

**NEEDS ANALYSIS SURVEY OF ENGLISH LEARNING BY USING MOBA
(Multiplayer Online Battle Arena)**

A Thesis

**Presented to Department of English Language Education as Partial
Fulfillment of Requirements to Obtain the *Sarjana Pendidikan* Degree in
English Language Education**



By :

**Rizal Husnul Huda
13322008**

**DEPARTMENT OF ENGLISH LANGUAGE EDUCATION
FACULTY OF PSYCHOLOGY AND SOCIOCULTURAL SCIENCES
ISLAMIC UNIVERSITY OF INDONESIA YOGYAKARTA**

2017

APPROVAL SHEET

NEEDS ANALYSIS SURVEY OF ENGLISH LEARNING BY USING MOBA

By :

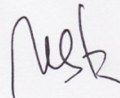
**Rizal Husnul Huda
13322008**



Approved on 10th August 2018

By:

Supervisor



**Ista Maharsi, S.S., M.hum
NIP. 056130501**

RATIFICATION SHEET

NEEDS ANALYSIS SURVEY OF ENGLISH LEARNING BY USING MOBA



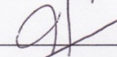
By:

Rizal Husnul Huda

13322008

Defended before the Board of Examiners on August 30th 2018 and declared acceptable

Board of Examiners

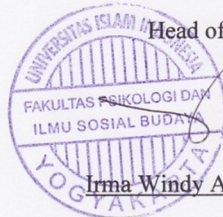
Chairperson	: Ista Maharsi, S.S., M.hum	
First Examiner	: Rizki Farani, S.Pd., M.Pd	
Second Examiner	: Intan Pradita, S.S., M.Hum	

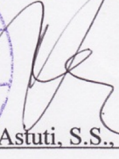
Yogyakarta, August 30th 2018

Department of English Language Education
Faculty of Psychology and Socio-Cultural Sciences

Islamic University of Indonesia

Head of Department




Irma Windy Astuti, S.S., M.Hum

NIP. 06221005

STATEMENT OF WORK'S ORIGINALITY

NEEDS ANALYSIS SURVEY OF ENGLISH LEARNING BY USING MOBA

I honestly declare that this thesis, which I have written, does not contain the work or parts of the work of other people, except those cited in the quotations and references, as a scientific paper should.

Yogyakarta, 10 August 2018



RIZAL HUSNUL HUDA

13322008



Hal-hal yang perlu diperbaiki.

HASIL UJIAN SKRIPSI

Ujian Pertama

Kepada :

Urusan Skripsi

Prodi : Pendidikan Bahasa Inggris

Tim Penguji :

1. Ista Maharsi, S.S., M.Hum
2. Intan Pradita, S.S., M.Hum
3. Rizki Farani, S.Pd., M.Pd

Nama : Rizal Husnul Huda

No. Idhs : 13322008

Hen/Idg : Kamis, 30 Agustus 2018

Waktu : Pkl 08.00 WIB

MENETAPKAN BAHWA SAUDARA DINYATAKAN :

- Lulus
- Lulus dengan revisi
- Tidak Lulus, revisi dan diujikembali

Perhatian!

Perbaikan Skripsi Saudara selambat-lambatnya harus sudah selesai pada tanggal dan diserahkan kembali ke biro/urusan/bagian skripsi setelah disetujui oleh Tim Penguji. **Apabila melampaui batas waktu tersebut di atas, Saudara diharuskan menempuh ujian ulang.**

Mengetahui,
 Urusan Skripsi,

No.	Halaman	Uraian/Revisi
1.	all	-misspelling, spacing, pages, etc.
2.		include JAMA Hockava in References
3.		Scaling (Goodman, Likert, Semantic)
4.	Title	Not only perception but "The Need Analysis Survey of Ery Learning" --- "
5.	Ch. 2.	Perception theory need an analysis theory.
6.	pg. 44	DONT use the word "influence"
7.	Formulation of Hypo	Put = (1) what are the needs of the students to use mobn in learning Ery.
8.		(2) what are the specific skills of learning Ery by using MOBA
9.		delete → Seal.
10.		explain all technical term → LAN, MMROPE
11.	pg. 12	add = category of OL game.
12.	pg. 15	integrate MOBA to language theory. Do to the others = cognition, etc.
13.	58	Reference for pages 17 - 21 why give recommendation of "open minded"

Tim Penguji

1. Ista Maharsi, S.S., M.Hum
2. Intan Pradita, S.S., M.Hum
3. Rizki Farani, S.Pd., M.Pd

Notulen :

- 1.

Tanda tangan dan tanggal:

1. 13/9/2018
2. 10-9-2018
3. 10-9-2018

Catatan ur notulen

Lembar 1 untuk mts yang diuji,

Lembar 2 dikumpulkan kembali ke biro skripsi

No. Telp. Uls : 02230136000

MOTTO

- “Never forget what you are, because the rest of the world will not. Wear it like armor, so it can never be used to hurt you” -Tyrion Lannister.
- “Chaos is a ladder” -Petyr Baelish.

DEDICATION

Gratefully and thankfully, I dedicate this thesis to:

1. The dean of Faculty of Psychology and Socio-Cultural Sciences Islamic University of Indonesia Dr. rer. nat. Arief Fahmie, S.Psi.,M.A., Psikolog.
2. The head of English Language Education Department Irma Windy Astuti S.S., M.Hum.
3. My thesis supervisor Ista Maharsi, S.S., M.Hum who always patiently support and guide me.
4. The whole lecturers at English Language Education Department and the staffs.
5. My wonderful parents, M. Nasri and Zulfa Ridwan who always take care of me and support me in everything. May Allah bless and keep my family safe and full of happiness.
6. My closest friends in PBI, Burhanudin, Intan, Maryam, Dinara, Diah and Mia who always support me.
7. My good and wonderful friend, Winandi Mardajaya who always help me with the progress of my thesis.
8. My wonderful comrades from Anggoro House, Bilal, Lutfi, Adit, Agung, Azmi, Darari, Wahyu, Rizal, Uki, Dede and Edo who always be good entertainments and amusement with their ridiculous behavior.
9. My newest and unusually attractive friend, Fayruziah who at the same time is my personal psychologist who helped me in the time of depression.
10. Some of my classmates from PBI 2013, Aryo, Yessy, Ma'rif, Edwin, Amri, Harley, Gaung and Agnes who sometimes hang out with me.
11. All those who have helped the researcher to complete the thesis which may not be mentioned one by one.

ACKNOWLEDGEMENT



Alhamdulillahirobbil‘alamin. All praises belong to Allah SWT, the Almighty who guides and gives the writer strength to finish this thesis as a partial fulfilment of requirements to obtain the Sarjana Pendidikan degree in English Language Education. Firstly, I want to give my sincere gratitude to my supervisor, Ista Maharsi, S.S., M.Hum., who always patiently gives me guidance and advise, who always and somehow managed to push me out of my lazy habits and made this thesis possible to be finished. Secondly, I want to thank another great lecturer, Puji Rahayu, S.Pd., MLST., who shares the same enthusiasm about gaming who helped me a lot with journals and any other online game learning related content. My appreciation also goes to all of my inspiring and wonderful lecturers at English Language Education Department, Nizamuddin Sadiq, S.Pd., M.Hum., who is like a father figure to us, Ista Maharsi, S.S., M.Hum., Astri Hapsari, S.S., M.TESOL., Rizki Farani, S.Pd., M.Pd., Adam Anshori, S.S., M.A., and last but not least, young-spirited Intan Pradita, S.S., M.Hum., and Raditya Adipramono, S.S., M.Pd.BI., who is like a big brother and sister figure to us that broaden our mind and interest in language learning with their meaningful lectures.

Endless thanks to my parents, Bpk. Nasri and Ibu Zulfa who always support and pray for me in every occasion. Thanks to PBI 2013, it's been incredible years to spend my university life with you all, and also thanks to my

closest friends, Maryam, Diah, Burhan, Intan, and Dinara whose home is always be our basecamp.

Last but not least, the author believes that this thesis is still far from perfect. Consequently, improvements are needed. Therefore, suggestions, recommendations are compulsory for further improvements. Finally, the author expects this thesis can be beneficial for the readers.

Yogyakarta, 26 Mei 2018

Rizal Husnul Huda

13322008

TABLE OF CONTENTS

TITLE AND FRONT PAGE	i
APPROVAL SHEET	Error! Bookmark not defined.
RATIFICATION SHEET	Error! Bookmark not defined.
STATEMENT OF WORK’S ORIGINALITY	iii
MOTTO	iv
DEDICATION	vii
ACKNOWLEDGEMENT	viii
TABLE OF CONTENTS	x
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF APPENDICES	xiv
ABSTRACT	xv
CHAPTER I	1
INTRODUCTION	1
1.1. Background	1
1.2. Problem Identification	8
1.3. Limitation of the Problem	9
1.4. Formulation of the Problem	10
1.5. Purpose of the Study	10
1.6. Significance of the Study	10
CHAPTER 2	12
LITERATURE REVIEW	12
2.1. Language Learning	12
2.1.1. Behaviorism	12
2.1.2. Cognitivism	12
2.1.3. Sociocultural	13
2.1.4. The Interaction Hypothesis	14

2.1.5. Connectivity Theory	14
2.2. Online Game	16
2.2.1. MOBA	23
2.3. MOBAs' Connection to SLA	29
2.4. Needs Analysis Theory	32
2.5. Review on Relevant Studies.....	33
CHAPTER III.....	36
RESEARCH DESIGN	36
3.1. Research Design.....	36
3.2. Population and Sample	37
3.2.1 Population	37
3.2.2. Sample.....	38
3.3. Data Collection Techniques	38
3.3.1 Instrument.....	39
3.3.2. Validity and Reliability of the Instrument.....	43
CHAPTER IV.....	46
RESEARCH FINDING AND DISCUSSION	46
4.1. RESEARCH FINDINGS	47
4.1.1. Questionnaires Result.....	47
4.2. Discussion	55
4.2.1. MOBAs' Correlation to Gender Difference	55
CHAPTER V	62
CONCLUSION AND RECOMMENDATION.....	62
5.1. Conclusion.....	62
5.2. Recommendation.....	64
REFERENCES	66

LIST OF TABLES

Table 4.1 Respondents' personal information.....	47
Table 4.2 Games and intensity	47
Table 4.3 Students' English learning by using MOBA.....	49
Table 4.4 Specific skill learning in MOBA.....	50
Table 4.5 Learners' motivation.....	50
Table 4.6 Students' motivation to learn English by using MOBA	51
Table 4.7 Communication intensity.....	52
Table 4.8 Communication formality	53
Table 4.9 Reading intensity	54
Table 4.10 Literatures inside MOBA	54
Table 4.11 Students' perception toward specific skill learning in MOBA.....	59

LIST OF FIGURES

Figure 4.1 Chart of communication figures	53
--	-----------

LIST OF APPENDICES

Appendix 1 Adopted Questionnaire	71
Appendix 2 Original Questionnaire of Jana Hrckova	77

NEEDS ANALYSIS SURVEY OF ENGLISH LEARNING BY USING MOBA

Rizal Husnul Huda

13322008

ABSTRACT

The purpose of this survey research is to analyze the needs of FPSB (Fakultas Psikologi Sosial dan Budaya) students of Islamic University of Indonesia in batch 2015-2017 in English learning by using MOBA games. This survey adapted Jana Hřčková's questionnaire from her research; The Influence of Computer Games on English Language Proficiency. The questionnaire originally consists of 34 items which are divided into 5 categories before the writer of this survey adapted it into 5 categories which is consists of 23 items. The result of this research shows that there are 33 female students, and 134 male students. The period of exposure to English is divided into 3 parts which are 1 to 5 years, 6 to 10 years, and more than 10 years with 19 students exposed for 1 to 5 years, 74 students exposed for 6 to 10 years and 74 students exposed more than 10 years. There are 29 students have perceived MOBA as very influential, 109 students have perceived MOBA as quite influential and 29 students have perceived MOBA as almost not influential to their English comprehension. In term of specific English skills, such as how helpful MOBA to their *Vocabulary*, there are 28 students are strongly agree, 87 students are agree, 38 students are neutral, 11 students are disagree and 3 students are strongly disagree. Secondly in term of *Grammar*, 6 students are strongly agree, 41 students are agree, 63 students are neutral, 47 students are disagree and 10 students are strongly disagree. Thirdly, in term of *Speaking*, 19 students are strongly agree, 40 students are agree, 59 students are neutral, 41 students are disagree and 8 students are strongly disagree. Fourthly, in term of *Reading*, 26 students are strongly agree, 95 students are agree, 36 students are neutral, 7 students are disagree and 3 students are strongly disagree. Lastly, in term of *Listening*, 23 students are strongly agree, 43 students are agree, 59 students are neutral, 35 students are disagree and 7 students are strongly disagree.

Keywords: language learning, needs analysis, survey, language learning strategies, survey research, FPSB student, digital learning, online game, moba.

CHAPTER I

INTRODUCTION

This chapter presents an introduction of the study. It consists of the background of the study, identification of the problem, and the aims of the study. Lastly presents about the significance of the study.

1.1. Background

Language is something crucial and can not be separated from human daily life since the beginning of the civilization. This is because language is a medium used by humans to communicate with each other. This is similar to Suwarna (2002: 4) said that the language is the main tool to communicate in human life, both individually and collectively social aims to convey something to others. Therefore, it is no exaggeration to say that without language, there would be no civilization in this world, while the most widely used language today is English. English is a language that has been recognized and used as the world language to enable the occurrence of communication between countries both individually and in groups as one of the markers that humans have entered the age of global civilization.

