistically significant and positive strength of relationship between reading comprehension and reading strategies use which means that if EFL learners' use of reading strategies is modified, their reading comprehension will be increased. Thus, the research rejects the hypothesis which states that there is no significant relationship between the overall use of reading strategies and reading comprehension among Yemeni EFL learners. Consequently, (Hypothesis 2) **is rejected.**

Objective-7: To study the relationship between learning culture (behavioral, attitudinal and contextual aspects of learning culture) and reading comprehension among Yemeni EFL learners.

To achieve this objective, a hypothesis has been formed in a null structure.

Hypothesis (3):

H_0: There is no significant relationship between learning culture (behavioral, attitudinal and contextual aspects of learning culture) and reading comprehension among Yemeni EFL learners.

4.2.3 Correlation Analysis between Learning Culture and Reading Comprehension

The correlation between learning culture and reading comprehension and statistical significance of the Hypothesis (3) is presented in the following table (4.5.3);

Table (4.5.3) presents the Coefficient of Correlation between learning culture (behavioral, attitudinal and contextual aspects of learning culture) and reading comprehension among Yemeni EFL learners

		Learning Culture			
		Behavioral	**Attitudinal**	**Contextual**	**Overall**
Reading Comprehension	**Pearson Correlation**	0.220*	0.829**	0.802**	0.918**
	Sig. (2-tailed)	0.011	0.000	0.000	0.000
Total	**134**				

First, the value of Pearson Correlation between behavioral aspect of learning culture and reading comprehension is 0.220 with p value = 0 i.e. < α (@significance level of 0.05).

Therefore, it can be concluded that reading comprehension and behavioral aspect of learning culture among Yemeni EFL learners are positively correlated. The result manifests a statistically significant and positive strength of relationship between reading comprehension and behavioral aspect of learning culture which means that if EFL learners' behavioral aspect of learning culture is altered, their reading comprehension will be increased.

Second, the value of Pearson Correlation between attitudinal aspect of learning culture and reading comprehension is 0.829 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be inferred that reading comprehension and attitudinal aspect of learning culture among Yemeni EFL learners are positively correlated. The result demonstrates a statistically significant and positive strength of relationship between reading comprehension and attitudinal aspect of learning culture which means that if EFL learners' attitudinal aspect of learning culture is modified, their reading comprehension will be raised up.

Third, the value of Pearson Correlation between contextual aspect of learning culture and reading comprehension is 0.802 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be inferred that reading comprehension and contextual aspect of learning culture among Yemeni EFL learners are positively correlated. The result offers a statistically significant and positive strength of relationship between reading comprehension and contextual aspect of learning culture which means that if EFL learners' contextual aspect of learning culture is changed, their reading comprehension will be increased.

Finally, the value of Pearson Correlation between learning culture and reading comprehension is 0.918 with p value = 0 i.e. < α (@significance level of 0.05). Therefore, it can be inferred that reading comprehension and learning culture among Yemeni EFL learners are positively correlated. The result reveals a statistically significant and positive strength of relationship between reading comprehension and learning culture which means that if EFL learners' learning culture is verified, their reading comprehension will be increased. Thus, the research rejects the hypothesis which states that there is no significant relationship between the learning culture and reading comprehension among Yemeni EFL learners. Consequently, **(**Hypothesis 3) **is rejected.**

4.3 Regression Analysis:

Objective 8 : To find out the difference in the contribution of predictor variables (Perceptual Learning Styles, Reading Strategies, Learning Culture) in predicting the criterion variable reading comprehension among Yemeni EFL learners.

To achieve this objective, the following null hypothesis has been formed.

Hypothesis 4:

> **H_0:** There is no difference in the contribution of predictor variables (Perceptual Learning Styles, Reading Strategies, Learning Culture) in predicting the criterion variable reading comprehension among Yemeni EFL learners.

In order to test the hypothesis 4, multiple linear regression analysis has been conducted. The dependent variable (Reading Comprehension) is regressed on predicting variables (Perceptual Learning Styles, Reading Strategies, and Learning Culture)

respectively. The comprehensive discussion regarding the regression analysis is explored below:

4.3.1 Regression Analysis to find out the difference in the contribution of predictor variables (Perceptual Learning Styles) in predicting the criterion variable reading comprehension among Yemeni EFL learners

First, linear regression has been carried out between reading comprehension and perceptual learning styles (visual, auditory, kinesthetic, tactile, group and individual). The result of linear regression between reading comprehension and perceptual learning styles (visual, auditory, kinesthetic, tactile, group and individual) is given in the following tables:

Table (4.6.1) presents the summary of ANOVA for regressio between reading comprehension and individual, visual, group, kinaesthetic, auditory, tactile Learning Styles

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3551.998	6	592.000	276.683	0.000[b]
	Residual	271.733	127	2.140		
	Total	3823.731	133			
a. Dependent Variable: RCTotal						
b. Predictors: (Constant), individual, visual, group, kinaesthetic, auditory, tactile						

Table (4.6.1) shows the effect of 'visual, auditory, kinesthetic, tactile, group and individual learning styles' which found to be significant ($F= 276.683$, $p<0.01$) on reading comprehension among Yemeni EFL learners at the level 0.01 of significance. It means that 'visual, auditory, kinesthetic, tactile, group and individual learning styles' are significant predictors of reading comprehension among Yemeni EFL learners.

Table (4.6.2) reveals Regression Coefficient of Yemeni EFL learners (Model Summary)				
Model	R	R^2	Adjusted R Square	Std. Error of the Estimate
1	0.964[a]	0.929	0.926	1.46275
a. Predictors: (Constant), individual, visual, group, kinesthetic, auditory, tactile				

Table **(4.6.2)** shows that the coefficient of multiple determination of R^2 is 0.929. It can be therefore, said that nearly 92.9% of the variation in reading comprehension of Yemeni EFL learners accounted for whatever is measured by visual (X_1), auditory(X_2), kinesthetic(X_3), tactile(X_4), group (X_5) and individual (X_6) learning styles taken together. The standard error estimate (SE) is 1.46275. This means that each time the regression equation for the sample is used to predict the reading comprehension; the chances are predicted reading comprehension will not miss the actual reading comprehension of Yemeni EFL learners by more than 1.46275+/-.

Table (4.6.3) shows Multiple linear regressions of the different subscales of learning Styles on reading comprehension among Yemeni EFL students					
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
Reading Comprehension (Constant)	-7.563	1.343		-5.631	0.000
Visual (X_1)	0.111	0.117	0.076	0.946	0.346
Auditory (X_2)	0.697	0.121	0.512	5.772	0.000
Kinaesthetic (X_3)	0.382	0.102	0.252	3.742	0.000
Tactile (X_4)	-0.596	0.130	-0.451	-4.599	0.000
Group (X_5)	0.908	0.066	0.566	13.793	0.000
Individual (X_6)	-0.627	0.071	-0.402	-8.840	0.000
a. Dependent Variable: Reading Comprehension (RC)					

It is evident from the table above, the following results:

First, the effect of visual learning style (X_1) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=0.076, t=0.946, p=0.346) at 0.01 level of significance. Hence, the null hypothesis is rejected and the alternative hypothesis is accepted. It means that visual learning style is a significant predictor of reading comprehension among the Yemeni EFL learners.

Second, the effect of auditory learning style (X_2) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=0.512, t=5.772, p=0.000) at 0.01 level of significance. Hence, the null hypothesis is rejected and the alternative hypothesis is accepted. It means that auditory learning style is also a significant predictor of reading comprehension among the Yemeni EFL learners.

Third, the impact of kinesthetic learning style (X_3) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=0.252, t=3.742, p=0.000) at 0.01 level of significance. Hence, the null hypothesis is rejected and formulated alternative hypothesis. It means that kinesthetic learning style is a significant predictor of reading comprehension among the Yemeni EFL learners.

On the contrary, the effect of tactile learning style (X_4) was found to be negative and not significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=-0.451, t=-4.599, p=0.000) at 0.01 level of significance. Hence, the null hypothesis is accepted. It means that tactile learning style is not a significant predictor of reading comprehension among the Yemeni EFL learners.

Then, the effect of group learning style (X_5) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=0.566, t=13.793, p=0.000) at 0.01 level of significance. Hence, the null hypothesis is rejected and formulated alternative hypothesis. It means that group learning style is a significant predictor of reading comprehension among the Yemeni EFL learners.

Finally, the impression of individual learning style (X_6) was found to be negative and not significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=-0.402, t=-8.840, p=0.000) at 0.01 level of significance. Hence, the null hypothesis is accepted. It means that individual learning style is not a significant predictor of reading comprehension among the Yemeni EFL learners.

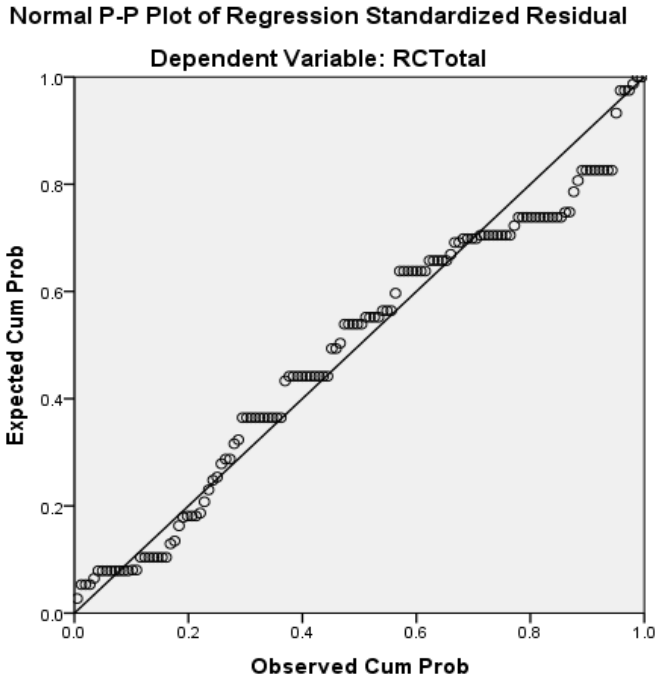


Figure (4.6.1): Normal P Plot of regression standardized residuals for the six learning styles versus reading comprehension

The relative contribution of predictor variables of perceptual learning styles (visual, auditory, kinesthetic, tactile, group and individual) on reading comprehension among Yemeni EFL students are presented in the following table (4.6.4):

Table (4.6.4) indicates the Relative contributions of predictor variables perceptual learning styles (visual, auditory, kinesthetic, tactile, group and individual) on criterion variable (reading comprehension) of Yemeni EFL learners

Independent variables	**β**	**r**	**β×r**	**% of contribution**
Visual (X_1)	0.076	0.687	0.052212	5.22%
Auditory (X_2)	0.512	0.667	0.341504	34.15%
Kinaesthetic (X_3)	0.252	0.233	0.058716	5.87%
Tactile (X_4)	-0.451	0.441	-0.198891	-19.89%
Group (X_5)	0.566	0.868	0.491288	49.13%
Individual (X_6)	-0.402	-0.457	0.183714	18.37%
Total			0.928543	92.85%

Table (**4.6.4**) shows that the total contribution of all the subscales of learning styles on reading comprehension among the Yemeni EFL learners found to be 92.85%, in which the contribution of visual learning style towards reading comprehension (X_1) =5.22%, auditory learning style (X_2)=34.15%, kinesthetic learning style (X_3)=5.87%, tactile learning style (X_4)= -19.89%, group learning style (X_5)=49.13%, individual learning style (X_6)=18.37%.

The regression equation developed for the contribution of predictor variables (visual, auditory, kinesthetic, tactile, group and individual learning styles) in predicting the criterion variable (reading comprehension) among Yemeni EFL learners (N=134) i.e;

$Y= -7.563+ 0.076 (X_1)+ 0.512 (X_2)+0.252 (X_3) -0.451(X_4)+0.566 (X_5)-0.402(X_6)$

Y= Reading comprehension

X_1= Visual learning style

X_2=Auditory learning style

X_3=Kinesthetic learning style

X_4=Tactile learning style

X_5=Group learning style

X_6=Individual learning style

4.3.2 Regression Analysis to find out the difference in the contribution of predictor variables Reading Strategies' use in predicting the criterion variable reading comprehension among Yemeni EFL learners

Second, linear regression has been carried out between the dependent variable- reading comprehension and use of reading strategies (global, problem-solving and support). The results of linear regression between the dependent variable- reading comprehension and reading strategies (global, problem-solving and support) are given in the following tables:

Table (4.6.5) presents the summary of ANOVA for regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3003.289	3	1001.096	158.625	0.000[b]
	Residual	820.442	130	6.311		
	Total	3823.731	133			

a. Dependent Variable: Reading Comprehension (RC)

b. Predictors: (Constant), Global, Problem-solving, Support

Table (4.6.5) shows the effect of 'global, problem-solving and support' which found to be significant ($F= 158.625$, $p<0.01$) on reading comprehension among Yemeni EFL learners at the level 0.01 of significance. It means that 'global, problem-solving and support reading strategies are significant predictors of reading comprehension among Yemeni EFL learners.

Table (4.6.6) reveals Regression Coefficient of Yemeni EFL learners (Model Summary)				
Model	R	R^2	Adjusted R Square	Std. Error of the Estimate
1	0.886[a]	0.785	0.780	2.51219
a. Predictors: Global, Problem-solving, Support				
b. Dependent Variable: Reading Comprehension (RC)				

Table (**4.6.6**) shows that the coefficient of multiple determination of R^2 is 0.785. It can be therefore, be said that nearly 78.5% of the variation in reading comprehension of Yemeni EFL learners accounted for whatever is measured by global(X_1), problem-solving(X_2), support (X_3) taken together. The SE estimate is 2.51219. This means that each time the regression equation for the sample is used to predict the reading comprehension; the chances are predicted reading comprehension will not miss the actual reading comprehension of Yemeni EFL learners by more than 2.51219+/-.

Table (4.6.7) shows Multiple linear regressions of the different global, problem-solving and support reading strategies on reading comprehension among Yemeni EFL students						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Reading Comprehension (Constant)	-22.872	3.358		-6.810	0.000
	Global (X_1)	1.130	0.062	0.231	18.145	0.000
	Problem-solving (X_2)	1.746	0.169	0.274	10.303	0.000
	Support (X_3)	0.843	0.169	0.260	4.989	0.000
a. Dependent Variable: Reading Comprehension (RC)						

It can be inferred from the table above the following results:

First, the effect of global reading strategies (X_1) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=0.231, t=18.145,

p=0.000) at 0.01 level of significance. It means that the use of global reading strategies is a significant predictor of reading comprehension among the Yemeni EFL learners.

Second, the effect of problem-solving reading strategies (X_2) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient= 0.274, t= 10.303, p=0.000) at 0.01 level of significance. It means that the use of problem-solving reading strategies is a significant predictor of reading comprehension among the Yemeni EFL learners.

Third, the effect of support reading strategies (X_3) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=0.260, t=4.989, p=0.000) at 0.01 level of significance. It means that the use of support reading strategies is a significant predictor of reading comprehension among the Yemeni EFL learners.

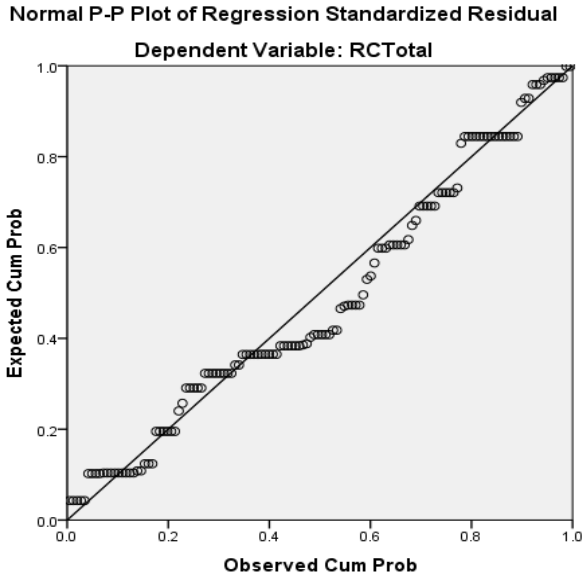


Figure (4.6.2): Normal P Plot of regression standardized residuals for the three subscales (global, problem-solving and support) of reading strategies versus reading comprehension

The relative contribution of predictor variables (global, problem-solving and support reading strategies) on reading comprehension among Yemeni EFL students are presented in the following table (4.6.8):

Table (4.6.8) Relative contributions of predictor variables (global, problem-solving & support of reading strategies) on criterion variable (reading comprehension) of Yemeni EFL learners

Independent variables	β	r	β×r	% of contribution
Global (X_1)	0.231	0.681	0.157311	15.7311
Problem-solving (X_2)	0.274	0.382	0.104668	10.4668
Support (X_3)	0.26	0.231	0.06006	6.006
Total			0.322039	32.2039

Table (4.6.8) presents that the total contribution of all the subscales of reading strategies (global, problem-solving & support) on criterion variable (reading comprehension) of Yemeni EFL learners on reading comprehension among the Yemeni EFL learners found to be 32.20%, in which the contribution of global reading strategies towards reading comprehension (X_1) =15.73%, problem-solving reading strategies (X_2)=10.46%, support reading strategies (X3)=6.00%.

