

Understanding the use of pejorative language in massively multiplayer online games (MMOGs)

by

Kedibone Charlotte Namane
u20673681

Submitted in fulfilment of the requirements for the degree
PhD in Informatics

in the

FACULTY OF ENGINEERING, BUILT-ENVIRONMENT AND INFORMATION
TECHNOLOGY

at the

UNIVERSITY OF PRETORIA

Supervisor:

Prof M Hattingh

Co-supervisor:

Prof M Matthee

Date of submission
30 September 2024

Word Count = 94172

Declaration regarding Plagiarism

The Department of Informatics emphasises integrity and ethical behaviour with regard to the preparation of all written assignments.

Although the lecturer will provide you with information regarding reference techniques, as well as ways to avoid plagiarism, you also have a responsibility to fulfil in this regard. Should you at any time feel unsure about the requirements, you must consult the lecturer concerned before submitting an assignment.

You are guilty of plagiarism when you extract information from a book, article, web page or any other information source without acknowledging the source and pretending that it is your own work. This doesn't only apply to cases where you quote verbatim, but also when you present someone else's work in a somewhat amended (paraphrased) format or when you use someone else's arguments or ideas without the necessary acknowledgement. You are also guilty of plagiarism if you copy and paste information directly from an electronic source (e.g., a website, e-mail message, electronic journal article, or CD ROM), even if you acknowledge the source.

You are not allowed to submit another student's previous work as your own. You are furthermore not allowed to let anyone copy or use your work with the intention of presenting it as his/her own.

Students who are guilty of plagiarism will forfeit all credits for the work concerned. In addition, the matter will be referred to the Committee for Discipline (Students) for a ruling. Plagiarism is considered a serious violation of the University's regulations and may lead to your suspension from the University. The University's policy regarding plagiarism is available on the Internet at <http://upetd.up.ac.za/authors/create/plagiarism/students.htm>.

I (full names & surname):	Kedibone Charlotte Namane
Student number:	U20673681

Declare the following:

1. I understand what plagiarism entails and am aware of the university's policy in this regard.
2. I declare that this assignment is my own, original work. Where someone else's work was used (whether from a printed source, the Internet or any other source) due acknowledgement was given and reference was made according to departmental requirements.
3. I did not copy and paste any information directly from an electronic source (e.g., a web page, electronic journal article or CD ROM) into this document.
4. I did not make use of another student's previous work and submitted it as my own.
5. I did not allow and will not allow anyone to copy my work with the intention of presenting it as his/her own work.



Signature

30 September 2024

Date

LIST OF ACRONYMS

Computer-Assisted Language Learning (CALL)
Computer-Mediated Communication (CMC)
Constructivist Grounded Theory (CGT)
Digital Game-Based approaches (DGBL)
End User Licence Agreement (EULA)
English as a First Language (EFL)
Grounded Theory (GT)
Grounded Theory Method (GTM)
Grounded Theory Methodology (GTM)
Information Systems (IS)
League of Legends (LoL)
Management Information Systems (MIS)
Massively Multiplayer Online Games (MMOGs)
Massively Multiplayer Online Role-Playing Games (MMORPGs)
Massively Multiplayer Online Social Game (MMOSG)
Multiplayer Online Battle Arena (MOBA)
Nintendo Entertainment System (NES)
Online Disinhibition Effect (ODE)
Quasi-Synchronous Computer-Mediated Communication (QS-CMC)
Realistic conflict theory (RCT)
Realistic Group Conflict Theory (RGCT)
Social Cognition Theory (SCT)
Sociological Game Theory (SGT)
Star Wars Galaxies (SWGs)
Stressor-Strain-Outcome (SSO)
Synthetic immersive environments (SIEs)
Terms of Service (ToS)
The Theory of Planned Behaviour (TPB)
United States Dollar (USD)
World of Warcraft (WOW)

ABSTRACT

Massively multiplayer online games (MMOG) contribute approximately 26 billion USD with approximately 1.1 billion players. Research has shown that many of the players are teenagers and young adults. Furthermore, these games can have a powerful influence on the players and their lives outside the online game. Ample research exists on the prevalence of toxic behaviour during gameplay, including bullying, harassment, and cheating. Less research is available on language use, and more specifically, the use of pejorative language during the playing of MMOG. Existing research on this topic indicates a gap in understanding the linguistic habits of gamers during gameplay. Exposure to toxicity and profanity (such as pejorative language use) during MMOG play can have repercussions such as relational aggression in adolescents. Therefore, the purpose of this study is to gain an understanding of MMOG players' perceptions of pejorative language use in MMOGs. In addition, the study aims to understand how other players account for the strong presence of pejorative language and expletives in player discourse.

The research study adopted a grounded theory methodology to develop a theoretical model, which draws on the stressor-strain-outcome (SSO) model, to understand the use of pejorative language in MMOGs by explaining different stressors that result in the use of pejorative language in MMOGs. This research took a qualitative approach in examining the main concerns of using pejorative language in MMOGs as perceived by the players. Twelve interviews were conducted before theoretical saturation was reached. These participants supplied rich data for the researcher to draw on due to their gaming experience. The data gathered led to the emergence of a substantive theory, "Understanding the Use of Pejorative Language in MMOGs".

The theory proposes that game language and competition (both inter-team and intra-team) are influenced by the type of game played. The influence of these core categories will, in turn, play a role in the actual language behaviour, which, in the context of this study, has been identified as pejorative. The actual language behaviour depends on the different gaming platforms and the moderation and medium of communication used in these platforms. Some outcomes then result from the actual language behaviour. The SSO model was used to explain and expand on the relationships between the core categories.

This study's primary contribution to the body of knowledge is a theoretical understanding of MMOG players' perceptions of pejorative language use in MMOGs. To the best of the researcher's knowledge, this study is the first to describe the use of pejorative language in MMOGs supported by qualitative data.

Keywords:

Massively multiplayer online games (MMOGs), massively multiplayer online role-playing games (MMORPGs), pejorative language, grounded theory, sociological game theory, game language, competitive nature of game, inter-team competition, intra-team competition, actual language, normalised language, contextual language, type of game, stressor strain outcome model

DEDICATION

This thesis is dedicated to my late grandmother.

Gogo, nayi iphuraphura lebomvu...

ACKNOWLEDGEMENTS

First, I would like to express my gratitude to Prof M. Hattingh, my supervisor, and Prof M. Matthee, my co-supervisor, for their dedicated time and enthusiasm in assisting me with this work. Thank you for always taking the time to talk to me or answer my concerns, for being understanding and offering me guidance, support, and encouragement, as well as your insightful critiques throughout my research journey. I am grateful.

In addition, I want to express my gratitude to my family and friends for their unwavering support and tolerance and for staying up with me all those late nights while I conducted my research and wrote my thesis. Your prayers and constant motivation to finish this work have kept me going.

I also express my gratitude to everyone who participated in the study and everyone who helped me to find participants.

Above all, I want to express my gratitude to God for guiding me through this journey. Day by day, I've felt Your guidance. It's You who gave me the strength to complete my degree. I'll continue to have faith in You for the future.

...and to you who decided to pick up this thesis and read it, thank you.

TABLE OF CONTENTS

LIST OF ACRONYMS.....	II
ABSTRACT.....	IV
DEDICATION.....	VI
ACKNOWLEDGEMENTS	VII
CHAPTER 1: INTRODUCTION	14
1.1 BACKGROUND INFORMATION.....	14
1.2 PROBLEM STATEMENT	17
1.3 RESEARCH JUSTIFICATION.....	19
1.4 RESEARCH QUESTIONS	20
1.4.1 PRIMARY RESEARCH QUESTION	20
1.4.2 SUB-QUESTIONS	20
1.5 RESEARCH OBJECTIVES	21
1.6 DELINEATION AND LIMITATIONS	21
1.7 RATIONALE FOR THE STUDY	22
1.8 CHAPTER OVERVIEW AND THE STRUCTURE OF THIS THESIS	22
CHAPTER 2: LITERATURE REVIEW	24
2.1 INTRODUCTION.....	24
2.2 THE EMERGENCE OF ONLINE GAMING	25
2.3 MASSIVELY MULTI-PLAYER ONLINE GAMES (MMOG).....	27
2.4 COMMUNICATION AND LANGUAGE PATTERNS IN MMOGS	29
2.4.1 WHY IT IS IMPORTANT TO UNDERSTAND THEM	29
2.4.2 PRIOR STUDIES ON MMOG LANGUAGE	30
2.4.3 MMOG INTERACTION SYSTEM	31
2.4.4 LANGUAGE LEARNING THROUGH MMOGS.....	34
2.4.5 ABUSIVE LANGUAGE AND COMMUNICATION PATTERNS AS FOUND IN MMOGs	37
2.4.6 APPROACHES EXPLAINING TOXIC BEHAVIOUR	49
2.4.7 HOW PEJORATIVE LANGUAGE IS RESEARCHED/INVESTIGATED IN MMOGs	52
2.4.8 NON-VERBAL COMMUNICATION	54
2.4.9 COMMUNICATION AND TEAM PERFORMANCE IN MMOGS.....	59
2.4.10 HOW LANGUAGE AND COMMUNICATION PATTERNS IN MMOGS INFLUENCE RELATIONSHIP FORMATION.....	61
2.4.11 LANGUAGE USE FOR GENDER IDENTITIES	64
2.4.12 THE THEORY OF SOCIAL GAMES.....	66
2.5 CONCLUSION	86
CHAPTER 3: METHODOLOGY	88
3.1 WHAT IS GROUNDED THEORY?.....	88

3.2 GROUNDED THEORY BACKGROUND	89
3.3 DIFFERENT TYPES OF GROUNDED THEORY	90
3.4 CONDUCTING LITERATURE REVIEWS IN GROUNDED THEORY STUDIES.....	94
3.5 CHALLENGES ASSOCIATED WITH THE GROUNDED THEORY METHOD.....	97
3.6 PRINCIPLES OF GROUNDED THEORY PROCEDURE	99
3.6.1 COMPARING INCIDENTS APPLICABLE TO EACH CATEGORY	101
3.6.2 INTEGRATING CATEGORIES AND THEIR PROPERTIES.....	103
3.6.3 DEVELOPING CONCEPTS.....	104
3.6.4 THEORETICAL SAMPLING	105
3.6.5 THEORETICAL SATURATION.....	106
3.6.6 CODING TECHNIQUES	107
3.6.7 DELIMITING THEORY	111
3.6.8 WRITING THEORY	112
3.7 METHODOLOGY APPLICATION TO THIS STUDY	114
3.7.1 RESEARCH DESIGN	114
3.7.2 SAMPLING	114
3.7.3 DATA COLLECTION	120
3.7.4 DATA ANALYSIS.....	125
3.7.5 DATA MANAGEMENT	131
3.7.6 ETHICAL CONSIDERATIONS	132
3.8 GROUNDED THEORY WITHIN THE INFORMATION SYSTEMS DISCIPLINE....	133
3.9 GROUNDED THEORY AND MMOG	134
3.10 SUMMARY	136
CHAPTER 4: FINDINGS.....	138
4.1 INTRODUCTION.....	138
4.2 THEORY BUILDING	138
4.2.1 THE EMERGING CATEGORIES.....	142
4.2.2 SUMMARY	180
CHAPTER 5: DISCUSSION	181
5.1 INTRODUCTION.....	181
5.2 THE EMERGING PATTERN.....	182
5.3 THE ROLE OF EXTANT LITERATURE IN THEORY BUILDING.....	185
5.4 THE STRESSOR-STRAIN-OUTCOME (SSO) MODEL	186
5.5 RELEVANCE OF SSO IN THE PRESENT STUDY	186
5.6 STRESSORS AS IDENTIFIED IN THIS STUDY	187
5.6.1 INFLUENCE OF THE TYPE OF GAME ON PEJORATIVE LANGUAGE USE	188
5.6.2 GAME LANGUAGE	194
5.6.3 THE COMPETITIVE NATURE OF THE GAME	199
5.7 THE STRAINS AS IDENTIFIED BY THIS STUDY	205
5.7.1 THE ACTUAL LANGAUGE USED IN MMOGS	205

5.7.2 THE PLATFORM/MEDIUM USED IN-GAME	208
5.8 OUTCOME OF PEJORATIVE LANGUAGE USE IN MMOGS	210
5.8.1 FORMATION OF SMALLER COMMUNITIES - DISSOCIATION	210
5.8.2 REMAINING SILENT	213
5.8.3 RETALIATION	216
5.9 SUMMARY	216
CHAPTER 6: CONCLUSION	217
6.1 INTRODUCTION	217
6.2 THE PROPOSED MODEL	217
6.3 THEORETICAL INTEGRATION	220
6.4 INTERRELATION OF CONCEPTS	222
6.5 EVALUATION OF THE PROPOSED THEORY	229
6.6 CONTRIBUTION OF RESEARCH	236
6.7 CONCLUSION ABOUT RESEARCH APPROACH	238
6.8 EVALUATION OF METHODOLOGICAL PROCESS	239
6.8.1 Do the findings fit the experiences of the readers and the participants as well?	240
6.8.2 How applicable/useful are the findings for policy and practice?	240
6.8.3 Are the findings organised around concepts rather than a mass of uninterpreted data?	240
6.8.4 Is the context described so that the reader can more fully understand the findings and its concepts?	241
6.8.5 Do the findings make sense by presenting a logical flow of ideas or are there gaps or missing links in the logic?	242
6.8.6 Are there depth in the findings, i.e., descriptive details that add richness and variation in addition to the presentation of concepts and links between concepts? ..	242
6.8.7 Has variation been built into the findings to demonstrate the complexity of human life?	242
6.8.8 Are there creative aspects in the findings, i.e., do the findings say something new, put old ideas together in new ways, or lead to new understandings?	243
6.8.9 Does the researcher demonstrate sensitivity to the participants and to the data?	243
6.8.10 Have the memos grown in depth and degree of abstraction as the research moves along?	243
6.9 REVISITING THE RESEARCH QUESTIONS	244
6.10 FUTURE RESEARCH	253
6.11 CONCLUDING REMARKS	253
REFERENCES	255
APPENDICES	275
APPENDIX A: ETHICS APPROVAL LETTER	275
APPENDIX B: INFORMED CONSENT	276

APPENDIX C: INTERVIEW QUESTIONS.....278

LIST OF FIGURES

Figure 1: Outline of Chapter 1.....	17
Figure 2: Outline of Chapter 2.....	24
Figure 3: Social context of play (Malliet, 2012)	32
Figure 4: Example of Star Wars Galaxies (SWGs) (steamcommunity, 2023)	33
Figure 5: The Social game (Storytelling, 2015).....	71
Figure 6: Scheme of the social game (Stolz, 2023b).	72
Figure 7: Social games. a, b Types of social games (Stolz, 2023b)	73
Figure 8: Outline of Chapter 3.....	89
Figure 9: Research design framework (Chun Tie et al., 2019).....	100
Figure 10: Data analysis procedure of grounded theory method (Cho & Lee, 2014)	102
Figure 11: Grounded theory method for the study (adapted from Davids, 2017; Urquhart et al., 2010; Weimann, 2012)	121
Figure 12: Outline of Chapter 4.....	138
Figure 13: Type of Game mind-map.	143
Figure 14: Game language mind-map.	149
Figure 15: Competitive Nature of Game mind-map	154
Figure 16: Individual Characteristics mind-map.	160
Figure 17: Platform/Environment mind map.....	162
Figure 18: Actual Language Behaviour concepts mind map.....	168
Figure 19: Outcome mind-map.	175
Figure 20: Outline of Chapter 5.....	181
Figure 21: Stressor-Strain-Outcome (SSO) Framework (Kim et al., 2019)	186
Figure 22: Stressors in MMOGs.	188
Figure 23: Realistic Conflict Theory (Sherif, 1966)	203
Figure 24: Strain as a direct consequence of stressors in MMOGs	205
Figure 25: Outcome of pejorative language use in MMOGs.....	210
Figure 26: Elisabeth Noelle-Neumann’s Spiral of Silence Theory (Noelle-Neumann, 1974)	214
Figure 27: Outline of Chapter 6.....	217
Figure 28: Proposed Model for Understanding the Use of Pejorative Language in MMOGs.	219
Figure 29: Proposed Model for Understanding the Use of Pejorative Language in MMOGs	252

LIST OF TABLES

Table 1: Illuminating the Types of Grounded Theory (Sebastian, 2019).	92
Table 2 : Participants' profiles	120
Table 3: Open-ended interview guide	127
Table 4: Observed participants and recordings obtained.....	128
Table 5: Example of the different data collection iterations.....	130
Table 6: Evidence base for codes on pejorative language use in MMOGs.....	141
Table 7: How participants describe themselves and others as players.....	145
Table 8: Interview excerpts on rules and moderation in the game.....	148
Table 9: Interview excerpts on gamers' perceptions of 'banter'	152
Table 10: Interview excerpts on gamers' perceptions of contextualised language.....	154
Table 11: How players describe the actual language used in MMOGs.....	169
Table 12: Examples of pejorative language used.	175
Table 13: Interview excerpts on dissociation	177
Table 14: Memo on normalised language.....	183
Table 15: Memo on Game Language.	184

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND INFORMATION

The traditional game has become firmly embedded in popular culture. These games included video games that required intelligence, irony, and flexibility when fewer entertainment options and facilities were available (Engka, Tulung, & Arie, 2021). The term *video game* refers to specialised software used to run games on personal computers (PCs) or game consoles like the Xbox and PlayStation. Playing these games together cultivates relationships, sharing, and solidarity that could be experienced as more are more sincere (Engka et al., 2021). Today, gaming serves as a form of self-entertainment and stress relief; playing video games is also regarded as an effective way to increase brain activity (Engka et al., 2021).

In the past, computer games were primarily an activity whereby humans would engage with a game as a computer program. Nowadays, they are more of a group activity during which participants use their computers to communicate with each other and a program. Designers of computer games are increasingly attempting to create interactive games (Nelsonmandela & Raja, 2020) because interactive games are useful venues for study and instruction. Interactive games are also regarded as a widespread type of multimedia application and service (Klabbers, 2009). Digital games, or interactive virtual worlds, encompass concepts that could be used for both amusement and education (González-Bailón, 2017; Swedberg, 2001). The social aspect of gaming, which has been cited as one of the strongest incentives to play games, is significant to the online gaming community, where individuals want to participate personally within their community, engage in discussions about games and play them (Edge, 2013; Lee & Lee, 2010; Scholz, 2011). As a result, the gaming sector has experienced a rapid rise in recent years. Over the past few decades, online games have become established as significant contributors to the worldwide media and entertainment industries (Saarinen, 2017a) and contribute approximately 26 billion USD with approximately 1.1 billion players (Clement, 2024).

Massively multiplayer online games (MMOGs) is a gaming genre whereby multiple players can play together with and against each other in the same virtual world, finishing quests/levels and attempting to strengthen a player's character (Nelsonmandela & Raja, 2020; Zhang & Kaufman, 2016). Some examples of MMOGs include games such as World

of Warcraft, Call of Duty, FIFA, Defence of the ancients (DOTA) to name a few. MMOGs have globally grown in popularity over the past few years, leading to a steady increase in production and consumption (Bawa, 2018). In the context of playing and socialising through such games, players from a wide range of cultural, demographic, economic, geographic, and linguistic backgrounds come together under the umbrella of MMOGs and spend a significant amount of time interacting and communicating (Ballard & Welch, 2017; Bawa, 2018).

Playing an MMOG not only involves killing virtual opponents but it also involves learning about and taking part in the shared customs of a gaming community (Ducheneaut & Moore, 2004). Players collaborate and form part of groups to progress through their games faster and conquer difficult tasks for the benefit of all team members. Therefore, MMOGs offer multiple benefits and opportunities for social interaction in the gaming world (Ballard & Welch, 2017; Zhang & Kaufman, 2016). MMOG players are driven by a range of factors, including social interaction, competitiveness, collaboration, interaction, fantasy, and general game design. The main reasons people play MMOGs include competitiveness, motivation, challenge, deflection from reality and the idea of being in a fantasy world, among other things (Saarinen, 2017a). However, even though MMOGs provide a platform for fostering friendships and positive collaboration, they can also be a platform through which people can be cruel towards each other by using pejorative language (Fryling, 2018).

Since the emergence of MMOGs, players (hereafter referred to as M-gamers) have altered existing words to create new words exclusive to their own communication styles, using game-specific language (Bawa, 2018; Bawa, Watson, & Watson, 2017). Subsequently, because there are millions of M-gamers internationally, one can assume that this linguistic form of communication is used by a significant portion of the population in entertainment and social settings, making it a socio-cultural language (Bawa, 2018; McKane, 2016). (Bawa, 2018; McKane, 2016). However, there is also a dark side to language usage in the gaming world. MMOGs can be harmful to M-gamers by exposing them to negative and toxic player behaviour, usually in the form of slurs (Nguyen & Zagal, 2016; Simpson, Knottnerus, & Stern, 2018). Slurs are often defined as pejorative language used in conjunction with other neutral adjectives directed against certain socioeconomic or ethnic groups. Pejorative language is mostly inherently lexical, characterising terms often used negatively

(Castroviejo, Fraser, & Vicente, 2021; Cervone, Augoustinos, & Maass, 2021; Dinu, Iordache, Uban, & Zampieri, 2021).

Multiple studies have been conducted on harmful conduct regarding MMOGs (Adinolf & Turkay, 2018; Blackburn & Kwak, 2014; Kordyaka, Jahn, & Niehaves, 2020; Kwak, Blackburn, & Han, 2015; Neto, Yokoyama, & Becker, 2017). Toxic behaviour is an all-encompassing phrase for many unfavourable actions (such as pejorative language, harassment, flaming, trolling, and cheating) that undermine teamwork and ruin the atmosphere of MMOGs (Kordyaka et al., 2020). When a player encounters a bad event in a game and becomes angry and frustrated, they engage in behaviour that might otherwise be deemed abusive, which can result in using language that is damaging, foul, and likely to spread beyond gameplay (Kordyaka et al., 2020; Neto et al., 2017). Both players and game developers have a role in limiting this sort of dangerous toxic play, which includes using pejorative language, yet it continues, which raises concerns about why it remains so common in MMOGs (Beres, Frommel, Reid, Mandryk, & Klarkowski, 2021; Kordyaka et al., 2020).

Various studies have investigated language use in online gaming, which has resulted in different findings. These include work by Bawa (2018), who found that MMOG players have distinctive language and communication styles, which allow them to be properly categorised as a cultural group collective. The challenge concerning pejorative language use among M-gamers is that even though some studies focus on the use of pejorative language in MMOGs (Breuer, 2017; Chotipaktanasook & Reinders, 2018; Costa, Tavares, da Silva, Isca, & Cerol, 2020; Ensslin, 2017; Ensslin & Finnegan, 2019; Hsu, 2020; Tan, 2011), there is limited understanding of what MMOG players consider the main concerns of pejorative language use in MMOGs, especially players' perceptions of pejorative language use in MMOGs.

The use of pejorative language can arise from teammates' presence and their impact on success and failure. Such toxic behaviour causes unhappiness and long-term harm and impacts an entire community (Kwak & Blackburn, 2015; Märtens, Shen, Iosup, & Kuipers, 2015). This type of toxic behaviour, unlike unethical behaviour such as cheating, is ill-defined and toxic actors may fail to recognise their poisonous behaviour. A better knowledge of the impact of pejorative language use in MMOGs is required due to the very real effects that the

use of pejorative language has on every aspect of the lives of those involved, even those that are not related to gaming (Kwak & Blackburn, 2015; Märtens et al., 2015).

Therefore, the present study is grounded theory research, intending to establish a holistic understanding of the experiences of the players. The aim is to understand gamers' perceptions of pejorative language use in MMOGs, the linguistic habits of gamers during gameplay, the main concerns regarding pejorative language use in MMOGs and how other players account for the strong presence of pejorative language and swearwords in player discourse. The researcher also attempts to understand the constructs and the relationships between the constructs of a theory that explain players' perceptions of the use of pejorative language in MMOGs. Figure 1 shows an outline of this chapter.

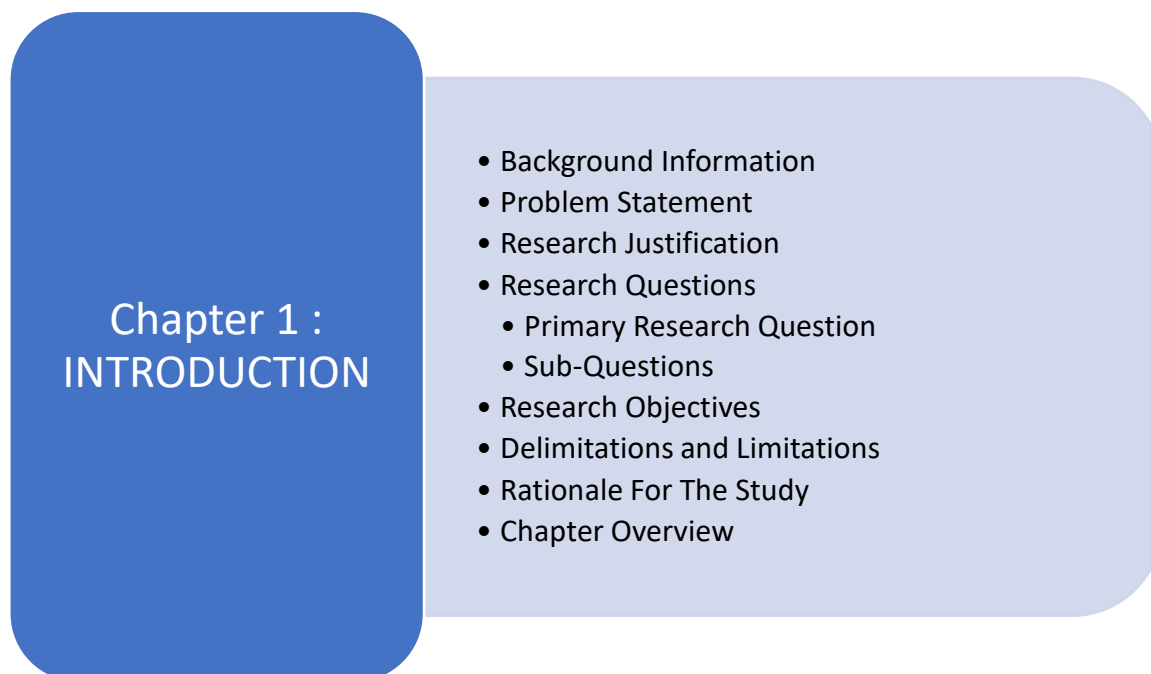


Figure 1: Outline of Chapter 1

1.2 PROBLEM STATEMENT

MMOGs have a reputation for building vibrant, dynamic social environments in which millions of users can interact. Numerous game components and cutting-edge technology like cognitive computing have been implemented to promote and enable social interactions in these online communities, which are essential to the success of MMOGs (Tang, Man, Hang, Cheuk, Kwong, Chi, Fai, & Kam, 2008). MMOGs are designed to stimulate social interaction between players in several ways, including trading, signalling or gesturing,

chatting, combat, and so forth; this collective area is known as the social sphere (Tang et al., 2008). The study of the communication and language patterns of M-gamer subcultures aids in casting a broader research and practice-relevant net that relates to several disciplines, such as linguistics, cross-cultural language studies, ethnology and learning design, and curriculum studies (Bawa, 2018; Bawa et al., 2017). Thus, language and communication patterns, as found in MMOGs, are an important part of such societies (McKane, 2016; Thorne, 2010).

M-gamers have used a game-specific language form characterised by alterations to existing words to create new words exclusive to their communication styles (Bawa, 2018; Bawa et al., 2017). Game language is far more temporal, it is a somewhat normative component of the everyday culture of play and is more anonymised compared to equivalent, already well-researched aspects of the dark side of technology use such as cyberbullying (Kordyaka et al., 2020). Considering these distinctions, playing video games occupies a large portion of players' private lives and identities, which makes it possible for brief instances of toxic behaviour to build over time, leading to psychological and emotional issues, including anxiety and low self-esteem (Kordyaka et al., 2020). Subsequently, because there are millions of M-gamers internationally, one can assume that this linguistic form of communication is used by a significant portion of the population in entertainment and social settings, making it a socio-cultural language (Bawa, 2018; McKane, 2016).

Prior studies on communication and language use in MMOGs include research by Ensslin (2017), who researched the language of gaming. Their research was not only limited to video gaming. According to Ensslin (2017), there is a gap in the study of language as used in and about video games—especially studies on the language elements of videogames—even though video games are among the most sophisticated and complex mediums. However, there are growing concerns regarding pejorative language use during MMOGs (Breuer, 2017; Chesney, Coyne, Logan, & Madden, 2009; Cook, Schaafsma, & Antheunis, 2018; S. Costa et al., 2020; de Mesquita Neto & Becker, 2018; Ictech II, 2021; Kou, 2020; Kowert, Domahidi, & Quandt, 2014; Kwak & Blackburn, 2015; Kwak et al., 2015; Maloney, Freeman, & Wohn, 2020; Märten et al., 2015; Saarinen, 2017a; Stark, 2019; Takano & Tsunoda, 2019).

Some of these concerns are about research findings that being a victim of toxic abuse in multiplayer online battle arena (MOBA) games enhances a player's likelihood of reproducing toxic conduct, which is one reason why exposure to toxic behaviour is known to cause it to occur (Kordyaka et al., 2020). Another possible explanation is the ingrained notion that abusive language (such as pejorative language) is a necessary component of how players interact in competitive gaming environments, i.e., that 'players will be players' (Adinolf & Turkay, 2018). A normalisation of this type of communication within the gaming culture can be seen in the implicit acceptance of derogatory and abusive acts that are explained as being an inherent feature of the gaming environment (Adinolf & Turkay, 2018; Beres et al., 2021; Kordyaka et al., 2020). The difficulty with normalising these perceived inherent gaming features in MMOGs is that it starts a loop of mutually reinforcing behaviour (Adinolf & Turkay, 2018; Beres et al., 2021; Kordyaka et al., 2020). Therefore, there is a lack of an understanding of the linguistic habits of gamers during gameplay. The reason for this is the necessity of grasping the concept of players' perceptions of pejorative language use in MMOGs and understanding how other players account for the strong presence of pejorative language and expletives in player discourse.

1.3 RESEARCH JUSTIFICATION

As noted, online gaming, particularly MMOG, is a common and well-liked pastime, and social interaction has been shown to have numerous advantages for players, including reducing loneliness and promoting well-being (Beres et al., 2021). Nevertheless, there are debates around the suggestion that multiplayer gaming, especially in online settings, could be harmful to gamers by exposing them to negative player behaviour (Nguyen & Zagal, 2016; Simpson et al., 2018). However, there is still a lack of persuasive data to support the proposal that MMOGs expose players to toxic behaviour (Chesney et al., 2009; Cook et al., 2018; Kwak & Blackburn, 2015; Kwak et al., 2015; Märtens et al., 2015). It could be helpful to determine if M-gamers are aware of the pejorative language in games and give it the same consideration or importance as non-gamers might while speaking within their subgroup (Bawa, 2018).