The era of global civilization is also marked by rapid progress in various aspects of human life that affect each other. For instance, on the field of technology which then led to the invention of the internet that greatly changed the way of people's communication, which is allows people from different parts of the world to communicate in an instant. Furthermore affects other aspects, namely

in term of education, with the development of communication technology, the traditional learning process where the process is only take place inside the classroom and schoolenvironment began to changeinto the learning process that basically take place from anywhere without being limited by the classroom or school environment, this is in line with the slogan carried by the English language education department of Islamic university Indonesia which reads "learn beyond classroom wall".

This phenomenon is quite influential on the current generation, especially the generation z, which according to Grail Research (2010) and Tari (2011) is a generation born in 1995 and above, but there are also some researchers who mentioned the generation z is a generation born after 1982 (Howe Strauss 1991), because this generation is so used to Internet technology, many of these generations can not spend time without social media or internet access, this generation is also often referred to as generation C (C stands for connection) or digital generation (Heckenberg-McDuff -Smith-White, 1991), reinforced with the emergence of online games that are the result of the combination of games and internet connection.

Online game is a term for computer games that utilizes network or internet as we call it today, can also be a LAN (Local Area Network) and has become one of the entertainment media which is very popular at this time, especially among generation Z, male or female alike. The rocketing popularity of online games among adolescent have been proved through the survey conducted by Hongkong governmental survey department back in 2009, according to the survey that

focused on adolescent ranging from age 15 to 24 years old have the average time approximately 8,7 hours of play in a week (Census and Statics Department, 2009). Furthermore, another survey conducted by European games industry back in 2010 found that 25% of total European adolescent population ranging from 16 years old and above are active online game players on daily basis (Game Division, 2010). All these surveys in the past few years gave us the clearer insight on the spreading popularity of online games among adolescent around the world and how it became more and more relatable with advancing technology. But at this time, although many research and study has been conducted about the potential of online games on language learning, there are still many people who deem online games as only entertainment or leisure activity and some even consider online games as a negative activity that can harmful for health especially for vision, and most of the lovers of online games from this generation are still not realized the potential of online games as a medium of language learning.

Recently, the high amounts of e-sports enthusiasts among adolescent draw the attention of linguists and experts to conduct research on the potential that provided by the online virtual gaming environment for teenagers. It is also driven by the use of English as the primary language in online gaming virtual environments, considering English as the language of the world. This of course makes the virtual world of online games the environment with such high potentials as a place of learning which where the negotiation of meaning occurs, as it is stated by (Gee, 2003) that modern media allow meaning to be conveyed through an interspersing of words, images and use of space and also his statement

that says video games in particular are fertile sites for learning and developing an expanded notion of what it means to be literate in the 21th century. This statement is in line with the fact that MMORPG (Massively Multiplayer Online Role-playing Game) is a media that rich in linguistic texts and communication between players that central to gameplay experience, so players of MMORPG not only learn language, but also develop multimodal literacy skill (listening, reading, writing and speaking). Regardless the common society perceive online games more from its negative side and assume that online games could be harmful for health and mental disorder as many games features violence aspects nowadays, in her TED video, Daphne Bavelier specifically debunked it as she emphasized that online games, FPS (First action shooter) to be specific, can be beneficial and positive to the perception, attention, cognitive skill and even good for vision as long as it played in the reasonable amount of time (e.g. Dye & Bavelier, 2010; Green & Bavelier, 2012)

Beside providing positive benefits for its players, as stated by Ritterfeld and Weber back in 2006, online games can make learning process more enjoyable and have much less pressure for adolescent. This statement is supported by some other experts that emphasized that online games are not only have the ability to render learning more interesting, it provides physically safe-from-harm learning environment thus the players freely roams and explores the the virtual world while enjoying its positive benefits by learning leadership development, collaboration, social and cognitive tasks, and expert-to-novice mentoring (Schrader & McCreery, 2008; Steinkuehler, 2007; Gee, 2003)

The early research that involving digital gaming vocabulary learning is conducted by Cheung and Harrison (1992) showed that intensive game-work enabled the participants to improve in term of game-specific lexical items. Further, Miller and Hegelheimer (2006) as well as Ranalli (2008) study the effects of supplementing *The Sims* with material to make the vocabulary input more comprehensible and both with positive result. Another study conducted by Rankin, Gold and Gooch (2006) with MMORPG (Massively Multiplayer Online Role-playing Game) *EverQuest 2* found that advanced second English students increased their vocabulary considerably.

Another recent research on online games constantly emerges, one of them is a study conducted by Dongping Zheng that examines how WoW (World of Warcraft) players utilize the linguistic resources provided by the game to increase their English vocabulary and other skills such as speaking and listening (voice chat), writing (written chat), and reading (quest logs, in-game story, skills instruction) and how the process looks like. This study found that players learn new vocabulary from many accidental learning that occurs during play. For instance, from quest logs that they do not understand, they can simply ask other more competent players which mostly and usually are native English speakers, this is in line with the statement of Thorne as he described MMORPG (Massively Multiplayer Online Role-playing Game) *World of Warcraft* as an immersive virtual world that provides its players the affordance to socialize, acquire cultural and linguistic knowledge, knowledge exchange, and pursue shared goals and objectives (Thorne, 2008)

Not only that, this study also found that new vocabulary learning occurs in the middle of game, this is due to the game feature such as game logs that exist to record every event or action taken by the players in form of text, such as the damage taken by the players during the fight or when the player defeated the enemy, that defeated enemy will drop random item and some amount of gold that can be taken by the players. Let say that the player take the item or gold from the defeated enemy, the game log will record it as it says “the player looted 100 gold” and so on, from this event the players have an affordance of learning new vocabulary such as loot that means taking item from defeated enemy, the players can immediately guess the meaning of “loot” by observing the action of his/her avatar in the game. All these findings provides clearer insight on how games generally (despite the genre) with its features that common among all such as, in-game story, game logs and questing can be beneficial and provides pleasurable learning place to learn foreign language (L2) through player to player and player to non-player interaction. As described above, there are also various linguistic features in Dota 2 (Defense of the Ancient), commonly quest or a task that can be completed by the players in order to gain prize, each quest has its own instruction in English, to be able to complete the quest, the players must understand the task that given first, because each quest has different specific task. And often, some higher-level quests can not be solved alone and requires collaboration between players through text discussion or voice chat, because some end-game quests often requires the presence of some specific hero or avatar with specific skills to complete the tasks and reach their goal in game. With this collaborative

action established, as Preston stated back in 2010 that emphasized that goal-oriented collaboration (chat) provides an opportunity target language interaction.

This has the potential as a rich learning media for its players multimodal skills such as reading, writing and vocabulary learning, as Squire (2006) emphasized that through learning by doing or functional epistemology, the in-game quest system is one fundamental component that can facilitate L2 learning.

In term of motivation, the players do not need to use special motivation strategy as learning process in the classroom does, because the excitement of the game itself is enough to motivate its players. For example, the prize from completing a quest, this alone is enough to encourage the players to understand the quest instruction in order to complete it. Based on that, the quest itself has a potential as an effective media for vocabulary learning. Not only that, there are so many linguistic texts in Dota 2 (Defense of the Ancient) such as game lore and various stories behind every avatar of Dota 2 that interesting to read, next is the instruction of its avatars' skills, considering every avatar has different skills that consists explanations about the use of every avatars' skills and what it does.

Beside text, the vocabulary comprehension of its players is strengthened by observing the action taken by their avatar inside the game as stated before, so the players not only understand the meaning of the word but understand its context as well. This is in line as Dongping Zheng's (2015) statement that says MMOGs interface provide a wealth of linguistic resource, including written instruction and storylines, optional pop-up tips, accessible manuals, animated

films and spoken audio with caption, as well as phone-like conversation between players.

The aim of this survey study is to describe the needs analysis of FPSB students batchelor 2015 to 2017 in learning English by using MOBA and to identify specific skills (vocabulary, grammar, reading, writing, speaking and listening) of English learning by using MOBA.

1.2. Problem Identification

Some of the research which one of them are Turgut and Irgin (2009) found that most of generation nowadays or often referred to as generation Z consider learning inside classroom can be a boring moment. Turgut also argued that this generation prefer to use ICT tools in their learning activity. This is true, this generation is so used to digital technology around them on daily basis.

In the other hand, the development and popularity of online game among generation Z is vast enough to draw researchers' attention, as a result, many studies have been conducted in this topic. And some of them began to apply online game in language learning in order to solve this problem. This might solve another problem as well, as we know every student has different learning style because every student has different character and background, some prefer reading and writing, some prefer speaking and listening, some prefer visual.

The implementation of online game in language learning might be helpful due to its many features such as chat for writing, voice chat for speaking and listening, background story for reading and game interface itself for visual. Thus, the researcher would like to identify the needs analysis of FPSB students

batchelor 2015 to 2017 in learning English by using MOBA and to identify specific skills (vocabulary, grammar, reading, writing, speaking and listening) of English learning by using MOBA

1.3. Limitation of the Problem

This study focused on the problem such as, there are many people consider online games can not be applied to language learning because the fact that online game is recently known widely and there are still few experiments have been conducted to language learning and online games. Most people deem online games as leisure activity only and even can negatively affect health, although it has been debunked by Daphne Bavelier as she emphasized that online games, FPS (First action shooter) to be precise, can be beneficial and positive to the perception, attention, cognitive skill and even good for vision as long as it played in the reasonable amount of time (e.g. Dye & Bavelier, 2010; Green & Bavelier, 2012). Most people that belong to generation Z think that online game as an entertainment only and not realize its potential as language learning medium. Although not all kind of online games can be applied to language learning, for instance FPS (First Person Shooter) or first action shooter due to the lack of its background story or communication.

This study will analyze the students' needs of language learning by using MOBA (Multiplayer Online Battle Arena) gameplay, what are the specific skills of language learning encountered by using MOBA and which one of MOBA features are used the most by learners.

1.4. Formulation of the Problem

- What are the needs analysis of the students to use MOBA in learning English?
- What are the specific skills of learning English by using MOBA?

1.5. Purpose of the Study

- Purpose
 1. To analyze student's needs in English learning by using MOBA online games.
 2. To identify the specific skills of English learning by using MOBA.

1.6. Significance of the Study

The significance of this research is, the result of this study can give reference to student that in studying language any preferred methods can be used. This study is expected to bring reference to teacher that learning language is not have to only inside classroom and the use of online games as learning medium is possible. This study is also expected to be helpful to the further development of more engaging English learning methods for the students in the future. And also with the conduction of this needs analysis survey study, we will know about the needs of the FPSB students in learning English and what skill can be improved the most by implementing new teaching method based on the findings of this survey study. Furthermore, by implementing MOBAs' aspects (Multiplayer Online Battle Arena) to curriculum to a certain degree, we expect to increase the awareness of FPSB students on how they can harness the rich linguistic sources provided by

MOBA and every other online games as a rich learning environment and to put an idea that beside as an entertainment, online games also have a huge benefits to their language skills such as writing, grammar, listening, and speaking, as well as vocabulary.

CHAPTER 2

LITERATURE REVIEW

2.1. Language Learning

Language learning is a process where human build their language comprehension through formal or informal situation (Kramina, 2000). There are several approaches in term of language learning as following:

2.1.1. Behaviorism

In this approach, language learning is defined as proses which learning occurs through imitation and practice, stimulus-respond. This theory is based on psychology, which learning process involves human behaviour as well, as stated by Wilga Rivers (1968)” the behaviorist theory of stimulus-response learning, particularly as developed in the operant conditioning model of Skinner, considers all learning to be the establishment of habits as a result of reinforcement and reward”. For instance, in term of language learning, an infant begin to mumble in attempt to imitate his mom’s word, later he can say the word close to right and his mom will respond by praising him as reward. Same as language learning in MOBA, its players will be motivated to be better in order to understand the rules and game features in order to win and be rewarded

2.1.2. Cognitivism

According to cognitive approach, language learning is a process which someone builds his language comprehension from time to time

through practice process. In this approach Long (1983) emphasized that interaction is crucial in the language learning process. For instance, in the interaction between teacher and students where the teacher modify learning input to the level which the students can absorb faster and more optimal. Same as language learning in MOBA, as more experienced players simplify their explanation to a degree which can be understood faster and easier by novice player than in-game instructions that tend to use formal and uncommon vocabulary.

2.1.3. Sociocultural

This approach emphasizes that learning process is centered on social interaction which the learning process is mediated by language, gestures and technology. Ratner (2002) stated that Vygotsky (1978) argues that the functioning of human mental is fundamentally a process that mediated and organized by cultural artifacts, activities and concepts. Vygotsky also stated that human mental is composed of lower neurobiological base, yet human have consciousness that gives them control over this lower-level neurobiological base by using higher-level sociocultural tools. To make it easier to explain, consider the interaction between human and material world through concrete material tools. For instance, when we intend to dig a hole on the ground, we could use the basic way of another living creature, with bare hands, it is possible but not efficient and will take long time to be done. In this case, we have our consciousness that allow us to think of more efficient way, by using shovel

as more practical and efficient tool (Ratner, 2002). Same as language learning in MOBA, we might accidentally absorb some new vocabularies from few hours of in-game exposure like an infant that learn a few words at a time by being exposed to their parents' daily conversation. In this case, we have our consciousness that allow us to be fully aware of learning potentials that provided by in-game exposure if we voluntary harness it for our language development while playing. Thus, optimum result can be obtained.