The regression equation developed for the contribution of predictor variables (global, problem-solving and support reading strategies) in predicting the criterion variable (reading comprehension) among Yemeni EFL learners (N=134) i.e;

$Y= -22.872+ 0.231 (X_1)+0.274(X_2)+0.26 (X_3)$

Y= Reading comprehension

X_1= Global reading strategies

X_2= Problem-solving reading strategies

X_3=Support reading strategies

4.3.3 Regression Analysis to find out the difference in the contribution of predictor variables Learning Culture in predicting the criterion variable reading comprehension among Yemeni EFL learners

Third, linear regression has been carried out between the dependent variable- reading comprehension and learning culture (behavioral, attitudinal and contextual aspects of learning culture). The results of linear regression between the dependent variable- reading comprehension and learning culture (behavioral, attitudinal and contextual aspects of learning culture)is given in the following tables:

Table (4.6.9) presents the summary of ANOVA for regression between reading comprehension and learning culture (behavioral, attitudinal and contextual aspects of learning culture)

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	3221.260	3	1073.753	231.692	.000[b]
	Residual	602.471	130	4.634		
	Total	3823.731	133			
a. Dependent Variable: Reading Comprehension (RC)						
b. Predictors: (Constant), Content, Behavior, Attitude of Learning Culture (LC)						

Table (4.6.9) shows the effect of 'behavioral, attitudinal, contextual aspects of learning culture' found to be significant (F= 231.692, p<0.01) on reading comprehension among Yemeni EFL learners at the level 0.01 of significance. It means that 'behavioral, attitudinal, contextual aspects of learning culture are significant predictors of reading comprehension among Yemeni EFL learners.

Table (4.6.10) reveals Regression Coefficient of Yemeni EFL learners (Model Summary)

Model	R	R^2	Adjusted R Square	Std. Error of the Estimate
1	0.918[a]	0.842	0.839	2.15276
a. Predictors: (Constant), Behavioral, Attitudinal & Contextual of Learning Culture (LC)				

Table (4.6.10) indicates the coefficient of multiple determination of R^2 is 0.842. It can be therefore, said that nearly 84.2% of the variation in reading comprehension of Yemeni EFL learners accounted for whatever is measured by behavioral (X_1), attitudinal (X_2),contextual aspects of learning culture (X_3) taken toghether. The SE estimate is 2.15276. This means that each time the regression equation for the sample is used to predict the reading comprehension; the chances are predicted reading comprehension will not miss the actual reading comprehension of Yemeni EFL learners by more than 2.15276+/-.

Table (4.6.11) shows multiple linear regressions of (behavioral, attitudinal, contextual) of learning culture on reading comprehension among Yemeni EFL students

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Reading Comprehension (Constant)	-16.763	1.029		-16.286	0.000
	Behavioral (X_1)	0.260	0.023	0.430	11.054	0.000
	Attitudinal (X_2)	0.231	0.129	0.391	1.793	0.075
	Contextual (X_3)	0.308	0.129	0.527	2.379	0.019
a. Dependent Variable: Reading Comprehension (RC)						

It is indicated from the table **(4.6.11)** above that:

First, the effect of behavioral aspect of learning culture (X_1) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=0.430, t=11.054, p=0.000) at 0.01 level of significance. It means that behavioral aspect of learning culture (X_1) is a significant predictor of reading comprehension among the Yemeni EFL learners.

Second, the effect of attitudinal aspect of learning culture (X_2) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-

effiecient=0.391, t=1.793, p=0.075) at 0.01 level of significance. It means that attitudinal aspect of learning culture (X_2) is a significant predictor of reading comprehension among the Yemeni EFL learners.

Third, the effect of contextual aspect of learning culture (X_3) was found to be positive and significant on reading comprehension among Yemeni EFL learners (Regression co-effiecient=0.527, t=2.379, p=0.019) at 0.01 level of significance. It means that contextual aspect of learning culture (X_3) is a significant predictor of reading comprehension among the Yemeni EFL learners.

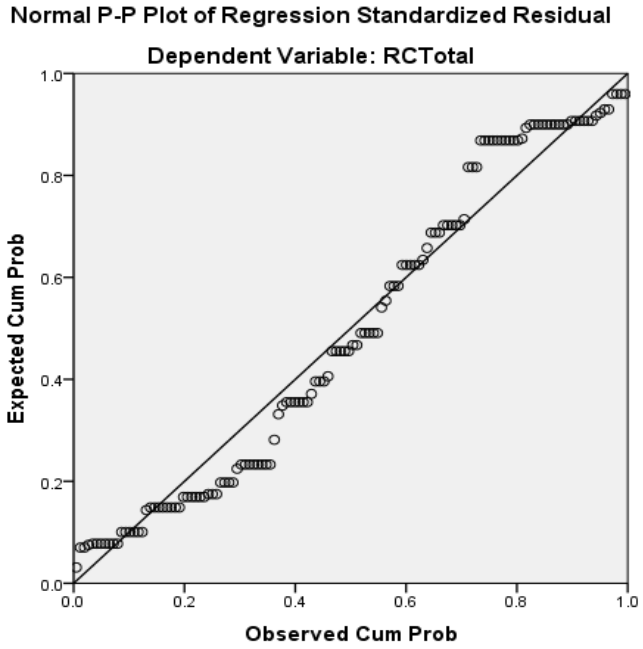


Figure (4.6.3): Normal P Plot of regression standardized residuals for the three subscales of learning culture versus reading comprehension

The relative contribution of predictor variables (behavioral, attitudinal, contextual aspects of learning culture) on reading comprehension among Yemeni EFL students are presented in the following table (4.6.12):

Table (4.6.12) presents relative contributions of predictor variables (behavioral, attitudinal, contextual aspects of learning culture) on criterion variable (reading comprehension) of Yemeni EFL learners				
Independent variables	**β**	**r**	**β×r**	**% of contribution**
behavioral aspect (X_1)	0.430	0.22	0.0946	9.46
attitudinal aspect (X_2)	0.391	0.829	0.324139	32.4139
contextual aspect (X_3)	0.527	0.802	0.422654	42.2654
Total			0.841393	84.1393

Table (4.6.12) shows that the total contribution of all the subscales of learning culture on reading comprehension among the Yemeni EFL learners found to be 84%, in which the contribution of behavioral aspect of learning culture towards reading comprehension (X_1) =9.46%, attitudinal aspect of learning culture (X_2)=32.41%, contextual aspect of learning culture (X3)=42.26%.

The regression equation developed for the contribution of predictor variables (behavioral, attitudinal, contextual aspects of learning culture) in predicting the criterion variable (reading comprehension) among Yemeni EFL learners (N=134) i.e;

Y= -16.763+ 0.430 +0.391 + 0.527

Y= Reading comprehension

X1= behavioral aspect of learning culture

X2= attitudinal aspect of learning culture

X3= contextual aspect of learning culture

4.3.4 Regression Analysis to find out the difference in the contribution of predictor variables (Perceptual Learning Styles, Reading Strategies, Learning Culture) in predicting the criterion variable reading comprehension among Yemeni EFL learners

Finally, multiple linear regressions have been carried out between the dependent variable- reading comprehension and three independent variables (perceptual learning styles, reading strategies and learning culture). The results of multiple linear regression between the dependent variable- reading comprehension and the three independent variables (perceptual learning styles, reading strategies and learning culture) is given in the following tables:

Table (4.6.13) presents the summary of ANOVA for regression between (Perceptual Learning Styles, Reading Strategies, Learning Culture) and Reading Comprehension

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	3274.679	3	1091.560	258.450	0.000[b]
	Residual	549.053	130	4.223		
	Total	3823.731	133			

a. Dependent Variable: Reading Comprehension (RC)

b. Predictors:(Constant), Learning Styles (LS), Reading Strategies (RS), Learning Culture (LC)

Table (4.6.13) shows the effect of 'perceptual learning styles, reading strategies, learning culture' which found to be significant ($F= 258.450$, $p<0.01$) on reading comprehesion among Yemeni EFL learners at the level 0.01 of significance. It means that 'perceptual learning styles, reading strategies, learning culture' are significant predictors of reading comprehension among Yemeni EFL learners.

Table (4.6.14) reveals Regression Coefficient of Yemeni EFL learners (Model Summary)				
Model	R	R^2	Adjusted R Square	Std. Error of the Estimate
1	0.925[a]	0.856	0.853	2.05511
a. Predictors: (Constant), Learning Culture (LC), Reading Strategies (RS), Learning Styles (LS)				
b. Dependent Variable: Reading Comprehension (RC)				

Table (4.6.14) shows that the coefficient of multiple determination of R^2 is 0.856. It can be therefore, said that nearly 85.6% of the variation in reading comprehension of Yemeni EFL learners accounted for whatever is measured by perceptual learning styles (X_1), use of reading strategies(X_2), learning culture (X_3) taken toghether. The SE estimate is 2.05511. This means that each time the regression equation for the sample is used to predict the reading comprehension; the chances are predicted reading comprehension will not miss the actual reading comprehension of Yemeni EFL learners by more than 2.05511+/-.

The Multiple linear regressions of Perceptual learning styles, use of reading strategies, learning culture on reading comprehension among Yemeni EFL students are presented below:

Table (4.6.15) shows Multiple linear regressions of Perceptual learning Styles, Reading Strategies, Learning Culture on reading comprehension among Yemeni EFL students					
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
Reading Comprehension (Constant)	-17.924	0.960		-18.667	0.000
Learning Styles	0.108	0.036	0.355	3.012	0.003
Reading Strategies	0.029	0.023	0.108	1.296	0.197
Learning Culture	0.140	0.037	0.479	3.804	0.000
Dependent Variable: Reading comprehension RC					

From the results of above table (4.6.15), it is observed that the following:

First, the effect of perceptual learning styles was found to be positive and significant on reading comprehension among Yemeni EFL students (Regression co-efficient=0.108, t=3.012, p<0.01) at 0.01 level of significance. It means that perceptual learning styles variable is a significant predictor of reading comprehension among Yemeni EFL students.

Second, the effect of using reading strategies was found to be positive and significant on reading comprehension among Yemeni EFL students (Regression co-efficient= 0.029, t= 1.296, p<0.01) at 0.01 level of significance. It means that reading strategies variable is a significant predictor of reading comprehension among Yemeni EFL students.

Third, the effect of learning culture was found to be positive and significant on reading comprehension among Yemeni EFL students (Regression co-efficient= 0.140, t=3.804, p<0.01) at 0.01 level of significance. It means that learning culture variable is a significant predictor of reading comprehension among Yemeni EFL students.

The relative contribution of Perceptual learning styles, Reading strategies, Learning culture on reading comprehension among Yemeni EFL students are presented in the following table.

Table (4.6.16): The relative contribution of Learning Styles, Reading Strategies' Use, Learning Culture on reading comprehension among Yemeni EFL students

Independent Variable	β	r	β×r	Percentage of contribution
Perceptual Learning Styles (X_1)	0.355	0.911	0.323405	32.34%
Reading Strategies' Use (X_2)	0.108	0.865	0.09342	9.34%
Learning Culture (X_3)	0.479	0.918	0.439722	43.97%
Total			0.856547	85.65%

Table (4.6.16) shows that, the total contribution of all the independent variables on reading comprehension among Yemeni EFL students was found to be 85.65%, in which the contribution of Perceptual Learning Styles (X_1)= 32.34%, Reading Strategies' Use (X_2)=9.34%, Leaning Culture (X_3)= 43.97%. Therefore, it can be concluded that the Learning Culture (X_3) is the most contributor/predictor followed by Perceptual Learning Styles (X_1), then Reading Strategies (X_2) on reading comprehension among Yemeni EFL students. The regression equation developed for the contribution of predictor variables (Perceptual Learning Styles, Use of Reading Strategies & Learning Culture) in predicting the criterion variable reading comprehension among Yemeni EFL students (N=134) .

$Y= -17.924 + 0.355 (X_1) +0.108 (X_2) +0.479 (X_3)$

Y= Reading Comprehension

X_1 = Perceptual Learning Styles

X_2 = Reading Strategies' Use

X_3 = Learning Culture

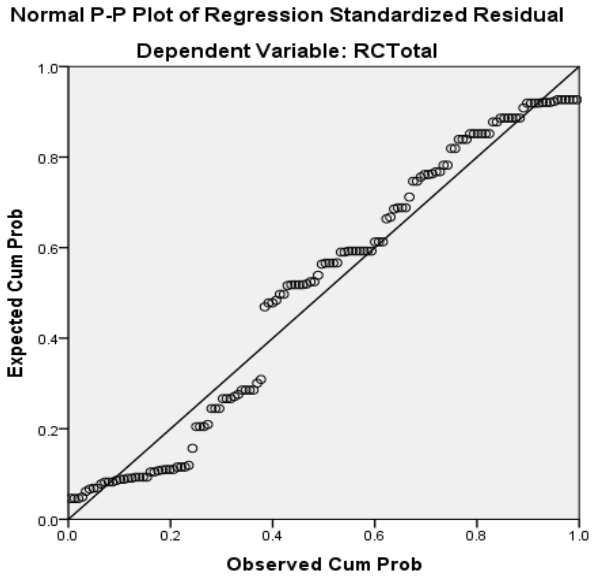


Figure (4.6.4) illustrates the diagrammatic representation of rating regression standardized residuals for Perceptual Learning Styles, Reading Strategies' Use, Learning Culture versus reading comprehension

Based on the above regression analysis, it can be concluded that all the three independent variables (Perceptual learning styles, Use of reading strategies, Learning culture) significantly impact the dependent variable- reading comprehension. Consequently, the null hypothesis 4, which states that **there is no significant difference in the contribution of predictor variables (Perceptual learning styles, Reading strategies' use, Learning culture) in predicting the criterion variable reading comprehension among the Yemeni EFL learners,** is rejected.

By examining the normal p-p plot of the regressing standardized residual as shown in figure **(4.6.4)**, it could be observed that the multiple linear regression analysis was stable. This is indicated by the normality line which is very normal. In total, the residual is normally distributed as most cases fall along the normality line. Therefore, the model is considered to be a good model.

4.4 Conclusion

The present study focuses on reading comprehension of Yemeni EFL learners in tertiary level with regard to their learning styles, reading strategies' use and learning culture. Specifically, the purpose of this study is to measure the levels of perceptual learning, use of reading strategies, learning culture among the Yemeni EFL learners. It also investigates the relationship between the perceptual learning styles, use of reading strategies, learning culture and reading comprehension among the Yemeni EFL learners in the second year of English major in Sana'a University, Yemen. The study, in addition, explores the impact of perceptual learning styles, strategies' use and learning culture on reading comprehension ability among the Yemeni EFL learners.

Keeping in view the objectives and the hypotheses of the present study, descriptive statistics and various statistical measures like frequency percentage and standard deviation

has been used as a first step. Second, correlation analysis has been applied to ascertain the degree of relationship/association between dependent and independent variables. Third, to compute the impact of the three independent variables on reading comprehension ability, regression analysis has been applied.

The data were coded and prepared for analysis using the Statistical Package for Social Sciences (SPSS) and Excel Microsoft. After using the appropriate statistical techniques, results have been explained and interpreted in the next chapter. Accordingly, recommendations and pedagogical implications have been suggested.

CHAPTER – V
SUMMARY OF FINDINGS, CONCLUSIONS AND IMPLICATIONS

This chapter summarizes the study and its research design and methodology. It lists the findings yielded from data analysis and discussion and conclusion of those findings. Then, it presents the pedagogical implications for teachers, curriculum designers and policy makers. Finally, it raises some questions that came to the attention of the researcher during the research process, and suggests recommendations for further investigation and research.

5.1 Summary

The current study was conducted to investigate three major research objectives: first, the levels of perceptual learning styles, reading strategies use, learning culture and reading comprehension among the Yemeni EFL learners at tertiary level; second, the relationship between the three variables; learning styles, reading strategies use, learning culture with reading comprehension. Third, the role of learning styles, use of reading strategies and learning culture as predictors of reading comprehension ability among the Yemeni EFL learners.