The true meaning or significance of gamers' language may be helpful for non-gamers with friends or players in their families to comprehend better why and how they speak that way within gaming environments. This might help them understand whether these communications would impact their real-world lives outside the games. There is evidence in

the literature of concerns voiced by non-gamers about MMOG players being increasingly drawn into its domains—often for lengthy periods (Bawa, 2018). Furthermore, in the context of education, researching how M-gamers communicate and adopt specialised language is important, especially in light of game-based learning as an instructional strategy (Bawa, 2018; Bodomo, 2009). This is because learners frequently act as game players and end users in teaching and training settings (Bodomo, 2009). Therefore, a thorough understanding of communication and linguistic traits might be essential for the effective design of education. Effective teaching requires an understanding of students' communication preferences and languages (Bawa et al., 2017).

Therefore, the lack of research focused on the language and communication patterns found in MMOGs makes it difficult to identify what M-gamers consider the main concerns regarding pejorative language use in MMOGs and players' perceptions of pejorative language use in MMOGs. This area requires more research attention because of the extreme repercussions of the harmful language used during gameplay.

Accordingly, there is a gap in understanding the linguistic habits of gamers during gameplay to grasp the concept of gamers' perceptions of pejorative language use in MMOGs and understand how other players account for the strong presence of pejorative language and expletives, particularly in player discourse.

The purpose of this study is to gain an understanding of MMOG players' perceptions of pejorative language use in MMOGs.

1.4 RESEARCH QUESTIONS

1.4.1 PRIMARY RESEARCH QUESTION

The research question is:

- What are gamers' perceptions of pejorative language use in MMOGs?

1.4.2 SUB-QUESTIONS

- What are the linguistic habits of gamers during gameplay?
- How do other players account for the strong presence of pejorative language and expletives, particularly in player discourse?

- What are the main concerns (most important aspects) of pejorative language use in MMOGs?
- What should the components and relationships between the components of a theory be to explain players' perceptions of the use of pejorative language in MMOGs?

This research takes a qualitative approach to examining the main concerns or most important aspects of the use of pejorative language in MMOGs.

1.5 RESEARCH OBJECTIVES

- To explore the main concerns regarding pejorative language use in MMOGs:
 - To understand how participants perceive the use of pejorative language during game play.
- Observe and differentiate the linguistic habits of gamers during gameplay.
- To understand how players account for the strong presence of pejorative language and expletives in a particular player discourse.

1.6 DELINEATION AND LIMITATIONS

This study adopts a constructivist methodology and a sample size of twelve (12) individuals. Charmaz and Belgrave (2012) advise researchers not to set an initial sample size but suggest that a qualitative study with fewer participants (e.g., 25 or less) is sufficient for examining the research subject. Studies using constructivist grounded theory (CGT) are advised to be flexible and sensitive to allow the researcher to respond to any unforeseen changes or possibilities. Therefore, the current study cannot (and does not wish to) draw any conclusions towards broad generalisability because it is a qualitative study with a small population. Although data gathering, transcribing, and analysis are openly reported in the qualitative sense, it is also impossible to claim constancy in any quantitative way. Another limitation is that the selection criteria for this research specifically restricted the research population to adults (over 18). Younger players' concerns weren't investigated.

1.7 RATIONALE FOR THE STUDY

A grounded theory methodology approach that focuses on the language and communication patterns as found in MMOGs, particularly the main concerns regarding the use of pejorative language during MMOG gameplay, is important in understanding how gamers perceive the use of such language during gameplay and how players account for the strong presence of pejorative language and expletives in a particular player discourse. In most cases, research on language use in MMOGs has mostly focused on how gamers use platforms for language learning and the different kinds of harmful language in gaming platforms. In this case, the underlying issue of how gamers perceive using pejorative language during gameplay is usually not considered. This study provides a holistic understanding of players' perceptions of the use of pejorative language in MMOGs.

1.8 CHAPTER OVERVIEW AND THE STRUCTURE OF THIS THESIS

Chapter 1 introduced the research area and provided the reason for this study. It briefly evaluated the phenomenon of language and communication patterns as found in MMOGs, especially players' perceptions of pejorative language use in MMOGs. The study adopts the grounded theory methodology (GTM) to understand the phenomenon at hand to build a future theory. The chapter subsequently described the purpose, limitations, delimitations, and assumptions of the present study.

The structure of this thesis reflects the research questions outlined in the sections above. Chapter 2 provides an overview of much argumentation applicable to research on massively multiplayer online games (MMOGs).

Chapters 3 is the methodology discussion which establishes the conceptual and methodological foundations of this study. Chapter 3 examines the theory and application of the grounded theory methodology (GTM), which is connected to the work of Glaser (Glaser & Strauss, 1967; Glaser, 1978, 1992, 1998; Glaser, Strauss, & Strutzel, 1968). This chapter explains the usage of GTM in this study. Knowing how the grounded theory methodology (GTM) suits the field of research is essential to comprehending what makes a study legitimate.

Chapter 4 follows by presenting the findings of this study. This chapter offers a brief explanation and examples showing how the evidence was utilised to create the suggested substantive theory.

Chapter 5 describes the relationship between the different constructs introduced in Chapter 4. The chapter outlines the researcher's understanding of the interview data, the constructs that emerged from the data and how they are related to each other. The stressor-strain-outcome (SSO) model was used to explain and expand on these relationships.

Chapter 6 concludes this paper by presenting the proposed theoretical model for this study as well as how it integrates with existing literature. The interrelation of concepts is also discussed here. The chapter further presents the study's contribution to the literature, followed by suggestions for future research. Finally, the reflections on theoretical contribution are presented before the concluding remarks.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

Computer games used to be primarily an activity where a human would engage with a game as a computer program. Nowadays, it's more of a group activity where participants use their computers to communicate with one another and a program. Designers of computer games are increasingly attempting to create interactive games such as World of Warcraft, Call of Duty, FIFA, Defence of the ancients (DOTA) to name a few (Nelsonmandela & Raja, 2020). Massively Multiplayer Online Games (MMOGs) is a gaming genre where multiple players can play together and against each other in the same virtual world, finishing quests/levels in an attempt to strengthen a player's character (Nelsonmandela & Raja, 2020; Zhang & Kaufman, 2016). The players are spread out among many different instances so that no two players can interact with each other at the same instance (Nelsonmandela & Raja, 2020). Figure 2 outlines the organisation of Chapter 2.

Chapter 2: LITERATURE REVIEW

- Introduction
- The Emergence Of Online Gaming
- Massively Multiplayer Oline Games (MMOGs)
 - Why It Is Important To Understand Them
 - Prior Studies On MMOG Language
 - MMOG Interaction System
 - Language Learning Through MMOGs
 - Abusive Language And Communication Patterns As Found In MMOGs
 - Approaches Explaining Toxic Behaviour
 - Ways In Which Pejorative Language Is Researched/Investigated In MMOGs
 - Non-verbal Communication
 - Communication And Team Performance In MMOGs
 - How Language And Communication Patterns In MMOGs Influence Relationship Formation
 - Language Use For Gender Identities
 - Social Game Theory
- Conclusion

Figure 2: Outline of Chapter 2

2.2 THE EMERGENCE OF ONLINE GAMING

A traditional game is one that has become firmly embedded in popular culture. These games include video games as well as games that require irony, intelligence, and flexibility when there are fewer entertainment options and facilities available (Engka et al., 2021). The term video game refers to specialised software used to run games on personal computers (PCs) or game consoles like the Xbox and PlayStation. Playing these games together fostered more sincere relationships, sharing, and solidarity (Engka et al., 2021). Today, gaming serves as a form of self-entertainment and stress relief. Playing video games is an effective way to increase brain activity (Engka et al., 2021).

With the spread of the internet and its acceptance globally, it has been used in transferring different kinds of content (Engka et al., 2021). Online games are examples of this, whereby individuals can not only play with their computers but also with other players connected to the internet (Vaughan, 1997) while playing various roles (Saarinen, 2017a). Online games are a type of entertainment-focused information technology based on the internet that facilitates entertaining the user (Saarinen, 2017a). Research reveals that the majority of computer owners spend most of their time on their computers weekly, of which 48 per cent was spent playing online games (Choi & Kim, 2004). Further, social networks previously located in physical spaces before the emergence of the web are now online and are changing how people interact in terms of online communities (Edge, 2013). Social conventions, player attitudes, and game flow experience all impact why people choose to play online games.

With the introduction of the Nintendo Entertainment System (NES), Amiga, Commodore 64, and Atari computers at the beginning of the 1980s, computer games made a full-fledged entry into people's lives and popular culture. However, the origins of video games can be traced back further than that. Due to differing definitions of computer games, there are debates over which game was the first computer game (Nordvall, 2012). However, *Tennis for Two*, launched in 1958, and *Spacewar!*, released in 1962, are generally regarded as contenders. An oscilloscope and analogue components were used to develop *Tennis for Two* while *Spacewar!* operated on a mainframe (Nordvall, 2012), which is the main point of disagreement about which computer game came out first. Much has changed since, and the standard of the gaming sector is continually changing (Edge, 2013; Nordvall, 2012).

The social aspect of gaming, cited as one of the strongest incentives to play games, is significant to the online gaming community, whereby individuals want to participate personally within their community as well as discuss and play games (Edge, 2013; Lee & Lee, 2010; Scholz, 2011). As a result, the internet gaming sector has risen rapidly in recent years. Over the past few decades, online games have become established as significant roleplayers in the worldwide media and entertainment industries (Saarinen, 2017a). Therefore, online game developers attempt to increase the length of time players spend playing games (Edge, 2013) and are always searching for fresh approaches to attract more players and enhance the user experience (Saarinen, 2017a) by creating new online games in innovative ways because the market for online games is growing and players often pay fees according to game playing time (Edge, 2013). Many methods and features have been proposed to keep players interested in online games (Choi & Kim, 2004). In addition to the increasing time spent playing and the frequency of play compared to previously existing demographics, the expansion of the gaming industry has also paved the way for an entirely new and evolving class of gamers (Engka et al., 2021). The growing internet and the social media transformation are the driving forces behind the growing multimedia industry, and they are also helping the digital gaming industry by giving it an avenue for rapid expansion (Saarinen, 2017a).

The 1988 video game *Club Caribe* allowed players to communicate in a chatroom, explore a virtual world, and engage with players from various regions of the real world (Nelsonmandela & Raja, 2020). The predefined world difference was drawn to differentiate the notable visually massively multiplayer online. Massively multiplayer online social games (MMOSGs) have become more popular among online gamers since the emergence of the first widely played multiplayer games (Nelsonmandela & Raja, 2020). The most important moment in this kind of history was the introduction of *World of Warcraft (WOW)* in 2004, which quickly became a major online game (Nelsonmandela & Raja, 2020). The number of *WOW* players has exceeded eight million users in the last few years. The success of this genre is due to the groundbreaking innovation of these games facilitating social interactions in a virtual world (Nelsonmandela & Raja, 2020). Moreover, what was just an online game at the time has now become the main attraction of massively multiplayer online role-playing games (MMORPGs). The creators of MMORPGs also realised that the focus of online games was on virtual gaming world interactions. As a result, the MMORPGs tradition turned it into a massively multiplayer online social game (MMOSG) (Nelsonmandela & Raja, 2020).

2.3 MASSIVELY MULTI-PLAYER ONLINE GAMES (MMOG)

Massively multiplayer online games (MMOGs) have grown in popularity over the past few decades on a global scale, with production and consumption steadily increasing (Bawa, 2018).

In the context of playing and socialising through such games, players from a wide range of demographic, economic, geographic, cultural, and linguistic backgrounds reside under the umbrella of MMOGs and spend a significant amount of time interacting and conversing (Ballard & Welch, 2017; Bawa, 2018). Playing an MMOG does not only involve killing virtual opponents, it also involves learning about and participating in the shared customs of a gaming community (Ducheneaut & Moore, 2004). Players must join groups and collaborate to progress through the games more rapidly and conquer difficult tasks to the advantage of all parties. As a result, MMOGs offer multiple benefits and opportunities for social interaction in the gaming world (Ballard & Welch, 2017; Zhang & Kaufman, 2016).

MMOGs provide a rich environment and cohesively constructed stories or mythologies that enable players to do more in the space. Some of the activities include the acquisition of objects, battles, conflict, exploration, quests and events, among others (Rice, 2006). The role-playing element, which is typically so enticing to a large market, is diminished in favour of level-and-loot and hack-and-slash gaming in today's MMOGs, and they are all similar. The player discovers that their encounter quickly turns repetitive and dull instead of providing a vast world to explore and an experience similar to being part of a living book (Rice, 2006). Players can temporarily escape from the monotonous repetition of daily life and gain insight into what it might be like to live in a different era or location, make a meaningful contribution to society, defeat a mutual enemy, save the world, travel to new locations, solve mysteries, find love, or engage in social interactions with others (Rice, 2006; Saarinen, 2017a). All of this occurs in expansive, persistent virtual spaces, generally in 3D, where thousands of users can congregate simultaneously (Rice, 2006).

MMOGs act as complex cultural environments that can accommodate a variety of player habits depending on the player's choices, objectives, and techniques, how they use the game's facilities and objects, and how they cooperate or compete with other player-controlled or computer-controlled characters (Saarinen, 2017a). Playing video games is a situated sociocultural action that involves the body, brain, and gaming environment. The

world of the game, player, player interface, and other things and people are all scattered across the structure of the game to facilitate multiplayer gameplay (Saarinen, 2017a). MMOGs, among other things, give players the chance to act in a particular way or do things they would not normally do and even portray behaviour that would be viewed as inappropriate in real-world contexts. In general, MMOGs offer a more fair playing field than actual sports because they typically do not require physical characteristics like tallness or physical strength (Saarinen, 2017a).

The majority of gamers play each other directly or online and have reported that MMOGs have given them a platform to make friends, which is significant for their gaming experience (Ballard & Welch, 2017). Therefore, the social connections between players correlate with increased game satisfaction (Ballard & Welch, 2017; Fryling, 2018) and thus, studies have emphasised the social benefits of MMOGs in helping develop players' prosocial skills.

MMOG players are driven by a range of factors, including social interaction, competitiveness, collaboration, interaction, fantasy, and general game design. The main reasons people play MMOGs include stimulation, challenge, competitiveness, deflection and the idea of fantasising, among others (Saarinen, 2017a). However, even though MMOGs provide a platform for fostering friendships and positive collaboration, they can also foster cruelty between players (Fryling, 2018). Since characters in MMOGs can earn incentives for being aggressive against other players, cyberbullying occurs frequently during gameplay (Ballard & Welch, 2017).

Game rank is a critical component of the gaming setting and is associated with the points obtained from killing enemies, completing missions, and other activities. The number of points needed to advance to the next level varies between and within games (Ballard & Welch, 2017; Fryling, 2018). The number of points needed to advance to the next level also varies depending on the respect a gamer receives for advancing. A player with a higher rank has the skills and experience necessary to win the game. Higher-ranked players are regarded as successful and considered both valuable partners and worthy opponents (Ballard & Welch, 2017; Fryling, 2018). This can be backed up by social dominance theories of aggression, which have shown that aggressive behaviour in groups can be supported by a person's higher status or ranking in a community. This implies that in the case of MMOGs,

ranking in a game could be associated with bullying on the platform (Ballard & Welch, 2017; Peurala, 2020).

There exists some research on griefing, which is inappropriate or antisocial behaviour in the context of online gaming (Ballard & Welch, 2017; Fryling, 2018). Bullying is a form of griefing; however, this term is more often used to describe tactical actions like invading other players' camps or interfering with communication (Ballard & Welch, 2017; Peurala, 2020). Griefing is a prevalent behaviour that reduces player happiness while boosting annoyance and aggressive behaviour. Antisocial behaviour by others is reported as the element of online gameplay players dislike the most (Ballard & Welch, 2017). This has also resulted in speculation about the impact of such communication and language characteristics on the players personally and the larger communities they may occupy (Bawa, 2018).

Therefore, it makes sense to see these players integrate into bigger and more expansive socio-communal environments, where they may adopt many roles in addition to their MMOG player roles, such as mentors, students, family members, and co-workers (Bawa, 2018). The majority of MMOG genres support social interaction, and because the cultural norms of each game impact how players interact, there are established gangs and tribes in several games that enable tight communication with a specific group of players (Ensslin & Finnegan, 2019). Since players frequently play many games together and talk outside of gameplay, these communities frequently exist outside of a specific game (Ballard & Welch, 2017).

2.4 COMMUNICATION AND LANGUAGE PATTERNS IN MMOGS

2.4.1 WHY IT IS IMPORTANT TO UNDERSTAND THEM

The study of the communication and language patterns of M-gamer subcultures aids in casting a broader research- and practice-relevant net that relates to several disciplines such as linguistics, cross-cultural language studies, ethnology and learning design, and curriculum studies (Bawa, 2018; Bawa et al., 2017). Thus, the language and communication patterns found in MMOGs are an important part of our societies (McKane, 2016; Thorne, 2010).

Language and communication patterns related to MMOGs add value to player development by developing cross-cultural language skills (Bawa, 2018; Thorne, 2010). Synthetic immersive environments (SIEs, i.e., goal-directed game models and visually created

environments that integrate elements of open social sessions to solve specific learning objectives) are created through communication systems in MMOGs, providing a variety of social and psychological interactions through language unique to the M-gaming community (Bawa, 2018; Bodomo, 2009; Thorne, 2010). The synchronous use of multifunctional resources, such as pictures, texts, and sounds, as well as multimodal usages, also distinguish communication and language in MMOGs (Bawa, 2018; Simpson et al., 2018).

As noted, online gaming, particularly MMOG, is a common and well-liked pastime, and social interaction has exhibited numerous advantages for players, including reducing loneliness and promoting well-being (Beres et al., 2021). Despite these advantages, some argue that multiplayer gaming, especially in online settings, can be harmful to gamers by exposing them to negative player behaviour (Nguyen & Zagal, 2016; Simpson et al., 2018). Toxic behaviour includes disruptive gaming that breaches the game's rules and social standards, as well as bad comments directed at other players (such as harassment, verbal abuse, and flaming) (Beres et al., 2021). However, there is a lack of persuasive data and actual research on either side. It could be helpful to determine if M-gamers are aware of the violence in the games and give it the same consideration or importance that outsiders might while speaking within their subgroup (Bawa, 2018).

2.4.2 PRIOR STUDIES ON MMOG LANGUAGE

Prior studies on communication and language use in MMOGs include research by Ensslin (2017) on the language of gaming. Their research was not limited to video gaming only. According to Ensslin (2017), there is a gap in the study of language as used in and about video games, especially studies on the language elements of video games, even though video games are among the most sophisticated and multifaceted mediums. Text-based discussions in virtual game arenas offer cooperative and engaging communication opportunities for language learning. Therefore, the purpose of the research by Ensslin (2017) was to examine these text-based discussions to understand the communication and language usage of gamers to utilise a multidimensional lens to discover avenues through which to explore these communities further.

In their paper "Using ubiquitous games in an English listening and speaking course: Impact on learning outcomes and motivation", Liu and Chu (2010) researched the motivation for learning English using a digital game. *World of Warcraft*, a worldwide popular MMOG, was

used as the context within which to conduct research on the semiotic ecology and linguistic complexity of an online game world (Thorne, Fischer, & Lu, 2012). The main goal of their study was to evaluate the linguistic ambiguity of game-presented texts explicitly and impartially (or quest texts, the tasks players are given that structure their gameplay) as well as game-external websites that are frequently used and typically created by active gamers. It does not focus on second language learning. Thorne, Fischer and Lu (2012) conducted research to discover messages players believed were most crucial to the game's gameplay, both in the context of game-generated sources and sources external to the game, like websites.

By providing an overview of prior studies on toxic behaviours regarded as trolling in online communities and in the context of online gaming, (Komaç & Çağıltay, 2019) conducted a study to provide insight into trolling behaviour. Trolling can be loosely defined as verbal or in-game actions that aim to annoy other players (Beres et al., 2021). Other research on language and communication in MMOGs also includes studies by Pearce (2017), who focused on how *World of Warcraft* users practice gender identities through language, as well as (Blake, 2011), who studied how games, including MMOGs, can be influential in online language learning.

The approach taken in the present study differs significantly from previous ones in that it offers a more qualitative and in-depth view of players' perceptions of pejorative language use in MMOGs. It seeks to understand the linguistic habits of gamers during gameplay and how other players account for the strong presence of pejorative language and expletives in player discourse.

2.4.3 MMOG INTERACTION SYSTEM

MMOGs have a reputation for building vibrant and dynamic social environments in which millions of users can interact. Numerous game components and cutting-edge technology like cognitive computing have been implemented to promote and enable social interactions in these online communities, which are essential to the success of MMOGs (Tang et al., 2008). Figure 3 shows these interactions in the social context of play, adapted from Malliet (2012).

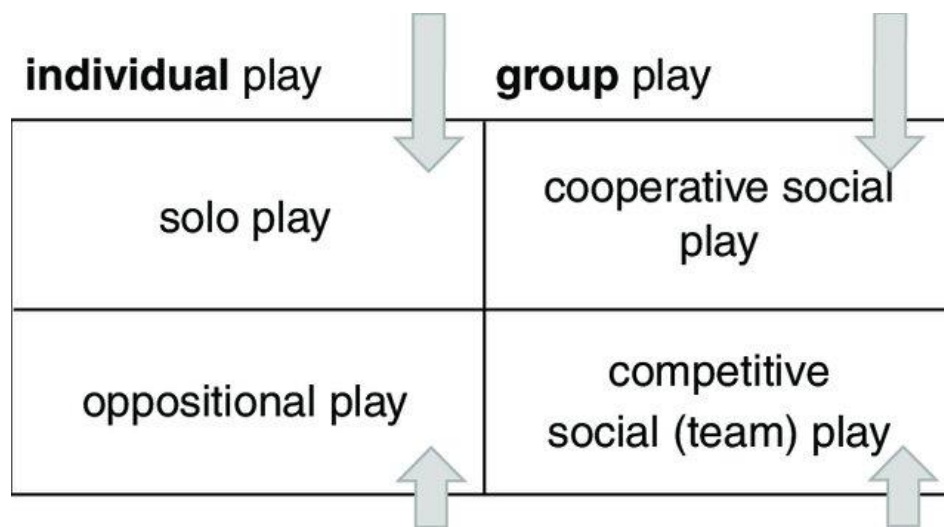


Figure 3: Social context of play (Malliet, 2012)

The interactions in the social context of play in Figure 3 examine the basic traits of online social play settings, especially those defined by cooperative and competitive behaviours in MMOGs, for fully comprehending the basics of social play and the interaction between social and individual play (Malliet, 2012). MMOGs are designed to stimulate social interaction between players in various ways, including trading, signalling/gesturing, chatting, combat, and so forth; this collective area is known as the social sphere (Tang et al., 2008). Players can purchase and sell items for a set price or by negotiating. During trade, both buyers and sellers have the option to bargain over prices. In general, trading offers a convenient forum for users with various occupations and skills to interact (Tang et al., 2008). There is a deficit of literature regarding the interaction systems used in MMOGs, the type of language or communication used on these systems and their impact on socialisation in these spaces.

Star Wars Galaxies (SWGs), a popular MMOG, has a unique feature differentiating it from other MMOGs, namely its extensive collection of social features. Players can communicate by typing expressions or gestures like /smile, /bow, and /cheer (Ducheneaut, Moore, & Nickell, 2007a). A public statement of the form "You smile at [target name]" will be sent to the other players in the game when a player selects another player and types /smile, for example. In certain instances, the avatar's impression changes to reflect the 'social' (in this case, a smile shows up on the avatar's face). Players take advantage of these social features to enhance their interactions with other players, from start and finish. For example, a player might interact with another player by gesturing a /wave, /smile while obtaining a service, and /bow to end the interaction (Bente & Krämer, 2011; Ducheneaut & Moore, 2004;

Ducheneaut et al., 2007a). Figure 4 shows an example of the MMOG Star Wars Galaxies (SWGs).



Figure 4: Example of Star Wars Galaxies (SWG) (steamcommunity, 2023)

Most MMOGs use text chat for most interactions (Ducheneaut et al., 2007a; Tang et al., 2008). There are four different conversation modes: public, private, team, and organisation (Tang et al., 2008). However, Ducheneaut et al. (2007a) and Ducheneaut and Moore (2004) note these as three chat modes. When in say mode, the player's typed words are seen by anyone close to the player. These messages are displayed in the chat windows of the other players as well as in a cartoon-style bubble above each player's avatar. Private communications are exchanged between players in *tell* mode. The two players do not need to be co-located for the message to be sent. It is solely visible to these two people and can be sent over any distance. Messages are then sent to a subset of players who have formed groups in *group* mode. Similar to a one-to-many *tell*, only group members can see the messages, which are not constrained by physical proximity (Ducheneaut & Moore, 2004; Ducheneaut et al., 2007a).

Besides these player-to-player interaction platforms, some platforms also allow for larger group interactions. In *Star Wars Galaxies*, for example, these are referred to as *third places* (Tang et al., 2008). Third places offer a wide range of public spaces that serve as venues for players to connect regularly outside their homes and places of employment in optional, informal, and cheerful predicted settings (Tang et al., 2008). These are some of the busiest and most crowded social areas of MMOGs. They are by far the most similar to social areas in the real world (e.g., bars). As a result, they provide a lot of information for analysis (Ducheneaut et al., 2007a). Contrary to purely social contacts, which go "beyond the frameworks of purpose, obligation, or role", most visitors to these spaces have specific goals of socialising there. Their interactions are typically "brief and instrumental" (Tang et al., 2008).

2.4.4 LANGUAGE LEARNING THROUGH MMOGS

The educational potential of digital games has drawn attention since the very beginning of using computers in language learning. Despite games typically solely considered pleasurable pursuits in the public press, new studies have conclusively demonstrated their educational benefits (Chotipaktanasook & Reinders, 2018). As a result, games are being used more frequently in all stages of education, including language learning. A growing body of research has shown how successful digital games are for teaching and learning languages, as shown in journal articles, book chapters, and specialised volumes (Chotipaktanasook & Reinders, 2018; Kongmee, Strachan, Pickard, & Montgomery, 2011; Lin & Guo, 2021; Ng, Azizie, & Chew, 2021; Peterson, 2012; Wang, 2017). These studies have demonstrated the value of digital games for second language (L2) learning and how their design aspects align with second language acquisition (SLA) ideas. However, the results of prior research on language acquisition through digital games, as highlighted by Peterson (2010), were inconclusive because they were based on small sample sizes and brief game-play sessions (Ng et al., 2021). Nonetheless, digital games have been shown to have a high potential for engaging students and facilitating real-time L2 contact with classmates and other players, including native speakers, making this relationship with interaction research promising (Chotipaktanasook & Reinders, 2018).

Many teachers' curricula and methods of instruction have been transformed by the expansion of the online gaming industry from face-to-face learning to digital game-based

approaches (hereafter DGBL) (Lin & Guo, 2021). As online gaming technology develops, educators and academics are trying to determine how to use these games to improve students' language learning experiences and offer an enjoyable and engaging learning environment for them (Ng et al., 2021). Numerous scholars have used DGBL in various teaching contexts over time, including teaching history, math, manufacturing, and languages. DGBL-related concerns have received much attention in language study, notably in vocabulary teaching and learning (Lin & Guo, 2021). This may, in part, be because memorising vocabulary is a significant challenge for many EFL learners, and effective communication necessitates accurate language usage. Even though studying vocabulary is a key skill, many language learners do not find it an exciting exercise (Lin & Guo, 2021).

Studies on computer-assisted language learning (CALL) have been conducted in the area of language learning and teaching based on digital games or the use of digital games to improve language learning and teaching (Chotipaktanasook & Reinders, 2018; Ng et al., 2021). MMOGs have drawn much attention from CALL scholars among the digital games that are currently the subject of considerable research. Considerable player involvement is required to advance in MMOGs, i.e., the type of game played by many players in a complicated environment (Chotipaktanasook & Reinders, 2018). This kind of game is renowned for its components supporting language learning. In addition, scholars have suggested that the immersive, linguistically rich, and cognitively demanding environment of MMOGs might be advantageous for language learning and practising language skills (Chotipaktanasook & Reinders, 2018; Lin & Guo, 2021).

There are also numerous reports on the potential advantages of this game genre for providing students with motivating and interactive learning environments for language acquisition as well as more opportunities to interact with people who speak different languages and engage in other types of interaction thought to be helpful for L2 acquisition (such as collaboration and meaning negotiation) (Chotipaktanasook & Reinders, 2018). The MMOG community has also encouraged online participants to communicate in their second language, primarily English, as part of their language learning experience (Ng et al., 2021). Most online gamers connect while playing MMOGs in their second language, typically English. Consequently, language acquisition could occur on this platform because online users are encouraged to socialise using their discrete target languages during game-play sessions, both in written and spoken form (Ng et al., 2021).

Online games designed with educational objectives typically have the following features: (1) an initiative is frequently a storytelling narrative created to strengthen players' sense of group cohesion; (2) many tasks that require problem-solving provide learning opportunities; (3) a secure environment is often provided (especially in young children's play) for participants to create their identities (Lin & Guo, 2021). By using the narratives, agencies, and material, learners can build communication skills and learning motivation (Lin & Guo, 2021). Therefore, using MMOGs in EFL settings might help overcome some of the aforementioned difficulties and allow for more opportunities for interaction between language learners. MMOGs have significantly expanded the boundaries of online-only language learning in digital games (Chotipaktanasook & Reinders, 2018).

It has further been demonstrated that MMOGs have several significant design elements and traits that significantly impact affective aspects of learning, including attitude, motivation, and anxiety, which are considered crucial for successful language learning. Another determination has been that playing MMOGs can reduce learners' concern about communicating in their second language while boosting their self-esteem and motivation, making them more open to doing so. An investigation by Thorne (2008) on cross-linguistic contact in the MMOG *World of Warcraft* between an English speaker residing in the United States and a Russian speaker living in the Ukraine. The study investigated online gaming and open internet environments as informal contexts for L2 use and development (Chotipaktanasook & Reinders, 2018). The feedback from participants was overwhelmingly favourable, and many thought/said that playing the game had increased their enjoyment and enthusiasm for language acquisition (Chotipaktanasook & Reinders, 2018; Thorne, 2008). Additionally, the analysis of the chat logs revealed that conversation in the game provided participants with chances for real-world L2 interaction as well as chances to share their expertise in terms of language use and explicit language corrections, ask for help, and cooperatively create repair sequences (Chotipaktanasook & Reinders, 2018).