2.1.4. The Interaction Hypothesis

Evelyn Hatch (1978), Michael Long (1983, 1996), Teresa Pica (1994) and Susan Gass (1997), among others, emphasized how important conversational interaction is as essential condition for second language acquisition and learning. These researchers have studied how the speech and interaction patterns are modified by its speakers in order to understand some information or participate in a conversation. Long and Krashen (1983) stated that in language acquisition, comprehensible input is necessary. Furthermore, Long (1983) stated that in order to make language comprehensible, modification of interaction is a necessary mechanism so learners have opportunity to interact with other speaker in order to work together and reach mutual comprehension.

2.1.5. Connectivity Theory

According to Klimesch's connectivity theory, that uses the methapor of network of nodes and connectors to predict memory-

associated behavior. Nodes are distinct encodings from sensory, motor, and emotive inputs, and are interconnected into networks by associations made through lived experience. The retrieval of any node can be triggered by stimulation at any node in a network, this means the greater the complexity of the interconnectedness, the stronger the memory. As Mecedonia and Klimesch (2014) found evidence to support this connectivity theory. The finding is the novel readers can retain words longer when they were associated with not only images but gestures as well. Furthermore, they emphasized that gestures involve motor as well as visual and tactile input, as opposed to visual input alone, and so serve to induce a larger network. Thus, according to connectivity theory, the retrievability of a word is determined by the number of connection in a network.

Richness of encoding has been used to explain memory-based behavior related to situations. Kroneisen and Erdfelder (2011), and Kroneisen, Erdfelder, and Buchner (2013) stated that suitable explanation for the *survival processing effect* can be generated by the richness of encoding framework, which will lead to the improvement of words retention when perceived as relevant to a survival scenario. The account generally proposes that consideration of the importance of a word's concept to a survival task generates multiple *relevance arguments* that act as memory prompts for retrieval (Kroneisen et al., 2013, p. 495).

Additionally, Röer, Bell, and Buchner (2013) found that study participants who self-generated relevance arguments were able to produce more than participants who were provided arguments, and that the number of possible functions correlated positively with retrieval of novel words. Overall, the richness of encoding framework predicts that active participation and relevance to a context enhances learning and retention of words.

2.2. Online Game

Online game is a term that very popular now days, this is a combination between digital games and internet technology where players can play as team or opponent with other players around the world. Initially, the first online game was developed for educational purposes in 1969. Then a system with the ability of time sharing called PLATO (Programmed Logic for Automatic Teaching Operations) in the early 1970s was developed, aimed to facilitate the students to learn online, where multiple users can access the computer simultaneously at the same time. Two years later, Plato IV came out with new graphics capabilities which later became the beginning of the advent of online games. But online games did not progress rapidly until 1995, then in this year online game developed rapidly, this is further strengthened by the abolition of restrictions of NSFNET (National Science Foundation Network) so that people can access the full domain of the Internet without limit as nowadays. Monetary success experienced by online game developer companies at that time also became a

strong factor in the widespread of online games at that time, along with its increasing popularity then the developer companies began to compete until today.

The intense competition encourages developers to keep innovating, which then became a factor that caused the wide variety of online games' genres or category, from simple text games to games with complex graphics and some have a vast, complex virtual world.

From the brief explanation about online games history that started back in 60s above, there are plenty category of online games that currently exist among others.

1. First person Shooter (FPS) Online Games.

This game uses first person perspective so that makes as if as the players see through his/her own eyes while playing, and as its name suggest, this game is synonymous with guns or any military-related weaponry in general. As Grimshaw (2007) defined the main goal of FPS games is player immersion, as it is now defined as mental immersion and not yet full physical immersion due to current technology limitation. Furthermore, he defined the main trait of FPS games as the player's perception that he is within the game environment, that he is the character whose hands he sees before him. Player immersion is primarily perceptual, from an awareness of being in and part of' reality to 'being in and part of' virtually. In term of gameplay, this category is very similar to MOBA, whereas two teams that consist of 2-10 players are competing in a small scenario map. The only

difference between FPS and MOBA is this category take heavily on first person perspective approach with realistic guns while MOBA take heavily on strategy approach with fantasy character and magical weapon. Furthermore, in FPS there is no leveling system, the main purpose of FPS is to kill enemy team to the last one while in MOBA the main purpose is to destroy enemies' main building. There are several game franchises of this category such as, *Counter Strike*, *Point Blank*, *Crossfire* and so on.

2. RTS (Real-time Strategy)

This game allows its player to build structures such as barrack, defensive tower, defensive wall, and many other structures to interact with natural resource within the map. For instance, in RTS games, there are some natural resources that spread across the map such as gold, wood, stone, steel, oil etc. The players can extract these natural resources by building specific required structure, these extracted resources then can be used to upgrade in-game technology or building etc. According to Xiong and Lida (2014), real-time strategy (RTS) is defined as sub-genre of the traditional strategy game where its players need to build an economy by gathering resources, building a base and military power in order to defeat the opponents. Furthermore, Xiong and Lida (2014) stated that the main trait that differentiate RTS (real-time strategy) games and the traditional strategy games is in RTS, every movement is simultaneous, which mean there are more than one movement and command can be issued by players meanwhile the traditional strategy game is turn-based, which means its

players can issue single movement or command at a time. In other words, traditional strategy game is more like chess. RTS is almost like simulator games, except in this genre, its players are competing for natural resource and map domination through diplomacy or with army. There are many game franchises from this category such as *Warcraft*, *Starcraft*, *Age of Empire*, *Cossack*, *Command and Conquer*, *Total War* and many more.

3. Cross-platform Online Play.

In this particular genre, the players are allowed to play online game from different platform such as PC (Personal Computer) and game console (Playstation, Xbox etc) as we know not every game can be played in all platform. For instance, there are several games that exclusive to game console (Playstation, Xbox etc) and not available in PC or exclusive to Playstation only. Some online games are available in multiple console but the community's interaction between these different consoles is limited because of each console use different server. However, by the time this cross-platform was established, the community from both console are no longer limited inside each other's server. In other words, cross-platform category allows the server from both consoles or platform to be interconnected. Thus, this category allows its player to compete through different game platform and console (from PC to console) or between different console (Playstation to Xbox) etc. There are several game franchises from this category such as *Call of Duty Online*, *Fortnite*, *Player Unknown Battleground* and so on.

4. Simulation Games.

As its name suggest, this particular genre allows its player to play a certain simulator. There are many kinds of simulation games, starting from house simulator (*The Sims*) where its players play in a limited house environment as a small family to a vast city-building simulator such as *Sim City* where its players are basically play as a big government and so on, in this game we could actually see each element of city grow or decay, depending on what we did (Prensky, 2001). The term of simulation itself is broad, which means simulation is where a tool is used to simulate something, as he stated that if an object simulates something, then it is a simulation. Furthermore, Prensky (2001) defined simulation as a ‘practice in safety’ situation where its user is involved in ‘what if’ experimental activity. Some franchise from this category such as *Sims City* is similar to RTS (Real-time Strategy) games, only without war or any battle in it. There are many game franchises of this category such as *Second Life*, *The Sims*, *Sim City*, *Zoo Thycoon*, *Dinner Dash* and so on.

5. Browser Games.

This game is also referred as to Casual Games as it played from browsers platforms such as Firefox, Opera etc. According to IGDA (International Game Developer Association) in 2008, this particular category is developed for the mass consumer, it basically can be enjoyed by everyone, including those who would not normally regard themselves as a ‘gamer’,

from children to grandmothers, from professional banker to stay-at-home moms. This game category is the most “friendly” category as it does not require PC (Personal Computer) with high specification, it means it can run in almost every functional computer. There are several game franchises from this category such as *Farmvile*, *Ninja Saga* and so on.

6. MMORPG (Massively Multiplayer Online Role-playing Game).

This third-person game is an online game where its players participate in a large scale virtual open world and has vast amounts of players playing at the same time, every player can interact to each other like the way they interact in real life (Zheng, 2015). Its player can level up by doing given quest (task) or simply by killing monsters. This game is so huge that it has its own currency that equal to the real world currency to a certain value and micro business such as item trade between players and so on. There are many game franchises from this category such as *Rohan Online*, *World of Warcraft*, *Perfect World*, *Cabal Online*, *Jade Dynasty*, *Granado Espada* and many more.

7. MOBA (Multiplayer Online Battle Arena).

Usually consist of ten players divided into two competing team in an arena at a time. There are many game franchises from this category such as *League of Legend*, *Dota 2*, *Heroes of Newert*, *Heroes of the Storm*, *Vainglory*, *Mobile Legends*, *Arena of Valor* and many more.

From several categories of online games previously mentioned, the last category is MOBA which is the main focus of this study. Therefore, the writer of this study will present more detailed explanation about this particular category.

There are many game brands/franchises from this particular category, such as *League of Legends* or LOL owned Riot Games company, *Heroes of the Storm* owned Blizzard company and *Dota 2* (Defense of the Ancient) owned by Valve company. The popularity of these games is often considered as the trigger for the emergence of a new type of sport called eSport.

These games are very popular, it can be seen from the number of its active players that can reach millions of players every month. *Dota 2* is one of the most popular among the MOBA genre games although still less popular from its main rivals; *League of Legend* or LOL, this is understandable considering LOL was released in 2009, 4 years earlier. However, *Dota 2* still has millions of active players per month based on what is allegedly from the duniagames.co.id website which states that the average number of *Dota 2* active players each month reaches 13 million players. As a newly rising fame, *Dota 2* is constantly staging big events, participated by various teams from all over the world, such as tournaments held in different countries with fantastic amount of prizespools, up to millions of dollars, as their annual world tournaments in the year 2016 called *Dota The International 6* has prizepool up to 20 million dollars that directly collected worldwide from new released item sells during yearly events, an incredible amount. This indicates that how popular this game is.

2.2.1. MOBA

MOBA (Multiplayer Online Battle Arena) is one of various online game genres that very popular lately, this particular genre involves two competing teams that usually consist of 5 players for each team or more inside a vast map or terrain yet not as vast as open world map from other genre, especially MMORPG (Massively Multiplayer Online Role-playing Game). The environment inside MOBA map is limited and resemble “arena”, unlike MMORPG’s open real time world, one game is usually take 30 minutes or more. To put it easier to explain, MOBA is like football game, the game will not start before the players enters the field and one game has duration, and the purpose of every game is to defeat one another.

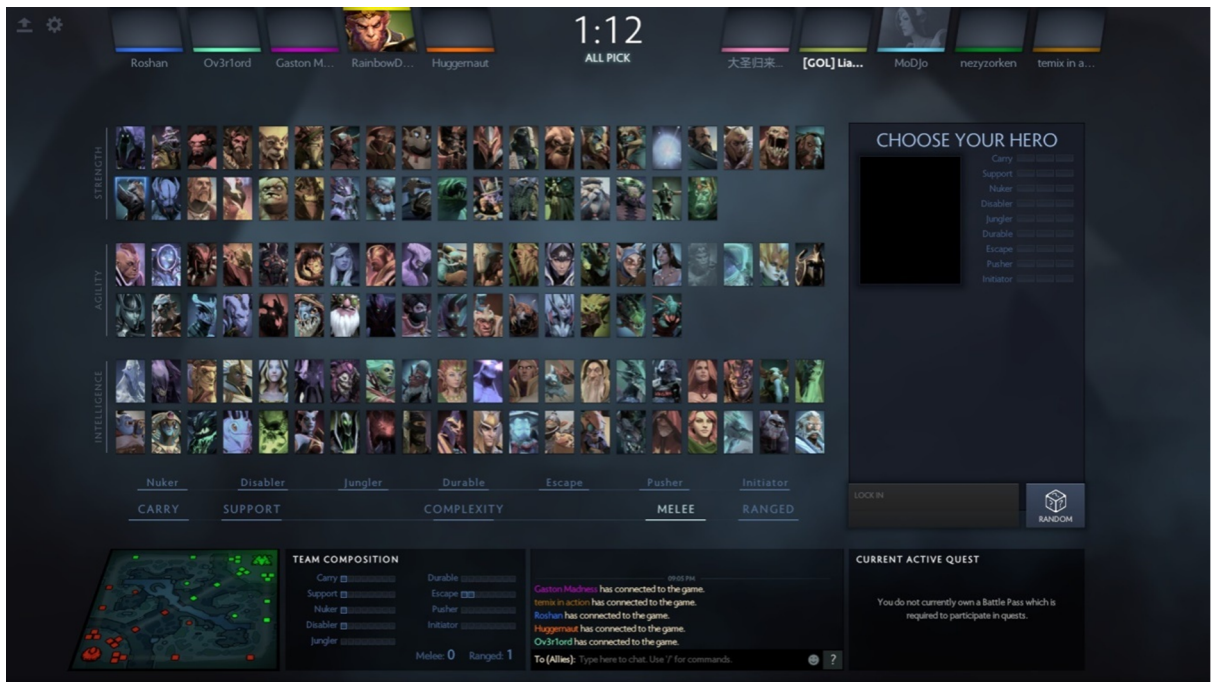
2.2.1.1.Dota 2 (Defense of the Ancient)

Dota 2 (Defense of the Ancients) is a multiplayer online battle arena (MOBA) video game developed and published by Valve Corporation. Dota is one of the most actively played games with peak of over a million concurrent players. It set in a three-dimensional graphical environment, played by two teams consisting of five players for each team, these two teams reffered to as the Radiant and Dire, compete in matches on an asymmetrical playing field.