For collecting data, four data-gathering instruments were used; a test of English reading comprehension and three questionnaires of perceptual learning styles, use of reading strategies and learning culture. Since the culture questionnaire was not found in the area of foreign language learning, the researcher designed a learning culture questionnaire for this purpose. For piloting, the questionnaires were administered to a group of 12 learners of first year undergraduate, then to a 42 group of students (third year) in English department so as to subject its results to the traditional item analysis, with the aim of making it right to the level of the target population (i.e. Second Year students). In

addition, for the reading comprehension test, the researcher adapted a test version of the TOEFL test-reading section similar to TOEFL Practice Tests (2015) containing 18 items. Both reading comprehension test and the three questionnaires were validated by different experts in educational and cultural teaching fields. The values of reliability regarding perceptual learning styles, use of reading strategies, learning culture questionnaires and reading comprehension test were found to be 0.88, 0.88, 0.86 and 0.90 respectively using SPSS.

Based on the two pilot studies and feedback from the EFL specialists, the two developed instruments were further modified and refined. At the end of the first semester in the academic year 2015-2016, the available sample 134 Yemeni Second Year students took the instruments in two sessions on the same day. 40 students out of the sample were interviewed to get more information and clarification on their answers to questionnaires. After conducting the test and administering the questionnaire papers among the participants, descriptive statistics were applied to the data. Descriptive statistics was used to explore, describe and analyze the data. Pearson's correlation was employed to describe the correlation between reading comprehension ability and perceptual learning styles, use of reading strategies and learning culture among the 134 Yemeni second-year EFL learners. Then linear regression analysis was used to find out the impact of the same three variables on reading comprehension.

5.2 Findings Yielded from Data Analysis

This study adds to the few studies so far conducted in the area of reading comprehension of EFL learners in general and of Arab/Yemeni learners of English in particular. It sheds light on the preferred learning styles and strategies used by the Yemeni EFL learners in reading classes. It also provides empirical data analysis and verifies the impact of learning culture in EFL learning context.

.

After reviewing an in-depth literature followed by descriptive analysis and inferential statistics, the findings obtained regarding reading comprehension, perceptual learning styles, use of reading strategies and learning culture among the Yemeni EFL learners in this study are illustrated below:

1. The distribution of reading comprehension levels of the Yemeni EFL learners have been found to be; 29.85%, 45.52% and 24.63% i.e low, medium and high respectively. It can be concluded from the descriptive statistics that nearly 45.52% of the Yemeni EFL students' reading comprehension ability falls under average level. This percentage is considered less than international standards of English proficiency.

2. The most preferred learning styles among the Yemeni EFL learners are kinesthetic (34.88%), followed by group (31.85%) and tactile (31.66%). The other two learning styles which are preferred by the Yemeni learners are auditory (30.90%) and visual (29.46%). The least preferred learning style is individual (27.09%).

3. Based on the PLSQ developed by Reid (1987), it has been noticed that the overall perceptual learning styles among the Yemeni EFL learners come under minor category, that is their preference of using all the six perceptual learning styles are minor and in the range of; auditory (59.70%), visual (38.80%), kinesthetic (61.19%), tactile (67.91%), group (72.39%) and individual (60.45%) learning styles respectively.

4. Based on SORS developed by Mokhtari & Sheorey (2002), it is found that (58.21%) of Yemeni EFL learners fall under medium level of using the global reading strategies. Likewise, (64.93%) and (56.72%) of the Yemeni EFL learners use problem-solving and support reading strategies respectively that is they fall under

the medium category. However, it has been surprising to find that (78.36%) of the Yemeni EFL learners' overall reading strategies use fall under the low category range.

5. Three quartiles were used to distribute the Yemeni EFL learners under three categories with regard to learning cultural that is unaware, rationalists and stereotypes. Based on the quartile deviation regarding the behavioral aspect of culture (25.37%), (52.24%) and (22.39%) of the Yemeni EFL learners are unaware, rationalists and stereotypes respectively. Based on descriptive statistics with respect to attitudinal aspect of learning culture, (32.84%), (45.52%) and (21.64%) of the Yemeni EFL learners are unaware, rationalists and stereotypes respectively. Similarly, with regard to contextual aspect of learning culture, (32.84%), (48.51%) and (18.66%) of the Yemeni EFL learners are found unaware, rationalists and stereotypes respectively.

6. The overall distribution of Yemeni EFL learners with respect to learning culture are (32.84%), (44.03%) and (23.13%) that is unaware, rationalists and stereotypes respectively. Thus, based on the descriptive statistics, it can be concluded that the Yemeni EFL learners are culturally rationalists.

7. The computed value of correlation coefficient between reading comprehension and learning styles among the Yemeni EFL learners based on Pearson Correlation is (r=0.911) with (p=0.000) at (α = 0.05/0.01). This indicates that reading comprehension and perceptual learning styles possesses statistically significant positive correlation. Thus, it can be statistically verified that if the learning styles are improved among the Yemeni EFL learners, their reading comprehension ability can substantially improve.

8. The computed values of correlation between the students' reading comprehension and the six perceptual learning namely visual, auditory, kinesthetic, tactile, group and individual styles are (0.687, 0.667, 0.233, 0.441, 0.868, -0.457) respectively. Therefore, it can be deduced from the correlation values that there is a significant positive correlation between reading comprehension and five learning styles except the individual learning style where a negative correlation has been observed (r=-0.457, p=0.000). Thus, it can be manifested that improving the visual, auditory, kinesthetic, tactile, group learning styles enhances reading comprehension ability among the Yemeni EFL learners. Further, it is clear that the maximum improvement in reading comprehension can be achieved by applying group learning style.

9. The computed value of correlation coefficient between reading comprehension and use of reading strategies among the Yemeni EFL learners based on Pearson Correlation is (r=0.865) with (p=0.000) at (α = 0.05/0.01). This indicates that reading comprehension and use of reading strategies possesses statistically significant positive correlation. Thus, it can be statistically verified that if the use of reading strategies is improved among the Yemeni EFL learners, their reading comprehension ability can be effectively developed.

10. Similarly, the computed values of correlation between the students' reading comprehension and the global, problem-solving and support reading strategies are (0.681, 0.382, 0.231) with (p=0.000) at (α = 0.05/0.01) respectively. Thus, statistically it can be inferred that the proper use of the three types of reading strategies enhances the performance of reading comprehension among the Yemeni EFL learners.

11. In case of learning culture and reading comprehension, the computed value of overall correlation coefficient is (r=0.918, p=0.000) at (α = 0.05/0.01). Hence, it is

evident that there is a statistically significant correlation between reading comprehension and learning culture. Therefore, from the correlation values it can be deduced that the influence learning culture improves the reading comprehension among the Yemeni EFL learners.

12. Similarly, the correlation values between the reading comprehension ability and the three components (behavioral, attitudinal & contextual) of learning culture are (0.220, 0.829 and 0.802) with (p=0.000) at (α = 0.05/0.01) respectively. Therefore, on the basis of correlation values, it can be manifested that attitudinal aspect of learning culture impacts reading comprehension maximally, followed by contextual and behavioral aspects respectively.

13. The computed values of regression parameters regarding various subscales under learning styles are visual (Regression co-efficient B=0.076, t=0.946, p=0.346), auditory (Regression co-efficient=0.512, t=5.772, p=0.000), kinesthetic (Regression co-efficient=0.252, t=3.742, p=0.000), tactile (Regression co-efficient=-0.451, t=-4.599, p=0.000), group (Regression co-efficient=0.566, t=13.793, p=0.000) and individual (Regression co-efficient=-0.402, t=-8.840, p=0.000) respectively. The total contribution of all the subscales of learning styles on reading comprehension among the Yemeni EFL learners found to be 92.85%, in which the contribution of visual learning style =5.22%, auditory learning style =34.15%, kinesthetic learning style =5.87%, tactile learning style=-19.89%, group learning style=49.13%, individual learning style =18.37% towards reading comprehension. Thus, on the basis of regression parameters, it can be concluded that the group learning style is the maximum contributing factor in influencing reading comprehension among Yemeni EFL learners. However, it has been observed that tactile and individual styles negatively influence the reading comprehension of Yemeni EFL learners.

14. The computed values of regression parameters regarding various subscales under reading strategies are global (Regression co-efficient=0.231, t=18.145, p=0.000), problem-solving (Regression co-efficient= 0.274, t= 10.303, p=0.000), support (Regression co-efficient=0.260, t=4.989, p=0.000) respectively. The total contribution of all the subscales of reading strategies on reading comprehension among the Yemeni EFL learners found to be 32.2%, in which the contribution of global reading strategies =15.73%, Problem-solving reading strategies =10.46%, support reading strategies=6.00% towards reading comprehension. Thus, on the basis of regression parameters it can be concluded that the global reading strategies is the maximum contributing factor in influencing reading comprehension among Yemeni EFL learners.

15. The computed values of regression parameters regarding various subscales under learning culture are behavioral aspect of learning culture (Regression co-efficient=0.430, t=11.054, p=0.000), attitudinal aspect of learning culture (Regression co-efficient=0.391, t=1.793, p=0.000), contextual aspect of learning culture (Regression co-efficient=0.527, t=2.379, p=0.000) respectively. The total contribution of all the subscales of learning culture on reading comprehension among the Yemeni EFL learners found to be 84%, in which the contribution of behavioral aspect of learning culture =9.46%, attitudinal aspect of learning culture =32.4%, contextual aspect of learning culture= 42.26% towards reading comprehension. Based on the values of regression parameters, it can be deduced that the contextual aspect of learning culture is the maximum contributing factor in influencing reading comprehension among Yemeni EFL learners.

16. The computed values of regression parameters regarding the three independent variables (perceptual learning styles, use of reading strategies and learning culture)

(Regression co-efficient=0.355, t=3.012, p=0.000), (Regression co-efficient=0.108, t=1.296, p=0.197), (Regression co-efficient=0.479, t=3.804, p=0.000) respectively. The total contribution of all the three variables on reading comprehension among the Yemeni EFL learners found to be 85.65%, in which the contribution of perceptual learning styles =32.34%, use of reading strategies =9.34% and learning culture =43.97% toward reading comprehension. On the basis of the values of regression parameters, it can be indicated that the learning culture variable is the most contributing predictor in influencing reading comprehension among Yemeni EFL learners.

To sum up**,** the findings of the study indicate that Yemeni EFL learners fall under average level in reading comprehension which might be considered unsatisfactory. They also show that Yemeni EFL learners mostly prefer kinesthetic learning style in general learning English; however, in correlation and regression analysis with reading comprehension, results reveal that majority of Yemeni EFL learners prefer group learning style. Their preferences in the six learning styles fall under minor category. The Yemeni EFL learners also are found to be more often using the support reading strategies in general learning English; however their use of reading strategies in general still falls under the low category range. It is also found that the global reading strategies are the most correlated and regressed with reading comprehension texts. Coming to the learning culture, results indicate that Yemeni EFL learners mostly are culturally rationalists in general particularly in their attitudes regarding overall learning culture as well as with correlation to reading comprehension. However, in regression analysis, it is found that the contextual aspect of learning culture or the content of learning materials are the most predicting in influencing reading comprehension. Based on the correlation results, it is found a significant relationship between the three components of learning culture and

reading comprehension especially with attitudinal aspect of learning culture. On the basis of regression results, it can be concluded that the three variables are found to be predictors in enhancing reading comprehension among the Yemeni EFL learners, starting with learning culture, followed by perceptual learning styles, and reading strategies use. Among the subcomponents of the three variables, the group learning style, global reading strategies and contextual aspect of learning culture are found to be the maximum contributing factors in influencing reading comprehension among Yemeni EFL learners.

5.3 Discussion and Conclusion of Findings

Findings in this study indicate that the majority of the Yemeni EFL learners' performance is still below average proficiency as per international standards. Learners' under performance in reading is apparent in their failure to achieve good scores in the reading test of this study despite of the long years of English learning. Only 33 students out of 134 show high level because they might have a good background or practice of English either at homes or studying in some advanced language institutes or private schools. 61 students show medium level and 42 out of 134 reveal low level. This indicates that the majority of Yemeni EFL learners have medium ability in reading comprehension but still not as per international standards. Similarly, previous studies have discovered that reading involves a variety of factors which may have an impact on learners' target language reading ability. Al-Ariqi (2008) investigates the Yemeni EFL learners' English proficiency in the five skills (speaking, listening, reading, writing and grammar). Regarding reading test, she finds that the Yemeni EFL learners score 59% but it is still considered low-proficient as it is less than the standardized marking scale of TOEFL test which should be 75%. Kasper et al (1993) states that some of these factors are learners' lack of target language proficiency and vocabulary while Carrell & Floyd (1987) explain that it might be due to the students' unfamiliarity with the content and/or

formal schemata of the texts to be read. Carrell (1988) argues that another of these factors is the students' inefficient reading strategies.

In a similar Arab context, a study was conducted in Iraq by Al-Kailbi (2015) who found that good readers were better users of the dictionary, guessed meanings of words from the context better than poor readers did. Good readers were found to be high achievers in the second language as they show higher level in comprehending texts. In another Saudi context, Al-Nujaidi (2008) finds that Saudi EFL first-year university learners show a low reading ability as well as a limited vocabulary size which is less than the standardized level required for reading complicated English texts. On the other hand, Alsamadani (2009), which is similar to the current study in three aspects; Arab learning environment, number of sample and English learning as a foreign language, investigates the Saudi students' perceived use of reading strategies and their comprehension levels. He ascertains that Saudi EFL learners, though they seem to be strategic readers, still do not rely on the use of reading strategies to comprehend texts. The three levels of reading comprehension in his study are 31 (22.1%), 77 (55%) and 32 (22.9%) which are low, medium and high respectively among a sample of 140. This means that Arab EFL learners show average level in reading comprehension which is still substandard.

Findings of this study in relation to learning styles show that Yemeni EFL learners prefer kinesthetic learning style. Related studies in English learning (Reid, 1987) have supported the results of the present investigation that English as second or foreign Language (ESL) vary significantly in their sensory preferences. Reid (1987) finds that students from Asian cultures were often highly visual and that non-native students of English language strongly preferred kinesthetic and tactile learning styles. Yet, most groups reveal in her study a negative preference for group learning. Reid concludes that the learning style preferences of nonnative speakers often differ significantly from those

of native speakers; that ESL students from different language backgrounds sometimes differ from one another in their learning style preferences; and that several variables are related to learners' perceptual learning styles such as cultural background. The same finding can be concluded that culture may affect the Yemeni EFL students' learning styles. Researchers believe that the reading task which foreign language readers face is far more complex and demanding than native language readers since reading comprehension involves mental process, which is often culturally specific.

Some studies might not be consistent to the results of the current study. Fibrianti (2014) in his study finds that learning styles are not affecting the students' reading comprehension. Based on his results, he states that there is no significant difference on students' reading comprehension score based on their learning style and explains that Indonesian learners of English language have equal opportunity to gain good competence in reading comprehension whatever learning styles they have. He justifies that other factors might be due to intelligence or cognitive competence, motivation, physical factor, socioeconomic status, parental attitudes and parental aspirations.

On the other hand, Abdulaziz & Alfaki find out that the majority of Saudi Learners' learning styles are auditory, few are visual, and only three out of 16 are visual-auditory; while one candidate is visual kinesthetic (2014). The data is different from the findings of the current study which might be because of the data-gathering tool used which is the VAK learning styles questionnaire in the Saudi study. For Yemeni EFL learners, it is found out in this study that they prefer kinesthetic, and then tactile and group learning styles. It might be so due to different factors such as their different cultural/background experiences, desire to be exposed to new approaches in learning, being obsessive with technology tools, dislike of conventional classes and preferring to practice activities required movement and shared work. Yemeni EFL learners' nowadays seem to be

influenced by movies and drama which expose them to different approaches of knowledge and make them more active and kinetic, which indicate that most of them are culturally quite rationalists.

It could be argued that the low level of metacognitive awareness in reading strategies as performed by the Yemeni EFL learners shows consistency with the previous studies that revealed that poor learners paid little attention to reading strategies of text. Among the three categories of metacognitive reading strategies, the support reading strategies are the most frequently used by the Yemeni EFL learners in general learning, but the global reading strategies are followed in reading comprehension. The findings both present important contribution to the less proficient EFL learners in a Yemeni context and pedagogical implication on the importance of strategy training.