Another study focused primarily on how players interact in MMOGs and found that the interaction in MMOGs was engaging, motivating, and enjoyable and helped learners improve their fluency and discourse management techniques (Peterson, 2012). Learners actively engaged in the game used various strategies to manage their interaction, engaged in collaborative dialogues in the L2 only, and had positive attitudes (Chotipaktanasook &

Reinders, 2018; Peterson, 2012). It was also found that learners were found to have interacted solely in English and to have utilised a variety of tactics. Another benefit of using MMOGs as a platform for language learning is the finding that using games as a platform for language learning has benefits. Ng et al. (2021) discovered that vocabulary games could improve English as a Second Language (ESL) and English as a First Language (EFL) learners' learning processes since games aid in helping them remember target terms more quickly (Ng et al., 2021).

The participants (who gave mainly positive feedback) claimed that engagement in MMOGs, together with the anonymity provided by the use of pseudonyms and avatars, have helped lower anxiety levels and encouraged opportunities for taking risks with English. Thus, this response was consistent with research on learner involvement in MMOGs (Chotipaktanasook & Reinders, 2018; Peterson, 2012).

2.4.5 ABUSIVE LANGUAGE AND COMMUNICATION PATTERNS AS FOUND IN MMOGs

MMOGs can be harmful to gamers by exposing them to negative and toxic player behaviour (Nguyen & Zagal, 2016; Simpson et al., 2018). Toxic behaviour is an all-encompassing phrase for many unfavourable actions (such as pejorative language, harassment, flaming, trolling, and cheating) that undermine teamwork and ruin the atmosphere of MMOGs (Kordyaka et al., 2020). When players encounter a bad event in a game and become angry and frustrated, they engage in abusive behaviour, which results in damaging and polluted communication likely to spread beyond the gaming environment (Kordyaka et al., 2020; Neto et al., 2017).

For game developers, preventing pejorative language (which leads to user attrition and discourages new players from signing up) is crucial since it threatens their ability to generate income (Beres et al., 2021). The Fair Play Alliance partnership was established by game developers and businesses to prevent toxic player interactions in online gaming and create communities free from abuse, harassment, and discrimination. Furthermore, players from under-represented groups are frequently the targets of toxic actions, which constitute a type of cyberbullying (Beres et al., 2021; Kordyaka et al., 2020).

Both players and game developers have a role in limiting dangerous toxic play, yet it continues, which raises concerns about why it is still so common in MMOGs (Beres et al., 2021; Kordyaka et al., 2020). Multiplayer Online Battle Arena (MOBA) games are one extremely popular subgenre of multiplayer video games where toxic behaviour can be observed (Kordyaka et al., 2020). Real-time strategy video games, combining more established game genres, including action, role-playing, and strategy games, might be viewed as a subgenre of MOBAs. *League of Legends* (LoL) and *Defence of the Ancients 2* are two of the most recent MOBAs. For instance, LoL is currently the most-played video game worldwide, with millions of active players, which demonstrates the importance of MOBAs (Kordyaka et al., 2020; Nguyen & Zagal, 2016).

In terms of gameplay, MOBAs differ from other MMOGs in several ways that increase their likelihood of negative behaviour. MOBAs tend to encourage less individuality and are generally very versatile, competitive, and stressful (Kordyaka et al., 2020; Nguyen & Zagal, 2016). Every time a game is played, a player controls a single champion on one of two teams of five players with varying skills. In the most popular game mode, ranked individual players gain or lose points based on the result of the match (Johnson, Nacke, & Wyeth, 2015). These points are added to indicate their overall level. As a result, cooperation and communication among players are essential for winning. Players mostly engage in toxic communication through text chat and ping commands, which are player-relayed alerts that share gaming information with the entire team (Johnson et al., 2015; Kordyaka et al., 2020).

A new study demonstrates that being a victim of toxic abuse in multiplayer online battle arena (MOBA) games enhances a player's likelihood to reproduce toxic conduct; accordingly, exposure to toxic behaviour is known to cause its occurrence (Kordyaka et al., 2020). Another possible explanation is the ingrained notion that abusive language is a necessary component of how players interact in competitive gaming environments, i.e., that players will be players (Adinolf & Turkay, 2018). Normalising these aggressive behaviours within the gaming culture can be noted in the implicit acceptance of harmful and abusive acts that are explained as being an inherent feature of the gaming environment (Adinolf & Turkay, 2018; Beres et al., 2021; Kordyaka et al., 2020). The difficulty with normalising harmful behaviour in MMOGs is that it starts a cycle of mutually reinforcing behaviour (Adinolf & Turkay, 2018; Beres et al., 2021; Kordyaka et al., 2020).

According to the theory of normalised behaviour, those who approve of behaviour are more likely to participate in that behaviour (Huesmann & Eron, 1984). However, it also contends that participating in behaviour would only reinforce normative beliefs about its acceptability (Beres et al., 2021; Huesmann & Eron, 1984; Rowell Huesmann, 1988). This shows that those who engage in abusive language use would normalise their ideas about this behaviour in the context of MMOGs and that those with normalised beliefs would be more accepting of abusive language use in MMOGs (Bawa, 2018; Beres et al., 2021; Kordyaka et al., 2020). Importantly, this spiralling cycle of normalised beliefs and harmful behaviour means that for MMOG developers, M-gamers, and researchers to contest harmful language use in online gaming effectively, there must first be an understanding of how these patterns of behaviour emerge in MMOGs and which M-players are most likely to feed this cycle (Beres et al., 2021).

Toxic behaviour is far more temporal; it is a somewhat normative component of the everyday culture of play and is more anonymised compared to equivalent and well-researched aspects of the dark side of technology use, such as cyberbullying (Kordyaka et al., 2020). Considering these distinctions, playing video games occupies a large portion of players' private lives and identities, which enables brief instances of toxic behaviour to build over time, leading to psychological and emotional problems, including anxiety and low self-esteem (Kordyaka et al., 2020). In MMOGs, pejorative language use and abuse happen at the same rank system. Most toxic conduct is related to teammates on the player's team, and the most prevalent forms of pejorative language include trolling and flaming, which are present practically everywhere in games and significantly reduce the enjoyment of playing (Beres et al., 2021; Kordyaka et al., 2020). Below are discussions of some of the most prevalent forms of communication and language patterns found in MMOGs.

2.4.5.1 Trolling

Trolling is loosely defined as verbal or in-game actions that aim to annoy other players and is one of the toxic behaviours in MMOGs (Beres et al., 2021). There is little agreement in the literature about what constitutes trolling, but most studies concur that it is done with malicious intent (Komaç & Çağıltay, 2019). Using the internet in a "deceptive, harmful, or disruptive manner in a social situation with no clear instrumental goal" is considered trolling (Buckels, Trapnell, & Paulhus, 2014). In contrast, several studies define trolling but do not use "deception" as an identifier (Komaç & Çağıltay, 2019). Aggression, dishonesty, and

disruption are considered the main elements of trolling. Some scholars have labelled a variety of negative remarks as trolling (Griffiths, 2014; Luzón, 2011), while other scholars (Alonzo & Aiken, 2004; Hardaker, 2010) consider some of these suggestions as distinct from trolling.

According to several definitions, a troll is someone who gains the trust of a group by adopting a persona that is not hostile while hiding their true motives, which are to cause disruption or initiate/escalate a fight (Komaç & Çağıltay, 2019). Three fundamental features of trolling have been identified based on the theory of relevance (Fragoso, 2015): the "first order intention", the "informative intention", and the "stimulus". The troll's overarching goal or "first order objective" is what he actually wants to accomplish through trolling. The troll's words or actions—the information he utters—are what constitute his "informative aim". The troll's method of achieving their first-order aim is known as "ostensive stimulus"; it entails baiting people or charging them to cross a bridge (Fragoso, 2015). In contrast, in the early 1990s, trolling was adopted in online communities for amusement. However, there has been a shift in this practice towards harmful behaviour (Bishop, 2014). According to some researchers, any misleading behaviour online is considered trolling, while others do not consider deceit necessarily requisite. Some scholars classify other negative behaviours with an apparent hostile purpose as independent phenomena, such as grieving and flaming, while others include them in the trolling category (Cook et al., 2018; Griffiths, 2014).

Trolling in the early 1990s was considerably different from trolling today, and this transformation occurred during the past ten years. The two forms of trolling were categorised by the author as classic trolling and anonymous trolling (Bishop, 2014; Komaç & Çağıltay, 2019). In traditional trolling, the trolling behaviours are a way to introduce new users to an online group (Bishop, 2014; Komaç & Çağıltay, 2019). However, to encompass trolling behaviour in the context of MMOGs, the types of trolling conduct seen in online places like social media platforms and online communities are insufficient. Online trolling is redefined to include MMOG-specific behaviours when the dynamics of in-game communication are considered, which supports the previously discussed trolling themes of deceit and disruption (Bishop, 2014; Komaç & Çağıltay, 2019).

Trolling is quite prevalent in the realm of online gaming, particularly in MMOGs. Players would misdirect newcomers to the group and 'kill' or verbally attack teammates, causing

disorder and disruption (Cook et al., 2018). Trolling aims to annoy people and cause disagreement, which can be achieved in several ways in MMOGs (Fragoso, 2015). The most popular strategy is to make fun of a single person or a small group of people in front of a larger group of people. In these situations, the enjoyment of trolling rises in direct proportion to the players' reputations or rankings when they respond to the provocation (Fragoso, 2015). Trolls sometimes seek to be hilarious over being offensive; however, even if they have good intentions, their techniques can be disruptive and damaging to others (Parker, 2017; Taylor, 2017). There are many trolls in the gaming world, and people's attachment to online games serves as bait for trolls. Trolls are probably going to worsen in gaming communities as their popularity keeps rising (Taylor, 2017).

Internet trolls have become a problem because of the exponential growth of online contacts, especially because they benefit from anonymity. MMOGs such as *WoW* are popular and participatory games, thus leading to the emergence of a large trolling environment (Taylor, 2017). *WoW*, in contrast to social networks like Facebook, allows players to remain anonymous by giving their characters alternate names. Players are urged to develop alternate personas, thereby aiding internet trolls who use these identities to disrupt these communities (Taylor, 2017). On the other hand, *League of Legends (LoL)* players frequently request that developers create methods to get rid of trolling. M-gamers claim that ineffective moderation of trolls is ruining the game on a forum. It is interesting to see how trolling behaviour affects one of the most played games in the world (Taylor, 2017). To combat this, Twitch, an online gaming broadcasting service, has communities where users serve as watchdogs to stop trolling conduct (Parker, 2017; Taylor, 2017). By illustration, stream viewers would establish and uphold societal standards. If a troll engages in sexist banter, some Twitch communities might flag the person as a deviant and either restate the rules or ban them (Parker, 2017).

There is evidence that societies are involved in deciding which actions are normalised and accepted within their culture (Beres et al., 2021). The online gaming community accepts trolling as an inevitable, self-perpetuating occurrence. Most trolls have admitted to having been the target of trolling in the past and continuing the cycle by engaging in similar behaviour themselves, which helps normalise the behaviour (Beres et al., 2021; Cook et al., 2018). Victimised M-gamers frequently claim that the attackers were "just trolling". Bystanders trying to help might advise to "not feed the troll", which means that they should

not interact with the troll because doing so would only motivate them (Hilvert-Bruce & Neill, 2020). Bullying should be ignored in real-world situations, but doing so online could encourage such bad behaviour to continue. Visual clues, including body language, emotions, and facial expressions, are invisible in an online setting (Hilvert-Bruce & Neill, 2020). If victims choose to ignore, the aggressor is spared the burden of guilt because they are not provided with any indicators to indicate the possible harm they are causing (Hilvert-Bruce & Neill, 2020).

2.4.5.2 Types of trolling

The section below discusses the different types of trolling, namely flaming, hate speech, and gaslighting.

2.4.5.2.1 Flaming

There doesn't seem to be much agreement on what exactly constitutes flaming. It is obvious when someone uses vulgarity or insults, but it takes a lot of insight to distinguish an insult from genuine criticism (Aiken & Waller, 2000; Cook, 2019; Mortensen, 2018). In most cases, flaming is described as aggressive spoken remarks towards a person rather than a concept. Flaming in MMOGs, also known as hostile or offensive language towards other gamers (Beres et al., 2021), can be described as making emotionally charged statements or antagonistic claims to others (Griffiths, 2014; Komaç & Çağıltay, 2019). As flaming is linked to ulterior motives, m-gamers often use a game glitch to their advantage while helping the opposing team or forcing another player's avatar into water, known as 'feeding' or broadcasting team locations. These serve a purpose because a motive is attached to the action (Cook et al., 2018). Most flammers have expressed that they engage in flaming behaviour online as a means of revenge; that is, they are giving other flame trollers "a taste of their own medicine" (Cook et al., 2018; Cook, 2019; Massanari, 2017; Mortensen, 2018). Flaming is usually done with the expectation that other M-gamers who are trolls would either change or be scared off by the MMOG community (Vermeulen, Abeeel, & Van Bauwel, 2016). Although somewhat subjective, intense flaming includes insults and other offensive remarks, which may cause people to shun the MMOG world (Aiken & Waller, 2000).

Other retaliation-driven flammers are only reactionary, which is a reaction to something whereby a gamer flames a troll instinctively when trolled rather than with a specific goal or intention in mind. This is regarded as being motivated by retribution because they must be flamed first before acting, known as a trigger to flaming (Chess & Shaw, 2015; Cook et al.,

2018; Massanari, 2017; Mortensen, 2018; Vermeulen et al., 2016). Although they may appear to overlap, intentions or goals and triggers have direct links to motivation. Goals are the ultimate success the flamer seeks, whereas triggers are the catalysts that cause flaming to start in the first place (Chess & Shaw, 2015). Flaming seems to foster flaming, and among M-gamers, the behaviour has become widely accepted in the MMOG world. Other flaming triggers often involve spotting players' weaknesses, such as gullibility, bad gameplay, etc. (Chess & Shaw, 2015). Therefore, the person retaliating is always alert for indications of weakness or a flamer's vulnerability for them to be recognised and to take appropriate action immediately (Chess & Shaw, 2015; Mortensen, 2018; Parker, 2017).

Contrary to the retaliation factor, Elliott (2012) notes that diverse opinions exist on flaming and its effect on those involved. Some find it unpleasant whereas others, especially in the online gaming world, find it humorous. This suggests that flaming is viewed differently depending on the environment in which it occurs (Moor, Heuvelman, & Verleur, 2010). Since the MMOG world has a competitive atmosphere, M-gamers usually present a hostile and aggressive mindset automatically. And since flaming is a recurrent occurrence, viewing it as normal behaviour in MMOG is to be expected (Moor, 2007). Some research finds that even though flaming annoys some MMOG players, they view this annoyance as just an inconvenience and less problematic (Aiken & Waller, 2000; Elliott, 2012; Moor et al., 2010). This can also be because individuals may exaggerate the influence a statement conveyed during a game may have on another gamer.

The most notable distinction is that while most online users do not find flaming entertaining, M-gamers generally find it amusing. This distinction is quite intriguing (Elliott, 2012; Moor, 2007; Moor et al., 2010) and could have a desensitising impact on how players view flaming as it is different from other online platforms that have a considerably stronger social component (Elliott, 2012). As a result, flaming is not viewed as the norm on these platforms as it is in MMOGs. In MMOGs, talks or dialogues may not last long because the text is not always visible, whereas they may be more permanent on other platforms (Elliott, 2012; Moor et al., 2010).

The literature contains several potential causes for increased feelings of anger, which could result in flaming. Losing was also considered a potential trigger for flaming; however, m-gamers seem to disagree with this, which suggests that losing itself is not frequently a cause

of flaming (Elliott, 2012). Nevertheless, according to research on *League of Legends (LoL)* by Kou and Nardi (2013), flaming indeed seems to happen more frequently when a team is losing. This occasionally begins as small, undetectable triggers, then escalates as the team continues to lose (Kou & Nardi, 2013). Players assign blame to those they think did not perform well during the game, and those accused of underperforming retaliate by blaming others (Kou & Nardi, 2013). This blame game then spirals out of control, resulting in flaming (Kou & Nardi, 2013). Players who participated in the study stated that they found aggressive communication leading to flaming the most harmful to creating a successful team (Kou & Nardi, 2013). This is because for some MMOGs like *LoL*, a single player performing badly during a game does not mean the team would lose; they might still stand a chance of winning, which is what matters in *LoL* (Kou & Nardi, 2013). However, if a single player starts flaming, then the chances of winning the game are reduced. This is because flaming, even when it only involves two players, irritates everyone on the team. Players cooperate less when they are not in the mood to play, which almost always results in losing the game (Kou & Nardi, 2013).

2.4.5.2.2 Hate speech

The European Union law defines hate speech as "the public incitement to violence or hatred directed to groups or individuals based on certain characteristics, including race, colour, religion, descent and national or ethnic origin". Hate speech can also be defined as the expression of ideas that inspire animosity toward persons or groups, i.e., giving words the potential to physically harm (da Silva, Tavares, Cerol, da Silva, Falcão, & Alves, 2020). Hate speech and insults are some of the uses of pejorative language in MMOGs, which come across as subtly hostile, discreet or sneaky. They can be explicit but can also take on a subtler form, in which the recipient might feel offended but is unable to identify its clear source (Beres et al., 2021). This is heightened by the lack of a clear boundary defining when the crossover between harsh mockery and hurtful banter results in hate speech and insults. This has led to debates about hate speech and other types of hostility in the online gaming community (Ballard & Welch, 2017).

Hate speech is frequently accepted as a typical response of fits of rage or frustration brought on by the innate competitiveness of MMOGs (Breuer, 2017). In-game communication via chat is frequent, and remarks can range from praise for a performance to humorous criticism, racial or personal insults, prejudice against a person's sexuality, intimidation or aggression

towards minorities. The use of hate speech as a power display or stress reduction might be encouraged by anonymity in front of a small group of fans and the lack of consequences. Both the perpetrators' and the victims' physical health and self-esteem suffer from this type of behaviour (Breuer, 2017; S. Costa et al., 2020; da Silva et al., 2020). Online gaming can affect how players model their social identities in their minds, impacting how they perceive other social groupings (Bonetti & Tonelli, 2020; Breuer, 2017).

Hate speech has become more prevalent in the last millennium. There have been significant rises in reports of online hate speech, with xenophobia—which includes prejudice against immigrants—and anti-Muslim prejudice emerging as the leading causes of hate speech with ethnicity coming in second (da Silva et al., 2020). It has also been said that the culture of online gaming is sexist, which also fuels hate speech (Ballard & Welch, 2017). M-gamers have brought to light content that they believed to be prejudiced, classist or sexist. Slurs falls in this category. There are also several reports of slurs against women, personal attacks, and ableist slurs that are deemed disrespectful, unacceptable, and deserving of a ban in MMOGs (Beres et al., 2021). Hate speech also manifests in homophobia and misogyny in MMOGs. Female and LGBT gamers are said to be more likely to receive threats, stalking, and comments that are sexually provocative. In addition, there are claims that male gamers frequently react negatively to less skilled or lower-ranked players, women, and gay players (Beres et al., 2021). Consequently, players who share similar traits will gravitate toward environments with strong representation of that group, forming online communities that appeal to specific majorities (Breuer, 2017; da Silva et al., 2020). Due to the underrepresentation of minorities, there are fewer minority players, who are subsequently more vulnerable to exclusion and hate speech. Despite the necessity of protecting minorities from hate speech attacks, control is frequently employed as a means of promoting intolerance (da Silva et al., 2020).

According to da Silva et al. (2020) and S. Costa et al. (2020), there are three main contexts in which hate speech is found in online gaming. These contexts are offline gameplay, online gameplay and the online community.

- Offline gameplay

Offline gameplay relates to the contents of the game and the player journey as a whole. In this aspect, some video games may show overt signs of hate speech or may even promote

the growth of hate speech through the use of extremely violent and harsh language and scenarios (S. Costa et al., 2020; da Silva et al., 2020).

- Online gameplay

This is associated with the dynamics of player engagement during MMOG sessions. Activities like creating teams or groups, exchanging techniques/ideas, and voice chat—which are frequently unmoderated—can spark arguments or serve as a platform for hate speech (S. Costa et al., 2020; Trujillo, Gruppi, Buntain, & Horne, 2020). All of these real-time activities cannot be viewed as purely virtual because they include the player in real life and might have effects and repercussions outside the game, such as disputes among friends (S. Costa et al., 2020; da Silva et al., 2020; Trujillo et al., 2020).

- Online community

The third setting refers to online communities built around particular online games, such as *League of Legends*, both on social media and online gaming platforms, where it is easy to find remarks and commentary rife with abusive language, hatred or even "virtual stones" towards those who express opposing viewpoints (S. Costa et al., 2020; da Silva et al., 2020). Unfortunately, these viewpoints are pervasive, and it is increasingly normal to see hate groups, white nationalist servers, and harassment campaigns targeting women in the online gaming community. In some major instances, the virtual world has given way to the physical one, endangering the safety and even the privacy of well-known members of these networks (S. Costa et al., 2020; da Silva et al., 2020). These discussions have thus generated petitions started by gamers demanding an end to hate speech (S. Costa et al., 2020; Costa, Tavares, Silva, Alves, Cerol, & Isca, 2020; da Silva et al., 2020).

2.4.5.2.3 Gaslighting and Spamming

Gaslighting can be described as an instance of unethical manipulation or testimonial unfairness and indeed, emotional abuse. It is a particularly cognitive unfairness when people are wronged in their roles as sources of knowledge. When someone disputes a witness' account of wrongdoing or offence caused to them on the premise of someone else's socialisation, this is known as gaslighting (Stark, 2019). In MMOGs, the damaging aspects of toxic conduct are less readily recognised and labelled as obviously toxic by players or onlookers, much like gaslighting. As a result, they might be simpler to defend as being simply an element of the gaming environment, promoting their normalisation and incorporation into gaming culture (Beres et al., 2021). One issue is that because of their cyclical nature, these

harmful behaviours are difficult to recognise, relate to existing normative views, and anticipate from individual attributes that can be tested or monitored (Beres et al., 2021).

Spamming, on the other hand, is persistently using digital communications in an annoying manner (Beres et al., 2021). The word 'spam' also pertains to the continuous and mass distribution of emails for marketing gain and for phishing. Spam acts as both repetition and noise, making conversation impossible. The term has been used most commonly in this sense over the past few years, but is still appropriate for all types of internet-mediated activities, including online gaming (Fragoso, 2015). A concise and effective definition of spam in the context of online gaming as excessive quantities of unsolicited messages of which the volume is so large that its content becomes irrelevant or futile. Spam is a common occurrence in all online games as a result of the lack of effort put into enhancing security (Treadway, 2010). Spamming can also be described as the act of generating tremendous content to a point where its sheer volume is offensive, irrespective of its content (Fragoso, 2015). Spammers usually do this by reiterating irrelevant conversation during a game, either verbally or visually, thereby making communication between players challenging or impossible (Fragoso, 2015; Komaç & Çağıltay, 2019).

The fundamental distinction between game spam and conventional spam is the kind of mailing list system used in the game. Players in online games receive spam messages via chat bots or mailing lists (Dakpa & Augustine, 2017; Treadway, 2010). However, the recipient of messages received through the game is unable to have their name removed from the mailing list, unlike the conventional spam system where a link would be provided to remove oneself from a mailing list (Treadway, 2010). While some MMOGs allow players to change their names via a subscription service, most do not allow avatar name changes once an account has been created. The lack of any sort of spam filter, spam or junk mail folders, like those in a standard e-mail account to catch these posts is another issue with MMOGs (Dakpa & Augustine, 2017; Treadway, 2010).

Creating a sense of community among players is one of the goals of an MMOG. The MMOG offers chat channels for communication and player interaction in order to accomplish this (Dakpa & Augustine, 2017; Treadway, 2010). In MMOGs, it would be more productive to think of the various types of spam as a line that goes from play "comic spam", which relates to friendly incitements among players to violent "aggressive spam" when communications

appear to be aggressive and are meant to be offensive and insulting. These two extremes are separated by an ambiguity called “ambiguous spam”, which can be viewed as both play and hostility (Fragoso, 2015). Due to cultural barriers between gamers, such ambiguous territory is likely to be bigger in multinational encounters, which can lead to misinterpretations like insults being seen as play or play being perceived as an insult (Ducheneaut & Moore, 2004; Fragoso, 2015).

MMOG spammers appear to thrive on this, as they engage in behaviour which is borderline hostile to gamers from other nations. However, due to the extent of cross-cultural ambiguity, behaviours that were not meant to be aggressive might also be misinterpreted (Fragoso, 2015). The repetition of certain words or phrases in some instances can signify a real desire to link up with other like-minded players because effective communication is essential to a team’s success. Even though such accidental spam is initially harmless, it is nevertheless frustrating to people who do not want to create teams with these groups of players because it makes communication more difficult. The spammers acquire strength and increase the intensity of their spam by working together to annoy more powerful players (Fragoso, 2015).

In some cases, spammers want to reach a wider audience to advertise or promote something. These players play without making any gestures but instead, speak out loud frequently (Ducheneaut & Moore, 2004). A very popular technique adopted by spammers in online games is chat bots. The purpose of this technique is to place a character in a densely populated region and use macros to create spam messages that are then delivered to every player via the general chat systems (Treadway, 2010). The game's built-in macro function enables users to build a list of commands that can be quickly repeated with the click of a single button. Some games additionally permit macros to invoke themselves as a command, enabling the macros to loop continuously. The spammer can quickly send their message to numerous channels by using these game features or macros (Treadway, 2010). To persuade users further to spend money on virtual items that can be utilised in the game, these chat bots can also be modified to broadcast the same spam messages over private chat systems to specific users. Mechanisms in several online games can be abused for spamming purposes (Treadway, 2010). This is referred to as shout-spamming, whereby gamers would have their avatars continually shout messages, typically using a macro. They could promote events in player-made cities, crafted goods that they are selling, buffs, and

other offerings (Ducheneaut & Moore, 2004; Treadway, 2010), which is against the terms of agreement for the game (Treadway, 2010).

Spammers who engage in this kind of shout-spamming typically use their online personas as some sort of virtual billboard with no player interaction. Still, much action could be taking place in the background (Ducheneaut & Moore, 2004). This can be done using bots, as they do not need the user to be in front of the computer. These bots, considered the most widely-used and challenging-to-handle hack, contain a program operated outside of the game, which sends commands to transmit the spam to the participants inside the game (Treadway, 2010). Although the player can disable specific chat channels, doing so isolates them from other players and prevents them from interacting with their avatars (Treadway, 2010). Players communicate secretly using "tells" and "whispers"; these are methods for private communications between two players in MMOGs (Treadway, 2010). Indeed, in crowded areas, the use of private text channels may rise. Observations showed that players frequently move to private messaging forums as a tactic for muting the noise in locations where there is shout-spamming (Ducheneaut & Moore, 2004).

However, spammers can also take advantage of the chat system by using direct messaging. Spammers can leverage the private messaging system to deliver spam to users by using the web scraper data collecting technique. Before distributing their spam to gamers, some spammers would even attempt to hide their actions by striking up a regular dialogue regarding the game. While using bots to streamline the process helps speed up this kind of exploitation, it can also be a tedious process (Treadway, 2010).

2.4.6 APPROACHES EXPLAINING TOXIC BEHAVIOUR

To understand toxic behaviour in MMOGs analytically, we review relevant studies that have documented harmful behaviour in the virtual world (Adinolf & Turkay, 2018; Beres et al., 2021; Blackburn & Kwak, 2014; Griffiths, 2014; Kwak et al., 2015; Neto et al., 2017). Three alternative theoretical concepts are discussed based on currently available evidence in the following sections.

2.4.6.1 Online disinhibition effect

The perceived lack of restriction one experiences when speaking online as opposed to in person is known as the online disinhibition effect (ODE), which is caused by lowered

behavioural restrictions (Suler, 2004). The two elements constituting this effect are the benign disinhibition or good behaviour, like assisting others and being nice, and toxic disinhibition or bad behaviour, such as aggressive expressions and improper acts. The former idea gives people a chance to express their innermost thoughts or reveal information they would be reluctant to reveal in person (Elliott, 2012; Griffiths, 2014; Kordyaka et al., 2020). The latter idea refers to the unfavourable side effect of the loss of inhibition, which can result in the use of obscene words, profanity, and even threats (Elliott, 2012; Griffiths, 2014; Kordyaka et al., 2020).

According to the research, the anonymous nature of the internet encourages disinhibition, which leads to hostility and flaming. In addition, because of their protection through anonymity, people may become less inhibited because of the internet. Internet users can thus present themselves in various ways online (Griffiths, 2014; Kordyaka et al., 2020; Lowry, Zhang, Wang, & Siponen, 2016). The internet offers anonymity, which eliminates the risk of confrontation, rejection, and other consequences of behaviour; therefore, the potential for trolling is unquestionably present. This enables people to act in ways they otherwise wouldn't in the offline world (Griffiths, 2014; Lowry et al., 2016). Observational research shows that those who engage in bad behaviour have greater levels of disinhibition, that using virtual platforms while remaining anonymous encourages negative behaviour in online communities, and that the mechanisms of moral disengagement have been identified (Griffiths, 2014; Kordyaka et al., 2020; Lowry et al., 2016).

Most MMOGs exhibit the feeling of disinhibition, indicating that it is probably a particularly useful predictor of harmful behaviour. One could argue that the high levels of anonymity in the gaming world enables both types of disinhibitions in the game world. A high possibility of more instinctive behaviours in reaction to gaming encounters with various values is also created by the combination of the design factor of competitiveness and the rapid nature of MMOGs, as opposed to games without these design elements (Kordyaka et al., 2020). For instance, in the very competitive game context, players who suffer the unpleasant effects of losing a game might deal with this by instinctively insulting fellow players without feeling the need to restrain their behaviour. Social repercussions are unlikely and further toxic behaviour is encouraged because the players are unlikely to cross paths again (given the high number of players) or remember their identities. In light of this, disinhibition is a prerequisite that makes harmful conduct more likely to occur (Kordyaka et al., 2020).

Understanding MMOG players' communication and linguistic patterns better might assist in resolving perceived gaming problems and foster a more favourable impression of the M-gamer subculture, which is desirable given its distinctive intellectual benefits and ecology (Kordyaka et al., 2020). The worlds simulated by MMOGs are sufficiently intimate to resemble a warm extended family and large enough to be a satisfying medium for constructive conversation with emotional ties. Because players of these games connect and communicate across cities and nations, the M-gamer subculture is embedded in a global civilisation (Kordyaka et al., 2020).