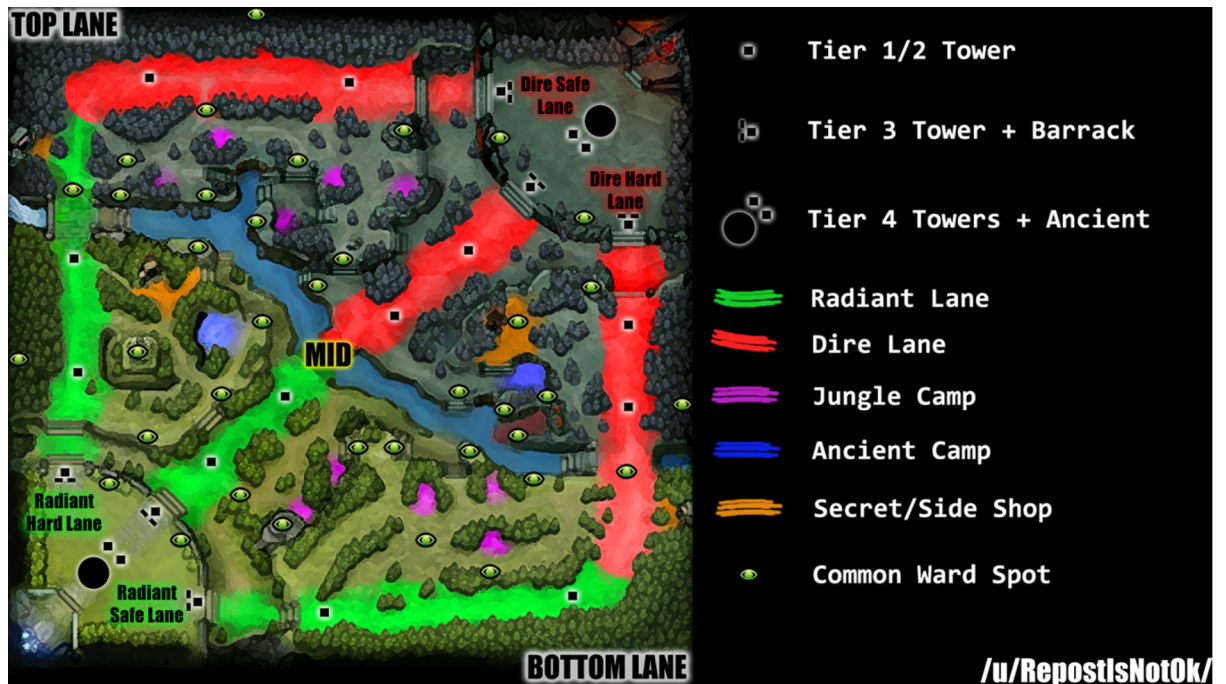


Each player commands one of 116 characters that called “Hero” which each feature unique abilities and styles of play. Each Hero’s method of combat is determined by its primary “attribute”; Strength, Agility or Intelligence, and there are three major role; Firstly, support-type heroes that have skills to provide healing and buff such as armor or any kind of protection for teammates and every skills that is meant to support other friendly heroes, mostly heroes with intelligence attribute but not all intelligence-type hero is support, some of them are fighter-type as well only they are heavily depend on their skill casting. Secondly, fighter-type heroes reffered as Carry that have skills and base attack with the highest damage, mostly heroes with Strength attribute and some Agility attributed heroes, these heroes’ role are to inflict as much damage as possible to enemy team during team fight, the downside of these both strength and agility based

heroes are the lack of magical defense which means they are generally weak against intelligence based heroes. However, the strength-based heroes have higher physical defense than agility-based heroes, on the other hand, the agility heroes have higher damage output than the other two attribute, however with the weakest both physical and magical defense. Thirdly, tank-type heroes that have the highest physical defense, these heroes are Strength-based characters as well due the fact that Strength attribute contribute to the high amount of health point the hero has, these types of heroes have the role to take and absorb as much damage as possible on the other teammates' place during team fight. The tank and fighter type heroes have the same attribute as we know, but what differentiate them from each other is the fighter-type heroes' abilities or skills have the effect that are focused to deal more damage while tank-type heroes have the abilities that are focused on enhancing their physical defense.



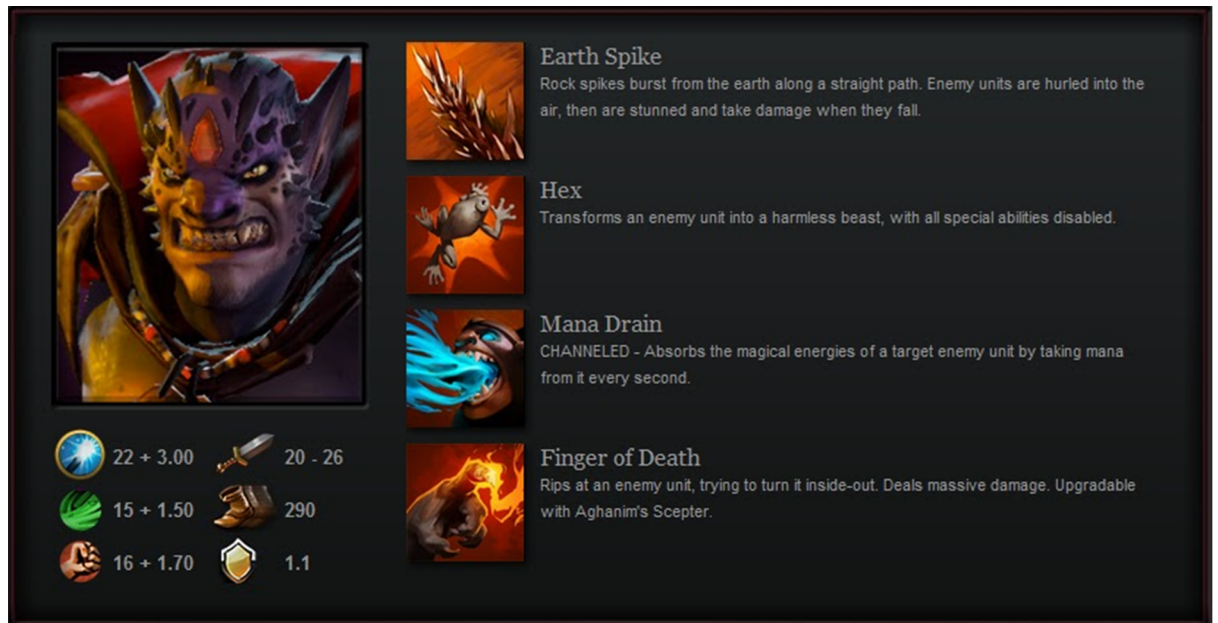
The two strongholds which are referred to as Ancients (Radiant and Dire) are connected by three paths referred to as “lanes”, which are guarded by defensive towers and computer-controlled creature called “creeps” that periodically spawn on groups and travel along the lanes to attack enemy heroes, creeps or buildings.



At the start of match, all Heroes starts from level one and will gain exp (experience) from each of enemy Heroes or creeps is killed by them or in their presence, and when the Heroes gain necessary amount of exp to level up, it will unlock its next level skill and so on.

Every skills have its specific explanation tabel which help the players to understand about their Hero's skills specificaly, (what its effect to the enemy or to friendly Heroes, what is the skill for, to paralyze or stun the enemy and so on), this will provide the opportunity for the players to understand the meaning of a specific vocabulary such as stun or paralyze and many more not just by meaning but also by context because the players will see what will his/her Hero do directly. Piirainen-Marsh and Tainio (2009) state that second language gaming could utilized as learning resource in

naturalistic settings and the game avatars could become the second language ‘teachers’.



In Dota 2 (Defense of the Ancient) or any MOBA (Multiplayer Online Battle Arena) games in general, teamwork is important, as mentioned before about three major roles, every role is meant to support other role and good communication is required in order to make strategies and decision, this will provide the players opportunity to learn practically by communicating with teammates in natural setting. Gee (2012) stated that “game associate words with images, actions, goals and dialogue, not just with definitions or other words” (p. xiv), so that learners understand them in context, rather than as abstract symbols.

2.3. MOBAs' Connection to SLA

The features of MOBAs (Multiplayer Online Battle Arena) have some similarities with the ones in another online games such as MMORPGs (Massively Multiplayer Online Role-playing Game). However, unlike MMORPGs that have vast virtual environment where its players can explore freely in real time at any moment, MOBA's environment is not as vast as MMORPGs have. MOBA is more like competitive game where its player divided into two teams consisting 5 players for each team in an arena-like environment at a time, every game last for 30-60 minutes. MOBA's players are free to pick any different avatar for every game they play in, and every avatar has different back story or lore that interconnected to each other whether directly and indirectly, some of them are or were friends, some are nemesis and even some were lovers which makes every hero in this game more compelling on its own way to its players.

LION LONE DRUID

◆◆◆ RANGED SUPPORT DISABLER NUKER INITIATOR

DEMO HERO ↗

LOADOUT / MY STATS / GUIDES / ABOUT

Lion gives enemies little chance to retaliate. Stunning targets with a damaging row of spikes, or temporarily transforming them into a harmless critter, even if his powerful spells aren't enough, he and his allies should still have all the time they need to slay their foes.

ROLES

Carry	▬▬▬▬	Durable	▬▬▬▬
Support	▬▬▬▬	Escape	▬▬▬▬
Nuker	▬▬▬▬	Pusher	▬▬▬▬
Disabler	▬▬▬▬	Initiator	▬▬▬▬
Jungler	▬▬▬▬		

BIOGRAPHY

Once a Grandmaster of the Demon Witch tradition of sorcery, Lion earned fame among his brethren for fighting on the side of light and righteousness. But adulation corrupts. With powers surpassed only by his ambition, the mage was seduced by a demon and turned to evil, trading his soul for prestige. After committing horrible crimes that marred his soul, he was abandoned. The demon betrayed him, striking better deals with his enemies. Such was Lion's rage that he followed the demon back to hell and slew it, ripping it limb from limb, taking its demonic hand for his own. However, such demonoplasty comes at a cost. Lion was transfigured by the process, his body transformed into something unrecognizable. He rose from hell, rage incarnate, slaying even those who had once called him master, and laying waste to the lands where he had once been so adored. He survives now as the sole practitioner of the Demon Witch tradition, and those who present themselves as acolytes or students are soon relieved of their mana and carried off by the faintest gust of wind.

Not only inside game, the vast popularity of Dota 2 lore among its community can be seen as it has its dedicated comic series that tells about every heroes' lore, origin story, items, skills origin and so on in a deeper manner.

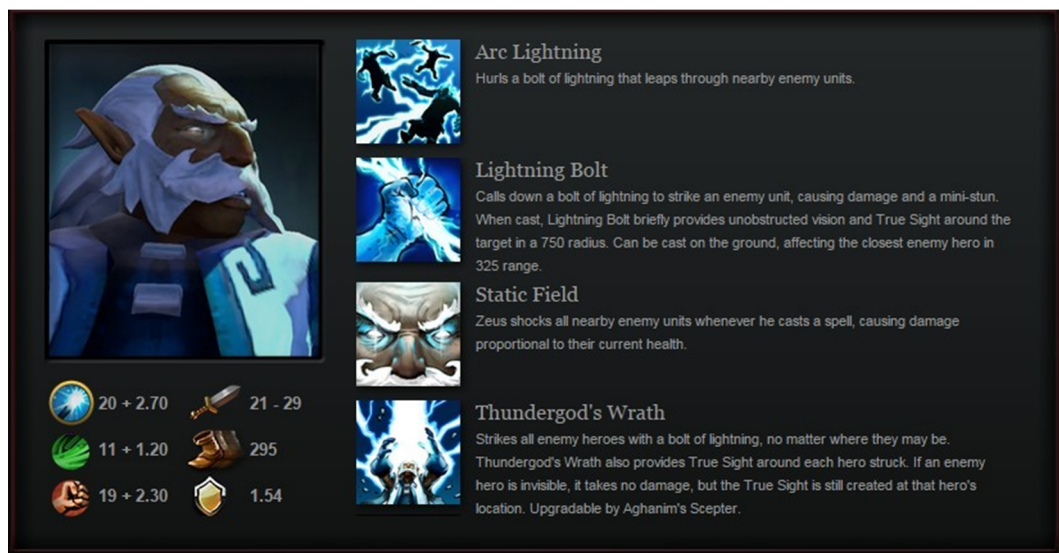


Sometimes the comic writers leave hidden hints or as we refer to as “easter egg” about possibly new hero or item that will be introduced in the upcoming game updates that often makes the community speculate and theorize by interconnecting every hidden hint they can find.

This could be interesting to read and provides its player the exposure of English as they read it. This is in line with SLA theory that emphasize on the importance of exposure and active interaction in target language (Long, 1981; Swain, 200; Sundqvist & Sylven, 2012). As they read in-game text, these texts

provide the adolescent affordance to improve their reading skill, and possibly their vocabulary.

Furthermore, every avatar also has its own unique skills and specific items that synergize with it in order to amplify the skills' effect, damage and stats, these skill and item has its instruction in text, this provides the learners even more exposure and affordance to target language.