In previous studies, similar results have been found. For example, in a Yemeni experimental study, Altamimi (2006) finds that the experimental group shows a significant improvement in their awareness of reading strategies compared to their pre-test performance and that of the control group. In addition, the findings of this study are consistent with a Saudi study conducted by Meniado (2016), descriptive survey and descriptive correlational methods with 60 randomly selected Saudi college-level EFL students in a college in Saudi Arabia were used. It is found out that the selected students moderately use the different metacognitive reading strategies when reading academic texts. Among the three categories of metacognitive reading strategies, the Problem-solving strategies (PROB) are the most frequently used. Besides, Alsamadani (2011) applied a quasi-experimental study to test the effect of the 3-2-1 strategy on English as a foreign language (EFL) learners' reading comprehension. The study indicated that at the end of the six-week instruction, there was a significant statistical difference in reading comprehension between the controlled group and experimental

group. The study concluded with recommendations for training EFL students and teachers on using different comprehension strategies, especially those that have proven to be effective in enhancing reading comprehension. Alsamadani (2009), previously, finds that there are other factors which might affect the Saudi EFL learners' reading comprehension like prior knowledge, time on task, purpose for reading, enthusiasm for reading and vocabulary intensity. In the same learning environment, Alnujaidi (2003) points out that Saudi freshmen undergraduate students use a few strategies such as; critical reading, summarizing using typographical aids, and noting text characteristics with high and moderate levels.

Another possible explanation for the low level of Yemeni EFL learners in using reading strategies could be related to the difference between perceived and actual use of reading strategies. Perceived use of reading strategies might fail during implementation (Mokhtari & Sheorey, 2002). In other words, learners might know which strategies to use, but they may not know how to use them effectively. As pointed out by Anderson (1991) and Carrell (1998), for successful reading to take place, it is essential to know which and how strategies should be taught to EFL learners. In other words, it can be suggested that participants who scored in a high range for perceived usage of reading strategies might not be reflected in reading comprehension performance. Hence, it is important to use additional data collection procedures, such as think-aloud protocols of reading, to obtain more information about the actual practice of strategies among students and to gain a better understanding of the nature of the relationship between reading comprehension and reading strategy use (Anderson,1991).

Findings in this study with respect to learning culture indicate that Yemeni EFL learners are rationalists particularly in the attitudinal aspect in general learning contexts and there is a significant relationship between the attitudinal aspect of learning culture

and reading comprehension. Yet, based on regression equation for the contribution of the three aspects of learning culture in predicting reading comprehension, it is found that the contextual aspect of learning culture is the most predictor for which Yemeni EFL learners are rationalists, too. On the same track, Ba-Udhan (2010) finds out in his study among Yemeni students in secondary schools that students show an interesting tendency towards the English language culture. Both male and female students have positive attitudes towards the native speakers and the English culture. Though some of the female students point out that learning English requires only understanding the target language culture, many of them prefer to learn English without paying attention to the culture of the English speaking communities. This attitude stems from the female students' belief that the Yemeni culture is superior to the cultures of the English-speaking countries. Moreover, due to the recent war occurs in Yemen, girls have encountered not only socio-cultural barriers to carry on their regular formal learning, but also some other economic and security problems as a result of instability in the area. Al-Ariqi & Mohsin (2017) suggest that the use of e-learning at homes can eliminate or reduce to the minimum socio-cultural obstacles and political instability that are infringing on the educational rights and development of Yemeni women.

Family and e-learning can play an essential role in English language learning. Bladram & Al-Ariqi (2016) suggest that in order to improve English teaching in Yemen in primary and secondary schools, English teachers must prepare all required attractive materials with the help of IT technology in their own portfolio, in the first step. This Portfolio should focus on cultural elements and communication skills in which e-learning tools such as digital aids and devices can be used. The second step focuses on the role of the family which is also essential in using the digital aids and devices to improve the students' English learning performance. Bladram & Al-Ariqi (2016) explain that there

should be a sense of cooperation between teachers and families in order to improve the students' reading comprehension ability. Teachers have to contact the students' family to explain to them what they should do and what e-materials are convenient to the students. Families have to provide these materials and digital devices and follow up their children to watch and listen daily to those programs. Comprehension has to be affected with the learners' culture, Pardo (2004) asserts that comprehension is based on the degree to which it matches with the culture espoused in the text and the learners' purpose for reading.

The results of the study with respect to correlation and regression analysis between the reading comprehension and (perceptual learning styles, use of reading strategies and learning culture) go in line with previous studies showing differences in learning due to differences in learning styles (Brown, 2000; Oxford, 2003). Chavosh & Davoudi (2016) have found that only tactile and kinesthetic learning styles have a statistically significant relationship with second language reading comprehension performance. Moreover, the findings of their study have revealed that the tactile learning style is the best predictor of second language reading comprehension performance. Likewise among Arab learners of EFL, Alkubaidi (2014) finds that group learning is most preferred by the participants of the study, then visual, individual, auditory, kinasethetic and lastly tactile learning. To a similar degree, most of the Yemeni learners prefer the group learning style in relation to comprehension reading. This can be explained that the Yemeni learners might like to work in group to gain more confidence and motivation towards English learning process particularly in reading complicated texts. Regression results emphasize the previous findings, for which the most predictor factor among learning styles is found to be the group learning style, too. Al-Ariqi & Baldram (2017) find that there is a significant relationship between the perceptual learning style preferences of the Yemeni EFL

students and their use of metacognitive reading strategies. It is found that the kinesthetic, group and tactile learning styles are the most preferred styles to students which have the strongest correlation with global and problem-solving strategies of reading. Consistent to these findings is the results of the study of Rossi-Le (1989) who found in her study that the dominant perceptual learning style preferences for the sample were tactile and kinesthetic. She also found that perceptual learning style preference is influenced by factors in the learner's background, particularly native language. Findings in Rossi-Le's study suggested that second language learners prefer a style of learning that will involve them in the totality of the language in which they need practical contexts and reactive behavior as a basis for their language advancement.

Alkahtani (2011) conducted a study to examine Saudi EFL college students' perceptual learning styles in order to determine whether their perception of their learning styles is a contributor of academic persistence success in different learning environments. The results ,he got, are correlated to the current study's findings regarding the learning styles preferences by Saudi learners which are in order tactile, auditory, visual, group, kinesthetic and individual. The study supported the idea that students' perceptions of their learning styles are affected by their personality types, cultural beliefs, and teacher's teaching style. Another two studies find two different results between reading comprehension and reading strategies use. Ghosh (2012) found a positive and significant relationship between perceived use of reading strategies and reading proficiency. Their study revealed that perceived use of reading strategies moderately correlated with reading proficiency for Indian learners of English. In contrast with these findings, another study by Alharbi (2015) explored the relationships between reading strategies, learning styles and reading comprehension for EFL college students. One of the study's aims is to examine the impact of silent or oral reading strategies and how these reading

strategies influence the Saudi EFL learners' reading comprehension. The findings showed that cognitive reading strategies did not lead to any statistically significant differences in reading comprehension which mean reading strategies are not influential factor in enhancing the Saudi EFL learners' reading comprehension whereas this study finds out that metacognitive reading strategies can be an indicator of reading comprehension.

5.4 Pedagogical Implications

The present study has provided empirical evidence that Yemeni EFL learners show unsatisfactory proficiency in reading comprehension as per international standards. To improve the Yemeni EFL learners' performance in reading comprehension, the study tries to shed light on the students' strengths, weaknesses, preference of certain activities, behavior in group work, participation in the classroom, problem-solving, cultural disposition based on their learning styles preferences, use of reading strategies and learning culture.

1. Teachers need to have knowledge of the students' diverse learning styles and do analysis on them in order to identify, respect and work with those learning styles. Teachers have to teach learners about their own learning style preferences in order to help them become more independent and take responsibility of their learning. Learners need to be more active and self-driven.

2. Student-centered approaches can be applied by teachers to motivate language learners in a way that matches their needs as well as learning style preferences. Students need to be engaged in self-reflection and self-evaluative activities in order to compensate their lack of practice to the target language. Teachers should focus on

the selection of more friendly, enjoyable and student-centered tasks and interactive tasks in order to offer them more learning opportunities and communicative skills.

3. Teachers should create a suitable and rich learning environment such as; using technological aids like information and communication technology, 5-minutes activities and flexible reading hours. This will assist students focus and appreciate their learning styles and enhance their reading progress. In addition, teachers should encourage the self-assessment system in the EFL classroom that is they should provide freedom to the students and explain themselves what difficulties they face in reading from their point of views.

4. Teaching styles should match with learning styles of the learners in order to create interest in learning English and build a teacher-student-relationship which will help students be involved in class activities. Teachers need to know how to attune second language instruction and strategy instruction based on the learners' learning style preferences.

5. Language barriers should be put in the mind of the teachers so that interaction can take place when considering the amount of input based on the students general level as well as their learning style preferences.

6. Teachers should instruct students how to use appropriate strategies to comprehend texts as well as verbalizing to them in a group work how these strategies can help enhancing their comprehension. Both should be aware of the benefits of using cognitive and metacognitive strategies to enhance the whole reading process.

7. Teachers should find out other factors which affect the students' comprehension ability and any other ways which can improve the level of low readers to cope with the high ones.

8. Motivating students to read and love reading can play a crucial role in bettering their reading progress. Thus, teachers' should enhance students' awareness of their reading strategies in order to help them become 'constructively responsive readers'.

9. The effective strategies should be transferred to new tasks and models for language learning strategy instruction to help students become good readers. Besides, the instructions and language of instruction should be evaluated in order to be integrated and create multiple strategy approaches.

10. Reading strategies can be classified based on the learners' characteristics and interest. Intensive reading and practical use of cognitive and metacognitive reading strategies in analyzing these texts may increase their interest towards reading.

11. Teachers' role should be directed in bicultural and bilingual settings especially in the current technological revolution time. National stories and drama can be translated into the target language in order to indulge students in their own culture and learning the target language simultaneously. Students, after that can be involved in role-plays, mime group discussion…etc.

12. It is crucial for EFL teachers to initiate activities based on cultural themes and incorporated materials. Teachers should indulge students on critical-thinking activities which involve reacting, reflecting, sharing and comparing to foster cultural awareness.

13. Culture aspect can be given attention if communicative approach will have to be used in schools instead of the conventional approaches. Therefore, teachers should apply ease-to-use communicative activities to help students become aware of the target-culture norms and behaviors.

14. Teachers should focus on the cultural connotations of cross-cultural differences in vocabulary as well as language differences and techniques for developing English proficiency and reading growth.
15. Teachers should select appropriate reading topics and materials for reading comprehension in relation to their cultural background. The experience-text relationship can be used by the teachers in which students can relate their own experience to the culturally different text.
16. Teachers should use methods and approaches that are sensitive to the readers' cultural schemata in order to bridge the gap between the text's content and the readers' cultural prior knowledge. A socio-cultural context should be created and supported by teachers to enhance reading activity and enhance transaction between a reader and a text.
17. Teachers' should get trained regularly to apply modern techniques and methods in teaching to putting in mind the three factors, learning styles preferences, effective reading strategies and cultural background of the students.
18. Teachers should teach all aspects of reading skills with utmost care as well as evaluate the different methods of reading. They can integrate appropriate activities, aids and drills which match with the referred styles and strategies utilized by Yemeni EFL learners in their local leaning environment.
19. Teachers should pay attention to the effects of culture and context on strategy use as well as their perceptual learning styles. In addition, texts item should be examined carefully and interpreted cautiously by teachers in order to provide meaningful contexts for comprehension.

20. Teachers should further an atmosphere of interactive learning in reading classes like group reading and social thinking aloud. In addition, sufficient and clear instructions can be given to stimulate verbal interaction in order to impoverish the learners' vocabulary inventory among EFL learners and their reading comprehension ability.
21. Current curriculum and syllabus of English for undergraduate learners can be evaluated to check its content in relation to learning culture aspect in order to enhance the learners' performance in learning English. New topics and diverse activities in attractive format and in different themes should be added to teachers' manuals and students' exercise books so that an interactive atmosphere should be created.
22. Design and prescribe the instructional materials that will stimulate the verbal interaction and reading understanding. Furthermore, the selection of texts in the textbooks should be categorized in such a way that it develops the overall IQ level and aptitude of the students including reading comprehension aptitude.
23. Re-evaluate current syllabus and teaching textbooks to check if they match with the learners' needs and their learning style preferences as well as relate the content of the English textbooks with the daily socio-cultural life of the learners.
24. Design an appropriate syllabus on metacognitive strategies in such a manner so that the learners will feel enthusiastic rather than overburdened and de-motivated. Further, the syllabus should be updated regularly as per international standards.
25. There should be an integration of metacognitive reading strategy instruction within teaching curriculum to enrich students' awareness of the mental processes involved in reading and the development of thoughtful and constructively responsive reading.

26. Methods of teaching reading in the mother tongue should be studied in comparison to the methods of teaching reading in the foreign language so that a level of understanding can be created.

5.5 Pedagogical Implications to Policy Makers

1. Cognitive and measurement sciences should be synchronized in such way so that they can be produce optimal results and made accessible to various educational stakeholders which include educational researchers, test developers, curriculum specialists, teachers, and policy makers.
2. Policymakers should design funding schemes directed to enhance the fusion of cognitive and measurement principles. Besides, the focus of the funding should be to augment assessment system that capitulate more transparent inferences about student achievement.
3. Policy makers should formulate a policy framework that will guide the researchers to explore modern forms of assessment and their impact on comprehension, learning, practice and decision making.
4. Disbursement of funds should be rapid when it is required for analysis of vital elements of learning i.e. learning styles, strategies, cognition, observation and interpretation. This will boost the overall reading comprehension of language learners.
5. Both private and public educational institutions should encourage multidisciplinary approach of assessment that will provide the room for hybridization of ideas between policy makers (researchers) and assessment developers which in turn can pace the performance of learners with respect to reading comprehension.
6. Policy makers and researchers should put maximum attention to learning styles, strategies, culture, cognition, observation, interpretation and their coordination.

7. Policy makers should develop the policies and systems that will aid developers of educational curricula and classroom assessments to innovate tools that will enable teachers to implement high-quality instructional and assessment practices via appropriate use of modern technology like IT and multimedia i.e. interactive or blended learning and flexible assessment system.
8. Policy makers should develop large scale assessment reporting system that will reveal important differences in performance at various levels of competencies regarding reading comprehension of EFL learners.
9. Policy makers should identify the limitations of current educational system and develop new system that will speed up their decision making ability concerning various reading comprehension programs and distribution/allocation of resources for the same**.**
10. In order eradicate the cultural resistance policy makers should inform the people via media about the importance of learning a foreign language and foster the learning culture among EFL learners in particular and public in general.

5.6 Recommendations for Further Research

The current research tries to establish the relationship between perceptual learning styles, reading strategies' use, learning culture and reading comprehension ability among the learners of EFL English major in Sana'a University. However, every study is proven to limitations which restrict its scope, perfectness and inclusiveness. Therefore, following vital suggestions are being made for further future research in the light of present findings of the study.

1. Although the learning culture instrument turned out to be highly reliable in this study, it might need more investigation to strengthen its reliability and validity.

2. This study might be replicated to include EFL learners on a larger sample from different levels in the same major as well as different levels in other language faculties.
3. The developed instrument of learning culture in this study can be used to measure the impact of learning culture on other language skills (listening, speaking, structure and writing).
4. In a replication of this study, teachers can be included to check their awareness regarding their students learning styles and strategies and learning culture.
5. Researchers can continue to collect and chart data about reading comprehension to collect more details about the nature of reading comprehension and other factors which can influence it.
6. Data can be collected about students' own experience and personal knowledge with texts they try to comprehend in EFL classrooms in order to share their opinions and apply what is convenient for them in textbooks.
7. Qualitative data like think-aloud and protocols as well as interviews with students can be used to enable us to expand our knowledge of students' use of reading strategies, learning style preferences and learning culture impact.
8. More factors such as age, educational level and gender can be explored to measure the students learning style preferences and language learning strategies use and learning culture.
9. Teachers can be participated in responding to questionnaires as a key to identify the type of activities which can be mostly go along with the students' learning culture background/awareness.

10. Further research, such as a correlational one, can study the interaction between metacognitive reading strategies, learning styles and learning culture and the impact of each on one another.

5.7 Conclusion

This chapter presents the summary of the study, the findings, discussion and conclusions to be drawn from the analysis of the data, some pedagogical implications for teaching reading comprehension to the Yemeni EFL learners and finally some suggestions for further research in reading area.