2.4.6.2 **Social cognitive theory**

According to social cognition theory (SCT), people acquire knowledge by watching how other people behave (Bandura, 2002). This theory holds that individual learning takes place in a social setting and is influenced by dynamic interactions between environmental and personal effects on behaviour (Bandura, 2002). Environmental effects include social and physical aspects occurring in various operationalisations, while personal impacts include cognitive, affective, and biological factors. The SCT strongly emphasises social learning because it is reinforced both internally and externally. Because behavioural learning in MMOGs is mostly accomplished through observing others, it is contended that the SCT is a particularly suitable method for explaining the incidence of toxic behaviour (Kordyaka et al., 2020).

Previous research that employed the SCT established variables connected to the prevalence of harmful behaviour online and created associated hypotheses to account for harmful conduct (Kordyaka et al., 2020). The methods causing and maintaining purposeful behaviour or motivation are a key factor in the development of disruptive behaviour in MMOGs. This concept is connected to earlier research on how the game environment affects players' perceptions of themselves. As a result, while playing MMOGs, players with a high need for specific incentives for toxicity would attempt to validate their self-concepts and display related actions (Kordyaka et al., 2020; Neto et al., 2017). Toxic victimisation encounters, or how frequently a player has been the victim of toxic behaviour in the past, support the likelihood that toxic behaviour will occur in future (Xiao & Wong, 2013).

The cycle of victimisation hypothesis holds that participation in violent behaviours in the past motivates involvement in similar behaviours in future supports this finding. Players typically have the opportunity to cause similar victimisation experiences in MMOGs because of the normal nature of toxic behaviour (Kordyaka et al., 2020; Xiao & Wong, 2013). Players who have experienced toxicity are consequently more prone to repeat toxic behaviour in the future. Further, a player's assessment of their capacity to plan and execute the courses of action necessary to achieve predetermined levels of performance is known as self-efficacy in the game environment (Kordyaka et al., 2020; Xiao & Wong, 2013).

2.4.6.3 Theory of planned behaviour

The theory of planned behaviour (TPB) attempts to predict people's intentions to engage in an interest-based behaviour at a certain time and context (Manstead & Parker, 1995). According to TPB, the desire to engage in a particular behaviour and its implementation can be explained as a mechanism of the three constructs, namely the person's attitude that can be interpreted as an assessment of the particular behaviour; normative beliefs, which are the cultural dimensions of significant others on taking an action of interest; and perceived behavioural control, which is the inability to execute the particular behaviour (Manstead & Parker, 1995). The prevalence of the phenomenon is influenced by a player's perspective on toxic behaviour, social variables, and attitude towards the behaviour in undertaking toxic behaviour (Kordyaka et al., 2020). Players who engage in toxic conduct in MMOGs do not have the opportunity to fully grasp the harmful effects of their actions since they do not receive comprehensive feedback from other players. Consequently, they fail to recognise the harm caused by toxic behaviour and are more prone to engaging in similar actions (Kordyaka et al., 2020).

2.4.7 HOW PEJORATIVE LANGUAGE IS RESEARCHED/INVESTIGATED IN MMOGs

Massively multiple online games (MMOGs) have grown in popularity over the past few decades on a global scale, with production and consumption steadily increasing (Bawa, 2018). In the context of playing and socialising through such games, players from a wide range of demographic, economic, geographic, cultural, and linguistic backgrounds come together under the umbrella of MMOGs and spend a significant amount of time interacting and conversing (Ballard & Welch, 2017; Bawa, 2018). The emergence of massively multiplayer online games or MMOGs, players (hereafter referred to as M-gamers) have used a game-specific language form characterised by alterations to existing words to create new

words exclusive to their communication styles (Bawa, 2018; Bawa et al., 2017). Subsequently, because there are millions of M-gamers internationally, it can be assumed that this linguistic form of communication is used by a significant portion of the population in entertainment and social settings, making it a socio-cultural language (Bawa, 2018; McKane, 2016).

Kordyaka et al. (2020) studied toxic behaviour in online games by proposing a unifying explanation of harmful conduct after addressing opposing views and testing three separate theories (social cognitive theory, theory of planned behaviour, and online disinhibition impact). Data for this study were gathered via questionnaires and analysed through statistics based on correlations. According to the study's findings, toxic behaviour is best explained by online disinhibition, with victimisation, disposition, and perceived behaviour also being significant contributors.

Research conducted by Blackburn and Kwak (2014) investigated over 10 million user complaints involving 1.46 million toxic players and related crowdsourcing choices, and proposed a supervised learning strategy for predicting crowdsourcing choices on harmful behaviour. The application of distributed judgements on harmful conduct generated by millions of experts was investigated. The researchers trained classifiers to identify the existence and level of toxicity using the same limited information that the reviewers had access to. A number of models focused on chat message linguistics, in-game performance, and reports from victims of toxic behaviour were developed. It was then discovered that this classifier was proficient in spotting obvious innocence and that training with high agreement decisions led to more accuracy on low accord choices. Finally, the researchers found that the classifier was comparatively consistent across subcultures by demonstrating that it was successfully applied to a dataset from Europe.

Kwak et al. (2015) examined toxic conduct and bullying in MMOGs, similar to (Blackburn & Kwak, 2014). They also scrutinised over 10 million user complaints involving 1.46 million toxic players and related crowdsourcing choices to test several theories that explain harmful behaviour. Their findings demonstrated that disclosing harmful behaviour is not widely practised and reaffirmed the negative effects of anonymity in CMC and online forums. The study also investigated the ambiguity of harmful behaviour, frequently experienced in MMOGs. Evidence also showed that relying on seasoned players during gameplay is helpful

in shielding innocent players who are falsely denounced by other players owing to weak gaming capabilities or hostile verbal behaviour (Kwak et al., 2015).

Lastly, by examining the patterns of communication of participants during *League of Legends* games, Neto et al. (2017) aimed to learn more about the effects of harmful behaviour on the game. (Neto et al., 2017) examined information from 1.9 million toxicity-filled virtual *LoL* games. Parameters were put forth to assess the performance of a player or team and team infiltration. In addition, subjects corresponding to various conversational tenors that might occur throughout a game were found. It was further demonstrated that every one of those factors is highly correlated with team performance and non-performance and that perpetrators have different effects on partners and adversary teams. The findings also demonstrated the importance of interaction between players during games. The majority of unfavourable subjects are related to player tension and poor performance. These circumstances might create a vicious cycle that makes a player more likely to engage in harmful behaviour (Neto et al., 2017).

2.4.8 NON-VERBAL COMMUNICATION

Nonverbal communication has been identified as one of the most important aspects of social engagement (Argyle, 2013; Yee, Bailenson, Urbanek, Chang, & Merget, 2007) In all parts of everyday life, people coordinate activities using nonverbal communication. In competitive MMOGs, nonverbal communication is crucial since players try to work as a team without being distracted in order to win (Leavitt, Keegan, & Clark, 2016). Communication among players might be viewed as vital to the mechanisms used to control the persistent environment also due to the social nature of most virtual worlds (Innocent & Haines, 2007). This is because communication among players influences both the nature of the world and the identities of the participants. Some online games facilitate this communication by giving players access to simple-to-activate notifications that give their colleagues audible and visual clues (Leavitt et al., 2016). There are other forms of communication outside just text and audio. To exchange information and give each other clues about their state of awareness, gamers use avatar gestures. Through specialised abilities that change the environment, automating or standardising common communication needs, and focus attention with semantic interpretations or contextual and physical links, enhanced communication simulation games enable players to share knowledge and direct action (Leavitt et al., 2016).

The nonverbal exchange of message through actions, expressions, and signs is characterised by its immediacy, closeness, impact, serenity, and depth. This communication happens within digital media using a hybrid language that combines visual arts, theatre, architecture, graphic design, film, and other creative fields (Cmeciu, 2010; Hocks & Kendrick, 2005; Innocent & Haines, 2007). For communication between players, MMOGs like *World of Warcraft* and *Second Life* often include in-game chat, avatar animation or "emotes", avatar appearance, and direct action. However, a chat window placed on top of the virtual environment typically acts as a mediator for this conversation. Players bypass this restriction by clogging the chat box with emoticons and acronyms to speed up conversation when there is a time crunch (Innocent & Haines, 2007). Hybrid forms of communication are starting to appear in these online gaming worlds.

In addition, since MMOGs are usually characterised by anonymity, non-verbal communication is likely to be crucial for social support and self-expression (Takano & Tsunoda, 2019). Players might feel freer to use non-verbal communication to disclose things that they normally wouldn't, especially in instances where fellow players use their avatars to gesture or show facial expressions. This is because co-presence, simultaneous interaction, and wholesome non-verbal communication all boost intimate connection in MMOGs (Takano & Tsunoda, 2019).

Nonverbal communication normally takes place through space ("proxemics", also known as interpersonal distance), body gestures ("kinesics", pointing at an item), touch ("haptics", touching somebody on the shoulder), gaze ("oculesics", quickly glancing in a direction), time ("chronemics", waiting for a long period), or artefacts ("objectics", signalling to control traffic) are examples of non-verbal communication (Leavitt et al., 2016). This sort of communication is usually personalised in MMOGs by the player's avatar's animation, style, and behaviour (Innocent & Haines, 2007; Maloney et al., 2020).

2.4.8.1 Proxemics

In the online gaming world, proxemic conduct has produced sentiments comparable to those in the real world. In an MMOG, players cooperate through non-verbal communication (Takano & Tsunoda, 2019). Avatar communication tools like this offer superior social support. Members of social support groups in *Second Life* favour non-verbal exchanges

prompted by proxemic conduct, direct real-time interaction, and co-presence (Takano & Tsunoda, 2019). Additionally, the proximity of avatars in MMOGs mimics the physical world's spatial behaviours (Maloney et al., 2020). According to previous research, people behave similarly in online environments and real worlds in terms of proximity, for example, intimate and personal distance denotes intimacy and acquaintance, whereas social and public distance indicates the need for privacy (Friedman, Steed, & Slater, 2007; Maloney et al., 2020). Players usually move away when they feel their avatars' private space has been invaded (Friedman et al., 2007; Maloney et al., 2020).

2.4.8.2 Gestures

Gestures are another type of non-verbal communication that take the form of intentional expressions and work in tandem with or in place of verbal cues to convey additional information, clarify or improve the meaning of what has been said, establish an interpretation of what is being communicated, lay out spatial configurations or trends of activity, or refer to objects spatially (Cmeci, 2010; Goodwin, 2007; Kendon, 2004; Leavitt et al., 2016). The meanings of gestures are expressed by open, deliberate actions in connection to things in MMOGs. By using perception, dependence on mutual understanding and updating teamwork, gestures help speakers arrange gamers' actions and serve as contextual references for the production of following actions (Leavitt et al., 2016; Maloney et al., 2020). For example, gestures such as happy-signalling motions like waving are frequently used in avatar-mediated interaction. Similarly, having avatars dance or touch each other on the back usually expresses affection and encouragement (Maloney et al., 2020).

Gestures can serve as integration tools that unify listeners' focus with a speaker's actions and assist in the creation of consensus regarding a course of action. Pings are an example of using gestures in online gaming. An example of this in a game is a player moving to a point on a map either nearer to or further away from the issue that has been detected (Leavitt et al., 2016). The method of using avatars to gesture involves continuously reading and translating: The reactions and actions made by other players are transcribed into the online gaming environment through the avatar (Maloney et al., 2020). The indications that players interpret from other players' avatars also influence how they act and what they say. As a result, avatars are crucial to the patterns of communication in virtual gaming worlds: Through computer-mediated platforms, communication is facilitated by avatars. The avatar serves as

the world's primary conduit for all verbal and non-verbal communication because it is each player's representation in the virtual environment (Leavitt et al., 2016; Maloney et al., 2020).

2.4.8.3 Gaze

Lastly, gazing serves to show concentration and is crucial in controlling turn-taking in social interactions (Argyle, 2013; Hall & Hall, 1959). In an online context, there would be a higher likelihood of mutual gaze if one of the two interactants was chatting (Yee et al., 2007). Interactions in MMOGs are influenced by the same social standards as offline conduct, this can be seen in non-verbal actions like eye contact and gaze avoidance. In virtual worlds, avoiding visual contact or looking away from the audience is regarded as impolite or snobbish (Maloney et al., 2020). Furthermore, previous studies have shown that gender disparities in mutual gazing exist. Male-male and mixed partners are less likely to engage in mutual gaze than female partners. Virtual worlds also show the same pattern of gender inequality (Yee et al., 2007).

2.4.8.4 Symbols and Emoticons

There has been a development known as symbol chat which use a pictographic conversation system, which has been integrated into the MMOG environment. Symbol chat is supported by the use of icons/emoticons and symbols in online-augmented and game spaces (Innocent & Haines, 2007). These communication methods have a history spanning the numerous advancements and improvements in graphic design over the past century as well as the different dialects used in pre-linguistic societies (Innocent & Haines, 2007). Users in MMOGs use emoticons and symbols in addition to avatar-mediated interaction as a means off non-verbal communication. The use of symbols and emoticons differs across MMOGs, but they typically serve to give context, clues, and emotions to text conversation (Bennerstedt & Ivarsson, 2010; Maloney et al., 2020). For example, when text messaging obstruct their goal, players adopted emoticons and symbols to help them coordinate (Bennerstedt & Ivarsson, 2010).

The limitations that apply to symbols and emoticons are different from those that apply to their traditional counterparts. Digital symbols can have sounds and can also be animated in addition to changing their impression based on context, being integrated in digital environments, responding to input and interaction, and being readily made, mixed, and edited (Innocent & Haines, 2007). In competitive, fast-paced games, gamers can save time by promptly texting an emotion or selecting a symbol. This can also be helpful because there

are numerous layers of communication taking place at once in MMOGs, covering multiple different formats (Innocent & Haines, 2007). Nevertheless, because they are included into chat sessions, the use of emoticons and symbols for non-verbal communication in MMOGs still takes significantly more time than non-verbal communications in the physical world (Leavitt et al., 2016; Maloney et al., 2020). However, even with this restriction, many gamers find symbols and emoticons useful for communication during gameplay (Maloney et al., 2020). According to Innocent and Haines (2007), the majority of users understand and enjoy symbol chat and some even modify the symbols to improve communication.

2.4.8.5 Icons and pictographs

A pictographic language enables pictogram-based communication. Pictograms are visual symbols that depict ideas, things, events, or actions from reality to convey a message. This kind of language is utilised when spoken communication is either not possible or not sufficient (Neurath, 1980). Several pictographic systems for public information programs have been designed over the past few years (Neurath, 1980). These mostly developed from Neurath's Isotype, a mechanism for straightforward interaction that utilised a foundational collection of pictographs that can be joined to produce more complicated messages (Innocent & Haines, 2007). A basic symbol glossary of roughly 3,000 symbols that can be assembled to form sentences and queries was created. These systems were created to enable non-linguistic information sharing between societies and cultures that speak native languages. Different methods have been used to formalise these (Bliss, 1965). The international standard ISO 7001:2007 Graphical symbols - Public information symbols established a common set of pictograms (7001:2007, 2013).

The value of pictographs in electronic content cannot be disputed. Pictographs are an effective method of illuminating highly complicated material. Through graphic visuals and typography, pictographs convey large and complicated amounts of information. They are frequently used by designers in infographics to illustrate data and make it easier to understand large amounts of information (Amini, Riche, Lee, Leboe-McGowan, & Irani, 2018). In Iconica, an iconographic language describes a language-based alternate world leveraged for internal communication systems, depicting its spaces, objects, and shapes, and communication between players and the world's artificial life (Innocent & Haines, 2007).

Semiomorph, for example, describes a number of gaming worlds by mapping a shared language to four distinct modalities of representation: word, diagram, icon, and simulation. Pictochat, a visual type of chat that uses the device's wireless networking to create informal interactions between many gamers is a standard feature of the Nintendo DS gaming platform (Innocent, 2003). Players can create and send texts to each other by drawing on the touch interface of the device and sending them by using a selection of pre-existing icons. Other MMOGs use a set of pictograms to illustrate the emotional experience or activities of many of the simulated characters (Innocent & Haines, 2007; Innocent, 2003).

In addition, some MMOGs contain a pictorial code that enables younger gamers who are unable to read text to comprehend the connections between the characters and their setting (Innocent & Haines, 2007). As an example, to coordinate the actions of multiplayer games in battle with several objectives, *WOW* enables players to set simple symbols like a star, a crescent, a skull, and so forth above specified targets. After determining what these symbols imply, the players determine which targets to assault with a skull, which ones to divert with a star, etc. (Innocent & Haines, 2007). Social contact, which primarily takes place through in-game chat is one of the primary activities in this kind of game context. This is enhanced by using emoticons and kaomoji, which are little combinations of letters that express moods and actions, such as joy and sadness, winking or laughing. This format is similar to other types of online chat and text-based interactions such as email. These provide text being uttered in an online discussion with an emotion or attitude. These are now often used for texting on mobile devices, and many of them have been formalised by being included in drop-down options in instant messenger and other chat programs (Innocent & Haines, 2007).

2.4.9 COMMUNICATION AND TEAM PERFORMANCE IN MMOGs

It is common for MMOGs to have multi-player teams, with the sizes and period of collaboration ranging from small shoddy pick-up teams to well-established groups with long-lasting structures (Leavitt et al., 2016; Ratan, Chung, Shen, Williams, & Poole, 2010; Williams, Ducheneaut, Xiong, Zhang, Yee, & Nickell, 2006). These team sizes and duration depend on the features and resources the game's program offers. The smaller pick-up teams are usually temporary and semi-random and are created using the game's matchmaking algorithms, whereas the well-established teams contain team members who have been playing together for a long time and have had enough time build efficient

information-sharing methods and adapt to one another's playing styles (Leavitt et al., 2016; Williams et al., 2006).

Teams consist of players matched against a similar team with about the same skill level and expertise. A smaller group of players form more long-lasting teams, regularly competing as a coherent unit with the same team members. Players on both types of teams take on specific duties that impact their gameplay and communication styles (Drachen, Yancey, Maguire, Chu, Wang, Mahlmann, Schubert, & Klabajan, 2014; Leavitt et al., 2016). Each player must cooperate in the team's best interests to improve performance, which calls for extensive familiarity and experience (Williams et al., 2006). Clear norms and processes help groups manage duties better and have members who are happy overall. Players who communicate successfully and want to collaborate to achieve a similar goal constitute a successful team (Drachen et al., 2014; Williams et al., 2006). In MMOGs, high-performing teams have built structure and established styles and patterns of communication that work effectively for members of the team (Drachen et al., 2014). For example, a team might decide that some of its players should adopt supportive roles and concentrate on improving the effectiveness of their team, which might support extensive team communication. Other tasks involve managing the battlefield or applying pressure to opponents, and adjusting the players' goals and methods appropriately (Drachen et al., 2014).

Previous studies investigating the function of non-linear channels of communication in MMOGs discovered that using speech or taking into account auditory cue awareness for coordination strengthened team relationships (Jørgensen, 2008; Williams, Caplan, & Xiong, 2007). However, voice communication can be puzzling for some players (Halloran, Fitzpatrick, Rogers, & Marshall, 2004), and game audio (notifications, audio effects, and soundtracks) have conflicting effects on how the team performs, particularly in MOBAs (Ng, Nesbitt, & Blackmore, 2015). There is also conflicting evidence linking text conversation to improved team effectiveness in MMOGs. On the one hand, teams that communicate more often and have much more integrated team communications systems performed better (Williams et al., 2007). On the other hand, players usually use chat messaging for emotional and social rather than task-related information, and initial standards and role-playing have an impact on involvement (Leavitt et al., 2016). Other forms of brief, real-time communication, such as speech or auditory cues, may be more efficient than chat messages

in time-limited and competitive games because chat messaging can be disruptive (Leavitt et al., 2016).

2.4.10 HOW LANGUAGE AND COMMUNICATION PATTERNS IN MMOGs INFLUENCE RELATIONSHIP FORMATION

Early theorists of social interaction aimed to explore how people construct meaning of the world and how things and other people affect how people behave (Blumer, 1980). Although these academics were unable to witness or hypothesise on interpersonal interactions that take place over computer-mediated channels of communication, the main contribution they made helps academics from many disciplines comprehend social interactions that take place online. Individuals undoubtedly react to things based on their perception of their meanings, and these meanings are derived from their interactions with those around, such as discussion (Ictech II, 2021). People react to phenomena based on their perception of their meanings, which they get from social interactions like talking to other people (Ictech II, 2021).

According to Mead and Schubert (1934), the most relatable and common human interaction is communication. Conversational social contact frequently has a flexible structure. Studies offer a conceptual framework for contemporary sociologists that emphasizes the micro-scale elements of communication, such as the activities characterized by self and how people maintain an expressive order during an encounter (Goffman, 2002, 2021; Ictech II, 2021). The extent to which a person's self-presentation matches their ideal self-presentation determines how much their self-concepts are changed. If they are successful in doing so, people will have higher self-esteem, whereas if they are unsuccessful, they will have lower self-esteem (Goffman, 2002, 2021; Ictech II, 2021).

People are more likely to express their idealised personas online because self-presentation there is frequently detached and fragmented, unlike in person. For instance, people frequently exaggerate aspects of themselves on online dating services. They hardly ever view it as dishonest, though, since they see it as a way to 'sell themselves' to others (Gibbs, Ellison, & Lai, 2011; Ictech II, 2021). Although people frequently exaggerate their achievements or desirable characteristics online, generally, people are extremely aware of the possibility of a physical meeting should a connection evolve. As a result, people frequently try to strike a balance in how they show themselves between their idealised

personas, their real personas, and their presumed personas (Ellison, Heino, & Gibbs, 2006; Gibbs et al., 2011; Ictech II, 2021).

Computer mediated communication (CMC) like virtual gaming platforms offer excellent control over what a person shares about themselves and involves minimal engagement because it is consensual asynchronous communication (Ictech II, 2021; McKenna, Green, & Gleason, 2002). Online communication make up a large portion of interactions on these kinds of social sites. Unfocused virtual contact happens infrequently throughout a player's day, for example, when they browse their newsfeed and decide to like or respond to another player's content (Kozlenkova, Palmatier, Fang, Xiao, & Huang, 2017; Parks & Roberts, 1998). Although this does not always indicate a willingness to interact virtually, it has a common significance among players (Ictech II, 2021). When a player is involved in several virtual conversations with different people, they frequently express an opinion through an act, statement or response before moving on (Kozlenkova et al., 2017; McKenna et al., 2002; Parks & Roberts, 1998). Virtual interactions are more engaged and hence more like physical communication whereby users are dedicated to a virtual meeting, as opposed to instant communication, which is frequently the dominant type of interaction on gaming platforms (Ictech II, 2021). Players depend on in-the-moment nonverbal interactions during real-time communication through the CMC channel they are using during online interactions (Ictech II, 2021).

Because MMOG play is a social activity, players must frequently collaborate with other, often familiar, players to achieve success (Ictech II, 2021; Williams et al., 2007; Williams, Consalvo, Caplan, & Yee, 2009). Studies on MMOGs have found that instant messenger platforms let users engage in interpersonal conversations. Because a player can carefully build their identity, interpersonal encounters are believed to be more intimate, passionate, and noticeable than face-to-face communication (Ictech II, 2021; Williams et al., 2007; Williams et al., 2009; Yee, 2006). Back when communication in MMOGs was only through in-game messaging systems that only allowed for communication via text and had no functionalities for verbal and non-verbal social cues, players had enough time to tweak their comments to have them received positively (Yee, 2006; Yee et al., 2007). Opposing players are not required to answer immediately while participating in unfocused online conversations, which also gives them enough time to respond. It is frequently assumed that they can do tasks, battle enemies, and take part in invasions while also conducting various

discussions both within and outside of the game (Ictech II, 2021; Yee, 2006; Yee et al., 2007).

Furthermore, text chat frees the user from worrying about their nonverbal and voice cues because their physical form is not visible. Instead, they can focus on the structure and content of their textual communication to shape how it is interpreted. Opponents often 'fill in the gaps' about their fellow players' traits when texting because they base their perceptions on sparse cues (Ictech II, 2021; Yee, 2006; Yee et al., 2007). Given that verbal communication in gaming also lacks visual elements like body language, it makes sense that this also applies to audio communication. Message CMC has a far greater possibility of intimacy than in-person interaction due to the remarkable capacity to regulate proactively how one presents oneself. It appears that because they are partially shielded by their non-visibility, players are less likely to make the effort to refrain from disclosing personal information that might be viewed as inappropriate (Ictech II, 2021).

Players of MMOGs frequently participate in several types of CMC with other players. Even some online players favour having their social interactions on a CMC channel. Shy online shy players successfully use CMC channels to increase the size of their social circle and find social support, according to research on socially anxious online gamers. Online friendships quite frequently serve as a source of support in these circumstances (Kowert et al., 2014). A significant portion of MMORPG gamers develop lifelong friendships and occasionally meet these buddies in person. The introduction of CMC channels, such as voice chat, to the social interactions of online gamers has both beneficial and bad effects (Griffiths, 2014; Ictech II, 2021; Kowert et al., 2014).

According to Gray (2012), voice communication in MMOGs gives players verbal signals that can help them identify group membership, which can subsequently help them apply prejudices and engage in bullying. For a long time, rudeness and hostility directed towards women who play MMOGs have resulted from language categorisation. MMOG players have been proven to react to female voices negatively more than male voices when they make the identical claims. Conversely, male players appear to be allowed to govern the masculinity of other players as they see fit without any meaningful regulatory intervention, even when their actions would be viewed as discrimination or harassment in the real world (Jha, 2014; Kuznekoff & Rose, 2013). However, men who play online games are not the

only ones who exhibit masculinity. Online female players of *WOW* have been observed to appreciate acting aggressively masculine as well (Royse, Lee, Undrahbuyan, Hopson, & Consalvo, 2007).

2.4.11 LANGUAGE USE FOR GENDER IDENTITIES

Individuals' self-worth have risen; thus, it's logical to examine how identity is portrayed when that individual is at their most distinctive, i.e., when they are involved in non-work-related, enjoyable, and hobby activities (Pearce, 2017). When compared to work or institutional settings, many leisure settings have much less stringent psychosocial standards. In online settings, characterised by anonymity, where identities cannot be connected to offline identities, the lack of restrictions is even more apparent. Online gaming communities have established their distinct systems of social structure-related views and convictions, which are frequently correlated with beliefs shared by communities outside of the gaming context. These beliefs may be embraced by the entire community or be specific to a certain type of game or genre (Pearce, 2017). Players in MMOGs can only infer things about others' preconceived notions since there is little to no method of learning much about their identities in-game. This is mainly accomplished through the vocabulary used in virtual communities (Pearce, 2017). One example of this is using language to detect someone's gender by analysing their language preferences and usage (Eisenclas, 2013; Kapidzic & Herring, 2011; Pearce, 2017).

Though identity in the physical world may be linked to unchangeable traits like appearance, identity in anonymised settings, like those of virtual communities, is always subject to modification (Marwick, 2013; Pearce, 2017). Online, the commonplace player is assumed to be white, male, and heterosexual except if they are 'marked' otherwise, which is an intriguing observation (Marwick, 2013). This finding suggests that individuals must make an effort to differentiate their vocabulary from the typical pattern to construct or act an identity different from that of a white, heterosexual male. On the other hand, players must adhere to acceptable linguistic conventions if they are trying to create or enact the persona of a straight, white man (Pearce, 2017). As no other characteristics besides playing ability can be used to establish identities, if a player takes on an identity inconsistent with being female, then their fan base can simply modify their view of the player as being male. As a result, witnessing instances of exhibiting sexual identities as right or wrong is very challenging, if not unachievable, in this setting (Pearce, 2017).

Although gender is not strictly confined to the binary categories of male and female, prejudices from online platforms carry considerably greater significance, and it can be very difficult to develop non-stereotypical personas. There is currently no dominant social language that includes prejudices and moral standards for those who do not fit within the male–female dichotomy (Pearce, 2017). This is important since social prejudices and standards influence how people perform their male and female gendered identities and supply them with resources (Pearce, 2017). Research on gender-influenced languages is explored by Panyametheekul and Herring (2003) in the context of quasi-synchronous and asynchronous communication. Virtual settings using internet-transmitted chat channels, like *WOW*, mostly use quasi-synchronous computer-mediated communication (QS-CMC). Both synchronous and asynchronous communication occur when language is produced and simultaneously, in real time received by an audience. However, the main distinction between synchronous and QS types of communication is in the nature of language production.

While a synchronous audience can access messages sent via the messaging system in real-time interaction, only the player who sent the message has access to the messages' content during asynchronous communication (QS-CMC). Online video gaming platforms were once considered a way to liberate societies from fixed identities and the corresponding inequities based on physical characteristics like gender and race (Marwick, 2013; Pearce, 2017). However, preconceptions persisted in virtual communities, except they are becoming more dependent on what players can infer from language use. Preconceptions not only follow players into virtual communities, they also adhere to players in encounters that take place offline. In the MMOG community, female players are generally stereotyped both offline and online (Marwick, 2013; Pearce, 2017). The way women communicate, which is thought to have a societal or relationship-focused goal, is associated with the use of unbiased and affectionate verbs, sexually implicit language, indirect statements, and more emoticons (Okazaki, Rubio, & Campo, 2014; Panyametheekul & Herring, 2003; Pearce, 2017). The opposing interpretation of this distinction asserts that masculine language use, regarded as mainly used for collaboration or personal social promotion, is characterised by profane and sexually explicit language, little mellowing of cynicism or slurs, and explicit questions. This gender-based linguistic preconception is not recent or exclusive to nations with large European populations (Okazaki et al., 2014; Pearce, 2017).

Okazaki et al. (2014) researched the subject of gender-affected online gossiping behaviour. They discovered that although both sexes value the social aspect of friendship more than autonomy, men are better able to balance these aspects of male and female social communication. When it comes to computer-mediated communication, such gender-based preconceptions do not exist in the real world (Panyametheekul & Herring, 2003; Pearce, 2017). Despite not all men and women talking according to the same set of linguistic conventions, most players nevertheless depend on this preconception when personal information is lacking (Eisenclas, 2013; Pearce, 2017). This application of preconceptions and sexist conventions is helpful for understanding the identities and behaviours of players in one's immediate environment, and also provides instructions on how to create and execute one's personal identity. When acting in-game as a gendered persona that is distinct from your real world gendered persona, this is especially helpful (Pearce, 2017).

2.4.12 THE THEORY OF SOCIAL GAMES

2.4.12.1 What Is Game Theory?

Psychological general theories, sometimes known as grand theories, are regarded as too theoretical to be useful in practical sociological research. Theoretical systems were also critiqued in this way, but numerous other renowned general theories have come under similar fire (Merton, 1968; Münch, 1996; Stolz, 2023b; Van den Berg, 1998). Frequently, the argument has been made that general theories are inadequate compared to empirical studies since they cannot explain individual occurrences, even those considered scandalous (Goldthorpe, 2000). This is still an ongoing phenomenon, constantly changing public opinion and science. The theory of cooperative games in essence evolved from the need to apply some economic principles to scenarios involving a small number of players. However, it is intriguing to investigate if game-theoretic ideas could be applied to perfect competition scenarios, or those with a very high player count (Krueger, Heck, Evans, & DiDonato, 2020; Owen, 2013; Stolz, 2023b).