In order to win a game which every player could ever wanted, they need to fully understand the skills' effect and use of the avatar they are using. This event motivates its player to read the skill instruction, this alone provides them internal motivation, as Gee (2007) stated that in the context of gaming, learners are motivated intrinsically to use or improve their English to advance in their games. This is supported as well by Dornyei (2001) as he stated that intrinsic motivation is perceived as a crucial factor for successful L2 learning. MOBA (Multiplayer Online Battle Arena) is not only motivate its player to improve their English, it provides fun and enjoyable learning environment as well as Peterson (2010)

hypothesized the proponents of game-enhanced learning will engender a high degree of motivation by its enjoyable and learner-centered nature of virtual world.

In MOBA (Multiplayer Online Battle Arena), learners are often faced to the circumstance where they are simply can not win a fight alone and this pushes them to conduct a collaborative action with their more experienced teammates in order to win a fight. This will provide them the affordance to communicate in target language when they plan a strategy, as Krashen (1985) stated in his input hypothesis, which emphasized that optimal learning requires input that slightly above the learner's current level of competence. Beside in-game interaction, MOBA (Multiplayer Online Battle Arena) has vast outside-game community, as the unexperienced and more competence players use to discuss about the strategy or item and skill build for certain avatar to obtain their maximal potential to win a game. In this case, MOBAs would be supporting venues as they provide the opportunities for peer assistance, community membership and collaborative social interaction. As Vygotsy (1978) use the approach of social constructivism that believe that mostly effective learning happens through executing collaborative tasks.

2.4. Needs Analysis Theory

Needs analysis is generally refers to the activities that are involved during the process of collecting information that will be used as the basis in order to develop a curriculum that will meet the needs of a certain group of learners (Iwai, 1999). In order to make use of this concept, Berwick and Brindley (1989) propose definitions of different types of needs and accounts of various problems and

limitations. Furthermore, they offer ways in which we could differentiate between needs that experienced or expressed by learners and those identified by analysts. In his state-of-the-art article, West (1994) gives a thorough overview of needs analysis in language teaching, including its history, theoretical basis, approaches to needs analysis, etc.

According to Iwai (1999), despite the fact that formal needs analysis is relatively new to the field of language teaching, teachers have been conducting Informal needs analysis in order to assess what language points their students needed to master. In fact, the reason why different approaches were born and then replaced by others is that teachers have intended to meet the needs of their students during their learning. Thus, needs analysis which is also known as needs assessment has a crucial role in order to design and carry out any language course, whether general English course or English for Specific Purpose or ESP (Songhori, 2006).

2.5. Review on Relevant Studies

In an early study involving gaming and incidental second language vocabulary learning, Cheung and Harrison (1992) showed that intensive game-work enabled the participants to improve in terms of game-specific lexical items.

Miller and Hegelheimer (2006) as well as Ranally (2008) find the effects of supplementing *The Sims* with material to make the vocabulary input more comprehensible, both with positive result. This study used pre-test and post-test as its instrument.

In a study of the MMORPG (Massively Multiplayer Online Role-playing Game) *EverQuest 2*, by using pre-test and post-test method, it was found that five intermediate and advanced second language English students increased their vocabulary considerably (Rankin, Gold & Gooch, 2006).

Turgut and Irgin (2009) studied teenager playing digital games in English at Internet cafes. From a phenomenological perspective, they argue that digital gaming allows players to incidentally make use of vocabulary “for their own purposes, in complex and pleasurable ways”.

Danning Chen studied gamer perception of language learning and L2 interaction in MMORPG. He found that the features of MMORPGs help adolescent to incidentally improve their English comprehension. In this quantitative study, Chen used questionnaire consist of 25 questions that distributed through social media, the criteria of participant is not strict, only players whose first language is not English are eligible to answer this questionnaire.

Dongping Zheng, Michel Bischoff and Besty Gilliland studied vocabulary learning in massively multiplayer online games: context and action before words, published on June 23, 2015. This study used interview, observation and documentation with 2 participants, Conan (Japanese native speaker) and Bischoff (English native speaker).

Another study is titled "a taxonomy of vocabulary learning strategies used in massively multiplayer online role-playing games" conducted by Julie

Bytheway. This qualitative research observed and video-recorded 5 hours of participants' gameplay to measure and match their behaviour during gameplay with what they have reported during interview.

In a study of computer gaming and its influence on the English language and acquisition, Jana Hrčková (2016) found that computer games, especially online games provide adolescent opportunities to learn English even without being noticed by adolescent, motivate adolescent to improve their English as well. This study used online questionnaire via google drive as its research instrument.

CHAPTER III

RESEARCH DESIGN

In this chapter, researcher will explain about the methodology of this study, this chapter is consisting of three sub topics as following:

3.1. Research Design

The concerns of this research is to conduct a needs analysis survey of English learning by using MOBA (Multiplayer Online Battle Arena) online games. This survey study will be conducted by using quantitative method. According to Kraemer (1991), there are three different characteristics of survey research. Firstly, it is used to describe specific aspects of given population, quantitatively. Second, the data needed for survey study are collected from people and are subjective. Finally, survey study uses a selected portion of overall population from which the findings later can be generalized back to the overall population. In survey study, the researcher cannot explicitly control the dependent and independent variables as it is used to define the scope of the study. Before the study is conducted, the researcher needed to predicate a model that identifies the relationships among these variables that the researcher is expecting.

In contrast to survey study, a survey is simply described as a tool of data collection in order to carry out survey research. Furthermore, Pinonneault and Kraemer (1993) defined as a means for gathering information about the characteristics and actions of a large group of people. According to Salant and

Dillman (1994), surveys can be used to assess needs as well. The term survey instrument is often used to distinguish the survey tool from the survey research that it is designed to support.

In data collection, the researcher use questionnaire that will be distributed through person and social media to save the effort and time, the collected data will be analyzed by using Statistic SPSS software or Microsoft Excel.

3.2. Population and Sample

3.2.1 Population

The population of this study are both male and female students of FPSB of Islamic University of Indonesia from year 2015 to 2017 that meets the criteria as generation Z and have experience in playing MOBA (Multiplayer Online Battle Arena) online games. FPSB is stands for Fakultas Psikologi Sosial dan Budaya consist of four departments, such as Psychology, Communication, English Department, and HI. Researcher of this study did not limit students' gender as population although female students are hardly familiar with action online games and choose intentionally from batchelor 2015 is because year 2015 students are mostly still active in classroom activity unlike students of year 2014 that mostly doing their thesis. Since this study is in informal and natural setting, there is no another criteria beside generation Z that have experience in playing MOBA (Multiplayer Online Battle Arena) online games and the researcher does not need to do any intervention or treatment.

Table 3.1 Number of chosen population

Department	Year					
	2015		2016		2017	
	M	F	M	F	M	F
Psychology	76	197	31	115	65	198
Communication	67	82	65	53	75	87
English Dept.	26	45	27	44	28	76
HI	45	41	48	47	54	61
Total	581		430		650	
Total Population	1661					

3.2.2. Sample

According to Webster (1985), sample is a small number of total population which is being studied in order to gain information about the whole population. The sample of this study is consisting of 167 students (10% of total population) with 95% confidence level interval based on the result of SPSS. This particular number of participant was decided based on Arikunto's (2006) theory that stated that in order to decide the number of sample that will be taken, researcher can take up to 10% to 15% or 20% to 25% of population's total number if the whole population is more than 100.

3.3. Data Collection Techniques

As stated by Kuntjojo (2009), data collecting is an activity that conducted through particular technique (tes or non-tes) by using particular tools that often

referred as research instrument. The collected data from the process then will be gathered, laid out and analyzed. From this process, the information will be obtained that explain the phenomenon that being researched or any related information to the phenomenon.

In this subchapter, researcher will explain about the technique of collecting data that consist of instrument, validity and reliability.

3.3.1 Instrument

According to Seaman (1991), data collection instrument refers to the tools or devises that used by a researcher to collect data such as questionnaires, interviews, tests and checklist. In this subchapter, researcher will explain about the instrument that will be used to collect data in order to determine the result of this study.

3.3.1.1 Questionnaire

Questionnaire is an instrument of data colleting that consist of a list of question that given by the researcher to the participants in order to collect data, this list of questions can be given directly or through media to the data source (Hendri, 2009)

The questionnaire that will be used in this research is the adaptation of research questionnaire of Jana Hrckova (2016) with title “The Influence of Computer Games on English Proficiency”. This questionnaire consists of 35 questions and used Google Drive and Google Forms application online for the distribution. In the process of

designing her questionnaire, she used several types of item, such as open-ended questions for personal data at the beginning. On the next page, the participants were asked about their current language abilities, such as how many years they have been exposed to English, current proficiency and whether they study any other language besides English. On the next page, the participants were asked about their gameplay: which game they play (respondent choose from provided list of games or an option to write their own pick), how often they play (with a range from 1-2, 2-4, 4-10, 10-15 and more than fifteen hours a week), how they communicate whilst playing (text, voice over internet protocol programs such as Skype, Ventrilo, TeamSpeak, Discord or in-game voice, video etc) and wheter they read in-game texts. On the next two pages is asking about the actual influence of computer games and how the participants perceive it by asking whether they think playing games actually helped them improve their English, which skill of language is improved the most (vocabulary, reading skills, listening skills or speaking). On the next step she used Likert scale in order to measure how student perceive their improvement by playing games with the options ranging from '1-games helped me a lot to 5-games did not help me at all'. On the second page of the two she asked the participants whether they ever played games explicitly for language studying purpose, such as a sports game to learn sports terminology. The question is later expanded by two Likert scale questions about

communication with other gamers and its level or formality. Lastly, the questionnaire ends with a page asking whether the participants would like computer games be added in the curriculum or school work and if it would motivate them to learn English better and the whole questionnaire is concluded with a short textual comprehension test. Jana's Questionnaire is included in appendix 2.

Meanwhile in this study, there are several questions that will not be used or will be changed to suit the topic of this study such as, from first page 'where are you from? (country or state)', this change is taken due to the fact that all of the population is from Indonesia. From second page, there are two questions that will not be used such as 'Do you study other language (German, Spanish, Italian, Other)' because this study is focused to English only, second question is 'What is your level of proficiency in English (A1, A2, B1, B2, C1, C2)' because this is survey research and this question is unnecessary. From fourth page, there are two questions that will be changed such as 'Which computer game do you play?(World of Warcraft, League of Legend, Assasin Creed)' to 'Which Moba do you play?(Dota 2, League of Legend, Mobile Legend etc)', and any question with words 'computer games' were changed into 'moba games' to specify the questions, this action is taken because this study is focused on Moba games only. The last is from seventh page, everything from this page is excluded because this

page consist of reading test and in this study, test is not needed because this study is needs analysis survey research.

In order to adapt and modify this questionnaire, the researcher will test it on 7 volunteers (5 as target number and 2 as spares), the purpose of this action is to eliminate the irrelevant question with this research and to get feedback from volunteer so the questions can be adapted to more relevant question.

Further explanation about questions' category that to be used by researcher of this survey research. Firstly, multiple choice questions will be used in question number 1 (gender) and number 6 (game intensity) as participants were allowed to choose only 1 from provided answers. Secondly, Open-ended questions in question number 2 (name) and number 3 (period of participants' exposure to english) as they were provided with tables to write down their answer. Thirdly, two-scale (Dichotomous scale) in question number 4 (participants' contact with MOBA games) and number 9 (language formality used), a dichotomous scale is a two-point that presents only two options that opposite to each other. This type of response scale does not give the respondent an opportunity to be neutral (Batchelder, 1977). Fourthly, checkboxes in question number 5 (list of MOBA games), number 8 (communication features), number 13 (in-game literatures) and number 15 (list of English learning skills). Fiftly, semantic differential in question number 7 (intensity of English usage during cummunication),

number 12 (reading intensity) and number 14 (English general improvement in MOBA), this scale measurement is used to measure attitude toward something, and it usually takes the form of 5 or 7 scale number with bipolar adjectival scale, some only takes 3 scale number (Osgood, 1957). Lastly, likert scale in question number 10 and 11 (communication difficulty by using English in MOBA), question number 16 to 20 about specific skills of English learning by using MOBA (vocabulary, grammar, speaking, reading and listening), question number 21 (learners' motivation to learn English by using MOBA), number 22 and 23 (students' opinion about the implementation of MOBAs' aspects to curriculum). This scale is used to measure agreement and disagreement, it usually takes 5 form of scaling, from strongly agree to strongly disagree (strongly agree, agree, neutral, disagree, strongly disagree), some uses 3 number scale (agree, neutral, disagree).

3.3.2. Validity and Reliability of the Instrument

Firstly, researcher check the validity and reliability of the questionnaire through pilot study before using it by asking 5 persons to fill this questionnaire, thus researcher can measure the questionnaire reliability. These 5 persons are random students of Islamic University of Indonesia from different faculty and not included in the target population.

3.3.2.1 Validity

Validity is a measure that indicate the level of authenticity, usefulness, and meaningfulness of an instrument. An instrument can be defined as valid if it has high authenticity and in contrast, an instrument with without high authenticity can not be defined as valid (Arikunto, 2010). The validity of an instrument is tested in order to describe how deep a research instrument able to reflect the content in accordance to the behavior that will be measured.