It is focused on conclusions and findings on the correlation of learning styles preferences, use of reading strategies and learning culture with reading comprehension as well as the influence of those three variables on reading comprehension at the tertiary level in Yemeni universities. It provides teachers and learners as well as educators and syllabus designers with some suggestions to know about the students' preferences of learning styles, use of strategies and impact of culture in general and to improve the students' comprehension in specific.

The findings indicate that the Yemeni EFL learners are medium achievers in reading comprehension. They favor kinesthetic learning style in general learning situation; however they prefer group learning style in reading comprehension. They also show that majority of Yemeni EFL learners use support reading strategies in general EFL learning, but prefer global reading strategies with respect to reading comprehension performance. Results also show that Yemeni EFL learners seem to be rationalists in learning culture particularly in their attitudes towards EFL learning while the content of learning materials and activities is found to be the most predictor on their reading comprehension performance.

Finally, this study is one of the few works of research that has been done in the field of reading comprehension in English foreign language learning. It is concluded that the perceptual learning styles, use of reading strategies and learning culture are contributors in enhancing reading comprehension among the Yemeni EFL learners, starting with learning culture, followed by perceptual learning styles, and reading strategies' use. Among the subcomponents of the three variables, contextual aspect of learning culture, the group learning style and the global reading strategies are found to be the maximum contributing factors in influencing reading comprehension among Yemeni EFL learners.

REFERENCES :

Abdulmajid, Faizah Bte, et al. *"Selected Malaysian Adult Learners' Academic Reading Strategies: A Case Study.",* www.face.stir.ac.uk/Majid61.htm. 2004.

Abhakorn, Jirapa. "*The Implications of Learner Strategies for Second or Foreign Language Teaching "* ARECLS, Vol. 5, 2008, pp. 186-204.

Aimin, Liang. *"The Study of Second Language Acquisition under Socio-Cultural Theory."* American Journal of Educational Research vol.1, no.5 , 2013, pp.162-167. www.pubs.sciepub.com/education/1/5/3/#

Akhtar, Shertaz. *"Investigating the need to Embrace Native English Speaking Culture to Enhance the ESL Experience as Expressed by Pakistani Learners."* Language in India. ISNN 1930-2940, Vol.14, no. 4, April, 2014.

Al-Ahdal, Arif Ahmed Mohammed Hassan. *"ELT in Yemen and India-The Need for Remedial Measures."* Language in India 10.11, 2010.

---. *"Integration of Information and Communication Technology (ICT) into the Education System of Yemen: The Need of the Hour."* International J. Educational Research vol.1, no.1, 2013.

Al-Ariqi, Iftikhar Yusuf. *"The Relationship between the Yemeni EFL Students' Proficiency and Self-Esteem."* Unpublished Master Thesis. Sana'a University, Yemen. 2008.

--- ."*The Place of Cultural Elements in Yemeni EFL High School Textbooks: An Alignment Analysis"* English Language and Literature: Retrospects and Prospects. Vergal Publication, Tamil Nadu, India, 2016.

Al-Ariqi, Iftikhar Yusuf, Rajendra Chenni, Jagannath K. Dange, and Mir Mohsin. *"E-Learning as a Panacea for Socio-Cultural Impediments in Women's Education: A Study on Struggle of Female Learners in Conflict Zones with Special Reference to Yemen"*, Journal Of Higher Education And Research Society: Journal Of Higher Education And Research Society, vol. 5 ,no.1, April 2017.

Al-Ariqi, Iftikhar Yusuf, Jagannath K. Dange and Mir Mohsin. *"The Development of Reading Comprehension Ability Test for Yemeni undergraduate EFL learners."* International Multidisciplinary E-journal, Vol.6, no.7, July 2017.

Al-Ariqi, Iftikhar Yusuf, and Mohammed Ali Saeed Bladram. "*The Relationship between Perceptual Learning Styles and Metacognitive Reading Strategies among Yemeni EFL Learners.*" English Studies International Research Journal, vol.5, no. 1, 2017.

Albadri, M. A. *"Reading Comprehension with the Medical Context: Problems and Solutions."* MA Unpublished MA Thesis, Aden University. Yemen. 2001.

Alderson.C.J. *"Assessing Reading."* Cambridge University Press. 2000.

Alebenazer, Chandran. *"Trainee Teacher's Metacognitive Awareness of Reading Strategies."* A published thesis, University Kebangsaan Malaysia (UKM), Malaysia. 2007.

Al-Farabi, Russell. *"Cultural Barriers in English Language Learning: A Socio- Linguistic Perspective."* International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS). A Peer-Reviewed Monthly Research Journal ISSN: 2394-7969 (Online), ISSN: 2394-7950 (Print), (ISRA) Vol. 1, no.5, June 2015, pp. 71-76.

Alghamedi, Mansour. *"The Impact of English Language Teaching on Students' Culture and their Mother Tongue at Primary Level."* 2003, www.mghamdi.com/Cult&Lang1.pdf on 24, March 2016.

Alghazo, Abeer. *"The Effect of Explicit Instruction of Metacognitive Learning Strategies on Promoting Jordanian Language Learners' Reading Competence."* Journal of Education and Practice vol.7, no. 10, 2016, pp. 170-177.

Al-Ghraphy, 1999. In AL-Sohbani, Yehiya. *"Metacognitive Reading Strategies Use by Yemeni EFL Undergraduate University Students."* Frontiers of Language and Teaching, Vol. 4, 2013, pp.121-133.

Al-Hamzi.1999. In Mubarak al-Tamimi, and Nasser Omer. *"The Effect of Direct Reading Strategy Instruction on Student's Reading Comprehension, Metacognitive Strategy Awareness, and Reading Attitudes among Eleventh Grade Students in Yemen"* ,LB1050. 365. T158 2007 f rb]. Diss. Universiti Sains Malaysia, 2006.

Al-harthi, Ebrahim. *"The Impact of Bilingual Education on Mother Tongue: The Impact of Foreign Language Learning on Arabic language learning."* The Jordan Academy of Arabic. www.majma.org.jo/index.php/ on 20, 4, 2011.

Ali, S.E. *"Problems and Prospects of English.*" South Asian Language Review, vol. 17, no. 2, 2007, pp.39-48

Alkahtani, Ali Hussein, et al. *"The Impact of Personality and Leadership Styles on Leading Change Capability of Malaysian Managers."* Australian Journal of Business and Management Research vol.1, no. 2, 2011, pp. 70.

Al-Kailbi, Ahmed Shakir. *"The Place of Reading Comprehension in Second Language Acquisition."* Journal of Literature, Languages and Linguistics Journal. ISSN 2422-8435: Vol. 6, 2015.

Almahrooqi, Rahma, and Adrain Roscoe. *"Focusing on EFL Reading: Theory & Practice*." Cambridge Scholars Publishing, 2014, pp.241-252

Al-Mekhlafi, A. G. *"Background Knowledge and Success in L2 Reading Comprehension."* Unpublished MA thesis, Arizona State University, 1995.

Al-Noursi, Omar. *"To Read or Not To Read."* In Almahrooqi, Rahma, and Adrain Roscoe. *Focusing on EFL Reading: Theory & Practice."* Cambridge Scholars Publishing, 2014, pp. 241-252

Al-Nujaidi, Abdulkarim H. *"The Relationship between Vocabulary Size, Reading Strategies, and Reading Comprehension of EFL Learners in Saudi Arabia."* Diss. Oklahoma State University, 2003.

Al-Osaimi, Saleh, and Wedell, Martin. *"Beliefs about Second Language Learning: The Influence of Learning Context and Learning Purpose."*, vol. 42, no. 1, 2014.

Alqahtani, Majed. *"An Investigation into the Language Needs of Saudi Students Studying in British Postgraduate Programmes and the Cultural Differences Impacting on Them."* Diss. University of Southampton, 2011.

Al-Qahtani, Mona Faisal. *"Relationship between English Language, Learning Strategies, Attitudes, Motivation, and Students' Academic Achievement."* Education in Medicine Journal, vol. 5, no. 3, 2013.

Al-Rasheed, Hamad. *"Teaching English at Primary Stage: Advantages & Disadvantages."* Arabian Gulf Message,1998 , pp.79-148.

Al-Refa'ai, O. Y. *"A study of the Reasons of Students' Low Academic Achievement in English Language at Aden College of Education, Aden University, Yemen."* Magazine of Aden College of Education. 2001.

Alsamadani, Hashem Ahmed. *"The Effects of the 3-2-1 Reading Strategy on EFL Reading Comprehension."* English Language Teaching: ISSN 1916-4742, E-ISSN 1916-4750,vol. 4, no. 3, 2011.

Al-Shamiry, Rafik. *"Yemeni Learners' Oral Communicative Competence in English: A Study at the Tertiary Level."* Unpublished Doctoral Dissertation. Hyderabad, India, 2000.

Al-Sohbani, Yehiya. *"Attitudes and Motivation of Yemeni Secondary School Students and English Language Learning."* Unpublished Ph.D. Thesis, Department of English, University of Pune, India, 1997.

AL-Sohbani, Yehiya. *"Metacognitive Reading Strategies Use by Yemeni EFL Undergraduate University Students."* Frontiers of Language and Teaching, vol. 4, 2013, pp.121-133.

Al-Tamimi, Atef, and Munir Shuib. *"Investigating the Learning Styles Preferences of ESL Learners: The Case of English Majors in Universiti Sains Malaysia."* Malaysian Journal of ELT Research vol.5, 2009, pp.56-107.

Alwalss, Bakil Ali Ahmed. *"Reading Skills and Strategies: A Study of Undergraduate Speakers Of Arabic Learning English At Sanas University."* 2000.

Anderson, Neil J. *"Metacognitive Reading Strategy Awareness of ESL and EFL Learners."* The CATESOL Journal vol.16, no.1, 2004.

Anderson, Neil. *"Improving Reading Speed."* English teaching forum. Vol. 37. No. 2, 1999.

Anthony, Rausch. *"Learning Styles and the Japanese University Second Language Student."* Annual Meeting of the Japan Association of Language Teachers, 22nd, Japan, 11,1996.

Azman, Hazita, Abdullah Mohammad Bhooth, and Kemboja Ismail.*"Readers Reading Practices Of EFL Yemeni Students: Recommendations for The 21st Century."* GEMA Online Journal of Language Studies vol.13, no.3, 2013.

Azzan, H. N. *"Reading comprehension monitoring strategies by Yemeni undergraduate English majors: An exploratory study."* Unpublished PhD Thesis. Dr. Babasaheb, 2001.

Baghban, Z. *"The Relationship between Iranian English Language Learners' Learning Styles and Strategies."* Journal of Language Teaching & Research, vol. 3, no. 4, 2012, pp.771-777

Baker, David. *"Language testing: A Critical Survey and Practical Guide."* Arnold, 1989.

Baker, Linda, and Brown, Ann. *"Metacognitive Skills and Reading in P. D. Pearson* (ed). Handbook of Reading Research. Longman, New York , 1984.

---. *"Metacognitive Skills and Reading."* Technical Report, no. 188. 1980. www.//files.eric.ed.gov/fulltext/ED195932.pdf on 28, March, 2017.

Baker, Will. *"From Cultural Awareness to Intercultural Awareness: Culture in ELT."* ELT Journal, vol.66, no. 1, 2011.

Balfakeh, Suad. *"Problems in Reading Comprehension Skills Secondary School Students in Yemen."* Journal of Language in India, vol.9, no. 10, 2009.

Ba-Matraf, B. *"A Study of The Techniques Used for Teaching Basic English Reading Comprehension Skills in Three Girls Secondary Schools in Sana'a: A Case Study."* Unpublished MA Thesis, Sana'a University ,1997.

Barjesteh, Hamed, et al. *"Critical pedagogy: Improving Iranian EFL learner's reading comprehension ability through CP strategies."* Indian Journal of Fundamental and Applied Life Sciences, vol.3, no. 3, 2013, pp. 335-341.

Barmeyer, Christoph I. *"Learning Styles and Their Impact on Cross-Cultural Training: An International Comparison in France, Germany and Quebec."* International Journal of Intercultural Relations, vol. 28, no. 6, 2004, pp. 577-594.

Barnett, Marva A. *"Reading through Context: How Real and Perceived Strategy Use Affects L2 Comprehension."* The Modern Language Journal, vol.72, no. 2, 1988, pp. 150-162.

---. *"More Than Meets the Eye: Foreign Language Reading. Language and Education: Theory and Practice."* Prentice-Hall Regents, Englewood Cliffs, NJ 07632. 1989.

Barrett, Thomas C. *"Taxonomy of Reading Comprehension." Teaching Reading in the Middle Class."* 1976, pp. 51-58.

Bataineh, Ruba Fahmi, et al. *"Obstacles of Using Communicative Techniques in Yemeni EFL Classes."* Lagos papers in English studies 3, 2008, pp.14-27.

---. *"Communicative Language Teaching in the Yemeni EFL Classroom: Embraced or Merely Lip-Serviced?",* Journal of Language Teaching & Research, vol.2, no. 4, 2011.

Ba-Udhan, Hassan Saeed Awadh. *"Impact of Students' Attitudes on their Achievement in English: A Study in the Yemeni Context."* Language in India, vol. 11, no. 2, 2011.

Belenky, Mary Field, et al. *"Women's Ways of Knowing: The Development of Self, Voice, and Mind."* Vol.15. New York: Basic books, 1986.

Bidabadi, Farinaz Shirani, and Hamidah Yamat. *"Learning Style Preferences by Iranian EFL Freshman University Students."* Procedia-Social and Behavioral Sciences,vol.7, 2010, pp. 219-226.

Bladram, Mohammed Ali Saeed, and Iftikhar Yusuf Al-Ariqi. *"English Language Teaching at Pre-University Stage in Yemen: Challenges and Practical Solutions Using IT."* ICITELL 2016, VIT University, Vellore, India, 2016.

Block, Ellen. *"The Comprehension Strategies of Second Language Readers."* TESOL QUARTERLY, vol. 20, no. 3, 1986, pp. 463-494.

Bowers, Rogers. *"Memories, Metaphors, Maxims, and Myths: Language Learning and Cultural Awareness."* ELT journal, vol. 46. no.1, 1992, pp. 29-38.

Brander, Birgitte Gade. *"Considering Culture in CALL Research."* CALL research perspectives, 2005, pp. 141-153.

Brown H. D. ed.*"Principles of Language Teaching and Learning."* (4th ed.). White Plains, NY: Longman, 2000.

Byram, Michael. *"Criteria for textbook evaluation (1993b)."* In Hinkel, Eli, ed. *"Culture in Second Language Teaching and Learning. "* Cambridge University Press, 1999.

---, ed. *"Routledge Encyclopedia of Language Teaching and Learning."* Psychology Press, 2004.

---. *"Teaching and Assessing Intercultural Communicative Competence."* Multilingual Matters, 1997.

Carrell, Patericia, et al. *"Interactive Approaches to Second Language Reading.",* Cambridge: Cambridge University Press,1988.

Carrell, Patricia L. *"Can Reading Strategies be Successfully Taught?"* Australian Review of Applied Linguistics, vol. 21, no. 1, 1998, pp. 1-20.

Cassidy, Simon. *"Learning Styles: an Overview of Theories, Models, and Measures."* Educational psychology, vol. 24, no. 4, 2004, pp. 419-444.

Chamot, Anna Uhl, and Lisa Kupper. *"Learning Strategies in Foreign Language Instruction."* Foreign language annals, vol.22, no.1 ,1989, pp. 13-22.

Chamot, Anna Uhl. *"Issues in Language Learning Strategy Research and Teaching."* Electronic Journal of foreign language teaching, vol.1, no.1, 2004, pp. 14-26.

Chomsky, Noam. *"Knowledge of Language: Its Nature, Origin, and Use."* Greenwood Publishing Group, 1986.

Cohen, A. D., R. M. Paige, et al. *"Maximizing Study Abroad: A Language Instructor's Guide to Strategies for Language and Culture Learning and Use."* Minneapolis: Center for Advanced Research in Language Acquisition, University of Minnesota, 2003.

Cohen, Andrew D. *"Strategies in Learning and Using a Second Language."* Routledge, 2014.

Coleman, Hywel. *"Society and the Language Classroom."* Cambridge University Press.2003

Cortazzi, Martin, and Lixian, Jin. *"Cultures of Learning: Language Classroom in China."* In Hinkel, Eli, ed. *"Culture in Second Language Teaching and Learning,"* Cambridge University Press, 1999.

Das, Jagannath Prasad. *"Reading Difficulties and Dyslexia: An Interpretation For Teachers."* Sage Publications, 2009.