Our understanding of circumstances involving decision-makers is intended to be aided by game theory. A game in the common sense is a competitive activity where players compete against one another under predetermined rules (Osborne, 2004). The primary contribution of game theory has been to illustrate the behaviour motivated by personal gain and rational players in unpredictable situations with other self-serving and rational players (Krueger et al., 2020; v. Neumann, 1928). This idea implied that players aim to maximise their own

expected value when they play so that they can win. But it quickly became clear that, even in cases where every participant acts sensibly, many of these games have no winners. Therefore, the more modest objective of not being taken advantage of becomes the focus of the game-theoretically reasonable player (Krueger et al., 2020; v. Neumann, 1928). Players can only succeed individually if other players make mistakes due to distraction or stupidity.

Examining models related to interactions between individuals, such as game theory, can also provide insights into how we are able to change our behaviour to enhance our own well-being. For instance, one can determine the benefits and limitations of different methods by examining the motivating factors encountered by negotiators engaged in combat (Osborne, 2004). The concepts that can be verbally communicated are accurately expressed in game theory models. But as much as this is the case, verbal depictions are often verbose and inaccurate; therefore, when explaining models, usually mathematical symbols are used to ensure correctness and conciseness (Osborne, 2004). Thus, it was proposed that a sociological general theory may be predicated on the idea of a social game and implies that this general theory might be better than competing general theories in order to give guidance on interpretation, explanation, and translation into general theories. Here, the term game is used as a conceptual starting point and focus point for the whole theory (Stolz, 2023b).

2.4.12.2 Social Game Theory

Sociologists occasionally research games; however, they often draw comparisons between social interactions and games. Typically, these references are used to emphasise a trait or aspect of the environment being studied that the writer anticipates the reader will already be familiar with via games (DiCicco-Bloom & Gibson, 2010). These traits include that, "...like games, some areas of social life are rule-governed, goal-oriented and possibly competitive in that there is some coveted reward that not everyone can possess; that action involves discrete moves and perhaps something approximating alternating turns that skilled 'play' involves the use of strategies; that with extended play one develops an instinctive feel for the game; that earlier actions constrain subsequent options for oneself and others; that a setting may demand that participants ignore external distractions; that play is engrossing; that roles are differentiated and knowingly coordinated; that rules are arbitrary, in the sense that they are based on convention rather than physical laws; and that, as a consequence of

rules' arbitrariness, many different games are possible". (DiCicco-Bloom & Gibson, 2010, p. 248).

Of course, there have been periodic allusions to certain games. Leifer (1988), for example, proposes that competent social actors behave uncertainly, delaying commitment to a clear plan until its ultimate success is certain, much like experienced players of chess. But regardless of whether a particular game is used as an example, the comparison continues only until such time as the writer must reiterate a particular point, like the fact that actions can be risky or that a complex web of errors, unpredictable devices, and political dynamics in lab settings negates the refined body of scholarly papers (Garfinkel & Rawls, 2015). It is unlikely to come across someone asking: If the comparison is correct, what other things might we uncover in the world, as well as under other abstract circumstances might it be true? (DiCicco-Bloom & Gibson, 2010; Garfinkel & Rawls, 2015; Rawls, 2019).

The social game theory generalises and expands on the classical game theory through the construction of mathematical theories of rules and rule systems, as well as direct application in modern social sciences (Burns, Roszkowska, Corte, & Machado, 2017). A consistent definition of rules, rule complexes, and rule systems—all of which are specified as mathematical objects—can be applied to both traditional game theory notions and sociological concepts such as norm, value, belief, role, social interaction, and institution. By using these techniques, interactions among people can be modelled while accounting for behavioural, social, and economic factors. It can also be used to consider games where information is lacking, inaccurate, or even misleading (Burns & Roszkowska, 2008; Burns et al., 2017). Thus, it has been concluded that the theory of social games is as expansive as other comparable grand theories, yet it provides a simpler means by which it can be applied to theoretical research and mid-range theorising. Formal and agent-based demonstration, together with both explanatory and descriptive heuristic, establish the connection between mid-range theory and real-world studies (Stolz, 2023b).

The following principles are the main ideas of social game theory (Burns & Gomolińska, 2000; Burns & Roszkowska, 2005, 2007, 2008; Burns et al., 2017):

- As with general game theory, social game theory is created and used in multi-player interaction scenarios where multiple players are dependent on one another.

- According to social game theory, actors use contrasts to determine how similar—or how dissimilar—the alternatives they are considering in the game are to their norms and values in the specific scenario at hand. This allows actors to either build their actions or choose among other options.
- Understanding exactly how societal standards and conventions, values, structures, and social interactions shape and regulate game dynamics is made possible by social game theory, which offers an ideological and organisational foundation for the categorisation and study of games in their socioeconomical context. Rethinking games as social constructs reveals the specific ways in which societal relationship rule complexity influence and govern interactions.
- Games are classified as either open or closed by social game theory. A closed game has a set layout or set of rules; in an open game, players can change, rearrange, and reorganise game elements like role elements or the overall set of game rules. It is possible for outside entities, or third parties, to possess the ability to manipulate and alter games in a metalevel way.
- The idea of a game solution is redefined by social game theory. It's possible that particular solutions imagined or put forth by parties with dissimilar ideas and objectives will be incoherent or contradicting. In certain instances, nevertheless, individuals might come up with common solutions or have outside forces impose them. In any scenario, though, they could serve as the foundation for interaction patterns and game equilibrium.
- According to social game theory, there are various kinds of game equilibria, including instrumental, normative, social, and so on. Among these is normative equilibrium, which is the cornerstone of social order and is a type of equilibrium that is significant to sociological studies.
- The theory acknowledges that human actors are proficient in factual understanding and have expertise in computation, but it also highlights their exceptional knowledge of society, skills, and aptitudes. Specifically, this includes their understanding of different cultural structures and entities, such as families, markets, governments, businesses or workplaces, hospitals, and educational systems, they can utilise to frame and participate in their social relationships and game interactions.

- **Social Games**

A social game is a way to structure a social setting where participants with certain characteristics participate in recurring actions and relationships that are influenced by the rules, objectives, resources, representations, and objects of the game (Stolz, 2023b). All social life can be thought of as a game, that is why the term social game is used very loosely (Coleman, 1969, 1994). There is an incredible diversity of game types: some can be played with or without observers, they can have outside impacts, they can serve a purpose for other games, and each participant can have a distinct aim or goals (Krueger et al., 2020; Stolz, 2023a, 2023b). Individuals must anticipate what other individuals are going to do in social games, where players are frequently self-interested and occasionally empathetic peers, knowing that other individuals are also attempting to predict what they will do (Hertwig & Hoffrage, 2013).

The type of strategic thinking that creates and exploits perceptions in an evolving way is required by social games. These games require fairness, logic, and compromise (Hertwig & Hoffrage, 2013; Krueger, Ullrich, & Chen, 2016). The players aren't necessarily aware of their representations and rules, and they may be agreed upon or disputed. Social games include conversations with spouses, friendship groups, organisations, etc (Stolz, 2023a, 2023b). Every component of the game is continuously and systematically related to every other component; any modification to one component affects and is affected by every other component of the game. It's crucial to remember that the way the various game components interact produces what appears to be a system or living entity. Figure 5 is a representation of the characteristics of a social game.



Figure 5: The Social game (Storytelling, 2015)

The social aspect of the game occurs in game time and space, as well as in an increasingly broad societal environment and a broader gaming setting. It determines the results of games and may serve one or more external function(s) (Stolz, 2023b). This is represented in Figure 6.

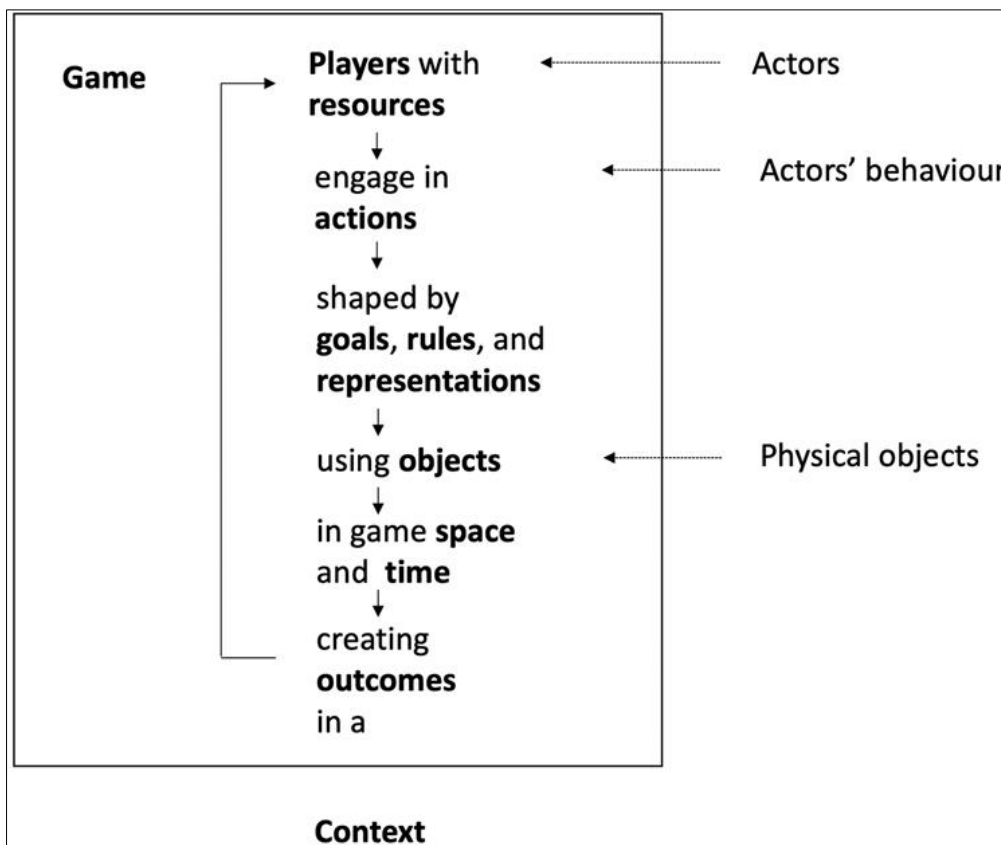


Figure 6: Scheme of the social game (Stolz, 2023b).

The iterative nature of social games is illustrated by the arrow loop, wherein activities inside the game lead to further interactions between players in the game until the game is completed. Social games are played in a social environment; they use actors and their actions, together with physical items, aimed at transforming their surroundings into players, game objects, and game activities that have a metaphorical reality that does not exist in the real world (Aichner & Jacob, 2015; Stolz, 2023b). In addition to being socially constructed, social games also exist within the real world (Burr, 2015; Hertwig & Hoffrage, 2013). The real world includes them since they exist regardless of the way behavioural researchers perceive or describe them. However, social games only exist to the extent that the people playing them genuinely play them and perceive their existence (Burns et al., 2017; Stolz, 2023b).

There is an incredible range of social game types, and numerous categories such as roleplay games (RPG), action, adventure, and more have been suggested (Klabbers, 2009; Stolz, 2023b). Depending on the player, social games might contain hundreds or even thousands of participants, observers, external impacts, a purpose for additional competition, and a

comparable or distinct aim for each player. The core of the interactive play experience process is an approach to decision-making that depends on the information provided to the user. Textual content, illustrations, and even touch can all be used to convey information in games that use force-feedback interfaces. Accordingly, they may be obvious representations such as graphic interface (GUI) components or contextualised game objects, or items that the player perceives as part of the virtual world (Fabricatore, 2018). The game types can have agreed upon or disputed rules and representations, yet not every player could be aware of them (Burns et al., 2017; Klabbers, 2009; Stolz, 2023b). Social games can be classified into two types being the distinction between games-for-fun and serious games, as well as the distinction between levels of social games (Stolz, 2023b). These are described in the sections that follow.

Classification Of Social Games

Social games can be categorised as games-for-fun and serious games as well as levels of social games, as represented in Figure 7a. This section further explains the distinctions between these classifications.

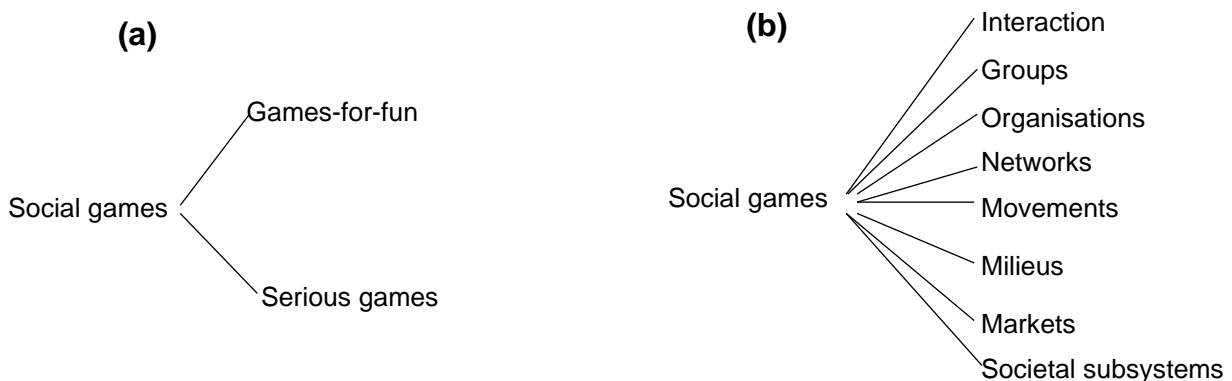


Figure 7: Social games. a, b Types of social games (Stolz, 2023b)

○ **Games For Fun and Serious Games**

Games-for-fun are separated from explicit interests and social roles, which is the primary difference between the two categories of games. For this reason, playing games for fun can lead to feelings of enjoyment, liberation, and distraction. Conversely, serious games are viewed as a part of the real world, within which needs and hard work dominate (Hertwig & Hoffrage, 2013; Stolz, 2023b). Applying such a broad definition of the social game defined above, it can be implied that there is hardly anything innately exciting about the majority of social games, and therefore they are seldom played”.

for fun. Just like academic conferences or raids by law enforcement, which are obviously not always fun, electoral votes are social games (Stolz, 2023a). But other than this, games-for-fun and serious games have identical characteristics. The fundamental tenet of the theory of social games is that social organisation can be divided into one general game-like structure (Stolz, 2023b).

- **Levels of Social Games**

Another way to classify social games is by considering various types of categories. The various levels of social games are distinguishable from one another, players can be examined and accepted into the team based on the criteria for joining a team (Stolz, 2023b). This is represented by Figure 7b. For instance, players form interactions when they see each other here and now, inhabiting a specific scenario and actively participating. By doing this, we are able to differentiate between extremely diverse categories (Stolz, 2023b). Social games that are widely recognised in the field of social sciences, such as relationships, collectives, associations, circuits, campaigns, environments, markets, and societal sub-systems such as the economy, the polity, and the social institutions play an important role in shaping our society (Calhoun, 2002; Hertwig & Hoffrage, 2013; Stolz, 2023b; Wahab, Ajiboye, Ogbeyemi, & Isaiah, 2023).

Social games, such as politics, economics, and science, are all analysed as part of the social fabric (Stolz, 2023b). Social games theory, much like the competition between grand theories, seek to explain the complex dynamics of social interactions. It is believed that social games apply to the entire social world, existing in every domain and at every level of society (Wahab et al., 2023). The social world does not consist entirely of games, especially not most game elements (DiCicco-Bloom & Gibson, 2010; Stolz, 2023b). Hence, the rules, players, goals, objects, and representations of a game are not considered as part of the game itself. People can also take personal actions that are not part of a clear social construct (Calhoun, 2002; Wahab et al., 2023). In addition, the life-world is not simply a game, but rather a complex interconnected system of multiple games (Stolz, 2023b).

The Elements Of Social Games

The various components that comprise social games are called game elements. These are usually also referred to as game attributes. They are also known as the elements, structures, items, or activities that are thought to be typical of games (Calhoun, 2002). Social games

ought to include easy, repetitive activities, social interaction, tutorials, support for paused gaming, and the ability to view what other players are doing. Encouraging and facilitating players' social connections is another important factor in social gaming (Krueger et al., 2020; Stolz, 2023a, 2023b). Understanding the many social gaming interactions that players engage in, is very helpful in achieving this. Even though the idea of social gaming is still a fairly recent concept, it can be agreed that there are a few common characteristics that define social gaming (Stolz, 2023b)

Numerous people play social games simultaneously. These participants have the option to work together or against one another. Social games are built around a network that makes interacting with others easier. Social games can be built on recent, custom structures or 'piggyback' on existing social platforms, allowing users to take advantage of their current social networks (Burns & Gomolińska, 2000; Burns et al., 2017; Stolz, 2023b). In a social game, each player is conscious of the presence, activities, and achievements of other players. Interaction between players of social games is another feature (Burns & Gomolińska, 2000; Burns et al., 2017; DiCicco-Bloom & Gibson, 2010; Stolz, 2023b). For social games, there are a few key elements that are usually considered. These are players, resources, actions, goals, rules, representations, objects, space and time, outcomes and context which make up a social game (Stolz, 2023b). These elements will be explained in the following sections.

- **Players**

Actors inhabit the role of players in games. Actors are unique individuals. An actor (or group of actors) who participates in the game and is acknowledged as such by other players, whether freely or involuntarily, is referred to as a player (Paavilainen, 2010; Stolz, 2023a, 2023b). There are a variety of actors playing different roles in the game often revolving and even hidden roles. Actors are interpretive, transformational, and creative entities with a restricted (or bounded) reason (Burns et al., 2017). Because they are a part of institutional and normative settings, they may also be moral creatures. Actors may collaborate to portray a single player, or they may be viewed as a group (a team, a nation) (Burns et al., 2017; Stolz, 2023a, 2023b).

Players have responsibilities and characteristics related to the game. Player qualities pertain to a player's characteristics that are significant to the game (Colman, 2003; Stolz, 2023b).

These consist of the quantity or kind of social, physical, psychological, and corporeal resources or attributes, such as gender, intelligence, strength, number of friends, and stigmatising appearance, as well as the quantity or type of game resources, such as objects, currency, real estate, and documents (Colman, 2003; Shubik, 1982; Stolz, 2023b). Negative player qualities are those that are specified by regulations, meaning that some players are not permitted to possess them (Stolz, 2023b). A player's privileges and duties about their attitude and conduct are bundled into a player-role. For example, in the game thieves vs. Police, some players are cops and others are thieves. In football, each side has one custodian, and every other player is on the pitch. The referee's duty is particularly intriguing as it involves both punishing and adjudicating rule violations. Police officers and judges may be found in social games, where they perform identical tasks (Paavilainen, 2010; Stolz, 2023b).

There are roughly three approaches in which players are created through society. First, the rules that form part of the game inform us of the specific characteristics and actions of the actors that are pertinent to the game and, thus, belong to the player (Colman, 2003; Stolz, 2023b). In a sense, the actor participates in the game solely in the ways that are prescribed by it. Second, in the sense that only specific actors are permitted to play or refrain from playing, the players are likewise socially constituted (Colman, 2003; Moulin, 1986; Stolz, 2023b). Third, the reasons why players choose to play the game or not are also socially formed. This is a result of actors using social games to shape their identities. Their deepest thoughts and theories about "who they are" are derived from the playing these games (Stolz, 2023a, 2023b). Third, the reasons why players choose to play the game or not are also socially formed. This is a result of actors using social games to shape their identities. Their deepest thoughts and theories about who they are originate from the games players play and can only come about from those games (Stolz, 2023a, 2023b).

- **Goals and Resources**

A game may have one goal, but frequently it has several. The usual states, instances or objects that players aim towards while they play a game with other players are known as the game's goals. What is at risk and the purpose of the game are the same (Bourdieu, 2000). There are many different kinds of goals; they might be transitional or definitive in nature (Stolz, 2023a, 2023b). Objectives may be mixed, non-competitive, or competitive. In order to achieve competitive goals, players must attempt to outperform their peers; non-

competitive goals may and should be accomplished without any kind of player comparison, whether such comparison is intended or even feasible (Bourdieu, 2000; Stolz, 2023a). In certain games, every player possesses common goals, whereas in other games, various sorts of players have distinct aims. Goals in games might relate to individuals or groups, for example, individual sports vs. team sports.

The need that games' goals be shared, at least in part, by all participants is a crucial component (Stolz, 2023a, 2023b). Players' objectives—their preferences—become evidently predetermined by the game as soon as they enter it. As a result, games have the power to coordinate people's intentions and behaviours, which helps to address the Hobbesian issue of social order in a variety of ways (Parsons, 1949; Stolz, 2023a). Stolz (2023a) notes that it's important to separate players' reasons for playing the game from their goals. Playing a social game typically involves a variety of motivations. Players may internalise the game's objectives and combine them with their deepest motivations, as has frequently been seen.

The word resources refers to all the legal and illegal methods players might employ to accomplish the game's intermediate or end objectives. Resources are also referred to as various types of capital on occasion (Stolz, 2023a). Asking yourself what you need to succeed as a player will help you identify resources in the game; a list of resources will then spring to mind. There are many distinct types of resources or capital, and multiple classifications are provided (Bourdieu, 2000; Coleman, 1969, 1994; Stolz, 2023a). From the standpoint of social games, Stolz (2023a) distinguishes between the following kinds of resources: those that are specific to an object (money, valuables, certain tools, etc.), cultural (understanding and familiarity with the game's representations and rules, including etiquette, vocabulary, and technique), social (connections to beneficial actors outside the game or other players within the game), mental (knowledge, forbearance, aggression, humour, ambition, and bravery), corporeal (beautiful, strong, tall, balanced, coloured), and positional (do the proper action at the appropriate moment). Depending on the game, these resources or capital take many different forms.

- **Actions**

An action can be described as a socially created representation of a behavioural pattern that is recognised by one or more actors as distinct from other behaviours as well as counted as

an action (Stolz, 2023a, 2023b). This counting as or differentiating might take place before, during, or following the behavioural sequence. For example, scoring a goal or giving a statement in a presidential debate are two examples of actions. Actors may use these behavioural models to plan, execute, and monitor their behaviour as well as to understand other actors' activities (Stolz, 2023a, 2023b). Without the ability to analyse, organise, execute, and monitor our continuous stream of behaviour using these socially formed action models, we could not possibly function in this world (Stolz, 2023a).

Any action that is not a component of a social game is considered solitary. Both the active actor and a spectator might perceive an isolated action as such. A game action is an example of a player's activity that teammates recognise as typical of a social game (Shubik, 1982; Stolz, 2023b). As they compete, players want to stay inside the boundaries of the game by using its resources and objects to accomplish objectives while also paying attention to its representations and rules. A common term for in-game activities is moves. When two or more players combine their game activities, it's called a game interaction. It is crucial to always remember that game actions and interactions incorporate references to both other players' actions and the game's rules. According to Stolz (2023a), the "homo sociologicus" or "homo oeconomicus" holds a position that is far different from this. That indicates that goal-driven, rule-based, and symbol-based action characterises social game play. Acts that conform to the rules of the game and are accepted by other players as legitimate game elements are socially produced in the sense that they are considered game activities. Yet, the game itself is also built by the acts within it. The game would eventually disappear without any gaming behaviours (Giddens, 2004; Stolz, 2023b).

○ ***Rules and Representations***

Rules govern social games. The definition of a rule is an interrelated set of guidelines that, in certain situations, may be used to (a) see or count as occurrences in specific instances or (b) refrain from acting or not have the authority to conduct oneself in certain ways (regulative rule). There is a wide range of rules. The game aspect they control may categorise them (Stolz, 2023a). Therefore, the rules may specify:

- the nature of the game's objective,
- the types of actors that are permitted to play,
- the characteristics of actors that are significant to the game.

- the potential legal actions or movements and the penalties imposed on certain unlawful acts or movements,
- the titles of the actors, manoeuvres, and game components,
- what are the game's results and how can you find out what the outcomes are,
- how outside influences are handled,
- the circumstances under which the game starts, stops, can be picked up again, and concludes,
- the exact additional rules that may be used in the game under what circumstances, as well as how rules may be altered (metarules).

Conversely, rules might be categorised based on their structure. Prescriptions, preferences, permissions, and proscriptions may all be distinguished (Deterding, 2017; Merton, 1968; Wrona & Gunnesch, 2016).

The presence and legitimacy of rules are derived from sharing them. Any rule that players witness the vast majority of players following and violations being either penalised or otherwise repaired establishes if they believe it to be valid (Stolz, 2023a, 2023b; Wrona & Gunnesch, 2016). Numerous social games have established policies for inappropriate behaviour, including actions that are particularly reprehensible to other participants. There are several responses and outcomes that might result from breaching the rules. Negative sanctions, which are events or actions aimed at punishing the rule-breaker, can be used to enforce the regulation. Smaller rule violations will often be handled inside the game's parameters first (Caruso, 2021; Salmon & Serra, 2013; Stolz, 2023a).

Players can impose negative sanctions on fellow players, those in charge of groups, or anyone tasked with policing or adjudicating the game. A few recreational games have referees. Leaders in social games may make decisions on misbehaviour, and there may even be a legal and police structure to deal with abnormal behaviour (Goffman, 2009; Salmon & Serra, 2013; Tyler, 2006). There are alternative approaches of responding to violations and upholding the law, though. The person who violates the rules could attempt to make amends by apologising or justifying their actions by placing the blame elsewhere. There's a probability that regulations will be broken and those who breach them will either go unpunished or find another way to have their behaviour repaired by justifications or explanations (Goffman, 2009; Jenkins, 2014).

Rules might be essentially valid. It is possible to characterise legitimacy as being accurate in both normative and cognitive contexts. For players, rules are valid only if they believe them to be true and factual, and if accompanying values, such as justice, God's will, and others substantiate the good nature of the laws (Stolz, 2023a). Rules can be permitting as well as restricting. They limit players' play, but they also make it possible for them to play because the game would not exist without the rules. Regarding the other game aspects, however, the same might be said (Burns et al., 2017; Stolz, 2023a). Different levels of implicit and discursive rules are used in social games. When there are written rules, we frequently discover that within them are additional written or unwritten rules that dictate how the fundamental rules must be followed. However, there exist additional, frequently unspoken guidelines that everyone knows should be followed in certain situations depending on how these guidelines and their implementation rules are to be administered (Searle, 1995; Smith & Searle, 2003; Stolz, 2023a).

This phenomenon is seen in both casual games and social games in general. Games are built on representations as much as rules. Signs that, by tradition and in a public manner, denote something other than themselves are called representations. Symbols or connections of symbols make up representations (Amineh & Asl, 2015; Searle, 1995). In games, three different kinds of representations can be conceptually discerned. The first kind relates to indicators for various game components, including as players, objects, resources, and rules; these components actually take the shape of representations to some extent (Searle, 1995; Smith & Searle, 2003). Both events and objects have names and significance. The regulations take the shape of language; numerous resources are only able to operate because they bear the indication that they are resources. A second category focuses on representations that are affixed to game components in order to subconsciously discuss the game or its components (Searle, 1995; Stolz, 2023a). These portrayals have the power to either or both rationalise, systematise, legitimise, and scrutinise the game. The vocabulary used in gameplay constitutes a third kind of representations.

For most games to function, participants must speak to each other before, during, and after the game (Searle, 1995; Smith & Searle, 2003). Gamers must say hello to one another, choose where and when to start, choose who comes next, and other tasks. While representations are the building blocks of games, they are also a part of a larger semantic

and social gaming environment (Amineh & Asl, 2015; Searle, 1995). Social games require collaborative representations to some degree in order to exist. There is often a good deal of consensus even in highly conflictual games about representations, such as player names, game rules, and object usage. Additionally, there is potential for disputes about portrayals in social games (Stolz, 2023a).

- ***Objects, Space, and time***

Any material element that is not human, such as animals and plants, can be referred to as an object. Neither concepts nor ideational events nor human beings, are objects. Not all games require objects; in some, players' bodies and their voices serve as the material basis for the action. However, objects of some kind exist in the majority of games, and they often take on a significant amount of influence (Stolz, 2023a, 2023b). Objects can be used to symbolise goals or the accomplishment of goals. Obtaining an object is the aim of several games. In other games, medals, trophies, and pedestals are symbolic of victory. Although rules and representations are intangible by their structure, they are frequently represented by tangible items, recorded in textual form in books, or carved in stone. Alternatively, the items may be the indicators that stand in for the guidelines and descriptions (Stolz, 2023a, 2023b).

Objects are the most common form that resources take. We discover gaming pieces, cards, balls, sticks, sportswear, and others in games-for-fun. The following may qualify as means of production in social games: factory floors, technical apparatus, machinery, and tools. It can also be any type of object representing symbolic power, such as luxury goods, apparel, and modes of transportation (Stolz, 2023a, 2023b). Objects like game boards, arenas, houses, barriers, boundary rocks, and drapes are frequently used to represent game spaces. Actors, who may have slitted ears, coloured belts or crowns can also be characterised by items. It's noteworthy that things may also serve as avatars for gamers (Stolz, 2023a, 2023b).

Every game has a certain space, time, and social setting. What's intriguing is that they design their own unique game space, game time, and game context as well. The time allotted for playing the game is known as game time. Games typically include distinct actions or noises to indicate the start, middle, and finish of their internal temporal structures (Stolz, 2023a, 2023b). Games frequently include a built-in time structure. Game elements, such as

representations which represent the game time and make it legit, or resources, have an impact on game time in addition to rules. The area designated for playing the game is called game space. Objects are frequently used to indicate the game's space. Occasionally, the gaming space is housed inside a unique structure or chamber (Stolz, 2023a, 2023b). The playing environment is frequently internally spatially defined, as in the case of a football pitch that is split into two halves, with a goal and penalty area designated in front of each goal. In addition to rules, various game characteristics may also govern the game environment (Stolz, 2023a, 2023b).

- **Context and Outcomes**

All non-gaming events with historical, current or potential bearing on how the game is played are included in the context of the game. It might be challenging to define the boundaries of game context precisely, as it encompasses more than just the game itself (Boudon, 2016; Stolz, 2023a). Games can have outcomes. The conditions, occurrences, or dynamics of a game or its environment that arise from player engagement are called outcomes. They may or may not be planned, align with the objectives of the game, and be evaluated by the game. In some metatheories, outcomes are referred to as *explananda* or effects (Boudon, 2016; González-Bailón, 2017; Stolz, 2023a). Outcomes may manifest in several ways. The development or modification of a game element is one kind of outcome. A second kind is a game or context variable statistic, which is often expressed as a total, deviation, mean or unit of measurement (Stolz, 2023a, 2023b). Thirdly, results can also show up as the correlation between two variables related to the game or scenario, which is frequently expressed as a cross-tabulation, correlation coefficient, regression coefficient or odd's ratio. Lastly, the results might show up as a function or statistic representing the shape of the game process over time (Stolz, 2023a, 2023b).