In this study, researcher adapted questionnaire of Jana Hrckova's (2016) study about the Influence of computer games on English proficiency. Before use this questionnaire on the field, Jana conducted pilot study by asking 5 random gamers to fill the questionnaire questions in order to eliminate mistakes and to get feedback about the questions themselves. In this process she made several changes to her questions as the volunteer found it confusing and vague such as 'where is your location?', volunteer found this question confusing whether asking about country or city, so researcher add choices (city or country). Another question was considered redundant such as 'what is your native tongue?' as the volunteer already stated their nationality, so this question was eliminated. Further change was for question 'what game you don't like to play' as it asked for negative experience with gaming so this question is excluded as well.

In this study, researcher conduct same action by doing pilot study to eliminate some question that does not suit the purpose of this study. Furthermore, in order to check the validity of the questionnaire, researcher use content to determine whether the domain has been adequately covered (Linda, 1987) and expert judgement. Expert judgement is where researcher rely on the experienced individuals' assessment to determine the meaningfulness of the instrument that is to be use (Wilson, 1999). In this case, the lecturers is considered as expert thus this instrument will be continuously consulted with lecturer of English Department.

3.3.2.2 Reliability

According to Twycross and Shields (2004) reliability refers to the consistency, repeatability and stability of result obtained by an instrument, the instrument is deemed reliable if it generates same result in identical situations but different circumstance over time. Furthermore, reliability is the degree where the measurement result is free from errors (McMillan, 2006). The questionnaire that is to be use in this study was constructed by Jana Hrckova in her research and was approved by her advisor.

The questionnaire only used once and since some of the questions were changed or excluded to suit the need of this study and slightly different from Jana's research but still at the same topic and

situation, we do not expect the exactly same result but we will try to obtain result as close as possible.

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

In this chapter, researcher will describe the findings obtained from the questionnaires that distributed to batchelor 2015-2017 students of FPSB of Islamic University of Indonesia through Google form and hard copy to analyze the needs of FPSB students in learning English and what are the specific skills of English learning by using MOBA (Multiplayer Online Battle Arena) games and then proceed to the discussions.

The result of the distributed questionnaires will be consisting of several parts; firstly, the respondent general information, games and intensity, how students perceive MOBA games as learning medium and how much it improves learners' motivation. Additionally, tables and charts were included to give more detailed explanations and information.

4.1. RESEARCH FINDINGS

4.1.1. Questionnaires Result

Table 4.1 Respondents' personal information

Item		Frequency	Percentage
Gender	Male	134	80.3
	Female	33	19.7
Exposure to English	1-5 years	19	11.3
	6-10 years	74	44.3
	>10 years	74	44.3

Total respondents were 167 students who participated in answering the questionnaires. From table 4.1, there are 33 female students, and 134 male students. The period of exposure to English is divided into 3 parts which are 1 to 5 years, 6 to 10 years, and more than 10 years with 19 students exposed for 1 to 5 years, 74 students exposed for 6 to 10 years and 74 students exposed more than 10 years.

Table 4.2 MOBA games and intensity

Item		Frequency	Percentage
Status	Still playing	129	77.2
	Not playing anymore	38	22.8
Games	Dota 2	75	33.9
	League of Legends	18	10.8
	Mobile Legend	119	71.3

	Heroes of Newert	8	4.8
	Heroes of the Storm	2	1.2
	Vainglory	15	9
	Arena of Valor	39	23.4
Intensity (per week)	1-2 hours	24	14.4
	2-4 hours	28	16.8
	4-10 hours	49	29.3
	10-15 hours	26	15.6
	>15 hours	40	24

From the total population that consist of 167 students, in table 4.2 there are 129 students who are still playing and 38 students that not play anymore. In the *Game* part, there are 75 students plays *Dota 2*, 18 students play *League of Legends*, 119 students play *Mobile Legend*, 8 students plays *Heroes of Newert*, 2 students plays *Heroes of the Storm*, 15 students plays *Vainglory* and 39 students plays *Arena of Valor*. Note; in game part, the participants were allowed to choose more than 1 game in the questionnaire. Lastly, the researcher also found that 24 students plays for 1-2 hours per week, 28 students plays 2-4 hours per week, 49 students plays 4-10 hours per week, 26 students plays for 10-15 hours per week and 40 students plays more than 15 hours per week.

Table 4.3 Students' English learning by using MOBA

Item		Frequency	Percentage
Students' opinion	Very influential	29	17.4
	Quite influential	109	65.3
	Almost not influential	29	17.4

This table consist of 2 parts; how students perceive MOBA (Multiplayer Online Battle Arena) as learning medium to improve their English comprehension (with specific skills category) in MOBA games.

From table above, we can see 29 students have perceived MOBA as **very influential**, 109 students have perceived MOBA as **quite influential** and 29 students have perceived MOBA as **almost not influential** to their English comprehension.

Table 4.4 Specific skill of English learning in MOBA

Item	Frequency					
Skill	Scale	Vocabulary	Grammar	Speaking	Reading	Listening
	Strongly agree	28	6	19	26	23
	Agree	87	41	40	95	43
	Neutral	38	63	59	36	59
	Disagree	11	47	41	7	35
	Strongly disagree	3	10	8	3	7

Firstly, from table above we can see in term how helpful MOBA (Multiplayer Online Battle Arena) to their *Vocabulary*, there are 28 (16.8%) students are **strongly agree**, 87 (52.1%) students are **agree**, 38 (22.8%) students are **neutral**, 11 (6.6 %) students are **disagree** and 3 (1.8 %) students are **strongly disagree**. Secondly in term of *Grammar*, 6 (3.6 %) students are **strongly agree**, 41 (24.6%) students are **agree**, 63 (37.7%) students are **neutral**, 47 (28.1%) students are **disagree** and 10 (6%) students are **strongly disagree**. Thirdly, in term of *Speaking*, 19 (11.4%) students are **strongly agree**, 40 (24%) students are **agree**, 59 (35%) students are **neutral**, 41 (24.6%) students are **disagree** and 8 (4.8%) students are **strongly disagree**. Fourthly, in term of *Reading*, 26 (15.6%) students are **strongly agree**, 95 (56.9%) students are **agree**, 36 (21.6 %) students are **neutral**, 7 (4.2%) students are **disagree** and 3 (1.8%) students are **strongly disagree**. Lastly, in term of *Listening*, 23 (13.8%) students are **strongly agree**, 43 (25.7%) students are **agree**, 59 (35.3%) students are **neutral**, 35 (21%) students are **disagree** and 7 (21%) students are **strongly disagree**.

Table 4.5 Learners' motivation

Question from questionnaire: Do you agree if MOBA can motivate you to be better in English?

Item	Scale	Frequency	Percentage
Motivation	Strongly agree	36	21.6
	Agree	49	29.3

	Neutral	53	31.7
	Disagree	24	14.4
	Strongly disagree	5	3

From table above, we found that 36 students are **strongly agree**, 49 students are **agree**, 53 students are **neutral**, 24 students are **disagree** and 5 students are **strongly disagree**.

Table 4.6 Students' motivation to learn English by using MOBA

Question from questionnaire: Will you be more interested in learning English if MOBA (Multiplayer Online Battle Arena) element is included in English task or homework?

Item	Scale	Frequency	Percentage
Motivation	Strongly agree	42	25.1
	Agree	59	35.3
	Neutral	37	22.2
	Disagree	21	12.6
	Strongly disagree	8	4.8

From table above, we found that 42 out of 167 students are **strongly agree**, 59 students are **agree**, 37 students are neutral, 21 students are disagree and 8 students are **strongly disagree**.

Table 4.7 Communication intensity

In this part, the researcher will present detailed data about communication intensity, formality and the features used by the participants to communicate.

Item	Scale	Frequency	Percentage
Communication intensity	Always	58	34.7
	Sometime	92	55.1
	Almost never	17	10.2

From table above, this research found that 58 out of 167 students always communicate during game, 92 students sometimes communicate and 17 students almost never communicate but still communicate. The reason the researcher use almost never instead of never is because in online games where the player plays as team consist of several players, it is impossible to not communicate at all.

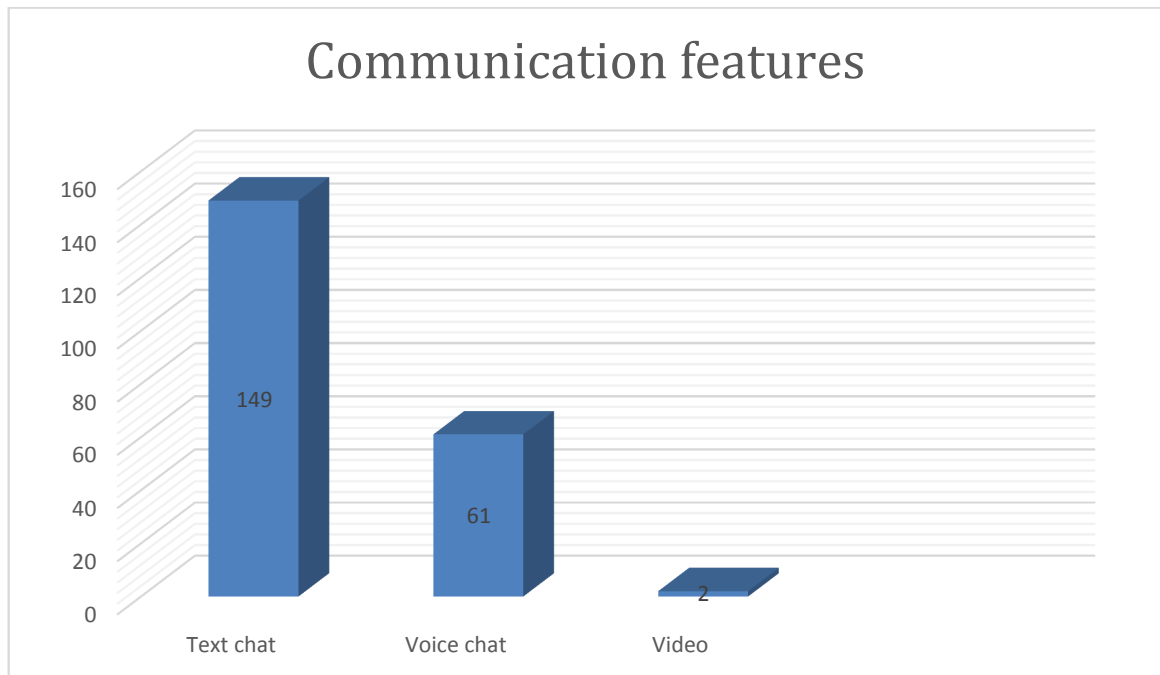


Figure 4.1 Chart of communication figures

From chart above, we can see 149 out of 167 students use text chat, 61 students use voice chat and only 2 students use video call to communicate during game. In this part, the participants were allowed to choose more than one answers.

Table 4.8 Communication formality

Item	Formality	Frequency	Percentage
Communication	Formal	36	78.4
	Informal	131	21.6

In this table, we found that 36 out of 167 students communicate formally while 131 students communicate informally or more casually.

Table 4.9 Reading intensity.

Item	Scale	Frequency	Percentage
Reading	Often	92	55.1
	Sometime	64	38.3
	Rarely	11	6.6

From this table, we can see 92 out of 167 students often read in game text, 64 students sometimes read in game text and only 11 students rarely read in game text, the reason the researcher use rarely instead of never is because it is impossible for a player to never read some text such as skill or item description as its player need to understand what their avatar's skills and items in order to use it properly to win although they might skip some text such as background story but it is possible for them to be interested to read their favourite avatar's background story at some point.

Table 4.10 Literatures inside MOBA

Item		Frequency	Percentage
Text features	Background story	81	48.5
	Skill description	154	92.2
	Item description	142	85

From this part, we found that 81 out of 167 students read background story, 154 students read skill description and 142 students read item

description. The participants were allowed to choose more than one answer in this part.

4.2. Discussion

In this section, the writer will be discussing about the logical explanations based on every finding.

4.2.1. MOBAs' Correlation to Gender Difference

Based on the result of this research, MOBA games are generally more appealing to male than female as 134 out of 167 students who play MOBA consisted of male and only 33 female students. The main factor of this is might be because psychologically male tend to be more inclined toward action than female and action is very synonymous with violence. In other words, male tend to be more inclined toward violence, consciously or not, voluntarily or not. As Jesse J. Prinz (2012) claimed that males are naturally more violent than female as he provides multiple proof through long history of man since ancient time to first and second world war.

4.2.2. Game Choice and Accesibility

Based on another result of this survey, *Mobile Legends* is the most played MOBA game which 119 out of 167 students are playing it. This is possibly because of the platform this game is based on which is on mobile phone, as its name contain the word "mobile". According to the Office of the Government Chief Information Officer of Hongkong in 2017, mobile devices bring much convenience to most people as it enable them to use ICT

(information and communication technology) anywhere and anytime effectively and more independently in the society.

The fact that this game is played on mobile phone, became the main factor in the number of learners that choose to play this game because unlike another previously listed MOBA above, *Mobile Legend* does not require high-end PC (Personal Computer) as it based on mobile phone platform as we know that not everyone have access to gaming-capable PC.