De Vaus, David. *"A., 2002. Surveys in Social Research.",* 2004.

Dennis, Danielle V. *"Are Assessment Data Really Driving Middle School Reading Instruction? What We Can Learn from One Student's Experience."* Journal of Adolescent & Adult Literacy, vol. 51, no. 7, 2008, pp. 578-587.

Designing and managing MCQs (2015). *"Appendix C: MCQS And Blooms Taxonomy."*://www.u.arizona.edu/~jag/POL602/Designing-Managing-MCQs.pdf

Dörnyei, Z., and Skehan, P. (2003). In Naserieh, Farid. *"The Relationship between Perceptual Learning Style Preferences and Skill-Based Learning Strategies."* A Published Master Thesis. Shahid Beheshti University. 2009.

Dulul, Adel Abdulkhaliq Abdulkareem, and Smita S. Patil. *"The Influence of Teachers' Practices on English Grammar Teaching at First and Second Year Levels in Yemeni Colleges: An Investigation."* Diss. University of Pune, 2012.

Dunn, Rita Stafford, and Kenneth J. Dunn. *"Teaching Students through Their Individual Learning Styles: A Practical Approach."* Prentice Hall, 1978.

Dunn, Rita Stafford, and Shirley A. Griggs, eds. *"Practical Approaches to Using Learning Styles in Higher Education."* Greenwood Publishing Group, 2000.

Educational Development Center . *"Item Analysis."* Scantron Guides, 2016.

Ehrman, Madeline . *"Understanding Second Language Learning Difficulties."* Sage, 1996.

Ehrman, Madeline, and Rebecca Oxford. *"Adult Language Learning Styles and Strategies in an Intensive Training Setting."* The Modern Language Journal, vol. 74, no. 3, 1990, pp. 311-327.

Ehrman, Madeline, et al. *"A Brief Overview of Individual Differences in Second Language Learning."* System, vol. 31. no. 3, 2003, pp. 313-330.

El-Koumy, AbdelSalam. *"Metacognition and Reading Comprehension: Current Trends in Theory and Research."* Education Resources Information Center (ERIC), USA, 2004.

Ellis, Rod. *"Classroom Learning Styles and Their Effect on Second Language Acquisition: A Study of Two Learners."* System, vol.17. no. 2, 1989, pp. 249-262.

---. *"SLA Research and Language Teaching."* Oxford University Press, 198 Madison Avenue, New York, NY 10016-4314, 1997.

---. "*The Study of Second Language Acquisition.* " Oxford University, 1994.

Fan, Yen-Chi. *"The Effect of Comprehension Strategy Instruction on EFL Learners' Reading Comprehension."* Asian Social Science, vol. 6, no. 8, 2010, pp. 19.

Farahian, Majid. *"Poor EFL Learners' Metacognitive Reading Strategies: A Case Study."* International Journal of Applied Linguistics and English Literature, vol.5, no. 1, 2016, pp. 272-280.

Fareh, Shehdeh. *"Challenges of teaching English in the Arab world: Why Can't EFL Programs Deliver as Expected?"* Procedia-Social and Behavioral Sciences, vol. 2, no. 2, 2010, pp. 3600-3604.

Farooq, Muhammad Shahid, and Jean-Claude Regnier. *"Role of Learning Styles in the Quality of Learning at Different Levels."* Informatica Economica, vol. 15, no. 3, 2011.

Febrianti, Sari. *"Students' Reading Comprehension Based On Their Learning Styles (A Causal Comparative Study at the Eight Term Students of English Education Department of UIN Syarif Hidayatullah Jakarta)."* A Published Master Thesis. UIN Syarif Hidayatullah Jakarta, Indonesia, 2014.

Felder, R. M., and B. A. Soloman. *"Index of Learning Styles".*//www. ncsu. edu/felder-public/ILSpage. html." 2005.

Fischer, Barbara Bree, and Louis Fischer. *"Styles in Teaching and Learning."* Educational leadership, vol. 36, no. 4, 1979, pp. 245-254.

Floyd, Pamela, and Patricia L. Carrell. *"Effects on ESL Reading of Teaching Cultural Content Schemata."* Language Learning, vol. 37, no. 1, 1987, pp. 89-108.

Fry, Edward. *"Teaching Faster Reading: A Manual."* Cambridge University Press, 1963.

Garmabi, Hanieh, and Gholamreza Zareian. *"Investigating EFL Teachers' Attitudes towards the Effectiveness of Reading Metacognitive Strategies Regarding their Academic Degrees."* International Journal of Linguistics, vol. 8, no. 1, 2016, pp. 26-37.

Garner, Ruth. *"Metacognition and Reading Comprehension."* Ablex Publishing, Norwood, NJ. , 1985.

Ghani, Mamuna. *"Language Learning Strategies Employed by L2 Learners."* Journal of Research (Faculty of Languages & Islamic Studies), vol. 4, 2003, pp. 31-36.

Ghezlou, Maryam, et al. *"Gender Differences in Reading Strategy Use, Reading Self-Efficacy, and Perceptual Learning Styles among EFL Learners."* International Journal of Language Learning and Applied Linguistics World, vol. 5, no. 1, 2014, pp. 609-624.

Grabe, William, and Stoller, Fredricka. "*Teaching and Researching Reading."* England, Pearson Education Limited, 2002.

Habtoor, Hussein Ali Abdulla. "*The Reading Problems Faced by the Learners of English as a Second_Foreign Language: A Case Study of Students of the Department of English in the College of Education_Shabwa, Aden University, Yemen."* A Published Doctoral Thesis. Aligarh Muslim University Aligarh, India, 2004.

Hakim, Badia. *"The Role of Learning Styles in the Success of TBLT in EFL Classrooms in Saudi Arabia."* International Journal of Applied Linguistics and English Literature, vol. 4, no. 3, 2015, pp. 205-211.

Haladyna, Thomas M., and Steven M. Downing. *"A Taxonomy of Multiple-Choice Item-Writing Rules."* Applied measurement in education, vol. 2, no. 1, 1989, pp. 37-50.

Hall, Edward T. *"Foreword: Cultural Models in Transcultural Communication."* Nonverbal Behavior, 1979.

Haokip, Mary Kim. *"Culture in English Language Teaching: A Case Study of the English Syllabus at the Higher Secondary Level in Meghalaya."* A Master Published Thesis. Central Institute of English & Foreign Languages, North East Campus, Shillong, 2003.

Hesar, Mohammad, M. et al. *"Why And How To Apply Culture In An EFL Classroom."*, International Conference on Language, Medias and Culture Proceedings, vol. 33, 2012.

Hinkel, Eli, ed. *"Culture in second language teaching and learning."* Cambridge University Press, 1999.

Ho, Si Thang. *"Addressing Culture in EFL Classrooms: The Challenge of Shifting From a Traditional to an Intercultural Stance."* Electronic Journal of Foreign Language Teaching, Centre for Language Studies National University of Singapore, vol. 6, no. 1, 2009, pp. 63–76.

Holliday, Adrian. *"Large and Small-class Cultures in Egyptian University Classrooms: A Cultural Justification for Curriculum Change",* (1991-1994). In Coleman, Hywel. *"Society and the Language Classroom."*,Cambridge University Press, 2003.

Hosenfeld, C. "*A Preliminary Investigation of the Reading Strategies of Successful and Nonsuccessful Second Language Readers."* 1977. In Hudson, Thom. Ed. *"Teaching Second Language Reading ",* Oxford UP. 2007.

Hotiu, Angelica. *"The Relationship between Item Difficulty and Discrimination Indices in Multiple-Choice Tests in A Physical Science Course."*, Diss. Florida Atlantic University, 2006.

Hsieh, Pei-Hsuan, and Francis Dwyer. *"The Instructional Effect of Online Reading Strategies and Learning Styles on Student Academic Achievement."* Journal of Educational Technology & Society, vol.12, no. 2, 2009.

Hudson, Thom. *"Teaching Second Language Reading."* Oxford. Oxford University Press, 2007.

Hung, Bui Phu. *"Improving EFL Classroom Interaction by Understanding Students' Learning Styles."* International Journal of Language and Linguistics, vol. 6, 2014, pp. 379-368.

İlter, Binnur Genç, and Cem Oktay Güzeller. *"Cultural Problems of Turkish Students While Learning English as a Foreign Language."* Modern Language Journal, vol. 89, no. 2, 2005, pp. 456-461.

Ismail, Nasrah Mahmoud. "*Effectiveness of A Metacognitive Reading Strategies Program For Improving Low Achieving EFL Readers."* International education studies, vol. 8, no. 1, 2014.

Jabeen, Farhat, and Sayid Kazim Shah. *"The Role of Culture in ELT: Learners' Attitude towards the Teaching of Target Language Culture."* European Journal of Social Sciences, vol. 23, no. 4, 2011.

Jhaish, Mohammed Ashour. *"The Relationship among Learning Styles, Language Learning Strategies, and the Academic Achievement among the English Majors at Al-Aqsa University." Unpublished Master's Thesis),*The Islamic University ,2010.

Karelia, Bharti N., et al. *"The Levels of Difficulty and Discrimination Indices and Relationship between them in Four-Response Type Multiple Choice Questions of Pharmacology Summative Tests Of Year II MBBS Students."* IeJSME,vol. 6, 2013, pp. 41-46.

Karthigeyan, K., and K. Nirmala. *"Learning Style Preference of English Language Learners."*, Educationia Confab, vol. 2, no. 1, 2013, pp. 134-140.

Kasper, Gabriele, and Shoshana Blum-Kulka.*"Interlanguage Pragmatics: An Introduction."* Interlanguage pragmatics, vol. 3, 1993, pp. 15.

Keefe, James W. *"Learning Style: An Overview."* Student Learning Styles: Diagnosing and Prescribing Programs, vol. 1, 1979, pp. 1-17.

Khademi, Marzieh, et al. *"The Relationship between Iranian EFL Instructors' Understanding of Learning Styles and Their Students' Success In Reading Comprehension."*, English Language Teaching, vol. 6, no. 4, 2013, pp. 134.

Khan, I. A. *"Teaching and Learning of English: An Exploratory Study of Difficulties and Strategies."* British Journal of Social Sciences, vol. 1, no. 1, 2012, pp.76-93.

Kinsella, Kate. *"Understanding and Empowering Diverse Learners in ESL Classrooms."*, Learning styles in the ESL/EFL classroom, 1995, pp. 170-194.

Kirkpatrick, Robert. *"Looking at Learning Styles Research Paper: A Critical Evaluation."* Asian EFL Journal, vol. 52, 2011, pp. 59-73.

Kolb Alice Y., and David A. Kolb. *"The Kolb Learning Style Inventory—Version 3.1 2005 Technical Specifications "* HayGroup. Experience Based Learning Systems, Inc. 2005

Krashen, Stephen. *"The Input Hypothesis."* The Input Hypothesis Issues & Implications 1985 ss. 1-32: Longman Group UK Ltd. 1985.

Lado, Robert. *"Linguistics across Cultures: Applied Linguistics for Language Teachers."* (1957).

Lai, Ya-LiYu, et al. *"Theory of Reading Strategies and its Application by EFL Learners: Reflections On Two Case Studies."* Journal of Longhua University of Science and Technology, *www. lhu. edu. tw/m/oaa/synthetic/publish/publish/26/11* (2008).

Lee, Kang-Young. *"Treating Culture: What 11 High School EFL Conversation Textbooks in South Korea Do."* English Teaching, vol. 8, no. 1, 2009, pp.76.

Levy, Mike, and Glenn Stockwell. *"CALL Dimensions: Options and Issues in Computer-Assisted Language Learning."* Routledge, 2013.

Liando, Nihta VF. *"Students' vs. Teachers' Perspectives on Best Teacher Characteristics in EFL Classrooms"* TEFLIN Journal: A Publication on the Teaching and Learning of English, vol. 21, no. 2 ,2010, pp. 118-136.

Lien, Hsin-Yi. *"EFL Learners' Reading Strategy Use in Relation to Reading Anxiety."* Language Education in Asia, vol 2, no. 2, 2011, pp. 199-212.

Ling, Sun. *"Investigating Chinese English Majors' Use of Reading Strategies: a Study on the Relationship between Reading Strategies and Reading Achievements".* School of Teacher Education Kristianstad University, 2011

Liu, Jun. *"Asian Students' Classroom Communication Patterns in US Universities: An Emic Perspective."* Greenwood Publishing Group, 2001.

Lopera Medina, Sergio. *"Effects of Strategy Instruction in an EFL Reading Comprehension Course: A Case Study."* Profile Issues in Teachers Professional Development, vol. 14, no. 1, 2012, pp. 79-89.

Macaro, Ernesto. *"Learning Strategies in Second and Foreign Language Classrooms."* London: Continuum 282, 2001.

Macionis, John, and Linda Gerber. *"Chapter 3-Culture."* Sociology. 7th ed. Toronto, ON: Pearson Canada Inc 54, 2010, Manual.pdf.

McMillan, C. *"Do Teachers Teach as They are Taught to Teach.",* 2010.

Melton, Cynthia D. "*Bridging the Cultural Gap: A Study of Chinese Students' Learning Style Preferences."* RELC Journal, vol. 21, no. 1, 1990, pp. 29-54.

Meniado, Joel C. *"Metacognitive Reading Strategies, Motivation, and Reading Comprehension Performance of Saudi EFL Students."* English Language Teaching, vol. 9, no. 3, 2016, pp. 117.

Messick, Samuel. *"The Matter of Style: Manifestations of Personality in Cognition, Learning, and Teaching."* Educational Psychologist, vol, 29, no. 3, 1994, pp. 121-136.

Mijuškovic, Marija. *"The 21st Century FL Reading Classroom: Learning how to Read."* International Journal of Education and Research, vol.2, no.5, 5, 2014.

Mohammed, Ahmed. *"Culture as a Barrier to Second Language Acquisition and Translation Skills."*, 2015.

Mohammed, Lubna Ali, and H. M. Sidek. *"EST Reading Curriculum and Instruction: An Alignment Analysis."* Advances in Language and Literary Studies, vol. 6, no. 1, 2015, pp. 120-128.

Mokhtari, Kouider, and Ravi Sheorey. *"Measuring ESL Students' Awareness of Reading Strategies."* Journal of developmental education, vol, 25, no. 3, 2002, pp. 2.

Montgomery, Susan M. *"Addressing Diverse Learning Styles Through The Use of Multimedia."* Frontiers in Education Conference, Proceedings. IEEE, vol.1. 1995.

Moule, Jean. *"Cultural Competence: A Primer for Educators."* Cengage Learning, 2011.

Msaddek, Mohammed. *"The Effect of Metacognitive Strategy Instruction on Moroccan EFL Learners' Strategy Use and Reading Achievement."* Browser, 2016.

Mubarak al-Tamimi, and Nasser Omer. *"The Effect of Direct Reading Strategy Instruction on Student's Reading Comprehension, Metacognitive Strategy Awareness, and Reading Attitudes among Eleventh Grade Students in Yemen"*, [LB1050. 365. T158 2007 f rb]. Diss. Universiti Sains Malaysia, 2006.

Mukherjee, Poulomi, and Saibendu Kumar Lahiri. *"Analysis of Multiple Choice Questions (MCQS): Item And Test Statistics From An Assessment In A Medical College Of Kolkata, West Bengal."* IOSR J Dent Med Sci 1, 2015, pp. 47-52.

Mulugeta, Girma. *"Use of Students' Native Culture as a Resource in the EFL Classroom: The Case of Second Year English Majors in the Department of English Language Education."* Unpublished thesis presented to Addis Ababa University. 2008.

Nabil, Abdullah, and N. V. Patil. *"English Language Teaching In Yemen: Importance and Challenges."* International Journal of Social Science Tomorrow, vol. 1, no. 5, 2012, pp. 1-8.

Naiman, Neil, et al. *"The Good Language Learner (Toronto: Ontario Institute for Studies in Education)."* Ontario Institute for Studies in Education, Toronto 14, 1978.

Naserieh, Farid. *"The Relationship between Perceptual Learning Style Preferences and Skill-Based Learning Strategies.", Unpublished Master's thesis,* Shahid Beheshti University, Tehran, Iran, 2009.

Negari, Giti Mousapour, and Ezzat Barghi. *"The Relationship between Iranian EFL Learners' learning Style Preferences and Their Reading Comprehension Ability."* Modern Journal of Language Teaching Methods, vol. 4, no.1, 2014, pp. 67.

Nelson, Gayle L. *"Culture's Role in Reading Comprehension: A Schema Theoretical Approach."* Journal of Reading, vol. 30, no. 5, 1987, pp. 424-429.