Game functions are results of games designed for players or for a more advanced game. It's possible that a number of these roles are latent, meaning that the participants are unaware of them. Naturally, neither the purpose of games nor the demands of the participants should be used to justify their continued existence, as suggested by traditional functionalism (Parsons, 1949; Stolz, 2023a, 2023b). Historical causes and current effects (the function) are not the same. However, some games are intentionally designed to serve a certain purpose, with the intended purpose serving as one of the driving forces behind the game's setup (Colman, 2003; Smith & Searle, 2003; Stolz, 2023a, 2023b). Additionally,

certain games are extremely stable because their design piques the attention of strong participants or stakeholders, who will oppose any attempts to end the game or modify its features (Stolz, 2023a, 2023b).

- **Language Use In Social Games**

The analogy of a social game, while it may or may not convey much, is always negotiable and demands universal attention. It is a fugitive figure, meaning different things to different people, yet it is very well-liked and widely available (Embler, 1972). However, in everyday language, the language of the game is typically used negatively. The cruel little games individuals play to irritate one another, such the society game, or one-upmanship, have received much attention lately (Hsu, 2020). The goal of these games is to force the other player into a state of psychological (or social) inferiority (Embler, 1972). In social games, participants are familiar with the rules, cultural norms, distinctive strategies, and chances for success and failure; some are skilled players, while others are not. Since language is a social act, social communities often invent new terms or alter old ones that are used in everyday speech, making the lexicon hard for outsiders to understand. Communication inside a particular social group may be categorised as jargon (Hsu, 2020), and in the present research, we use gaming language as an illustration of how the vocabulary of social groups might appear.

When gamers communicate about gaming, they usually use vocabulary that is exclusive to gaming. Like other social communities, gamers have established their own language and social network, resulting in the creation of a unique jargon. Being a gamer involves more than just playing online games (Ensslin, 2017; Hsu, 2020). It also entails connecting with and projecting a unique personality, in addition to the community of individuals who have a common interest in gaming (Gee, 2014; Hsu, 2020). The theory of social games describes this as players engaging in actions shaped by goals, rules and representations in the game context (Stolz, 2023a, 2023b). The language used by gamers, which Ensslin (2017) refers to as gamerspeak, entails varying degrees of competence in the language. Gaming phrases may be more closely connected to one another and more analogous to the vocabulary used by gamers. The term *ludolect* is coined by Ensslin (2017) and has its origins from the Latin word *ludus*, which means game, and the Ancient Greek word *λέγω* (*lego*), which means I say / I speak. The term *ludolect* refers to how a set of rules and restrictions shape the related (game) languages (Hsu, 2020; Zähres, 2017). One of the unique ludic (playful, rule-based)

and enjoyable characteristics of social games such as MMOGs that adds to their significance is how they mimic and convey imaginary worlds and narratives through visualisation, and, importantly, language (Embler, 1972; Hsu, 2020). However, online social games have more meaning than only the game itself and its own fiction structure. Just as important are the ways in which social games engage with and make reference to the different texts and discourses pertaining to them, including the language or languages that players use to negotiate their own culture.

Gamers employ specialised language resources for communication, just like people with many other niche hobbies do. This is especially true while discussing gaming or describing events linked to gaming, frequently while in-game. Given that many well-known games are played competitively between teams, it might be crucial to communicate with other players promptly (Hsu, 2020). Speaking a particular narrative requires you to assume a particular character, and this character might change based on the context, setting, or line of work you are in. Language variations based on hobbies and lifestyle exist in addition to variations in decorum and tone (Hsu, 2020). This shows that language, context, and people's interests are all interconnected, operate together, and have a significant role in how individuals establish personalities and establish communities within society. Nevertheless, language users frequently are unaware of the characteristics of a language they speak. Consequently, when considering gaming language in light of the above reasons, it is not an exception (Ensslin, 2017; Ensslin & Finnegan, 2019; Gee, 2014; Hsu, 2020).

However, because of the rise of unconstrained behaviour in the gaming space, players frequently behave differently in face-to-face conversations than they do in gaming ones (Barlett & Helmstetter, 2018). As a result, the gaming space may be a hostile setting that can take many different forms, such as players engaging in actions that intentionally spoil the game for other players. In particular, the text and voice chat capabilities are frequently the source of rage and enmity (Elveljung, 2018; Pulos, 2013; Shaw, 2010, 2012). It's possible to hear some insulting words in these situations. Owing to their widespread usage, some players may even refer to these insults as common gaming language or game culture (Elveljung, 2018; Pulos, 2013). These gaming slurs have been found to have a connection to power; this is referred to as discursive power. Discursive power has been described as a process that is constantly upheld and encouraged by people. The researcher went on to say that gamers have come to accept this speech as the standard as this type of language is

allowed to go unregulated (Pulos, 2013). An outcome of this can either be that players find it easier to communicate with others in the game space or it can promote toxic online disinhibition, which makes it easier to engage in negative behaviours (Barlett & Helmstetter, 2018; Elveljung, 2018).

- **Other Is Research/ Application Of The Social Game Theory In Is Research**

Although game theory has been widely successful in fields like economics, political science, international relations, and biology, it has not been applied as much in sociological studies (Breen, 2009; Swedberg, 2001). This is because many social scientists consider game theory unrealistic and irrelevant, much like they do the rational choice approach (Schmitter, 2009). However, sociological techniques such as SGT have shown to be useful in explaining, describing, and analysing a broad range of social interactions. Game theory application in information systems (IS) has been gradual. This is partially due to the difficulty in organising extensive projects to produce products and services in a rapidly evolving, fiercely competitive, and ever-changing setting (Li & Whang, 2002). Game theory has demonstrated its efficacy in resolving issues in applications such as e-commerce through literary works (Patil, Bharath, & Annigeri, 2018). It should come as no surprise that the area has mostly concentrated on using decision theory to analyse and enhance the operation of physical systems (such as inventory or queueing systems) (Li & Whang, 2002). According to this method, the entire system is represented by a single entity that has access to all of the information and the power to make decisions. Nonetheless, the area has since broadened to cover a variety of inter-person and inter-firm dynamics-related topics.

In their study, Li and Whang (2002) reviewed multiple IS studies that applied game theory and found that since several participants engage using competitive markets, obligations under contracts, and established procedures, IS provides ideal settings for game theoretical applications. Managing the complexity of mathematics that arises from applying more advanced game theory principles to IS scenarios that are more realistic is a major problem. However, as it will add new perspectives on multi-person interactions to the area, the efforts will be well worth it.

In their paper titled “*Applications of Game Theory for Cyber Security System: A Survey*” Patil et al. (2018) concluded that when compared to previous ways, game theory offers a better solution for cyber security issues. This is because cyber architecture is expanding quickly,

and with it, so are the cyber hazards. Conventional cybersecurity solutions are not appropriate for infrastructure with higher bandwidth volumes since they only address known threats (Patil et al., 2018). According to Turcan, Coşkun, Özşahin and Rovshenov (2002), the largest problem facing today's organisations is unpredictability, namely managing it and making quicker, more informed decisions in unpredictable circumstances. There are disciplines that handle ambiguity in an organisation and deal with it from a decision-making viewpoint. This led to the study titled "*Intersection of strategic management and management information systems disciplines: Analysis of theories*". Turcan et al. (2002) began with a review of several research and scholarly databases, and determined which ideas are most frequently applied in the field of management information systems (MIS). They then requested a list of the theories that strategic management professionals most frequently employed. The study found that implementing theories and theories themselves are not as prevalent in the field of MIS. Their goal was to generate understanding of the many theories that have been adapted by MIS academics and originate from other fields of study. Turcan et al. (2002) subsequently demonstrated that the topic of strategic management has the strongest theoretical connections to the field of MIS, demonstrating the importance of multidisciplinary expertise in MIS research.

2.5 CONCLUSION

This chapter provided a review of literature focusing on language and communication patterns during massively multi-player online games. The chapter aimed to understand current studies on language and interactions patterns in massively multiplayer online games (MMOGs). The chapter has shown that MMOSGs have become more popular among online gamers since the emergence of the first widely played multiplayer games. The success of this genre is due to these games becoming a groundbreaking innovation because in a virtual world, players can engage in social interactions. Players are able to temporarily escape from the monotonous repetition of daily life and gain insight into what it might be like to live in a different era or location, make a meaningful contribution to a society, defeat a mutual enemy, save the world, travel to new locations, solve mysteries, find love, or engage in social interactions with others.

The chapter has also shown that MMOG players are driven by a range of factors, including social interaction, competitiveness, collaboration, interaction, fantasy, and general game design. However, even though MMOGs provide a platform for fostering friendships and

positive collaboration, they are also in some contexts, platforms through which people can be cruel towards each other. The emergence of MMOG has meant that M-gamers adopted a game-specific language form characterised by alterations to existing words to create new words exclusive to their communication styles. These different communication styles have led to some players exhibiting disruptive gaming behaviour that breaches the game's rules and social standards and make bad comments directed at other players (such as harassment, verbal abuse, and flaming). These types of comments undermine teamwork and ruin the atmosphere of MMOGs. When a player encounters a bad event in a game and becomes angry and frustrated, they engage in abusive behaviour, which results in language that is pejorative, damaging, polluted, and likely to spread.

The chapter further revealed that the study of the communication and language patterns of the M-Gamer subcultures aids in casting a broader research and practice-relevant net that relates to several disciplines such as Linguistics, Cross-cultural Language studies, Ethnology and Learning Design, and Curriculum Studies. Thus, understanding the language and communication patterns as found in MMOGs is an important part of our societies.

The next chapter provides a review of the methodology adopted for this study and how it applies to the study.

CHAPTER 3: METHODOLOGY

3.1 WHAT IS GROUNDED THEORY?

Grounded theory (GT) is a research methodology that focuses on developing theories that are grounded in data that has been logically gathered and scrutinised (Glaser & Strauss, 1967). It is employed to clarify social processes, also referred to as group behaviours and social interactions. It enables the researcher to construct a theoretical account of the fundamental characteristics of a subject while also supporting the description with empirical evidence (Orlikowski, 1993; Walsh, Holton, Bailyn, Fernandez, Levina, & Glaser, 2015). The approach is intended to promote researchers' ongoing engagement with their data while continuing to be actively involved in their developing analysis.

Data gathering and analysis take place simultaneously, informing and facilitating one another (Bryant, Bryant, Bryant, & Casper, 2007; Charmaz, 2006a; Henwood & Pidgeon, 2003). The theory also encourages researchers to investigate all conceivable theoretical concepts for their research findings and incorporates empirical checks into the analytical process (Urquhart, 2007). Researchers can breach the divide between formal theoretical approaches and in-depth sociological studies using the grounded theory method (GTM). This method also lessens the risk of researchers being led by theoretical concepts that are overly abstract (Bryant et al., 2007). The acquired data become increasingly focused and the analysis becomes increasingly theoretical through the iterative process of continuously switching between empirical facts and emerging analysis (Bryant et al., 2007; Henwood & Pidgeon, 2003). Figure 8 depicts the structure of this chapter.

Chapter 3: METHODOLOGY

- What Is Grounded Theory?
- Grounded Theory Background
- Different Types Of Grounded Theory
- Conducting Literature Reviews In Grounded Theory Studies
- Challenges Associated With The Grounded Theory Method
- Principles Of Grounded Theory Procedure
 - Comparing Incidents Applicable To Each Category
 - Integrating Categories And Their Properties
 - Developing Concepts
 - Theoretical Sampling
 - Theoretical Saturation
 - Theoretical Coding
 - Delimiting Theory
 - Writing Theory
- Methodology Application To This Study
 - Research Design
 - Sampling
 - Data Analysis
 - Data Management
 - Ethical Considerations
- Grounded Theory Within The Information Systems Discipline
- Grounded Theory And MMOG
- Summary

Figure 8: Outline of Chapter 3

3.2 GROUNDED THEORY BACKGROUND

While collaborating on a 1965 study called *The Awareness of Dying*, sociologists Barney Glaser and Anselm Strauss created the initial version of grounded theory (GT) (Glaser & Strauss, 1967). In addition to being a response to the predominately hypothetico-deductive usage of great theories in the social research of the 1960s, (Glaser & Strauss, 1967) established GT as a new methodology characterised as "the discovery of theory from data". They provided a set of qualitative methods for producing inductive hypotheses from evidence, as opposed to just using quantitative methods to check theories (Dick, 2005; Thornberg, 2012). They critiqued the prevalent method for qualitative research during this time because they believed it to be extremely constrained. At this time, qualitative

investigations were conducted using conventional techniques, which essentially consisted of formulating a hypothesis and performing research to support it.

This approach, according to Glaser and Strauss, was too constrictive and limiting for qualitative research and inappropriate for their research. Instead of drawing conclusions about theories based on presumptions, they claimed that theories should be allowed to develop through social study (Deterding, 2016; Dick, 2005; Thornberg, 2012). By adopting an inductive method for qualitative research, Glaser and Strauss developed a new methodology for the discovery of theory that was motivated by this argument and the dearth of social theories. They used this approach for their research and introduced grounded theory in their book "Awareness of Dying" (Glaser & Strauss, 1967). Shortly afterwards in 1967, Glaser and Strauss made the decision to publish a book named "Discovery of Grounded Theory: Strategies for Qualitative Research" to formally describe their newly created research methodology. The book went into greater detail about grounded theory, outlined the justification for their novel approach, and promoted it as a superior choice to the current qualitative research methodologies (Glaser & Strauss, 1967).

3.3 DIFFERENT TYPES OF GROUNDED THEORY

Following their partnership, the two creators pursued separate professional paths, and by the early 1990s, two unique variants of GT had emerged: Glaserian GT (Glaser, 1978, 1992, 1998) and Straussian GT, which Strauss developed in major part with Corbin (Strauss & Corbin, 1990a, 1998). Constructivist GT was a third kind of GT created (Charmaz, 2000, 2006b, 2008; Charmaz, 2009; Mills, Bonner, & Francis, 2006a, 2006b).

Glaser and Strauss (1967) original work and the additional advancement of GT, dubbed "classic" GT by Glaser and his supporters (Glaser, 1998, 2001, 2005), support holding off on conducting a literature review in the researcher's factual area of study until the analysis is almost finished. They argue that deferring the literature review helps the researcher develop a hypothesis that is anchored in empirical reality and fits with it. Their dictum is primarily intended to: (a) keep the researcher as independent and open to discovery as reasonable; and (b) prevent bias, such as fitting data into pre-existing conceptions that alter the data, do not represent the data or are unrelated to the substantive field. Notable examples of later advances in GT methodology include Clarke (2005) postmodern version of situational analysis and Dey (1999) version with an expanded understanding of

classification, process, causation, and composition/agency in GT. Table 1 is a comparison of the different types of grounded theory.

	GT (Classical Grounded Theory)	IGT (Interpretive Grounded Theory)	CGT (Constructivist Grounded Theory)
Philosophical Influence	(Attempts to be) free from influence	Interpretivism	Constructivism and Pragmatism
Role of the Researcher	The researcher is <i>distant</i> and <i>detached</i> .	The researcher is <i>engaged</i> with and <i>actively</i> interprets the data.	The researcher <i>constructs</i> rather than <i>discovers</i> .
Allowance of Prior Knowledge	No, the researcher and research must remain neutral. Only the information provided by the collected data should influence the progress of the research. Prior knowledge could negatively influence the direction or quality of the concluding theory.	Yes, it can be used to strengthen the overall research and data collection. Referred to as <i>sensitivity</i> and included having insight into relevant issues.	Yes, it is understood that one cannot escape prior knowledge. Examine and understand how it influences the researcher and research; do not ignore, erase or let it control the direction of the research.
Literature Review	To be conducted following data analysis.	Allowed prior to and during the data collection process. Can be used for data comparisons, enhance sensitivity, stimulate observations, and confirm or explain results.	There is no prescribed location; it is up to the decision-making process of a given researcher. If written early, it should be revisited to critique and confirm if it aligns with the researcher's conclusion.
Research Question(s)	There should be no pre-set or vaguely established questions prior to data collection. Questions should become clear during data analysis.	Kept partially vague for flexibility; will become clearer as the data emerges.	Influence how data is collected. Can and should be altered if more significant or pressing questions arise.

		Each additional question can reference another topic of interest.	
Data Coding and Analysis	<p>(1) Substantive coding, and (2) Theoretical coding (TC).</p> <p>Focuses on patterns or trends within the data. Questions should become clear during data analysis.</p>	<p>(1) Open coding (2) Selective coding.</p> <p>Allows for single occurrences within the data to be coded and analysed for significance. Included the Constant Comparative Method and use of core category. Have deconstructed and rebuilt codes to create more significant and descriptive categories and descriptive categories that lend themselves to a substantive theory.</p>	<p>(1) Code everything, and (2) Group all data around the most predominant codes (included focused coding)</p> <p>Purports these as flexible guidelines rather than strict rules. Allowance of more than one core category.</p>
Theory Creation and Verification	<p>There is a distinct separation between theory generation (primary) and verification (secondary). Creation of a substantive or formal theory is central to the completion of a research study. Verification can only occur afterwards by quantitative analysis.</p>	<p>Creation of a substantive or formal theory is central to the completion of a research study. Verification occurs through multiple perspectives confirming the same data.</p>	<p>The constructed theory is an interpretation rather than an exact representation. The theory is dependent upon the researcher's view and cannot occur or stand without it.</p>

Table 1: Illuminating the Types of Grounded Theory (Sebastian, 2019).

Many difficulties emerged as different assumptions about how grounded theory might advance and change became clearer with time (Sebastian, 2019; Willig, 2013). Grounded theory has been the subject of controversial and confused arguments over the past few decades due to the proliferation of unique and emergent ideas (Sebastian, 2019). If someone were to ask, "What is grounded theory?", the answers would seem convoluted, allowing for a history that dates back to the 1960s, and even confounded, as people would argue about which perspective is grounded theory and try to make sense of the original from the emergent (Sebastian, 2019). Instead, one should inquire as to the various varieties of grounded theory that exist and "How do we tell them apart?". In summary, modern grounded theory has the above-mentioned three distinct and influential viewpoints about its use in research (Sebastian, 2019; Willig, 2013).

The gathering and analysis of data reveal the primary distinctions between the Glaserian (Classical) GT (Glaser, 1978, 1992, 1998) and Straussian GT points of view. While Straussian theory is thought to be reformative in terms of data collecting, Glaserian grounded theory is thought to be a more accurate portrayal of the initial version, particularly with regard to the method to data analysis (Heath & Cowley, 2004; Walker & Myrick, 2006). Due to the ambiguity of the initial work outlining the data analysis process, Corbin and Strauss worked together to try and improve comprehension of data analysis throughout the grounded theory process (Glaser & Strauss, 1967; Glaser, 1978; Heath & Cowley, 2004). The most grounded theorists, however, strongly challenged this interpretation of the data analysis process, leading to remarks that the analysis process had become overly repetitive and programmed (Heath & Cowley, 2004; Walker & Myrick, 2006).

As reported by Walsh et al. (2015), in a discussion with other grounded theorists, the significance of awareness and an extensive knowledge of epistemological matters. This is because they apply to every research project, since ambiguity in this domain can result in an inadequate research design alongside various issues. The theorists contend that attaining epistemological understanding will result in clearly established and epistemologically congruent research outcomes because a researcher's epistemological stance can influence many aspects of a project, such as the researcher's role in the research and the data gathering and analysis methods (Walsh et al., 2015). According to Holton and Walsh (2016), proponents of classic GT theory contend that because it is not rigid in its epistemological presumptions, it may be used by researchers with a wide range of epistemological backgrounds. Given that its "methods work quite well for analysing data within the perspective of any discipline", Glaser (1992) contends that the epistemological foundation of classic GT is neutral. Holton defines classic GT as "epistemologically flexible" in a paper summarising discussions amongst classic GT specialists (Walsh et al., 2015). The researchers proposed that a researcher can employ a range of epistemological stances and all kinds of data by employing the whole analytical procedure of classic GT. Urquhart and Fernández (2013) further describe how interpretative, positivist, and critical realist scholars might effectively employ classic GT.

In addition, Glaser (1992) states that Straussian theory has ceased to be grounded theory and ought not to be regarded as such, publicly criticising his former research colleague for

pushing grounded theory as an enforced, comprehensive, and conceptual explanation. The remarks later led Strauss and Corbin (1998) to revise their original methodology for data analysis and clarify that their goal was not to advance a strict grounded theory. Rather, they were meant to be recommendations, not rules (Holton & Walsh, 2016; Walker & Myrick, 2006). Regarding whether verification should be the result of grounded theory, Glaserian and Straussian grounded theories diverged even further. While Glaserian grounded theorists contend that grounded theory ought to be inductive, Straussian grounded theorists hold that all three processes—induction, deduction, and verification—are necessary (Heath & Cowley, 2004).

As an alternate to the difficulties pertaining to the previously stated Glaserian theory (Glaser, 1992) and Straussian theory (Strauss & Corbin, 1998), Constructivist grounded theory was originally coined by other theorists (Charmaz, 2006a; Charmaz, Denzin, & Lincoln, 2003). Constructivist grounded theory was developed with the intention of finding an acceptable compromise between positivism and the concept of postmodernism (Charmaz et al., 2003). It provides an intuitive approach to bringing qualitative research into the twenty-first century. With the advent of constructivism as a philosophical viewpoint, the grounded theorist's technique was able to retain the inductive quality of the original version by incorporating the constructivist perspective (Appleton & King, 2002).

The constructivist GT also took issue with how the results were presented in the original version of grounded theory (Charmaz, 2006a; Charmaz et al., 2003). Rather than focusing on finding trends in the data, Constructivist GT theorists suggest that researchers and respondents create a shared reality, with the researcher's goal to create this shared reality (Charmaz, 2006a). Charmaz (2006a) has been subjected to the same criticism of modifications to the basic grounded theory technique that was aimed at Strauss. The central question has been to what extent an original approach can be modified or updated before it can no longer be regarded as such (Bryant, 2009). Constructivist grounded theory is contested by Glaserian theorists as being too different from the original version to qualify as grounded theory (Bryant et al., 2007).

3.4 CONDUCTING LITERATURE REVIEWS IN GROUNDED THEORY STUDIES

The idea that GT researchers are blank slates who set about gathering data without first studying literature is a widespread misconception. The misunderstanding of the assertion

by Glaser et al. (1968) that the researcher must discard the existing theory is the source of this misunderstanding (Davids, 2017). However, the rule in classic GT that states researchers should not examine any literature in the substantive field until the end of the analysis is problematic for numerous reasons. First, if this pronouncement is taken seriously, it prevents researchers from doing studies in their own fields of specialisation, which seems strange and counterintuitive (Thornberg, 2012). Bruce (2007) asserts that a serious researcher must acknowledge their theoretical presuppositions at the commencement of the study. What is already known cannot be unlearned by the subject (Schreiber, 2001; Thornberg, 2012). As an alternative, the presuppositions may force the knowledgeable researcher to pose as a theoretical 'virgin', which could conceal unthoughtful and preconceived forcing as well (Thornberg, 2012).

The notion that GT researchers should commence gathering data and ignore literature can be used as a convenient defence for wilful ignorance of the literature (Suddaby, 2006), which could give rise to the idea that conducting this type of research is simple and not concerned with literature (Thornberg, 2012; Urquhart, 2007). Researchers will quickly drive themselves into a corner during their research journey due to the gradual reduction of possible fields of research that they have yet to read if they avoid reading literature in the field but instead read literature in other, unrelated fields. This is in full compliance with Glaser (1978) proposal for improving theoretical sensitivity, and then, at the end of the analysis, begin to review the literature in the field. Moreover, preconceived notions are unavoidable if researchers intend to conduct additional research in the same area (Suddaby, 2006; Thornberg, 2012).

Failing to consider well-established theories and empirical findings suggests ignorance. The researchers must understand that what they may perceive to be an original breakthrough in their research may simply be a result of their lack of familiarity with the literature. The researchers should use the existing corpus of relevant literature to advance their understanding rather than taking the chance of starting from scratch, missing important details, producing insignificant products, or making the same mistakes as others (Suddaby, 2006; Thornberg, 2012). In addition, there are GT scholars who have seen how often the literature in the subject has enabled them to focus on the specifics in their data and then go further than the literature in their analysis. A preliminary and continuing study of literature indicates how a problem has been studied thus far, aids in identifying and avoiding previous conceptual and scientific mistakes and inspires theoretical sensitivity (Dick, 2005; Schreiber,

2001; Suddaby, 2006; Thornberg, 2012). Theoretical sensitivity can be defined as “The ability to generate concepts from data and to relate it according to normal models of theory in general and theory development in sociology in particular” (Glaser & Holton, 2004, p. 11).

Contrary to Glaser (1978), Strauss and Corbin (1990b) contend that literature can be employed proactively in GT studies, provided that the researcher does not allow it to impede originality and obstruct innovation. They argue that exposure to pertinent literature can increase one's sensitivity to minute details in data, serve as a source of similarity of concepts for data, prompt queries during the analytical process (for example, in instances where there is a mismatch between a researcher's data and the observations proposed in the literature) and suggest areas for quantitative research (Thornberg, 2012; Urquhart, 2007). The analysis is strengthened by utilising literature, which also encourages researchers to be cautious and contest evolving thoughts and ideas. In addition, it can assist the researcher in developing pertinent research queries and objectives and in routinely comparing facts and literature to elaborate, update, or critique prior knowledge and accepted views (Thornberg, 2012). Lastly, not conducting a review of literature at the start of the research process is an ideological view that undervalues researchers' capacity to consider the connections between existing theoretical concepts and their data collection and analysis, as well as to acknowledge existing theoretical concepts without forcing them on the data (Thornberg, 2012; Urquhart, 2007)

This concept does not imply that GTM researchers must disregard previous findings and start from scratch. Instead, the use of systematic techniques, analytical abilities, and theoretical sensitivities to rigorously generate theory is at the heart of GT (Davids, 2017; Urquhart, 2007). Theoretical sensitivity can be improved by using literature reviews, which also offer a methodological approach that allows you to identify the most crucial classifications in data. By scheduling their assessment of the literature, GT scholars can reach this theoretical position. The non-committal review of the literature is the first stage through which this methodological approach can be achieved. During this stage, the emerging research builds theoretical sensitivity by perusing the literature. The researcher is also studying the grounded theory methodology and highlighting the research challenge at this phase (Davids, 2017). When integrating the emerging theory with existing theories, the second stage of the literature review is concentrated on comparison (Davids, 2017). By drawing this contrast, the researcher places the emerging theory into the context of the

established body of knowledge, enhancing the significance of the conceptual approach. Instead of the other way around, the developed grounded theory determines the relevance of the literature (Davids, 2017; Urquhart, 2007).

3.5 CHALLENGES ASSOCIATED WITH THE GROUNDED THEORY METHOD

The grounded theory methodology has been criticised for producing superficial theoretical models centred around micro-phenomena (Layder, 1993, 1998). Urquhart, Lehmann and Myers (2010) suggest that a GTM researcher "scale up the theory" and integrate the emergent theory with pre-existing theories in the field of study to counter this argument. The researcher scales up the theory by organising concepts into broad categories, this is done with the sole purpose of "raising the degree of abstraction", and then connecting these categories to produce constructs (Urquhart & Fernández, 2013; Urquhart et al., 2010). The last and most crucial stage in developing a theory utilising the GTM is theoretical integration (Urquhart & Fernández, 2013). Because grounded theory ignores the researcher's embeddedness, it masks the researcher's significant involvement in data generation and analysis (Bryant et al., 2007). Other literature notes that large quantities of data generated by grounded theory methods are frequently challenging to manage. The use of grounded theory techniques therefore requires expertise from researchers as there are currently no set standards to adhere to when classifying things (Olesen, 2007).

Since Glaser and Strauss disagreed on their core philosophies and wrote different texts outlining their perspectives on how to approach grounded theory not long after the publication of their initial work, it is unclear to scholars how to apply grounded theory (Bryant et al., 2007). Their differing schools of thought were evident in the main disparities that surfaced; Glaser's technique was more positivist in nature, whilst Strauss' was more post-positivist. There is a lot of disagreement and debate regarding how to properly use grounded theory as a result of these seemingly incompatible interpretations of the same theory (Moghaddam, 2006). In addition, it can be difficult for the researcher to choose between the constructionist, interpretivist, or post-positivist ideologies, each of which has its own range of ontological, epistemological, and methodological assumptions, before determining how to properly apply grounded theory. The fundamental procedures and tactics of grounded theory (coding, sampling techniques, comparison, iterative analysis), which further complicate issues, remain unaltered (Coghlan & Brydon-Miller, 2014). Therefore, before

using grounded theory as a technique of inquiry, researchers must consider and come to an understanding of their unique epistemological and ontological ideas (Hatch, 2002).

When analysing social phenomena, grounded theory might be difficult for the researcher because it calls for an unbiased view to let themes develop spontaneously rather than forcing them on the reality. The researcher should be inductive and data-driven in their style of inquiry because they might be too affected by past knowledge from the academic literature (Henry, 1992; Seale, 1999). The methodology advocates "bracketing off" foreknowledge and preconceptions; however, throughout the data collecting and analysis process, this is often difficult, if not impossible. This further presents a practical challenge for the researcher, who is often obliged to submit a thorough research proposal before beginning the study. The problem is not resolved by completely skipping a literature study; instead, it aims to prevent having past information lead the researcher to test hypotheses instead of directly observing, whether explicitly or implicitly. (Suddaby, 2006).

Studies using grounded theory are frequently criticised for being inconsistent, unreliable, and having a weak grasp of the grounded theory methodology (Linden & Palmieri, 2021). Therefore, before beginning a grounded theory study, a researcher must be conscious of their own biases. All the researcher's assumptions, conceptions of ontology and epistemology, viewpoints, and life experiences must be explored and acknowledged (Hatch, 2002). This is essential since a person's values, experiences, and prejudices might affect the observations they make while the data is being gathered and analysed. In turn, this may influence later coding and category formation (Moghaddam, 2006). Researchers can, however, take precautions to prevent this. To avoid bias, one method is to incorporate self-disclosure statements or to have peers review emergent conceptualisations and interpretations of the data (Corbin & Strauss, 1990; Henry, 1992).