4.2.3. Reading and Vocabulary

Based on the next result of this research, most participants choses reading and vocabulary skill as the most encountered skill learning during playing, the similar result is also found by Danning Chen (2012) in his study: *Gamer perception of language learning and L2 interaction in MMORPGs* (Massively Multiplayer Role-playing Online Game) which is most of his participant from multiple country with multiple language background were agreed that playing MMORPG helps improve their vocabulary. The main factor that caused reading to be chosen in the first place is because the majority of game features is in form of literature, starting from skill and item instruction which is crucial to be understood by its players and obviously heros' in-game lore and comics that drives its player to read intensively and cause them to be more exposed to English which is eventually enrich their vocabulary comprehension due to the repetitive exposure to a certain vocabulary. This in line with Nuthall (2000) statetement as he emphasized that

it takes ‘three or four experiences involving interaction with relevant information for a new knowledge construct to be created in working memory and then transferred to long-term memory’.

4.2.4. Students’ motivation to learn English by using MOBA

Based on the result of this part, the amounts of students that generally agree (agree and strongly agree) which is 111 students outweigh the amounts of students that generally disagree (disagree and strongly disagree) which is 29 students. The main factor of this might be because most students consider the implementation of MOBAs’ aspect into curriculum can motivate them to improve their English comprehension as Gee (2007) stated that in the context of gaming, learners are motivated intrinsically to use or improve their English to advance in their games, which is supported by Dornyei (2001) as he stated that intrinsic motivation is perceived as a crucial factor for successful L2 learning.

4.2.5. Communication Formality

Based on the result of this survey, 36 out of 167 students communicate formally while 131 students communicate informally. The main factor of this might be because most of the participant uses informal language to communicate as the learners does not have much time to use formal and long sentences to communicate in the middle of game as it could compromise their way to victory, thus they tend to use shorter and faster way to communicate effectively and immediately.

4.2.6. Communication Intensity

Based on the result of this survey, the amounts of students that communicate intensely outweigh the amount of the students that rarely communicate by 58 to 17 students. The main factor of this might be because as MOBA players, which is collaborative team-based game that oriented heavily on communication and information exchange, the interaction between players is crucial, whether to discuss play style, strategy or asking for feedback. For instance, as a new player ask for skill or item instruction from a more experienced teammate. This is in line with Peterson's (2012) statement as he says that gamers can gain assistance or collaborate with more experienced members, who provide newcomers or novice players with explicit instructions and feedback. This statement also in line with Vygotsky (1978)'s notion of the zone of proximal development which states that with the support of a more experienced "other", the learner progresses through challenges faster than they could on their own, whether with an experienced peer or a teacher, or a resource. From this perspective, it is interesting to consider how MOBA (Multiplayer Online Battle Arena) communities and players may take on the role of a teacher and support for inexperienced learners.

Table 4.11 Specific skills of English learning in MOBA

Item	Frequency					
Skill	Scale	Vocabulary	Grammar	Speaking	Reading	Listening
	Strongly agree	28	6	19	26	23
	Agree	87	41	40	95	43
	Neutral	38	63	59	36	59
	Disagree	11	47	41	7	35
	Strongly disagree	3	10	8	3	7

From the table above, we found that vocabulary and reading are perceived as the most improved skill while playing online games or MOBA (Multiplayer Online Battle Arena) to be specific.

To support the result of this research furthermore, there are 5 learning strategies that agreed by Robert Marzano (2012) that occurs during game and player interaction with another player or contents contained inside the game.

Firstly, by getting the students to engage with the content. As we know, before learning something new, it is important to be engage with the content that to be learned first, so that the information can be absorbed faster and easier. This is in line with the statement of Simpson (2005) as he states that video games are believed to meet the relevance and engagement demands of today's generations of teenaged digital natives, who already spend most of their time in virtual space. Furthermore, a quote from Danning Chen (2014) in

his research about *Gamer perception of language learning and L2 interaction in MMORPGs* that says “not only did the learners engage in collaborative social interaction, they felt the gaming experience was motivating and engaging and that it helped them to improve fluency and to learn vocabulary”. He mentioned the relation between the engagement game provides and the improvement of learners’ fluency and vocabulary as the result of this research shows that vocabulary and reading are the most perceived as most improved skills while playing.

Secondly, giving the learned feedback, this is also occurred during in-game communication as new players asking questions to experienced ones, as Danning Chen (2012) stated that the dialogue between the two players, both inside and outside of the game, indicated that the two players learned languages in a natural, meaningful interaction by giving each other various forms of negotiation of meaning, peer scaffolding, and explicit feedback.

Thirdly, multiple exposure, the students get exposed to English language in many occasions during game. For instance, during communication as they negotiate new knowledge and give feedback to each other and during the interaction between players and contents inside game such as background story, skill and item description as Nuthall (2000) stated that It takes ‘three or four experiences involving interaction with relevant information for a new knowledge construct to be created in working memory and then transferred to long-term memory’. Multiple exposures provide students with multiple opportunities to encounter, engage with, and elaborate on new knowledge and

skills. It is not simple repetition or drill work. Research demonstrates that deep learning is developed over time via multiple and spaced interactions with new knowledge and concepts. This may require distributing practice across several days and using different activities to vary the interactions learners have with the new knowledge.

Fourthly, by having students apply their knowledge, Robert Marzano (2012) found that by helping students applying their knowledge will help them deepen their understanding, this is in line as the players who read the skill or item description before, to apply what they already understand from reading the text about certain avatar's ability by playing with that certain avatar, while in game they will observe the action or gesture taken by their avatar as they use certain skill they already read about before, this event will deepen their comprehension especially in term of vocabulary.

Lastly, by getting the students working together, Robert Marzano and John Hattie (2012) agreed that by getting students working together as peer or small group will help them to achieve better result than they could by their own, this is also in line as the interaction between players occurs during game as Vygotsky (1978) states in his notion of the zone of proximal development that with the support of a more experienced "other", the learner progresses through challenges faster than they could on their own.

CHAPTER V

CONCLUSION AND RECOMMENDATION

In this chapter researcher describe the conclusion based on the research finding from chapter 4 and also include recommendation for further research.

5.1. Conclusion

The main purpose of this research is to analyze and describe the students' needs of English learning by using MOBA (Multiplayer Online Battle Arena) games. The participant of this research consisted of 167 students of FPSB (Fakultas Psikologi Sosial dan Budaya) of Islamic University of Indonesia who filled the questionnaire that were distributed through google form and hard copy.

1. Based on the result of this research, MOBA games is generally more appealing to male students than female as 134 out of 167 students who play MOBA consisted of male and only 33 female students. The main factor of this is might be because psychologically male tend to be more inclined toward action than female and action is very synonymous with violence. In other words, male tend to be more inclined toward violence, consciously or not, voluntarily or not. As Jesse J. Prinz (2012) claimed that males are naturally more violent than female as he provides multiple proof through long history of man since ancient time to first and second world war.
2. Based on the next result of this research, most students of FPSB batch 2015-2017 choses reading and vocabulary skill as the most encountered

skill learning during playing, the similar result is also found by Danning Chen (2012) in his study: *Gamer perception of language learning and L2 interaction in MMORPGs* (Massively Multiplayer Role-playing Online Game) which is most of his participant from multiple country with multiple language background were agreed that playing MMORPG helps improve their vocabulary.

3. Other result shows that most of the students perceives MOBA positively in term of engagement as they consider it as a learning environment provider with interesting and joyful display, as Chen (2014) states about how gaming experience can increase learners' motivation and engagement level which is highly helpful to their language improvement.
4. Another result of this research shows that most of the participant uses informal language to communicate as the learners does not have much time to use formal and long sentences to communicate in the middle of game as it could compromise their way to victory, thus they tend to use shorter and faster way to communicate effectively and immediately.
5. Further result shows that the participants are mostly interested if the MOBA elements are implemented in English curriculum.

5.2. Recommendation

In this part, researcher will provide 3 recommendations

1. First of all, researcher of this study encourage students of FPSB to be more aware of potential medias and places that can be good English learning environment which is highly helpful to their language improvement, and not to limit their learning place inside classroom. For instance, by playing online games, the students at least accidentally absorb few new vocabularies from few hours exposure of in-game literatures. This learning process can be optimized if the students are fully aware of the learning potential of playing online games. Let alone now we enter the era of advanced technology especially in communication and entertainment thus can provide limitless potential if we harness it smartly and fully aware of its learning potential.
2. Secondly, researcher strongly encourage the FPSB students to read more literatures with English content or prioritize exposure to English language by choosing to use English subtitle instead of Bahasa indonesia when watching movie because by doing so, the students are more exposed to English and can enrich their knowledge not only about the content but also English comprehension itself, not only in term of vocabulary, but also potentially in grammar if the learner pay close attention in sentences patterns.
3. Lastly, researcher strongly remind the FPSB students to be wiser in using existing media as learning medium. For instance, in gaming, as we know

games now days are mostly synonymous with violence and many negative aspects such as blood, gore and strong language. Thus, researcher strongly remind learners to be wiser and smarter in absorbing positive aspect without abusing the negative aspect.

REFERENCES

- Arikunto, S. (2006). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: PT. Rineka Cipta.
- Batchelder, W. H., Narens, L. (1977). *A Critical Examination of the Analysis of Dichotomous Data*. Irvine: University of California.
- Berwick, R. (1989). *Needs assessment in language programming: from theory to practice*. In: Johnson, R. K. (Ed). *The second language curriculum* (pp.48-62). Cambridge: Cambridge University Press.
- Braunn, L. W. (2007). *Teens, Technology, and Literacy: Or, Why bad grammar is not always bad*. London: Library of Congress.
- Brindley, G. (1989). *The role of needs analysis in adult ESL program design*. In: Johnson, R .K. (Ed). *The second language curriculum* (pp.63-78). Cambridge: Cambridge University Press.
- Bytheway, J. (2013). *The online-community culture in massively multiplayer online roleplaying games affects language learners' use of vocabulary learning strategies*. *World Call: Global perspectives on Computer-Assisted Language Learning*, 39-42.
- Bytheway, J. (2015). *A taxonomy of vocabulary learning strategies used in massively multiplayer online role-playing games*. New Zealand: Victoria University of Wellington.
- Chen, D. (2014). *Gamer perception of language learning and L2 interaction in MMOPRGs*. Master of Arts in English Language and Culture: Education and Communication.
- Chik, A. (2011). *Learner autonomy development through digital gameplay*. *Journal of Digital Culture & Education*, 3(1), 30-45.
- Chik, A. (2012). *Digital gameplay for autonomous foreign language learning: Gamers' and language teachers' perspectives*. In H. Reinders (Ed.), *Digital*

- Games in Language Learning and Teaching. New York: Palgrave Macmillan.
- Chik, A. (2014). *Digital gaming and language learning: Autonomy and community*. *Language Learning & Technology* 18(2), 85–100. Retrieved from <http://llt.msu.edu/issues/june2014/chik.pdf>
- Chik, A. (2014). Digital gaming and language learning: Autonomy and community. *Language Learning & Technology*, 18(2), 85-100. Retrieved March 9, 2016.
- deHaan, J. (2005). *Learning language through video games: A theoretical framework, an evaluation of game genres and questions for further research*. In S.P. Schaffer & M.L. Price (Eds.), *Interactive convergence: Critical issues in multimedia* (pp. 229-239). Oxford, UK: Inter-Disciplinary Press.
- deHaan, J. (2011). *Teaching and learning English through digital game projects*. *Digital Culture & Education*, 3:1, 46-55.
- Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. New York: Palgrave Macmillan.
- Glasow, P. A. (2005). *Fundamentals of Survey Research Methodology*. Virginia: Washington C3 Center.
- Greco, L. D., Walop, W., McCarthy, E. H. (1987). *Questionnaire development: validity and reliability*. New York: Department of Epidemiology and Biostatistics, McGill University.
- Grimshaw, M. (2007). *Sound and Immersion in the First-person Shooter*. United Kingdom: University of Wolverhampton.
- Hrčková, J. (2016). *The Influence of Computer Games on English Language Proficiency*. Brno: Department of English Language and Literature, Masaryk University.

- Henry, A. (2014). *Swedish students' beliefs about learning English in and outside of school*. In D. Lasagabaster, A. Doiz and J-M Sierra (eds). *Motivation and Foreign Language Learning: From Theory to Practice* [Language Learning & Language Teaching, 40] (pp. 93–116). Amsterdam: John Benjamins.
- Iwai, T., Kondo, K., Limm, S. J. D., Ray, E. G., Shimizu, H., and Brown, J. D. (1999). *Japanese language needs analysis*. Available at: <http://www.nflrc.hawaii.edu/Networks/NW13/NW13.pdf>
- Kazamia, V. (2010). *Using the SILL to record the language learning strategy use: Suggestions for the Greek EFL population*. Greek: Aristotle University of Thessaloniki.
- Kraemer, K. L. (1991). *Introduction*. Paper presented at The Information Systems Research Challenge: Survey Research Methods.
- Long, M.H. (1981). *Input, interaction and second language acquisition*. In H. Winitz (Ed.), *Native language and foreign language and foreign language acquisition* (Vol. 379, pp. 259-278). New York, NY: Annals of the New York Academy of Sciences.
- Osgood EC; Suci GJ & Tannenbaum PH (1957). *The measurement of meaning*. Urbana, University of Illinois Press.
- Peterson, M. (2010a). *Massively multiplayer online role-playing games (MMORPGs) as arenas for second language learning*. *Computer Assisted Language Learning*, 23(5), 429-439.
- Pica, T. (1994). *Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes*. *Language Learning*, 44(4), 493-527.
- Pinsonneault, A., & Kraemer, K. L. (1993). *Survey research methodology in management information systems: An assessment*. *Journal of Management Information Systems*, 10, 75-105.