Nieto, Claudia. *"Cultural Competence and its Influence on the Teaching and Learning of International Students."* A Published MA Thesis of Bowling Green State University, 2008.

Nieto, Sonia. "*Language, Culture and Teaching"* Routledge, New York & London, 2010

Nunan, David, and Julie Choi, eds. "Language and culture: Reflective Narratives and the Emergence of Identity." Routledge, 2010.

O'Malley, J. Michael, and Anna Uhl Chamot. *"Learning Strategies in Second Language Acquisition."* Cambridge University Press, 1990.

Oxford, Rebecca L., and Madeline E. Ehrman. *"Adults' Language Learning Strategies in an Intensive Foreign Language Program in the United States."* System, vol. 23, no. 3, 1995, pp. 359-386.

Oxford, Rebecca L., and Neil J. Anderson. *"A Crosscultural View of Learning Styles."* Language Teaching, vol. 28, no. 4, 1995, pp: 201-215.

Oxford, Rebecca L., ed. *"Language Learning Styles and Strategies."* Mouton de Gruyter, 2003.

Oxford, Rebecca, and David Crookall. *"Research on Language Learning Strategies: Methods, Findings, and Instructional Issues."* The Modern Language Journal, vol. 73, No.4, 1989, pp. 404-419.

Oxford, Rebecca. *"Integrated Skills in the ESL/EFL Classroom."* ERIC Digest.", 2001.

---. *"Language Learning Strategies: What Every Teacher Should Know."* Newbury House Publishers, New York ,1990.

Pai, Young, Susan Adler, & Linda Shadiow, L. *"Cultural Foundations of Education."* Prentice Hall. Upper Saddle River, N.J, 2006.

Pardo, Laura S. *"What Every Teacher Needs to Know about Comprehension."* The Reading Teacher, vol. 58, no. 3, 2004, pp. 272-280.

Parera, Mireia Trenchs. *"Reading Strategies and Strategy Awareness in Three EFL Educated Readers of English Literary Texts."* Atlantis, 2006, pp. 69-87.

Peacock, Matthew. *"Match or mismatch? Learning Styles and Teaching Styles in EFL."* International Journal of Applied Linguistics, vol. 11, no. 1 , 2001, pp.1-20.

Pei-Shi, Weng. *"The Effect of Learning Styles on Learning Strategy Use by EFL Learners."* Journal of Social Sciences, vol. 8, no. 2, 2012, pp. 230.

Peterson, Brooks. *"Cultural Intelligence: A Guide to Working with People from Other Cultures."* Nicholas Brealey Publishing, 2011.

Phakiti, Aek. *"A Closer Look at the Relationship Of Cognitive and Metacognitive Strategy Use to EFL Reading Achievement Test Performance."* Language Testing, vol. 20, no. 1, 2003, pp. 26-56.

Philips, Susan U. *"Participant Structures and Communicative Competence: Warm Springs Children in Community and Classroom".* na, 2001.

Pratiwi, Santy Widya, and Zainal Arifin dan Dewi Novita. *"The Correlation between Learning Styles And Students' Reading Comprehension."* Nitro Professional, 2012.

Purpura, James Enos. *"An Analysis of the Relationships between Test Takers' Cognitive and Metacognitive Strategy Use and Second Language Test Performance."* Language Learning, vol. 47, no. 2, 1997, pp. 289-325.

Radwan, Adel Abu. "*Gender and Learning Style Preferences of EFL Learner."* Arab World English Journal, vol. 5, no. 1, 2014.

Rafique, Rumana. *"Exploring Language Learning Style Preferences of the ELT Graduate Students."* Asian Journal of Humanity, Art and Literature, vol. 3, no. 1, 2016, pp. 27-40.

Rajabi, Soraya, and Saeed Ketabi. *"Aspects of Cultural Elements in Prominent English Textbooks for EFL Setting."* Theory and Practice in Language Studies, vol. 2, no. 4, 2012, pp. 705.

Razawi, Nurul Amilin, et al. *"Students' diverse learning styles in learning English as a second language."* International Journal of Business and Social Science, vol. 2, no. 19, 2011.

Reid, Joy M. *"The Learning Style Preferences of ESL Students."* TESOL quarterly, vol. 21, no.1, 1987. pp. 87-111.

---. *"Learning Styles in the ESL/EFL Classroom."* Foreign Teaching and Research Press, 2002.

---, ed. *"Understanding Learning Styles in the Second Language Classroom."* Prentice Hall Regents, 1998.

Robinson, Gail L. *"Crosscultural Understanding."* Prentice Hall, 1988.

Rossi-Le, Laura. *"Perceptual Learning Style Preferences and Their Relationship to Language Learning Strategies in Adult Students of English as a Second Language."* Diss. Drake University, 1989.

Rubin, Joan. *"What The Good Language Learner Can Teach Us."* TESOL quarterly , 1975, pp. 41-51.

Sadeghi, Nabiollah, et al. *"Learning Styles, Personality Types and Reading Comprehension Performance."* English Language Teaching, vol. 5, no. 4 , 2012, pp. 116-123.

Saeed, Nadhim. *"The Use of English in Yemen."*, //www.academia.edu/2641331/The_Use_of_English_in_Yemen on August, 14, 2016.

Samuels, S. Jay, and Michael L. Kamil. *"Models of the Reading Process."* Interactive approaches to second language reading ,1988, pp. 22-36.

Sapir, Edward. *"The Status of Linguistics as a Science. Culture, Language and Personality. "* DG Mandelbaum. Berkeley." 1958.

Saudi Commission for Health Specialties, (2015). *"Item Writing Manual for Multiple-Choice Questions."* [Internet] [cited 2015 June 12], http://www.scfhs.org.sa/education/HighEduExams/Guidlines/mcq/Documents/MCQ%20

Scarcella, Robin C., and Rebecca L. Oxford. *"The Tapestry of Language Learning: The Individual In The Communicative Classroom."* Boston: Heinle & Heinle, 1992.

Scarino, Angela, and Anthony Liddicoat. *"Teaching and learning languages: A guide."* Melbourne: Curriculum Corporation, 2009.

Shamim, Fauzia. *"Learner Resistance to Innovation in Classroom Methodology"* Society and the language classroom, 1996, pp. 105-121.

Skinner, Burrhus Frederic. *"The Behavior of Organisms: An Experimental Analysis."* BF Skinner Foundation,1990.

Soureshjani, Kamal Heidari. *"Culture Knowledge and Its Availability in Language Teaching and Learning in English as a Foreign Language (EFL) Contexts."* Journal of Languages and Culture, vol, 4, no. 4, 2013, pp. 58-64.

Spackman, Christopher L. *"Culture and Second Language Acquisition."* The Times, 2009, pp. 87-102.

Speilberger, C. D. (Ed.). *"Encyclopedia of Applied Psychology",* 1. Academic Press, 2004.

Stark, Aaron. *"Noam Chomsky on Language."* Agenda, 1998.

Talley, Paul C. *"Crossing perceived cultural barriers in a Taiwanese college EFL classroom."* International Journal of Business and Social Science, vol. 5, no. 6, 2014.

Tanveer, Muhammad. *"Investigation of The Factors that Cause Language Anxiety for ESL/EFL Learners in Learning Speaking Skills and the Influence it Casts on Communication in The Target Language."* University of Glasgow, Scotland , 2007.

The Official Guide to TOEFL Test: 4th Ed. "*McGraw Hill Education"*, (India) Private Limited, 2012.

Tomalin, Barry, and Susan Stempleski. "*Cultural Awareness-Resource Books for Teachers."* Oxford University Press, 2013.

Troike, Muriel Saville. *"Introducing Second Language Acquisition."* Cambridge University Press, 2006.

Tuan, Luu Trong. *"Matching and Stretching Learners' Learning Styles."* Journal of Language Teaching & Research, vol. 2, no. 2, 2011.

Ulaywi, Raghad, and Khairi, Fatin. *"The Effect of Using Culture Awareness Strategies on Iraqi EFL College Students' Reading & Writing Performance."* AL-USTATH ,Vol:2, no. 502, 2013.

University of Washington. *"Understanding Item Analysis Reports."* [Internet] [cited 2015 [cited 4 July 2015,www.washington.edu/oea/services/scanning_scoring/scoring/item_analysis.html

Vygotsky, Lev. *"Interaction between Learning and Development."* Readings on the development of children, vol. 23, no. 3, 1978, pp. 34-41.

Watson, Goodwin, and Edwin Glaser. "*Watson-Glaser Critical Thinking Appraisal,"* UK Edition: Practice Test. Psychological Corporation, 2002.

Weinstein, Claire E., and Richard E. Mayer. *"The Teaching of Learning Strategies."* Innovation abstracts, vol. 5, no. 32. 1983.

Wen, Huachuan. *"Chomsky's Language Development Theories: Rescuing Parents out of Dilemma."* International Journal of Learning and Development, vol. 3, no. 3, 2013, pp. 148-153.

Whorf, Benjamin. *"Benjamin Lee Whorf."* (1897-1941). www.en.wikipedia.org/wiki/Benjamin_Lee_Whorf on April, 10, 2017.

---. *"Language & Behavior."* Etc A Review of General Semantics, vol.1, no. 4, 1944, www.en.wikipedia.org/wiki/Benjamin_Lee_Whorfon April, 10, 2017.

Wikipedia,.*"Reading Comprehension*.", 2015. https://en.wikipedia.org/wiki/Reading_comprehension on March, 29, 2017

William, 1988. In Jhaish, Mohammed Ashour. *"The Relationship among Learning Styles, Language Learning Strategies, and the Academic Achievement among the English Majors At Al-Aqsa University."* Unpublished master's thesis. The Islamic University, 2010.

Williams, Judy. "*Reading Comprehension, Learning Styles, and Seventh Grade Students.*" Liberty University, 2010.

Willing, Ken. "*Learning Styles In Adult Immigrant Education.*", Research Series (Ed. David Nunan),Australia: National Curriculum Research Center: Adult Migrant Education Programme, 1988.

Willing, Ken, and David Nunan. *"Learning styles in adult migrant education."*, National Centre for English Language Teaching and Research, Macquarie University, 1993.

Yukselir, Ceyhun. *"An Investigation into the Reading Strategy Use of EFL Prep-Class Students."* Procedia-Social and Behavioral Sciences 158 , 2014, pp. 65-72.

Zare-ee, Abbas. *"The Relationship between Cognitive and Meta-Cognitive Strategy Use and EFL Reading Achievement."* Journal of Applied Psychology, vol. 2, no. 5, 2007, pp. 105-119.

Zebisch, Guido. M.A. *"Reading More than the One Book - Resources of Information in Yemen. A Comparative Study."* Sana'a, Yemen, 2010, http://www.goethe.de/ins/za/pro/lag/kenya-zebisch.pdf on 19, 2, 2017.

Zhang, Limei. *"A Structural Equation Modeling Approach to Investigating Test Takers' Strategy Use and Reading Test Performance."* The Asian EFL Journal Quarterly March, vol. 16, 2014, pp. 153.

Name: …… **Age: ……**

Gender: …… **District: .....**

Dear student,

I am a researcher in English Department, Kuvempu University, India. I'm doing my PhD research on "The relationship between learning styles, strategies' use, culture and reading comprehension: A study of Yemeni EFL learners". The following three questionnaires are part of the study instruments to elicit some information about your English language learning. I shall be grateful if you read the instructions and go through each questionnaire following by a test.

Your answers will be kept confidential.

Your cooperation is highly appreciated.

Researcher

Iftikhar Yusuf Al-Ariqi

APPENDIX I

PERCEPTUAL LEARNING STYLE PREFERENCE QUESTIONNAIRE

(By Joy Reid, 1987)

Directions:

People learn in many different ways. For example, some people learn primarily with their eyes (visual learners) or with their ears (auditory learners); some people prefer to learn by experience and /or by "hands-on" tasks (kinesthetic or tactile learners); some people learn better when they work alone while others prefer to learn in groups.

This questionnaire has been designed to help you identify the way(s) you learn best – the way(s) you prefer to learn.

Decide whether you agree or disagree with each statement. And then indicate whether you:

Strongly Agree (SA)
Agree (A)
Undecided (U)
Disagree (D)
Strongly Disagree (SD)

Please respond to each statement quickly, without too much thought. Try not to change your responses after you choose them. Please answer all the questions.

Statements	SA	A	U	D	SD
1. When the teacher tells me the instructions I understand better.					
2. I prefer to learn by doing something in class.					
3. I get more work done when I work with others.					
4. I learn more when I study with a group.					
5. In class, I learn best when I work with others.					
6. I learn better by reading what the teacher writes on the chalkboard.					
7. When someone tells me how to do something in class, I learn it better.					

8. When I do things in class, I learn better.					
9. I remember things I have heard in class better than things I have read.					
10. When I read instructions, I remember them better.					
11. I learn more when I can make a model of something.					
12. I understand better when I read instructions.					
13. When I study alone, I remember things better.					
14. I learn more when I make something for a class project.					
15. I enjoy learning in class by doing experiments.					
16. I learn better when I make drawings as I study.					
17. I learn better in class when the teacher gives a lecture.					
18. When I work alone, I learn better.					
19. I understand things better in class when I participate in role-playing.					
20. I learn better in class when I listen to someone.					
21. I enjoy working on an assignment with two or three classmates.					
22. When I build something, I remember what I have learned better.					
23. I prefer to study with others.					
24. I learn better by reading than by listening to someone.					
25. I enjoy making something for a class project.					

26. I learn best in class when I can participate in related activities.					
27. In class, I work better when I work alone.					
28. I prefer working on projects by myself.					
29. I learn more by reading textbooks than by listening to lectures.					
30. I prefer to work by myself.					

SELF-SCORING SHEET

Instructions

There are 5 questions for each learning category in this questionnaire. The questions are grouped below according to each learning style. Each question you answer has a numerical value:

SA	A	U	D	SD
5	4	3	2	1

Fill in the blanks below with the numerical value of each answer. For example, if you answered Strongly Agree (SA) for question 6 (a visual question), write a number 5 (SA) on the blank next to question 6 below.

Visual
6 - __ 5__

When you have completed all the numerical values for Visual, add the numbers. Multiply the answer by 2, and put the total in the appropriate blank.

Follow this process for each of the learning style categories. When you are finished, look at the scale at the bottom of the page; it will help you determine your major learning style preference(s), your minor learning style preference(s), and those learning style(s) that are negligible.

SELF-SCORING SHEET

VISUAL
6 - _____
10 - _____
12 - _____
24 - _____
29 - _____
Total_____ x 2 = _____(Score)

TACTILE
11 - _____
14 - _____
16 - _____
22 - _____
25 - _____
Total_____ x 2 = _____(Score)

AUDITORY
1 - _____
7 - _____
9 - _____
17 - _____
20 - _____
Total_____ x 2 = _____(Score)

GROUP
3 - _____
4 - _____
5 - _____
21 - _____
23 - _____
Total_____ x 2 = _____(Score)

KINESTHETIC
2 - _____
8 - _____
15 - _____
19 - _____
26 - _____
Total_____ x 2 = _____(Score)

INDIVIDUAL
13 - _____
18 - _____
27 - _____
28 - _____
30 - _____
Total_____ x 2 = _____(Score)

Major Learning Style Preference	38-50
Minor Learning Style Preference	25-37
Negligible	0-24

APPENDIX II

SURVEY OF READING STRATEGIES

Kouider Mokhtari and Ravi Sheorey, 2002

Mokhtari, K., & Sheorey, R. *Measuring ESL Students Reading Strategies. Journal of Developmental Education*, vol, 25 , no.3, 2002, pp. 2-10.

This is a survey on your reading strategies while reading. You will see that each statement is followed by five numbers, 1, 2, 3, 4, and 5, and each number means the following:

'1' means that 'I **never or almost never** do this'. '2' means that 'I do this **only occasionally**'.

'3' means that 'I **sometimes** do this'. (About **50%** of the time.) '4' means that 'I **usually** do this'.

'5' means that 'I **always or almost always** do this'.

After reading each statement, ***circle the number*** (1, 2, 3, 4, or 5) which applies to you**.** Note that there are **no right or wrong responses** to any of the items on this survey.