Researchers who claim to have employed grounded theory in their research have occasionally misrepresented the methodology. Some have unintentionally misused the theory component of grounded theory by producing concentrated themes about a phenomenon or collated summaries of data rather than developing theory (Denzin & Lincoln, 2008). It has been widely utilised and exploited. When employing grounded theory, researchers need to be cautious to avoid misapplying it or using it as sort of catch-all to defend a variety of procedures (Bryant et al., 2007). Additionally, developing a solid

hypothesis can take some time. The act of gathering and analysing data until a level of theoretical saturation is reached is frequently a time-consuming, rigorous non-linear procedure on the part of the researcher (Chong & Yeo, 2015). Due to these difficulties, grounded theory may not be the best methodology for smaller-scale initiatives (Chamberlain, 2013). One recognised limitation of grounded theory is that it cannot be used to investigate several categories of research issues (Chong & Yeo, 2015). There have been claims that grounded theory is only applicable in circumstances where there is a tendency to use data that can be observed or measured directly and reported upon. This idea has been refuted in more recent research, which finds that expanding the range of data collection increases the applicability of grounded theory to more categories of research topics (Seale, 1999).

3.6 PRINCIPLES OF GROUNDED THEORY PROCEDURE

A thorough comprehension of the research process is required by the researcher before starting any research investigation. If the objectives of the research are to be met, a well-developed study outline and knowledge of the critical factors in organising and conducting a GT study are important (Chun Tie, Birks, & Francis, 2019). The development of a grounded theory is not a straightforward process that ends with data collection and analysis. Iterative research methodologies include repeatedly going through the procedures. Grounded theory was innovative in part because it combined data collecting and interpretation (Dick, 2005; Markey, Tilki, & Taylor, 2014). It emphasises returning to the field even after doing some analysis.

A researcher venturing into GT engages some participants, collects data and analyses it, and then return to the field with a different recruiting approach and research emphasis. They would then consider those discoveries while doing further analyses. The nature of grounded theory is purposefully cyclical (Chun Tie et al., 2019; Dick, 2005; Markey et al., 2014; Sbaraini, Carter, Evans, & Blinkhorn, 2011). A researcher can align with a grounded theorist and adopt a GT approach, yet it is necessary to understand how a methodology has evolved to advance research. An effective strategy is to utilise a framework to guide the design of your research study.

First introduced by Glaser and Strauss (1967), the constant comparative approach of collaborative coding and analysis was further developed by Glaser et al. (1968). Yet, the

approach was not explained in the order in which the researcher carries out their research activities (Lehmann, 2001).

The grounded theory process is divided into the following various stages: Figure 9 is an example of a representation of these interactions between the key stages of the grounded theory processes and methodologies.

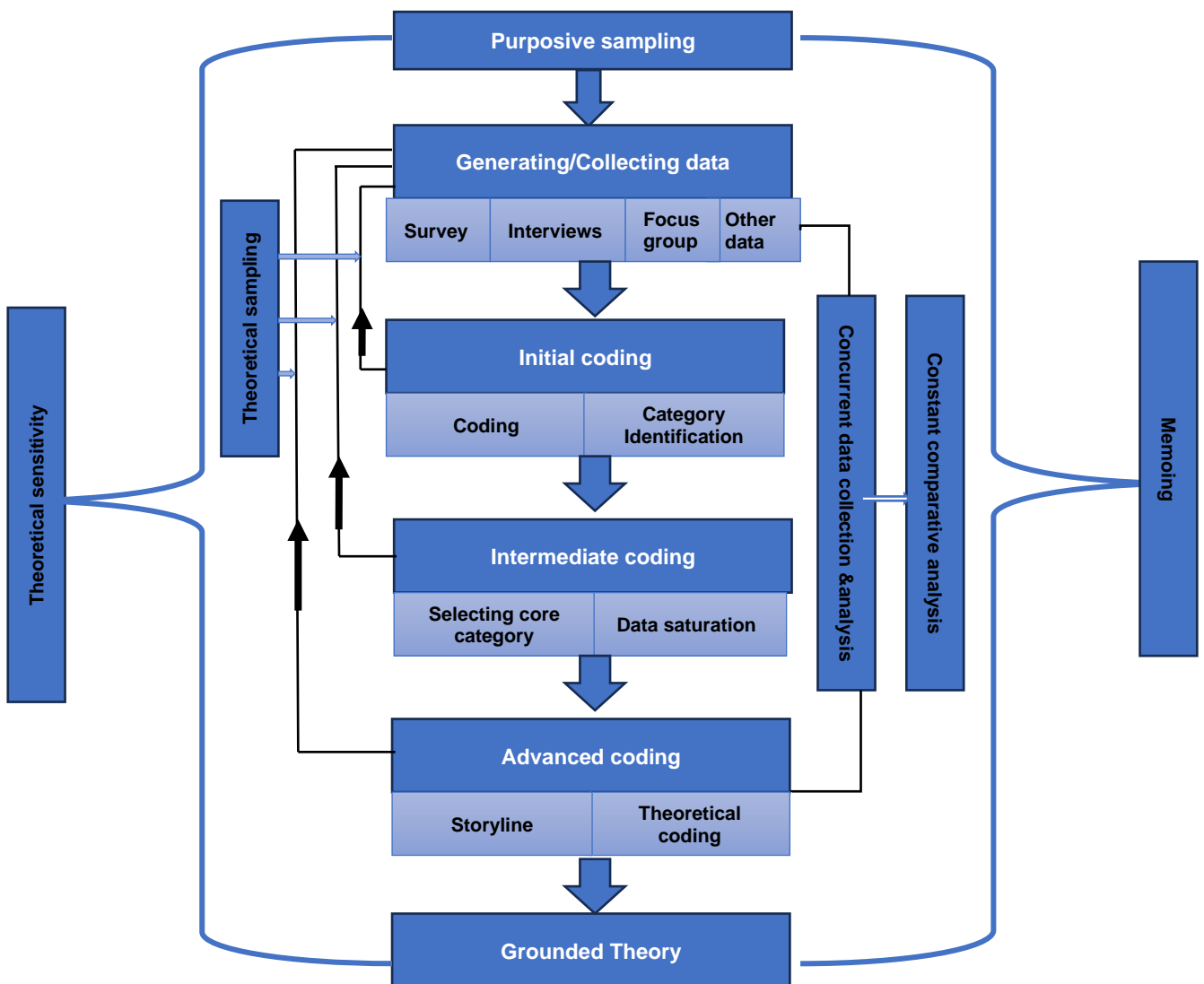


Figure 9: Research design framework (Chun Tie et al., 2019)

3.6.1 COMPARING INCIDENTS APPLICABLE TO EACH CATEGORY

Begin by categorising each incident in the data into as many possible different analysis categories as categories arise or as new data become available that fit an existing category (Glaser & Strauss, 1967; Lehmann, 2001). Incidents are referred to as text units, which include the distinct, standalone concepts or themes in interviews, records and more, along with the case stories' actual components (Lehmann, 2001). The first principle for the constant comparative approach is to compare new event codes to past incident codes from both the same group and other groups.

Glaser was knowledgeable with descriptive statistics, while Strauss was versed in symbolic interactionism (Chun Tie et al., 2019). Initially, Glaser and Strauss collaborated on a study investigating the experiences of terminally ill patients with various levels of health status awareness. Some of them believed they were about to pass away and made an effort to validate or disprove their beliefs. Others made an effort to comprehend by interpreting the behaviour of caregivers and family members (Chun Tie et al., 2019). Glaser and Strauss examined how the patients handled learning they were going to die as well as the responses of the medical professionals who were taking care of them. Glaser and Strauss questioned the necessity of utilising a scientific approach to verification for this work throughout their partnership (Chun Tie et al., 2019). In conducting this work, they created a theory of death first presented in "Awareness of Dying" and established the constant comparative method, a crucial component of grounded theory (Glaser & Strauss, 1967). It is thought that the constant comparative method provides a novel approach to organising and analysing qualitative data (Chun Tie et al., 2019).

Constant comparative analysis and theoretical sampling are two distinctive features of grounded theory. Constant comparative analysis requires the systematic selection and examination of a number of groups for comparison, which is done as part of an iterative process of simultaneous data gathering and analysis (Cho & Lee, 2014; Chong & Yeo, 2015; Corbin & Strauss, 2008). The foundation of content analysis in qualitative research is theoretical sampling. It might be difficult for researchers conducting grounded theory research to decide what data to gather (Corbin & Strauss, 2008). Figure 10 is an illustration of the GTM data analysis procedure.

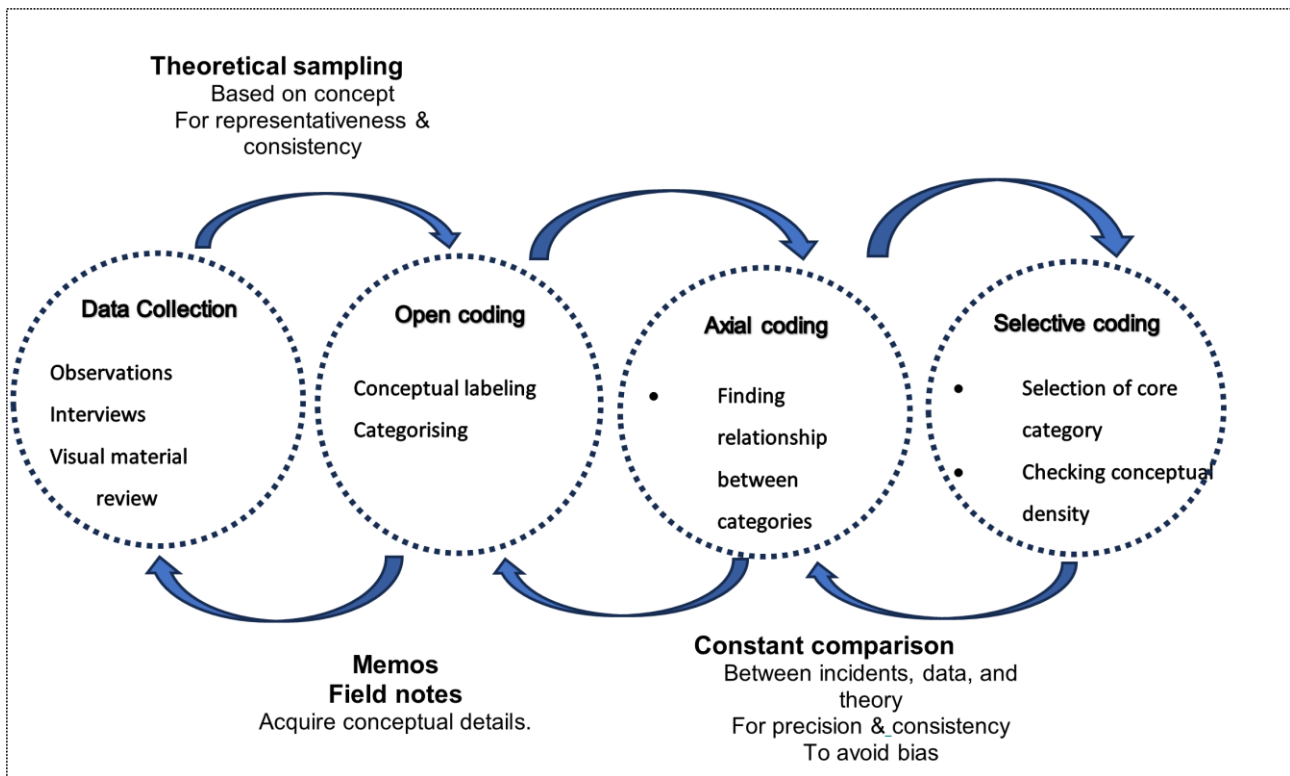


Figure 10: Data analysis procedure of grounded theory method (Cho & Lee, 2014)

To consistently improve concepts and categories that are theoretically pertinent, the constant comparison method is employed to identify similarities and contrasts. GT research differs from conventional descriptive analysis in that it involves a continuous comparative iterative process (Chun Tie et al., 2019; Corbin & Strauss, 2008; Willig, 2013). When an occurrence is noted, its correlations and contrasts with prior incidents must be examined. The concepts that result in this are then identified, contrasted over time, and categorised as stated earlier (Chun Tie et al., 2019; Willig, 2013). Comparing results helps the researcher avoid bias since it forces them to be tested against new information. Further, using these comparisons can improve accuracy and consistency. Once comparison results in the division of the original notion into two new concepts or variations of the initial concept, reliability is increased (Chun Tie et al., 2019; Willig, 2013).

By switching between identifying similarities among and distinctions across emerging categories, the researcher ensures that the coding process keeps going forward (Corbin & Strauss, 2008; Willig, 2013). The researcher must shift their attention back to distinctions within a category after identifying a trait that connects examples of phenomena to spot any newly developing subcategories. Continuous comparative analysis ensures that the

researcher doesn't just create categories; they are also deconstructed into more manageable meaning units (Corbin & Strauss, 2008; Willig, 2013). In this approach, any centralising urge can be resisted, and the true complexity and heterogeneity of the data can be appreciated. Constant comparative analysis aims to connect and unify categories in order to develop a theory that encompasses all occurrences of variation (Willig, 2013).

The second constant comparative technique principle is to stop coding and write down your thoughts in a memo (Glaser & Strauss, 1967; Lehmann, 2001). Memos document the evolution of theory; therefore, few memos result in thin theory. Memos on the method document conflicts with the method and aid in writing the section on method. But the most significant point is that theoretical memos are written about concepts and their (possible) connections to other concepts. It is advised that researchers should not be concerned about producing poor memos because it's a low-risk activity; memos will improve as knowledge and theories advance (Dick, 2005; Urquhart, 2007). Written theoretical questions, coding summaries, and hypotheses are included in memos. They are intended to monitor and encourage coding as well as serve as a foundation for the consolidation of theory and, eventually, theory generation. For the duration of the research study, memos are consistently written (Douglas, 2003). They can be used to consider and clarify the meanings that participants and researchers have assigned to codes, to discover connections between codes, to organise and further develop ideas, and to jot down significant quotes or phrases. They offer a solid comprehension of the qualities of the focal core concept and important related concepts as well as the fundamental aspects of the phenomenon (Douglas, 2003).

3.6.2 INTEGRATING CATEGORIES AND THEIR PROPERTIES

Categories can be created by grouping concepts related to the same concept. Not all ideas develop into categories. Compared to the concepts they define; categories are on a larger scale and are more abstract. They are created using the same analytical procedure as producing lower-level concepts, which involves comparisons to reveal the differences and similarities (Corbin & Strauss, 1990). As opposed to comparing episodes, the constant comparative method will start to concentrate on the emergent characteristics of the category. There will be a gradual integration of many features. The arising theory will start to develop on its own (Douglas, 2003; Lehmann, 2001).

The pillars of a developing theory are categories. They offer the tools necessary for integrating a theory. Although these ideas differ in structure, the researcher may see as they are being coded that they appear to reflect actions leading to the same process (Corbin & Strauss, 1990). Concepts can be gathered under a more general heading, but simply putting concepts under a general heading does not make something a category. In order to attain that position, a more abstract idea must be formed in terms of the characteristics and dimensions of the phenomena it represents, the circumstances that originate from it, the relations by which it is portrayed, and the outcomes it generates. Categories can be identified and afforded interpretability by such definition. A theory can be formed as a result of categories connecting to one another through time (Corbin & Strauss, 1990).

3.6.3 DEVELOPING CONCEPTS

Evidence is used to generate conceptual categories or their properties, which are then used to explain the notion. The proof need not be unquestionably true, but even if it were, it would still only be one of the many potential markers of and data on the notion. In addition, even the most correct data might evolve without changing the concept itself (Lehmann, 2001). Relational statements are used to evaluate facts, form concepts, and connect them. The iterative process involves flexibility in early coding as the researcher works toward the development of important theory, which goes beyond the commonly accepted concept of coding (Douglas, 2003). Glaser (1992) makes a point of distinguishing between different kinds of coding in the grounded research process and stresses the significance of the continuous comparison technique, which enables categories and conceptual qualities to arise.

Patterns and differences that are identified need to be taken into consideration. The data must be scrutinised for consistency to determine where this consistency is not immediately obvious. Discovering patterns or consistencies might help integrate data and give it some meaning (Willig, 2013). After this is achieved, theory can then incorporate the process. Process GT can mean many things. A phenomenon can be deconstructed into phases, stages, or steps using process analysis. Process can also refer to deliberate behaviour that is not always progressive but alters in reaction to external factors (Willig, 2013).

3.6.4 THEORETICAL SAMPLING

The foundation of content analysis in qualitative research is theoretical sampling. It might be difficult for researchers conducting grounded theory research to decide what data to gather. According to Corbin and Strauss (2008), it is important that prior data is studied to serve as the foundation for any future data collection. Questions arise as the data are analysed, and potential deficiencies in the data or the developing grounded theory are found.

The question "What groups are next, and for what theoretical purpose?" are clarified through theoretical sampling (Glaser & Strauss, 1967). Theoretical sampling can fill in these deficits and develop new ideas (Charmaz, 2017). The emergent theory directs the theoretical sampling process during data collection by instructing the researcher on what data to gather to learn more (Glaser & Strauss, 1967). To fill in any gaps, this procedure directs the researcher on deciding where to sample from based on emerging concepts.

The theoretical importance of the groups to the growth of the emerging categories serves as the primary selection criterion. Instead of acting as an ethnographer seeking to gather all the facts about a group, the grounded theory researcher actively samples theoretically pertinent data (Glaser & Strauss, 1967; Lehmann, 2001; Urquhart, 2007). Glaser and Strauss (1967) caution that subsequent data collection cannot be planned before the emergent theory, aside from options for the initial data collection. This runs counter to established research practices, which include use sample procedures like random, stratified, and statistical sampling (Ligita, Harvey, Wicking, Nurjannah, & Francis, 2020). They further added that while the developing theory points to the subsequent phases, the sociologist is not aware of them until he is driven by developing gaps in his theory and by research questions suggested by earlier responses (Glaser & Strauss, 1967).

By employing theoretical sampling, the researcher demonstrates sensitivity to the data and agility in investigating the breadth of the concepts drawn from the data before deciding what concepts to seek next (Ligita et al., 2020). The development of theoretical sensitivity or "insight into data" occurs during the data analysis process (Corbin & Strauss, 2008; Ligita et al., 2020). Because of their theoretical sensitivity, researchers may demonstrate how notions are based in facts and are pertinent to theories still being developed. As a result, the researcher can decide whether or not the notions are crucial (Birks & Mills, 2015; Ligita et al., 2020).

The definition of a category with characteristics, dimensions, changes, and associations is made easier by theoretical sampling (Corbin & Strauss, 2008; Ligita et al., 2020). Once saturation is reached (Glaser, 1978), or when new codes are produced that do not contribute to an existing category, all acquired data are continuously compared (Birks & Mills, 2015; Ligita et al., 2020). Theoretical sampling is guided by constant comparison of the conceptual level of data throughout analysis since it enables the researchers to pose queries and, as a result, drives continuous collection of data. The newly created data offer a broader and clearer insight into the phenomenon by establishing parallels and contrasts between incidents (Birks & Mills, 2015; Ligita et al., 2020). Theoretical sampling can happen even from the initial interview or dataset because the concepts can develop in initial data gathering and processing. Until all ideas are well formulated and implemented, saturation of categories occurs, and a theory is explained, the researcher keeps collecting data using theoretical sampling (Birks & Mills, 2015; Corbin & Strauss, 2008; Ligita et al., 2020).

The four processes listed here are repeated until the theory that develops from the data has a broad enough application to be useful for the selected substantive topic.

3.6.5 THEORETICAL SATURATION

One of the problems newcomers to grounded theory frequently have is when to stop the data collection process. Surprisingly, the solution is simple: data collection stops when the researcher identifies that it is no longer necessary to continue collecting data, although it is challenging to understand when the necessity ceases (Holton, 2007). This is what Glaser (1978) refers to as the "point of theoretical saturation". In their important grounded theory method for qualitative research, which seeks to create sociological theory from textual evidence to explain social events, Glaser and Strauss (1967) introduced the idea of saturation. The point in data collection when no new events or ideas emerge from the data and all pertinent conceptual categories are already discovered, examined, and exhausted is referred to in grounded theory as theoretical saturation (Aldiabat & Le Navenec, 2018; Hennink, Kaiser, & Marconi, 2017).

In grounded theory, data collection and analysis should go on indefinitely until theoretical saturation is reached. That is, the researcher keeps sampling and coding data until both new variants for existing categories have stopped emerging and until no new categories can be identified (Aldiabat & Le Navenec, 2018; Willig, 2013). Thus, in theoretical saturation,

sample adequacy is more important than sample size. With this iterative method, themes from the data can be identified and used to direct the selection of participants for deeper exploration of those themes during successive data collection till theoretical saturation has been achieved. Ensuring that all constructions of a phenomena (i.e., questions, concepts, categorisations, and correlations) are completely examined and sustained so that the emergent theory is credible and resilient, it is required that theoretical sampling and theoretical saturation are therefore intimately intertwined (Hennink et al., 2017).

As mentioned in the sections above, the features and qualities per category or concept are determined by the ongoing comparison of replaceable indicators in the data (Hennink et al., 2017; Willig, 2013). So, rather than being a fact, theoretical saturation serves as a goal (Willig, 2013). This is because even though we may (and should) aim for category saturation, category alterations or perspective shifts are always a possibility. As a result of this, the constant comparing procedure continues until no new characteristics or measurements appear. A concept has reached its theoretical saturation point at this moment (Bryant & Charmaz, 2007; Hennink et al., 2017).

The conceptual density needed to elevate the theory above description and permit its integration through theoretical propositions as an abstract conceptual theory is produced by an "intense property development." Theoretically, sampling is no longer required to acquire data for incident comparisons after a category is saturated. Naturally, once a GT's numerous interconnected categories are saturated, theoretical completeness is attained for the specific inquiry (Hennink et al., 2017; Willig, 2013). According to Glaser and Strauss (1967), grounded theory is always a work in progress. But, when developing a theory is the goal, one must always be on the lookout for new viewpoints that will alter and advance his concept. The written word is not the last one, but rather a break in the ongoing process of creating theory; these viewpoints can readily emerge on the last day of study or when the article is evaluated (Willig, 2013).

3.6.6 CODING TECHNIQUES

3.6.6.1 Theoretical Coding

This is the method used to determine the relationships between categories and build the substantive theory. Coding during the initial phases of analysis is primarily descriptive. At this point specific types of phenomena are given descriptive designations. As a result, new,

fundamental categories constantly appear (Glaser et al., 1968; Hennink et al., 2017; Strauss & Corbin, 1990b, 1998; Urquhart, 2007; Willig, 2013). The researcher can find more advanced categories that continuously combine lower-level categories into useful components as the coding process advances. In sum, this is the introduction of analytical categories. Category labels should not be automatically generated from pre-existing theoretical proposals but should instead be anchored in the data since grounded theory attempts to establish new theories that are tailored to the setting (Hennink et al., 2017; Willig, 2013).

In a perfect world, category labels would use language research participants would generally use. This aids the researcher in keeping the analysis free from the influence of pre-existing theories (Glaser et al., 1968; Strauss & Corbin, 1990b, 1998; Urquhart, 2007). The use of a coding paradigm on the data is theoretical coding. A coding paradigm makes the researcher more aware of specific connections between categories. Open coding, axial coding, and selective coding are the three coding steps that (Strauss & Corbin, 1990b, 1998) emphasise. It is crucial to remember that axial coding and open coding are complementary. The differences between the two types of coding are arbitrary and are simply used to provide explanation. Because the connections are ultimately derived from the data, analysts naturally establish connections as they interact with the data (axial coding).

3.6.6.2 Open Coding

Open coding is a technique for dissecting data and creating concepts that translate collections of unprocessed data. Open coding could begin at a microscopic level, sometimes known as line-by-line analysis or micro-analysis, whereby data is carefully examined to understand a phrase or word and its several meanings. Using in-vivo coding and the conclusions drawn by the researcher of the ideas found in the data are the two ways that concepts are named (Charmaz & Belgrave, 2019; Davids, 2017; Evans, 2013; Glaser, 2013). All concepts, regardless of degree, arise from the data. They span from lower-level conceptions to more complex ones (categories/themes). Although Glaser and Strauss (1967) urge precaution because many codes do not operate with gerunds, gerunding can be utilised to build a code that aids in implying process. When gerunds are inserted into words that are simply conditions, factors, categories, and others, it is easy to *over-gerund*, which compromises the theory. Moreover, using too many gerunds might cause a theory to seem coerced or poorly developed. Researchers should resist the urge to automatically use

gerunds as not all codes are gerunds (Charmaz & Belgrave, 2019; Davids, 2017; Evans, 2013; Glaser, 2013).

3.6.6.3 Axial Coding

Axial coding, which is unique to the Straussian GTM, is a technique of connecting concepts, subcategories, and categories. The manner of associating revolves within a category axis. The coding paradigm could be applied to establishing relationships (Strauss & Corbin, 1990b, 1998). The application of axial coding and the coding paradigm is still being questioned. The objection is related to the usage of the coding paradigm and the idea that it prevents actual emergence by coercing preconceived concepts onto data (Davids, 2017; Strauss & Corbin, 1990b, 1998). This is contrary to the most fundamental principle of grounded theory, which states that preconceptions must be minimised to adhere to the essence of grounded theory. By analysing various IS research findings that were published in IS journals, a study by Seidel and Urquhart (2013) put this argument to the test.

The Straussian GTM coding techniques and coding paradigm were applied in research conducted by Seidel and Urquhart (2013). The examination sought to identify instances when the use of the Straussian GTM prevented emergence and compelled fixed conceptualisations. They found that the theories produced by the axial coding paradigm were very similar to each other but concluded that the paradigm aided theory building. The coding paradigm has been effectively applied in IS research investigations, which has allowed for the development of grounded theory and theorising about the occurrences being studied (Seidel & Urquhart, 2013). Moreover, examples of how the GTM is a developing approach with adaptable implementation include axial coding and the coding paradigm. There is now an emphasis on the need of seeing the coding paradigm as an optional guideline due to the idea that it is crucial to keep in mind that it is merely a tool and not a set of rules (Davids, 2017; Urquhart, 2007; Willig, 2013). The tool is used by the researcher to comprehend the context around incidents and so enhance the analysis rather than coding for conditions or effects. Birks, Fernandez, Levina and Nasirin (2013) argue that the overbearing attention on the distinctions between the grounded theory practises is a diversion and does not benefit GTM researchers in their additional discussion on the concerns of forcing and because GTM is a contested approach. Much more significant than their differences are the shared traits among GTM techniques.

The other components of the various GTM techniques are quite similar, with the exception of the coding paradigm used in the specific GTM (Strauss & Corbin, 1990b, 1998). The promotion of a single, true, method for conducting grounded theory research unfairly limits its applicability. Additionally, if the researcher is forthright with the data, it can be discovered that the coding paradigm is insufficient to describe the emergent hypothesis. The coding paradigm would therefore be discarded in favour of a different coding approach that more accurately describes the phenomena under investigation (Davids, 2017; Urquhart, 2007). Another component of axial coding is process coding, which focuses on connecting ideas or subcategories to a category in a series of connections that indicate causative circumstances, phenomena, setting, transitional factors, action/interactional methods, and outcomes (Davids, 2017; Strauss & Corbin, 1990a; Willig, 2013).

3.6.6.4 Selective Coding

Selective coding is the process of choosing the primary category that best communicates the purpose of the study and how the other key categories connect to it. All other notions are connected to this category, which serves as the research's central subject (Strauss & Corbin, 1990b, 1998). (Strauss & Corbin, 1990b); Strauss and Corbin (1998) offer three methods for determining the main category and combine the main category with other key categories discovered throughout the research process to assist researchers working with developing theory. These three methods include: (1) establishing a storyline, (2) using integrative diagrams, and (3) examining and categorising memos.

According to Strauss and Corbin (1990b), a storyline is a detailed account that describes the study's core phenomena. It also serves as an abstraction of the narrative. Researchers employ a narrative to describe how categories and subcategories are linked together around a central category. The goal of this narrative theory approach is to help the reader better understand the final theory (Strauss & Corbin, 1990b). Integrative diagrams can be used to arrange data, clarify theoretical connections amongst analytical ideas, and improve the theoretical sensitivity of the theory-building process. Memoing is considered the foundational step in the process of developing a theory as it collects the researcher's comprehensive ideas and records the analysis method used by the researcher (Charmaz & Belgrave, 2019; Willig, 2013). The reason analytical and theoretic memos are crucial is because they aid in continual comparison, development, theoretical sampling, and theoretical consolidation. Memos are vital to the conceptualisation process of GTM since they assist researchers in

analysing data, the connections between them, and any inconsistencies in the data (Birks et al., 2013; Birks & Mills, 2015; Charmaz & Belgrave, 2019; Strauss & Corbin, 1998; Urquhart, 2007; Willig, 2013). Researchers who wish to hypothesise regarding categories with an emphasis on interrelationships might do so by creating theoretical memos. Memos might be written as suggestions, text stories, mental models, or illustrations (Charmaz & Belgrave, 2019; Strauss & Corbin, 1998; Urquhart, 2007; Willig, 2013).

3.6.7 DELIMITING THEORY

The constant comparative approach has a number of delimiting properties that, as the theory advances, start to constrain what may otherwise be an immense process. The theory as well as the categories are the two stages at which delimiting happens (Glaser & Strauss, 1967; Lehmann, 2001). First, as the researcher compares the subsequent instances of a category to its attributes, large adjustments start to become less frequent. Subsequent changes primarily focus on logical clarification, the elimination of irrelevant properties, the incorporation of property information into the primary framework of linked categories, and most importantly, reduction (Glaser & Strauss, 1967; Lehmann, 2001).

Reduction simply means that the researcher may find underlying patterns and regularities in the initial set of categories or related qualities, allowing them to develop the theory with a more manageable number of more advanced level concepts. This limits the text's terminology (Glaser & Strauss, 1967). Further terminology reduction can thus result in theory being generalised. As a result, the researcher begins to meet two essential components of theory: (1) "parsimony of variables and formulation"; and (2) "scope in the applicability of the theory to a wide range of situations", while also maintaining a connected interaction of data and theory. Some of these correlations may, at this stage, be based on the research of other areas of expertise (Glaser & Strauss, 1967).

Reducing the initial list of coding categories is the second phase of theory delimitation. The researcher commits to the theory as it develops, becomes simplified, and starts to work better for organising a large amount of qualitative data. Their dedication now enables reducing the initial set of categories for data collection and coding, in accordance with the current limitations of his theory (Glaser & Strauss, 1967). The researcher can then consider, code, and analyse situations in a more selective and targeted manner, with more

time to spend on the ongoing comparison of instances that clearly fit into this more condensed set of categories (Glaser & Strauss, 1967).

The number of categories is further delimited because theoretical saturation is reached. A researcher gains the ability to determine rapidly whether the following applicable incident indicates new aspects after coding occurrences within the same category several times (Glaser & Strauss, 1967). The events are coded and compared based on whether the answer is affirmative. In that case, the event is not coded because it does nothing to advance the theory and merely adds weight to the coded data. Further, when data are gathered using theoretical sampling, the amount of data that has to be coded is significantly decreased, saving the researcher time when reviewing his data for coding (Glaser & Strauss, 1967).