- Prensky, M. (2001). *Simulation – Are they Games?*. McGraw-Hill: Digital Game-based Learning.
- Ranalli, J. (2008). *Learning English with The Sims: exploiting authentic computer simulation games for L2 learning*. USA: Iowa State University.
- Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. New York: John Wiley and Sons.
- Scarino, A., Liddicoat, A. J. (2009). *Teaching and learning language*. Australia: Department of Education, Employment and Workplace Relations.
- Songhori, M. H. (2017). *Introduction to Needs Analysis*. Kerman: Azad University of Baft.
- Sylvén, L., Sundqvist, P. (2012). *Gaming as extramural English L2 learning and L2 proficiency among young learners*. *ReCALL*, 24(3): 302-321
<http://dx.doi.org/10.1017/S095834401200016X>
- Thorn, Steven L. (2008). *Transcultural communication in open Internet environments and massively multiplayer online games*. In S. Magnan (Ed.), *Mediating discourse online* (pp. 305-327). Amsterdam: John Benjamins.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- West, R. (1994). *Needs analysis in language teaching*. *Language Teaching*, 27/1, 1-19.
- Xiong, S., Lida, H. (2014). *Attractiveness of Real-time Strategy Games*. Nomi, Ishikawa: Japan Advanced Institute of Science and Technology.
- Zheng, D., Bischoff, M., Gilliland, B. (2015). *Vocabulary learning in massively multiplayer online games: context and action before words*. USA: Department of Second Language Studies, University of Hawaii.

Zohrabi, M. (2013). *Mixed method research: Instruments, validity, reliability and reporting findings*. Iran: University of Tabriz.

<http://www.statisticshowto.com/semantic-differential-scale/>

<https://dota2.gamepedia.com/Heroes/Introductions>

<http://www.evidencebasedteaching.org.au/robert-marzano-vs-john-hattie/>

<https://www.lifewire.com/internet-game-timeline-1983536>

<https://techcrunch.com/2015/10/31/the-history-of-gaming-an-evolving-community/>

<https://akhdian.net/2012/07/05/jenis-jenis-game-online/>

<https://duniagames.co.id/game/3092-dota-2>

<http://www.dota2.com/thelastcastle/>

APENDIX 1

Questionnaire of the Needs Analysis of English Learning by Using MOBA NEEDS ANALYSIS SURVEY STUDY OF FPSB STUDENTS' ENGLISH LEARNING BY USING MOBA FROM BATCH 2015 TO 2017 IN ISLAMIC UNIVERSITY OF INDONESIA

Angket Penelitian

Angket ini berisi pernyataan-pernyataan yang berkaitan dengan analisis kebutuhan mahasiswa/mahasiswi FPSB angkatan 2015-2017 pada pembelajaran Bahasa Inggris dengan menggunakan MOBA (Multiplayer Online Battle Arena), sebagian besar dari pertanyaan diadaptasi dari kuisisioner yang telah digunakan oleh Jana Hrcokova dalam penelitiannya yang berjudul “The Influence of Computer Games on English Proficiency”.

Silahkan baca setiap pernyataan dan berikan jawaban anda dengan cara mengisi jawaban dalam kolom yang sudah disediakan, mencentang/melingkari/menyilang jawaban ganda yang sudah disediakan serta melingkari angka 1, 2, 3, 4 atau 5 yang menunjukkan seberapa setuju anda dengan pernyataan di bawah.

Atas perhatian dan waktu yang anda luangkan untuk mengisi angket ini, Peneliti mengucapkan terimakasih.

Yogyakarta, Maret 2017

Rizal Husnul Huda

Nama saya Rizal Husnul Huda, dari prodi pendidikan bahasa Inggris, penelitian saya ini yaitu tentang analisis kebutuhan mahasiswa FPSB angkatan 2015-2017 dalam pembelajaran Bahasa Inggris dengan menggunakan MOBA (Multiplayer Battle Arena) yang sangat populer saat ini, contoh game-game MOBA: Dota 2, League of legends, Mobile legend dll.

Pilihlah jawaban di bawah dengan cara di lingkari/dicentang/disilang.

1. Jenis kelamin?
 - Laki-laki
 - Perempuan

2. Siapa namamu? (**Opsional**)

3. Sudah berapa tahun kamu belajar/mengenal bahasa Inggris?

4. Pernahkah kamu memainkan game Moba?
(**Centang salah satu jawaban**)
 - Pernah dan masih bermain
 - Pernah tetapi sudah tidak bermain lagi

5. Game Moba mana yang pernah kamu mainkan?
(**Centang satu atau lebih**)
 - Dota 2
 - League of Legends
 - Mobile Legend
 - Heroes of Newert
 - Heroes of the Storm
 - Vainglory
 - Arena of Valor (AOV)

6. Seberapa sering kamu bermain? (dalam seminggu)

(Centang salah satu jawaban)

- 1-2 jam
- 2-4 jam
- 4-10 jam
- 10-15 jam
- Lebih dari 15 jam

7. Seberapa sering kamu berkomunikasi menggunakan bahasa Inggris dengan pemain lain saat bermain?
- Sangat sering
 - Kadang-kadang
 - Sangat jarang
8. Apa fitur yang kamu gunakan untuk berkomunikasi dengan pemain lain?
(Centang satu atau lebih)
- Text chat
 - Voice programs (skype/Ventrilo/teamspeak/discord)
 - Video
9. Saat kamu berkomunikasi, bagaimana bahasa yang kamu gunakan?
- Formal
 - Tidak formal

Keterangan untuk pertanyaan nomor 10 dan 11:

1=sangat kesulitan

2=cukup kesulitan

3=netral/tidak tahu

4=tidak kesulitan

5=tidak kesulitan sama sekali

10. Apakah kamu kesulitan saat berkomunikasi dalam bahasa Inggris?

(Lingkari salah satu angka dalam tabel)

Sangat kesulitan 1 2 3 4 5 Tidak sama sekali

11. Apakah pemain lain dapat memahami bahasa Inggris yang kamu gunakan?

(Lingkari salah satu angka dalam tabel)

Sangat kesulitan 1 2 3 4 5 Tidak sama sekali

12. Seberapa sering kamu membaca teks dalam game?

- a. Sering
- b. Kadang-kadang
- c. Jarang

13. Teks mana yang kamu baca?

(Centang satu atau lebih)

- Cerita latar belakang
- Deskripsi skill
- Deskripsi item

14. Menurutmu seberapa besar bermain Moba mempengaruhi perkembangan bahasa Inggrismu?

- a. Sangat berpengaruh
- b. Cukup berpengaruh
- c. Tidak terlalu berpengaruh

15. Menurutmu skill mana yang paling dipengaruhi oleh game Moba?

(Centang satu atau lebih)

- Vocabulary
- Grammar
- Speaking
- Reading
- Listening

Keterangan untuk pertanyaan nomor 17-20:

1 = Sangat tidak setuju

2 = Tidak setuju

3 = Netral

4 = Setuju

5 = Sangat setuju

16. Apa kamu setuju jika Moba dapat membantu perkembanganmu dalam **vocabulary skill**?

(Lingkari salah satu angka dalam tabel)

Sangat tidak 1 2 3 4 5 Sangat setuju
setuju

17. Apa kamu setuju jika Moba dapat membantu perkembanganmu dalam **grammar skill**?

(Lingkari salah satu angka dalam tabel)

Sangat tidak 1 2 3 4 5 Sangat setuju
setuju

18. Apa kamu setuju jika Moba dapat membantu perkembanganmu dalam **speaking skill**?

(Lingkari salah satu angka dalam tabel)

Sangat tidak 1 2 3 4 5 Sangat setuju
setuju

19. Apa kamu setuju jika Moba dapat membantu perkembanganmu dalam **reading skill**?

(Lingkari salah satu angka dalam tabel)

Sangat tidak 1 2 3 4 5 Sangat setuju
setuju

20. Apa kamu setuju jika Moba dapat membantu perkembanganmu dalam **listening skill**?

(Lingkari salah satu angka dalam tabel)

Sangat tidak 1 2 3 4 5 Sangat setuju
setuju

Keterangan untuk nomor 22 dan 23:

1=Sangat tidak setuju

2=Tidak setuju

3=Netral

4=Setuju

5=Sangat setuju

Pilihlah jawaban yang sesuai dengan pendapatmu berdasarkan pernyataan nomor 21-23

21. Game Moba dapat meningkatkan motivasimu untuk menjadi lebih baik dalam bahasa Inggris.

(Centang salah satu angka dalam tabel)

Sangat tidak setuju 1 2 3 4 5 Sangat setuju

22. Kamu akan merasa lebih tertarik untuk belajar bahasa Inggris jika dosen memasukkan unsur game Moba ke dalam mata kuliah Bahasa Inggris.

(Centang salah satu angka dalam tabel)

Sangat tidak setuju 1 2 3 4 5 Sangat setuju

23. Apakah kamu setuju jika unsur game Moba dimasukkan dalam tugas kuliah?

(Centang salah satu angka dalam tabel)

Sangat tidak setuju 1 2 3 4 5 Sangat setuju

TERIMA KASIH ATAS PERTISIPASINYA

APENDIX 2
THE INFLUENCE OF COMPUTER GAMES ON ENGLISH LANGUAGE
PROFIENCY

Hello, my name is Jana Hrckova and I am currently writing my bachelor's thesis on language learning at the Faculty of Education, Masaryk University. This questionnaire is anonymous and will help me determine the influence of computer computer games on your English proficiency. It will take about 10 minutes to complete.

Questionnaire

Page 1

1. Who are you?
 - Male
 - Female

2. Where are you from?
Country or state

3. What is your name?

Page 2 (LANGUAGE)

4. How Long have you studied English?

5. Do you study any other language?
Choose one or more
 - German
 - Spanish
 - French
 - Italian

- No, only English
- Other

6. What is your level of proficiency in English now?

- A1
- A2
- B1
- B2
- C1
- C2
- Other

PAGE 3 (INFLUENCE)

7. Do you think that playing games helped you with your English?

- d. Yes
- e. No

8. What has improved the most because of computer games?

- Vocabulary
- Grammar
- Speaking/fluency
- Other

9. How much do you think the games helped you with your vocabulary?

Helped me a lot 1 2 3 4 5 Didn't help me at
all

10. How much do you think the games helped you with your reading skills?

Helped me a lot 1 2 3 4 5 Didn't help me at
all

11. How much do you think the games helped you with your listening skill?

Helped me a lot 1 2 3 4 5 Didn't help me at
all

12. How much do you think the games helped you with your speaking?

Helped me a lot 1 2 3 4 5 Didn't help me at
all

PAGE 4 (COMPUTER GAMES)

13. Which of these computer games do you play?

Choose one of more

- World of Warcraft
- League of Legends
- Assassin's Creed (any)
- Other

14. How often do you play computer games? (in a week)

- 1-2 hours
- 2-4 hours
- 4-10 hours
- 10-15 hours
- More than 15 hours

15. Which type of computer game do you play/like the most?

16. How you communicate with other players?

- Text
- Voice programs (skype/Ventrilo/teamspeak/discord)
- Video
- Other

17. Do you read the texts in game?

- d. Yes
- e. No

PAGE 5 (INFLUENCE)

18. Have you ever played a game to learn English

- Yes
- No

19. When you play a computer game and see an unknown word, you look it up in a dictionary/online?

- Yes (immediately)
- Yes (after playing)
- No

20. When you play a computer game and hear an unknown word, do you look it up in a dictionary/online?

- Yes (immediately)
- Yes (after playing)
- No

21. When you communicate with other players, do you use formal or informal English?

- Formal
- Informal

22. When you communicate with other players, do you have a problem understanding informal English?

Yes, extremely difficult	1	2	3	4	5	No, extremely easy
-----------------------------	---	---	---	---	---	-----------------------

23. When you communicate with other players, do you find it easy to talk to them in English?

Yes, extremely difficult	1	2	3	4	5	No, extremely easy
-----------------------------	---	---	---	---	---	-----------------------

24. Do other players understand you when you speak in English?

- Yes, with no problems
- Yes, with problems
- No

PAGE 6 (COMPUTER GAMES IN SCHOOL)

25. Would you like computer games to be included in the school work?

Yes 1 2 3 No

26. Do computer games motivate you to learn English better?

Yes, extremely 1 2 3 4 5 No, not at all

27. Do you think you would be more interested in English if you could play computer games as homework?

Yes, extremely 1 2 3 4 5 No, not at all

28. Would you like your teacher to give you homework connected to computer games?

Yes, extremely 1 2 3 4 5 No, not at all

PAGE 7 (SHORT TEST)

29. Please re-write this quest descriptions into simple words (world of Warcraft quest text)

I've got a real problem on my hands. I have a deadline looming for an order of lumber, and I'm running out of time. The wolves and bears north of here have chased my workers away from the bundles of wood that they've already chopped. I've already talked to Deputy Rainer about clearing the animals, but I need someone to go collect the wood for me. If you could collect eight bundles of wood for me I might just make my deadline.

30. Do you find this exercise difficult?

yes 1 2 3 4 5 No

31. Are there any unknown words?

Please write them down

32. Did you look the unknown words up in dictionary/online?

- Yes, in a dictionary
- Yes, online
- No

33. Would you like to word with similar text in school?

- Yes
- No