No	**Statements**	**Never**	**Occasionally**	**Sometimes**	**Usually**	**Always**
1.	I have a purpose in mind when I read.	1	2	3	4	5
2.	I take notes while reading to help me understand what I read.	1	2	3	4	5
3.	I think about what I know to help me understand what I read.	1	2	3	4	5
4.	I take an overall view of the text to see what it is about before reading it.	1	2	3	4	5
5.	When text becomes difficult, I read aloud to help me understand what I read.	1	2	3	4	5
6.	I think about whether the content of the text fits my reading purpose.	1	2	3	4	5
7.	I read slowly and carefully to make sure I understand what I am reading.	1	2	3	4	5

8.	I review the text first by noting its characteristics like length and organization.	1	2	3	4	5
9.	I try to get back on track when I lose concentration.	1	2	3	4	5
10.	I underline or circle information in the text to help me remember it.	1	2	3	4	5
11.	I adjust my reading speed according to what I am reading.	1	2	3	4	5
12.	When reading, I decide what to read closely and what to ignore.	1	2	3	4	5
13.	I use reference materials (e.g. a dictionary) to help me understand what I read.	1	2	3	4	5
14.	When text becomes difficult, I pay closer attention to what I am reading.	1	2	3	4	5
15.	I use tables, figures, and pictures in text to increase my understanding.	1	2	3	4	5
16.	I stop from time to time and think about what I am reading.	1	2	3	4	5
17.	I use context clues to help me better understand what I am reading.	1	2	3	4	5
18	I paraphrase (restate ideas in my own words) to better understand what I read.	1	2	3	4	5
19	I try to picture or visualize information to help remember what I read.	1	2	3	4	5
20.	I use typographical features like bold face and italics to identify key information.	1	2	3	4	5
21.	I critically analyze and evaluate the information presented in the text.	1	2	3	4	5
22.	I go back and forth in the text to find relationships among ideas in it.	1	2	3	4	5
23.	I check my understanding when I come across new information.	1	2	3	4	5
24.	I try to guess what the content of the text is about when I read.	1	2	3	4	5
25.	When text becomes difficult, I re-read it to increase my understanding.	1	2	3	4	5
26.	I ask myself questions I like to have answered in the text.	1	2	3	4	5
27.	I check to see if my guesses about the text are right or wrong.	1	2	3	4	5
28.	When I read, I guess the meaning of unknown words or phrases.	1	2	3	4	5
29.	When reading, I translate from English into my native language.	1	2	3	4	5
30.	When reading, I think about information in both English and my mother tongue.	1	2	3	4	5

SCORING GUIDELINES FOR THE *SURVEY OF READING STRATEGIES*

Student Name: _____ Date: _____

1. Write the number you circled for each statement (i.e., 1, 2, 3, 4, or 5) in the appropriate blanks below.
2. Add up the scores under each column and place the result on the line under each column.
3. Divide the subscale score by the number of statements in each column to get the average for each subscale.
4. Calculate the average for the whole inventory by adding up the subscale scores and dividing by 30.
5. Use the interpretation guidelines below to understand your averages.

Global Reading Strategies (GLOB Subscale)	Problem Solving Strategies (PROB Subscale)	Support Reading Strategies (SUP Subscale)	**Overall Reading Strategies (ORS)**
1. _____	7. _____	2. _____	**GLOB** _____
3. _____	9. _____	5. _____	**PROB** _____
4. _____	11. _____	10. _____	**SUP** _____
6. _____	14. _____	13. _____	
8. _____	16. _____	18. _____	
12. _____	19. _____	22. _____	
15. _____	25. _____	26. _____	
17. _____	28. _____	29. _____	
20. _____		30. _____	
21. _____			
23. _____			
24. _____			
27. _____			
_____ GLOB Score	_____ PROB Score	_____ SUP Score	____**Overall Score**
/ 13	**/ 8**	**/ 9**	**/ 30**

_____ GLOB Average _____ PROB Average _____ SUP Average ____ **Overall average**

KEY TO AVERAGES: 3.5 or higher = High 2.5 – 3.4 = Medium 2.4 or lower = Low

APPENDIX III

LEARNING CULTURE QUESTIONNAIRE

Developed by the Researcher

Dear student,

I shall be grateful if you go through this questionnaire regarding your cultural background. Decide which of the following statements do you strongly agree, agree, disagree, strongly disagree with? If you are unsure, mark it neutral? Please read them and **tick (√) the appropriate box that best explains your views.** Note that there is no right or wrong responses to any of the items on this survey.

Your answers will be kept confidential.

No.	Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I think it is rude to tell the teacher if he/she makes an error even if the teacher lets me do so.					
2	I think there are many differences between values found in English texts and our values.					
3	I like to share my own regional customs with my classmates in English class.					
4	I can't express my ideas during reading class because I think it is not an acceptable behavior.					
5	I think English classes should focus only on English grammar and usage.					
6	I think that cultural activities help me prepare for my professional career.					
7	I think it is polite to be silent in class without asking questions even if the teacher allows me to do so.					

8	I think my native values should be presented in English learning texts					
9	Being familiar with the topic, ideas and assumptions will help me comprehend the English text.					
10	I don't like it if the teacher highlights my mistake in reading.					
11	The more cultural differences I find between my mother tongue and English, the worse I learn English.					
12	Family life, education, holiday, etc…in my country should be illustrated in the English books being taught to us.					
13	I consider it a pressure to be directly instructed by the teacher.					
14	Reading English stories helps me broaden my knowledge of the target culture.					
15	While practicing a presentation or one of English skills, I sometimes need to tell my classmates about an assigned item from my native culture and contextualize the knowledge I have.					
16	It is fine to use the first name of the teacher in class.					
17	I think if my thoughts are integrated in English class, it will enhance my motivation to learn more.					
18	I prefer English reading classes to cover the English life and their social problems.					
19	I usually whisper to a classmate for clarification in class because I can't ask the teacher.					
20	The stories or texts would be more interesting if all the English drinks changed to halal ones. e.g. wine-orange juice.					
21	I would enjoy the story more if the currencies were in Yemeni rials.					
22	I speak only when the teacher speaks to me first.					
23	I think it would be better if all the English idioms changed to Arabic ones.					

24	I would like some of English customs to be replaced by Yemeni or Arabic ones in the stories we read in reading classes.					
25	I think some Arabic should be used in some cases in reading classes.					
26	When a reading passage carries some cultural aspects of my society, my participation in class discussion increases.					
27	I would like the text or story more if the dates and months were in Arabic.					
28	I think learning about the target culture will affect my own culture negatively.					
29	I would like the story or text more if the names of the characters were in Arabic.					
30	I like to learn English with its attitudes and norms however strange or different they look.					

READING COMPREHENSION TEST

Name :…… **Group** …… **Score :…….** →

Read carefully the two passages below, and then answer the questions that follow. Copy all your answers into the table above.

EARLY CINEMA

The cinema did not emerge as a form of mass consumption until its technology evolved from the initial "peepshow" format to the point where images were projected on a screen in a darkened theater. In the peepshow format, a film was viewed through a small opening in a machine that was created for that purpose. Thomas Edison's peepshow device, the Kinetoscope, was introduced to the public in 1894. It was designed for use in Kinetoscope parlors, or arcades, which contained only a few individual machines and permitted only one customer to view a short, 50-foot film at any one time. The first Kinetoscope parlors contained five machines. For the price of 25 cents (or 5 cents per machine), customers moved from machine to machine to watch five different films (or, in the case of famous prizefights, successive rounds of a single fight).

These Kinetoscope arcades were modeled on phonograph parlors, which had proven successful for Edison several years earlier. In the phonograph parlors, customers listened to recordings through individual ear tubes, moving from one machine to the next to hear different recorded speeches or pieces of music. The Kinetoscope parlors functioned in a similar way. Edison was more interested in the sale of Kinetoscopes (for roughly $1,000 apiece) to these parlors than in the films that would be run in them (which cost approximately $10 to $15 each). He refused to develop projection technology, reasoning that if he made and sold projectors, then exhibitors would purchase only one machine - a projector - from him instead of several.

Exhibitors, however, wanted to maximize their profits, which they could do more **readily** by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission. About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumiere, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the **assistance** of Edison's former assistant, William Dickson) perfected projection devices. These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience.

With the advent of projection in 1895-1896, notion pictures became the ultimate form of mass consumption. Previously, large audiences had viewed spectacles at the theater, where vaudeville, popular dramas, musical and minstrel shows, classical plays, lectures, and slide-and-lantern shows had been presented to several hundred spectators at a time. But the movies differed significantly from these other forms of entertainment, which depended on either live performance or (in the case of the slide-and-lantern shows) the active involvement of a master of ceremonies who assembled the final program.

Although early exhibitors regularly accompanied movies with live acts, the substance of the movies themselves is mass-produced, prerecorded material that can easily be reproduced by theaters with little or no active participation by the exhibitor. Even though early exhibitors shaped their film programs by mixing films and other entertainments together in whichever way they thought would be most attractive to audiences or by accompanying them with lectures, their creative control remained limited. What audiences came to see was the technological marvel of the movies; the lifelike reproduction of the commonplace motion of trains, of waves striking the shore, and of people walking in the street; and the magic made possible by trick photography and the manipulation of the camera.

With the advent of projection, the viewer's relationship with the image was no longer private, as it had been with earlier peepshow devices such as the Kinetoscope and the Mutoscope, which was a similar machine that reproduced motion by means of successive images on individual photographic cards instead of on strips of celluloid. **It** suddenly became public-an experience that the viewer shared with dozens, scores, and even hundreds of others. At the same time, the image that the spectator looked at **expanded** from the minuscule peepshow dimensions of 1 or 2 inches (in height) to the life-size proportions of 6 or 9 feet.

1. According to paragraph 1, all of the following were true of viewing films in Kinetoscope parlors EXCEPT:
(A) One individual at a time viewed a film.
(B) Customers could view one film after another.
(C) Prize fights were the most popular subjects for films.
(D) Each film was short.

2. The author discusses phonograph parlors in paragraph 2 in order to …..
(A) explain Edison's financial success.
(B) describe the model used to design Kinetoscope parlors.
(C) contrast their popularity to that of Kinetoscope parlors.
(D) illustrate how much more technologically advanced Kinetoscope parlors were.

3. The word "readily" in paragraph 3 is closest in meaning to …..
(A) frequently
(B) easily
(C) intelligently
(D) obviously

4. The word "assistance" in paragraph 3 is closest in meaning to …..
(A) criticism
(B) leadership
(C) help
(D) approval

5. According to paragraph 4, how did the early movies differ from previous spectacles that were presented to large audiences?
(A) They were a more expensive form of entertainment.
(B) They were viewed by larger audiences.
(C) They were more educational.
(D) They did not require live entertainers.

6. According to paragraph 5, what role did early exhibitors play in the presentation of movies in theaters?
(A) They decided how to combine various components of the film program.
(B) They advised filmmakers on appropriate movie content.
(C) They often took part in the live-action performances.
(D) They produced and prerecorded the material that was shown in the theaters.

7. Which of the following is mentioned in paragraph 6 as one of the ways the Mutoscope differed from the Kinetoscope?
(A) Sound and motion were simultaneously produced in the Mutoscope.
(B) More than one person could view the images at the same time with the Mutoscope.
(C) The Mutoscope was a less sophisticated earlier prototype of the Kinetoscope.
(D) A different type of material was used to produce the images used in the Mutoscope.

8. The word "It" in paragraph 6 refers to …..
(A) the advent of projection
(B) the viewer's relationship with the image
(C) a similar machine
(D) celluloid

9. According to paragraph 6, the images seen by viewers in the earlier peepshows, compared with the images projected or the screen, were relatively …..
(A) small in size
(B) inexpensive to create
(C) unfocused
(D) limited in subject matter

10. The word "expanded" in paragraph 6 is closest in meaning to …..
(A) was enlarged
(B) was improved
(C) was varied
(D) was rejected

THE ORIGINS OF CETACEANS

It should be obvious that cetaceans - whales, porpoises, and dolphins are mammals. They breathe through lungs, not through gills, and give birth to live young. Their streamlined bodies, the absence of hind legs, and the presence of a fluke[1] and blowhole[2] cannot disguise their affinities with land-dwelling mammals. However, unlike the cases of sea otters and pinnipeds (seals, sea lions, and walruses, whose limbs are functional both on land and at sea), it is not easy to envision what the first whales looked like. Extinct but already fully marine cetaceans are known from the fossil record. How was the gap between a walking mammal and a swimming whale bridged? Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans.

Very exciting discoveries have finally allowed scientists to reconstruct the most likely origins of cetaceans. In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale. The fossil was officially named Pakicetus in honor of the country where the discovery was made. *Pakicetus* was found embedded in rocks formed from river deposits that were 52 million years old. The river that formed these deposits was actually not far from an ancient ocean known as the Tethys Sea.

The fossil consists of a complete skull of an archaeocyte, an extinct group of ancestors of modern cetaceans. Although limited to a skull, the *Pakicetus* fossil provides **precious** details on the origins of cetaceans. The skull is cetacean-like but its jawbones lack the enlarged space that is filled with fat or oil and used for receiving underwater sound in modern whales. *Pakicetus* probably detected sound through the ear opening as in land mammals. The skull also lacks a blowhole, another cetacean adaptation for diving. Other features; however, show experts that *Pakicetus* is a transitional form between a group of extinct flesh-eating mammals, the mesonychids, and cetaceans. It has been suggested that *Pakicetus* fed on fish in shallow water and was not yet adapted for life in the open ocean. **It** probably bred and gave birth on land.

Another major discovery was made in Egypt in 1989. Several skeletons of another early whale, *Basilosaurus*, were found in sediments left by the Tethys Sea and now **exposed** in the Sahara desert. This whale lived around 40 million years ago, 12 million years after *Pakicetus*. Many incomplete skeletons were found but they included, for the first time in an archaeocyte, a complete hind leg that features a foot with three tiny toes.

Such legs would have been far too small to have supported the 50-foot-long *Basilosaurus* on land. *Basilosaurus* was undoubtedly a fully marine whale with possibly nonfunctional, or vestigial, hind legs.

An even more exciting find was reported in 1994, also from Pakistan. The now extinct whale *Ambulocetus natans* ("the walking whale that swam") lived in the Tethys Sea 49 million years ago. It lived around 3 million years after *Pakicetus* but 9 million years before *Basilosaurus*. The fossil **luckily** includes a good portion of the hind legs. The legs were strong and ended in long feet very much like those of a modern pinniped. The legs were certainly functional both on land and at sea. The whale retained a tail and lacked a fluke, the major means of locomotion in modern cetaceans. The structure of the backbone shows, however, that *Ambulocetus* swam like modern whales by moving the rear portion of its body up and down, even though a fluke was missing. The large hind legs were used for **propulsion** in water. On land, where it probably bred and gave birth, *Ambulocetus* may have moved around very much like a modern sea lion. It was undoubtedly a whale that linked life on land with life at sea.

1. **Fluke:** The two parts that constitute the large triangular tail of a whale
2. **Blowhole:** A hole in the top of the head used for breathing

11. In paragraph 1, what does the author say about the presence of a blow hole in cetaceans?
(A) It clearly indicates that cetaceans are mammals.
(B) It cannot conceal the fact that cetaceans are mammals.
(C) It is the main difference between cetaceans and land-dwelling mammals.
(D) It cannot yield clues about the origins of cetaceans.

12. Which of the following can be inferred from paragraph 1 about early sea otters?
(A) It is not difficult to imagine what they looked like.
(B) There were great numbers of them.
(C) They lived in the sea only.
(D) They did not leave many fossil remains.

13. The word "precious" in paragraph 3 is closest in meaning to …..
(A) exact
(B) scarce
(C) valuable
(D) initial

14. The word "exposed" in paragraph 4 is closest in meaning to …..
(A) explained
(B) visible
(C) identified
(D) located

15. The hind leg of *Basilosaurus* was a significant finding because it showed that *Basilosaurus*

(A) lived later than *Ambulocetus natans.*
(B) lived later than *Ambulocetus natans*.
(C) lived at the same time as *Pakicetus*.
(D) was able to swim well.
(E) could not have walked on land

16. It can be inferred that *Basilosaurus* bred and gave birth in which of the following locations?

(A) On land
(B) Both on land and at sea
(C) In shallow water
(D) In a marine environment

17. Why does the author use the word "luckily" in mentioning that the *Ambulocetus natans* fossil included hind legs?

(A) Fossil legs of early whales are a rare find.
(B) The legs provided important information about the evolution of cetaceans.
(C) The discovery allowed scientists to reconstruct a complete skeleton of the whale.
(D) Until that time, only the front legs of early whales had been discovered.

18. The word "propulsion" in paragraph 5 is closest in meaning to ……

(A) staying afloat
(B) changing direction
(C) decreasing weight
(D) moving forward

MAY ALLAH GRANT YOU SUCCESS!