3.6.8 WRITING THEORY

The qualitative analyst has coded data, a collection of memos, and a theory available at this point in the research. These memos and dialogues serve as the foundation for the categories, which eventually develop into the main ideas of the theory that are given in articles or publications (Glaser & Strauss, 1967). The researcher can confidently publish his findings once he is certain that his analytic framework constitutes a structured substantive theory, that it is a relatively precise declaration of the topics under study, and that it is presented in a way that others working in the same field could understand. It is first important to compile the memos on each category before beginning to write one's theory, which can be done with ease because the memos have already been written about the categories (Glaser & Strauss, 1967).

As constant comparisons compel the researcher to consider a wide range of data variation, using this strategy will likely result in the development of a detailed theory that strongly resembles the data (Glaser & Strauss, 1967). Diversity refers to the process of comparing each incident to other incidents or to characteristics of a category in order to identify as many parallels and differences as feasible. Unlike coding used for basic findings, this method of comparison merely determines whether an incident reflects the few attributes of the category that are being evaluated (Glaser & Strauss, 1967). This method of comparing instances on a regular basis has the tendency to produce a developmental theory (Glaser & Strauss, 1967). While static theories can also be produced using this method, it is particularly useful for producing ideas about the progression of events in relation to institutions, roles, and

human engagement (Glaser & Strauss, 1967). Yet, regardless of whether the theory is static or evolving, both this approach and theoretical sampling are constantly producing new theories. The researcher begins to see his categories in perspective of both their internal capabilities and their changing relationships to other categories through comparisons of instances (Glaser & Strauss, 1967).

This approach to theory construction is inductive. The researcher is compelled to generate thoughts on a degree of generality greater in conceptual abstraction than the qualitative material being investigated in order to theoretically comprehend such variability in his data. In order to explain disparities in the data, he is compelled to highlight inherent patterns and regularities, and diversities and employ more abstract ideas. He is compelled to practice terminological reduction to grasp his data (Glaser & Strauss, 1967). If the researcher begins with unprocessed data, they will eventually arrive at a substantive theory: a theory for the subject matter on which they have conducted study. The researcher will arrive at a formal theory for a conceptual field if he begins with the conclusions obtained from several studies relevant to an abstract sociological category (Glaser & Strauss, 1967).

The transition to formal theory necessitates further study of one's substantive theory. The researcher must also incorporate information from other research having the same detailed theoretical relevance, regardless of how disparate their substantive content may be (Glaser & Strauss, 1967). The key is that the researcher must understand the relationship between the level of generality from where he begins and the level from where he begins in respect to the level at which he desires to end (Glaser & Strauss, 1967). Any one of discussion or propositional theory can be produced by the constant comparative technique. The researcher may want to write formal statements regarding a category or describe a variety of aspects of a category within his presentation (Glaser & Strauss, 1967; Lehmann, 2001). While developing a theory, the earlier style of presentation is usually adequate, and if the audience need a formal hypothesis, he or she can readily convert it into a proposition (Glaser & Strauss, 1967; Lehmann, 2001).

3.7 METHODOLOGY APPLICATION TO THIS STUDY

3.7.1 RESEARCH DESIGN

Research studies can be distinguished between two stances, namely subjectivism and objectivism which both provide different explanations of the world with regards to how people make sense of it (Orlikowski & Baroudi, 1991). This study aims to use grounded theory to explore and explain the use of language in MMOGs. The constructivist grounded theory (CGT) approach was adopted in this qualitative study. Through in-depth data collecting, careful analysis, and insightful interpretation of the data, the theory is employed to take analysis beyond the descriptive layer of data (Charmaz, 1990). After the study, categories and concepts were continuously compared in great depth. The categories were built into a theory that explains the links between them, together with an analysis and interpretation of the data that was gathered (McCann & Polacsek, 2022; Polacsek, Boardman, & McCann, 2018).

The purpose of qualitative research is to comprehend a phenomenon from the viewpoint of the participant. This aspiration to understand people's thoughts from their points of view is embedded in the subjective paradigm (Locke, 2000). The researcher's aim was to gather subjective data from participants' personal perspectives and their interpretations of their use and acceptance of pejorative language during gameplay. However, according to Charmaz (2017), this can only be accomplished when the researcher starts with an open-ended, fundamental term like social interaction. She argues that comprehension requires a researcher to be considerate of a participant's anonymity as well as their perspective and self-awareness.

3.7.2 SAMPLING

The following section is an overview of the target population, the method of sampling used and the sample size.

3.7.2.1 Target Population

The purpose of this study was to gain an understanding of players' perceptions of pejorative language use in MMOGs. Therefore, the target population for this study was MMOG gamers over the age of 18. The reason for this target population was due to the growing concerns about pejorative language use during MMOGs (Aiken & Waller, 2000; Breuer, 2017; S. Costa et al., 2020; de Mesquita Neto & Becker, 2018; Elliott, 2012; Gray, 2012; Halloran et

al., 2004; Ictech II, 2021; Innocent, 2003; Kowert et al., 2014; Maloney et al., 2020; Saarinen, 2017a; Stark, 2019; Takano & Tsunoda, 2019; Tan, 2011).

3.7.2.2 Sampling Method

The sampling technique most often used in qualitative research throughout the social sciences is undoubtedly snowball sampling (Noy, 2008). When other contact channels have dried up, it may be utilised as the primary method of reaching out to informants or as a back-up method to help researchers enrich sampling clusters and reach out to new subjects and social groupings. Since this approach appears to be an auxiliary and informal procedure, this style of employment may actually contribute to this method's poor absorption into mainstream qualitative work (Etikan, Alkassim, & Abubakar, 2016). Since a random sample could be taken, the population would not be classified as hidden, snowball sampling or chain-referral sampling of a hidden population starts with a convenience sample of the initial subject. As a result, the sample grows wave by wave, much like a snowball swelling in size as it rolls down a hill. The first subject serves as a seed, through which the Wave 1 subject is recruited. Wave 1 subject then recruits Wave 2 subjects. Because respondents with a large number of social connections can give researchers a higher percentage of other respondents with traits comparable to that first respondent, this sampling technique produces biased samples (Etikan et al., 2016; Noy, 2008).

It was thought that using snowball samples would make it impossible to make an unbiased estimate, as this variation is known as respondent-driven sampling. Under some circumstances, it enables the researcher to obtain asymptotically accurate predictions from snowball samples (Noy, 2008). Thus, participants are allowed to approximate the social network linking the hidden community via snowball sampling and respondent-driven sampling. The snowball sampling approach, one of the most popular non-probability sampling techniques, is particularly appropriate when the population of interest is difficult to contact and collecting a list of the population presents challenges for the researcher (Johnston & Sabin, 2010; Noy, 2008; Tansey, 2009).

The snowball effect approach is not random as its name might suggest, it is a non-random sampling. The researcher plays a significant role in creating, monitoring, and advancing the sample and works constantly to guarantee that the loop of referrals stays within restrictions that are pertinent to the study. One of the risks of snowball sampling is that participants

usually suggest others who have the same traits or perspectives. Furthermore, the researcher is responsible for ensuring the initial group of participants is sufficiently diverse to prevent the sample from being overly biased or distorted at a single angle (Etikan et al., 2016; Johnston & Sabin, 2010; Noy, 2008).

Two types of snowball sampling are linear snowballing and exponential discriminatory snowball sampling (Etikan et al., 2016). In linear snowballing, the researcher recruits one person for a linear snowball sample, while the second respondent recruits the third respondent. The chain repeatedly refers linearly all the way to the end of the sample. In the second type, known as exponential non-discriminative snowball sampling, each participant recruited for the study also recruits another participant; in contrast, in exponential discriminatory snowball sampling, not every participant who is recruited for the study will also recruit another participant; the chain is discriminatory (Etikan et al., 2016). The ability for the researchers to include survey participants they would not have known when identifying members of a particular demographic is one of the technique's most significant applications.

The sample for this study was chosen using the snowball effect in that the initial set of participants were chosen based on their participation in MMOGs and age, which was above 18 years. Since the researcher was neither able to reach nor knew many M-gamers, the researcher identified known M-gamers who then referred other players that they knew of in order to obtain the required sample for this study. The referrals included six other participants, one of whom was female. Upon interviewing the female participant, the researcher found that their perspective and experiences on the pejorative language used in MMOGs was different from that of the male participants. Therefore, the researcher decided on theoretical sampling, as described in Section 3.6.4, and thus deliberately included three more female gamers. Following this process, the researcher also returned to some of the other previous gamers (males and females) who formed part of minority groups based on the initial data analysis to follow up on findings. Potential participants were requested to contact the researcher if they were interested in being part of the study. Screening interviews were then arranged with the respondents in order to select the required sample suitable for this study.

3.7.2.3 Sample Size

This study adopted the constructivist GT methodology and a sample size of twelve (12) individuals, this is because theoretical saturation was reached at this point. Charmaz and Belgrave (2012) advised researchers not to set an initial sample size but suggested that a qualitative study with fewer participants (e.g., 25 or less) is sufficient for examining the research subject. Studies using CGT are advised to be flexible and sensitive to allow the researcher to respond to any unforeseen changes or possibilities. In CGT, the concepts and themes that surface throughout the data gathering phase determine the size of the sample. Theoretical saturation is the ideal and that can be achieved in a small sample or a larger one. Despite the paucity of prior studies, concrete evidence of conceptual saturation will ultimately determine how quickly the researcher reaches theoretical saturation (Charmaz & Belgrave, 2012).

Therefore, in the context of this study, the initial target population was projected to be 15; however, only twelve (12) interviews were conducted.

All participants were self-described MMOG players meaning that they play multiplayer online games regularly. The first participants recruited for this study were conveniently recruited as they were known to the researcher. The researcher identified and approached known MMOG gamers requesting them to participate in the study. The process of sampling involved asking the primary research participants for referrals and contact information of others they knew who could be relevant to the specific study. As a result, participants were a mixture of male and female players, some of whom were students and others working professionals—all over the age of 18.

The following criteria were applied when identifying participants:

- Massively multiplayer online gamers.
- Adult (Over the age of 18).
- Capable and available to participate in the study.
- The ability to speak and understand English as interviews were conducted in English.

- Willing to follow research procedures and standards.

The initial three participants were chosen at random because they were MMPG players known to the researcher. Following interviews with these participants, the researcher sought to understand more on the topic; therefore, these respondents were asked to refer other people they knew to be players who fit the above-mentioned criteria. The referrals included two other participants. Upon the initial data analysis of the data gathered from these gamers, the researcher felt the need for different perspectives and experiences on the pejorative language used in MMOGs; therefore, the researcher decided on theoretical sampling. This involved deliberately including gamers who formed part of minority groups and had been shown to have different experiences based on the initial data analysis. This sample included female gamers. Following this process, the researcher also returned to some of the other previous gamers to follow up on findings. Some of the follow-ups included more interviews, requesting previous game recordings from these participants and observing some of them play.

All participants were screened to ensure that they met the criteria for this study. Table 2 is a summary of the participants' profiles.

Participants	Gender	How long they have been playing for	Game played the most	Hours of game play per day (~)
Initial Sampling				
Participant 1	Male	Since the age of 7/8	<i>League of Legends, Battlefield 2042 CS GO.</i>	5 Hours
Participant 2	Male	Since age 11	<i>Dota 2 (Defence of the ancients)</i>	4 Hours
Participant 3	Male	3 Years	<i>Call of Duty FIFA Forza Horizon</i>	7 Hours
Participant 4	Male	1 Year	<i>GTA Online Call of Duty</i>	3 Hours

			<i>Fortnite</i> <i>Forza Horizon</i>	
Participant 5	Male	Since age 10	<i>PUBG Mobile</i> <i>Torn City</i>	3 Hours
Theoretical Sampling				
Participant 6	Male	Since age 12/13	<i>FIFA</i> <i>Call of Duty</i> <i>Tekken 7</i>	5 Hours
Participant 7	Male	+ 12 years	<i>FIFA</i> <i>Redemption</i> <i>Grand Theft Auto</i> <i>Fortnite</i>	** (not specified)
Participant 8	Male	7 Years	<i>Project Zomboid</i> The zombie franchise of games Survival and shooter games	2 hours
Participant 9	Female	7 years	<i>League of Legends,</i> <i>World of Warcraft</i> <i>Overwatch.</i> <i>The Elder Scrolls Online</i> <i>Guild Wars two</i>	4 hours +
Participant 10	Female	"...since I was a kid..."	<i>Apex Legends</i> <i>Valerian City</i> <i>Diablo</i>	2-3 hours
Participant 11	Female	10-12 Years	First-person shooter games (e.g., like <i>Counter Strike</i>) Survival games (<i>Ark Survival Evolved</i>) <i>Elder Scrolls Online</i> <i>World of Warcraft</i>	4 hours
Participant 12	Female	8 Years	<i>Minecraft</i> First-person shooters (e.g., <i>Valor</i>)	2-4 hours

			<i>Wolves</i>	
--	--	--	---------------	--

Table 2 : Participants' profiles

3.7.3 DATA COLLECTION

Qualitative research allows for more detailed methods of data collection using a variety of data collection methods, such as focus groups, interviews, observations, etc. (Gill, Stewart, Treasure, & Chadwick, 2008). The main purpose of qualitative research is to draw out detailed and rich individual experiences about the topic under investigation (Pietkiewicz & Smith, 2014). The purpose of the present study is to understand players' perceptions of pejorative language use in MMOGs. The researcher wanted to understand the linguistic habits of gamers during gameplay and how other players account for the strong presence of pejorative language and expletives in player discourse. Constructivist GTM was therefore, an appropriate methodology to help answer the research question as it was developed with the intention of finding an acceptable compromise between positivism and the concept of postmodernism (Charmaz et al., 2003). Rather than focusing on finding trends in the data, constructivist GT theorists suggested that both researchers and the respondents create a shared reality, with the researcher's goal to create this shared reality (Charmaz, 2006a). The main source of data collection for this study was semi-structured interviews, which were then augmented by participant-recorded games, researcher observations of participants' gameplay and memos, as explained in Section 3.7.3.1. Figure 11 shows the data collection process that was followed.

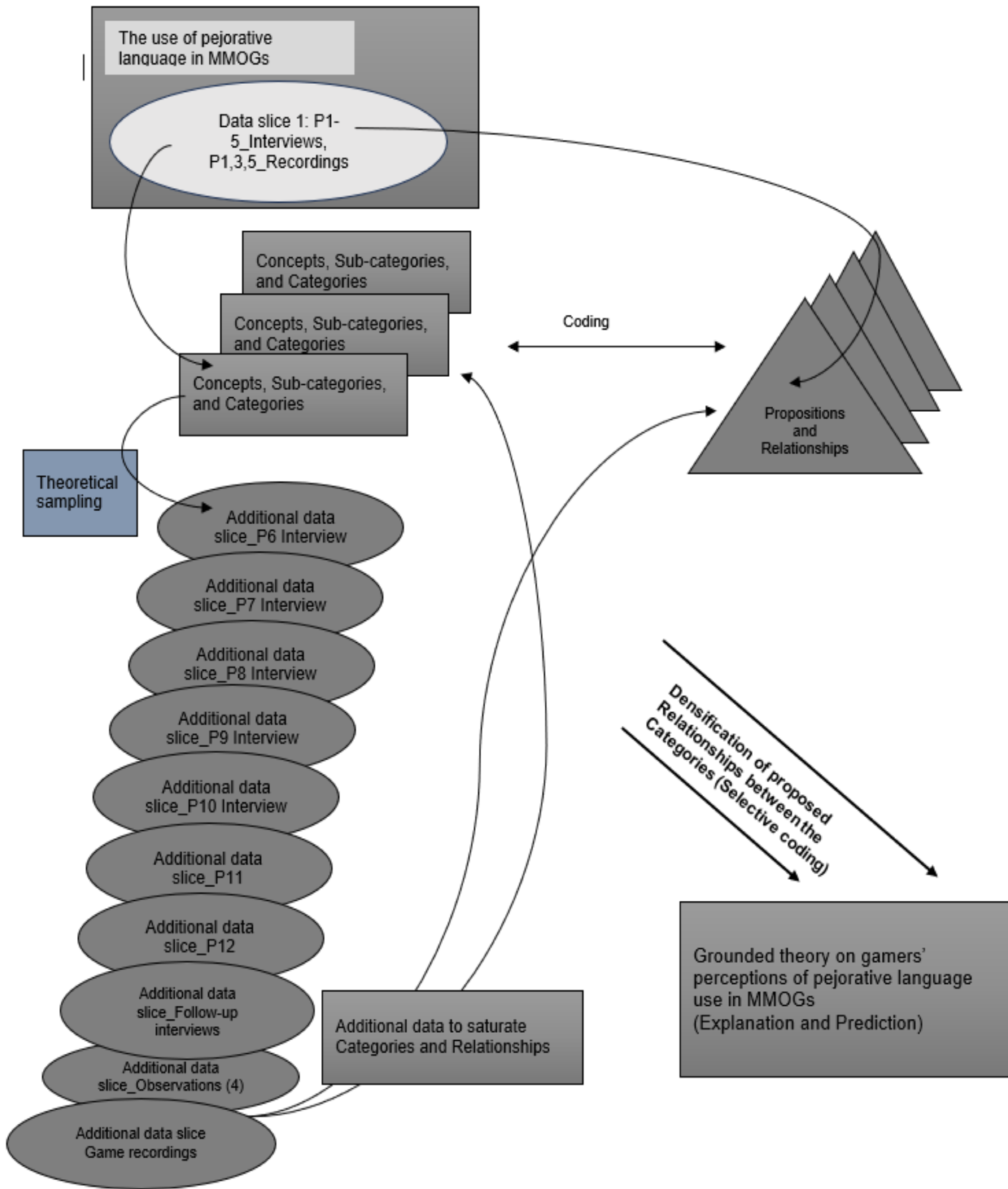


Figure 11: Grounded theory method for the study (adapted from Davids, 2017; Urquhart et al., 2010; Weimann, 2012)

3.7.3.1 Interview Method

Interviews are an effective way of eliciting data directly from participants; these can either be structured, semi-structured or unstructured—the objectives of the study determine the format of the interview (Showkat & Parveen, 2017). In structured interviews, the researcher has a predefined set of questions that are followed, whereas with semi-structured interviews, the interview is structured around a topic of interest instead of specific, predetermined questions (Showkat & Parveen, 2017).

3.7.3.1.1 Semi-structured interviews

Semi-structured interviews were used as the method of data collection for this study. This method gave the researcher and participants room for flexibility and allowed them to engage in a conversation to explore the phenomenon of the use of pejorative language during gameplay. The data collection method consisted of semi-structured questions, which were used as a guide. Since semi-structured interviews are not rigid, the researcher can probe further with follow-up questions for better clarity and also to allow the participant being interviewed to engage while recollecting and exploring their experiences (Pietkiewicz & Smith, 2014).

An introduction to the study and its subject was given before a general set of questions were asked. This made it possible to talk about the participants' opinions on interactions in both the real world and the MMOG world because of the rapport that had been built. To gather the data required for analysis, the researcher probed the participants' ideas, thoughts, and behaviours during the interview process. The initial questions were generic and flexible to promote a feeling of comfort and familiarity. Thereafter, the guiding questions were more detailed and centred on the distinctive thoughts of each participant. These open-ended questions served as a structure for the interviews and ensured that the participants touched on facts at some point that would aid in answering the research question. Participants were encouraged to state their beliefs, methods and manner of interaction, and other information pertinent to how they communicate during gameplay, in an approach that requires a trust relationship.

The researcher's personal opinions, familiarity with the subject matter, and the terminology they may use during the interview procedure are an equally significant component of CGT as the perspectives of the participants, although the researcher must still maintain objectivity and prevent their enthusiasm for the subject matter from distorting the participants'

responses. Since constructivism explicitly recognises the subjective role of the researcher, the researcher must take account of this. The need for researcher reflexivity is, therefore, an important consequence of assuming the constructivist position (Charmaz, 2014). According to Charmaz (2014), the constructivist grounded theory technique requires researchers to be reflective about their actions and conclusions, which is consistent with constructivist epistemology. This perspective is widely accepted by qualitative researchers who acknowledge their active role in data collection and interpretation, though the definition and practice of reflexivity remain debated (Finlay, 2002). Reflexivity can be seen as a critical introspection process from a constructivist perspective. Researchers must critically assess their interpretations and study choices, as well as the ways in which their views, interests, and presumptions affect the research (Charmaz, 2014). However, a thorough analysis of researcher subjectivity may lead to nihilism (Finlay, 2002). This risk can be decreased by finding a balance between the need to provide a logical and reliable explanation of social phenomena and an open evaluation of the subjectivity of researchers. Eventually, the aim was to develop a theory based on the data that was developed through interpretative acts, comparative analysis, and coding. Using memos to compare the synthesised categories, the researcher formed and revised categories and subcategories, synthesised the data by dividing it up into smaller pieces, and developed thoughts linked to the subject.

3.7.3.1.2 Observations

Both respondent and non-respondent observation are effective methods for gathering qualitative data because they allow researchers to record a wide range of data, including verbal and non-verbal communication, actions and environmental elements in a setting (Barrett & Twycross, 2018). Another benefit of observations is that they give the researcher a first-hand understanding of what occurs in the environment. Field notes will typically be taken if the researcher is using a qualitative approach to observation. Field notes can be in many different formats, including a detailed explanation of what has been observed, a chronological log of events, a record of interactions with participants, or an enlarged account of fieldwork-related impressions (Barrett & Twycross, 2018).

Similar to other qualitative data collecting methods, observation yields a large amount of data that may be recorded and analysed. Digitally recording observations to enable repeated viewing is one method for aiding in data gathering and analysis (Barrett & Twycross, 2018). The researcher has certain methodological and ethical problems when conducting

observations. From a methodological perspective, the Hawthorne effect, or participant behaviour changing as a result of observation, might affect the significance of findings. The majority of researchers do, however, describe a process of habituation where, after a very short time, people being observed return to their usual behaviour. When a researcher observes unethical behaviour that potentially endangers participants, they should ethically assess when and how to intervene (Barrett & Twycross, 2018).

For this study, seven of the participants were observed during gameplay for the researcher to note their actions, use of language and communication patterns and how they reacted to others' language use and communication patterns. The observation took place after the interviews.

3.7.3.1.3 In-game Recordings

This study also adopted the second type of archival data method for collecting data. Gamers usually record their games to share with others, for future reference or as memorabilia. The researcher requested past game recordings from some participants to analyse and further enrich the data that had already been collected from the interviews and observations. One of the oldest and most popular sources of information for scholars are archives. Scholars have pieced together histories of significant historical events, notable individuals' lives, or occasions of general public interest for millennia using written texts and visual images. Archives-based studies are becoming more common in many academic domains as post-positivism methodologies have acquired more popularity in the field of empirical research (Timothy, 2012).

This second category of archival data is more interested in exploration, description, and explanation than causal correlations, in contrast with the numerical datasets described before. These artefacts are created and reserved by a party other than the researcher, just as numerical datasets (Timothy, 2012). Archives contain direct or indirect sources. Direct sources can be used in their original form or when they are received from the producers themselves, e.g., correspondence from an immigrant. The second type of archival data originates from a variety of documents, photographs, and artefacts that have persisted in collections from earlier times or from direct sources and are still useable today, or came from the original producers (Timothy, 2012). Examples of direct sources include letters from immigrants, poetry by aspiring poets or pictures from a trip in the late nineteenth century.

Indirect sources include, e.g., collection inventories, which can then be used to analyse someone's background and determine their interests (Timothy, 2012).

3.7.3.2 Piloting of Testing

After the semi-structured interviews questions had been drafted, a pilot study was conducted with other scholars. According to Gill et al. (2008), it is important to pilot interview questions before data collection. This allows for the scrutiny of the contents to eliminate error, ensure that the schedule is easy to understand and will facilitate the answering of the research questions (Gill et al., 2008; Luker, 2015). The feedback received from the pilot study was used to modify the interview schedule where it was deemed necessary.

3.7.4 DATA ANALYSIS

Within this research project, data collection, coding, and analysis were all executed in an overlapping manner to assist the researcher in getting a head start on the analysis by iteratively following the data collection, coding, and analysis procedures (Glaser & Strauss, 2017; Glaser et al., 1968). This method is a critical component of theory-building because it enables researchers to benefit from flexible data collection by allowing them to make changes while collecting data. Changes to data-gathering tools, the addition of data sources in some cases or the addition of cases to probe new themes are some examples of these modifications (Eisenhardt, 1989). The analysis for this study focused on comparison in order to achieve concept and connection validity, which, in turn, led to the internal validity of this study. The researcher took advantage of this method to benefit from an early start on analysis by iteratively conducting interviews, doing observations, and listening to recordings of games while also coding and analysing the data in the process.

Participant 1 was the first interviewee. The researcher reached out to the participant via email and explained the purpose of the study. Upon agreeing to be part of the study, the researcher sent the consent form to the participant who signed and returned it. A date was set for the interview, following which the interview was conducted via *Zoom*. All the other interviews followed this process, the data collected from interviews were also supplemented with recordings and observations. The snowballing method was used to recruit the first five participants. As noted in previous chapters, in linear snowballing, the researcher recruits one person for a linear snowball sample, while the second respondent recruits the third respondent. The chain repeatedly refers linearly all the way to the end of the sample (Etikan

et al., 2016). One of the risks of snowball sampling is that participants usually suggest others with the same traits or perspectives. Additionally, it is the researcher's responsibility to make sure the initial group of participants is sufficiently diverse to prevent the sample from being overly biased or distorted in one single angle (Etikan et al., 2016; Johnston & Sabin, 2010; Noy, 2008).

As the initial participants were interviewed, the researcher started noting emerging concepts and patterns in the responses, this resulted in an interest to understand more about these patterns. As a result, the researcher utilised theoretical sampling to recruit the next participants, a process whereby data were collected based on concepts or themes drawn from the data from the initial interviews (Glaser & Strauss, 1967). The participants were regarded as the primary sources of information and as knowledgeable judges of their everyday experiences. The researcher probed the participants' ideas, thoughts, and behaviours during the interview process. The initial questions were generic and flexible to promote a feeling of comfort and familiarity. During the interviews, the interviewer ensured the interviewees were actively listening/conveying interest and focus by expressing real enthusiasm, attention, and engagement to the participants with utterances like "mm", "okay", "I see", etc.

Thereafter, the guiding questions were more detailed and centred on the distinctive thoughts of each participant. These open-ended leading questions served as a structure for the interviews and ensured that the participants touched on facts at some point that would aid in answering the research question. Participants were encouraged to state their beliefs, methods and manner of interaction, and other information pertinent to how they communicate during gameplay, in an approach that requires a trust relationship. This was achieved by asking follow-up questions such as "How come?", "why do you think that's the case?", "What do you mean?", "Can you explain that?", "What would that entail?" while maintaining a non-judgemental attitude.

Each interview followed a standardised interview guide which was deconstructed into two parts: A) Background information, B) Language use in MMOGs. Table 3 shows how the guiding questions were structured.

Part A: Background Information	Part B: Language use in MMOGs
<p>1. Can you tell me more about yourself? This is an open question to make the participant more comfortable.</p> <p>2. Which games do you usually play?</p> <p>3. How often do you play online games?</p> <p>4. How long have you been playing?</p> <p>5. What role(s) do you usually take in online games</p>	<p>1. What are your linguistic habits during gameplay?</p> <p>a. How do you communicate with other players who are not in your team? (chat, audio, etc.)</p> <p>b. How do you communicate with your team members?</p> <p>2. How would you describe typical gaming language?</p> <p>3. How does your typical gaming language differ from your daily language?</p> <p>a. Do you use more direct/forceful/pejorative language?</p> <p>b. Please describe how the team member interaction language can be characterised.</p> <p>4. If previously indicated that pejorative language was used, what are your views regarding the use of pejorative language during game play? a. Is pejorative language or swearwords often used by players?</p> <p>b. If so, when and how is it used?</p> <p>c. Why do you think this is so?</p> <p>5. How do you account for the strong presence of pejorative language and swearwords in particular when communicating with other players?</p> <p>6. Does it bother you that there is pejorative language during game play or is it normal? (Please elaborate)</p>

Table 3: Open-ended interview guide

The interview questions were modified during the research study in light of emerging concepts and relationships that emerged from earlier cycles. This is a form of theoretical saturation and had an impact on the choice and use of later data sources, which were the recordings and observations. Gamers were observed during gameplay for the researcher to note their actions, use of language and communication patterns and how they reacted to

others' language use and communication patterns. Both respondent and non-respondent observation are effective methods for gathering qualitative data because they allow researchers to record a wide range of data, including verbal and non-verbal communication, actions and environmental elements in a setting (Barrett & Twycross, 2018). This data is presented in Table 4.

Observed Participants and Recordings obtained
<ul style="list-style-type: none">• Participant 1• Participant 3• Participant 4• Participant 5• Participant 9• Participant 11• Participant 12

Table 4: Observed participants and recordings obtained.

Observations differed in duration because some players sent previous games which were recorded. The duration ranged from short clips of a few minutes to longer sessions of 1-2 hours which is the minimum duration most players play a game. The observations consisted of the researcher sitting silently and watching players play without interfering with their game. Other observations involved the researcher watching pre-recorded games of participants playing.

The data analysis began by categorising each incident in the data into as many possible different analysis categories as categories arose or as new data that fitted an existing category became available (Glaser & Strauss, 1967; Lehmann, 2001). Incidents are referred to as text units, which include the distinct, standalone concepts or themes in interviews, records, and others, along with the case stories' actual components (Lehmann, 2001). The first principle for the constant comparative approach is to compare new event codes to past incident codes from both the same group and other groups. The constant comparative method provides a novel approach to organising and analysing qualitative data (Chun Tie et al., 2019). Analysis of observations and recordings was done to create, amend, and validate the interview categories and codes that had already been discovered.

Table 5 is an example of the different iterations the researcher performed to refine the Game language category. After each data collection cycle, distinct concepts relating to the normality of the use of pejorative language in MMOGs arose following analysis. The analysis of the data collected in the next cycles also supported data for previously recognised concepts or led to the creation of new concepts. Table 5 also demonstrates how comparable concepts were categorised into more detailed categories following each cycle of data collection and analysis. Upcoming sections and chapters further expound on all the other emerging concepts and categories in the order that they developed or were confirmed during analysis.

Data Collection phases	Concepts	Categories	Focus for next cycle
Initial interviews	Mentioning that it depends on who you are playing with, accepting that pejorative language is meant to be funny, Being used to those types of conversations, It's nothing deep, Being nonchalant about pejorative language, "It's a national anthem in the gaming community".	Part of the game	The researcher needed more clarity on how players explain the switch to pejorative language when gaming and what was meant by them saying it's game culture.
Follow-up interviews Observations Recordings	Agreeing that pejorative language in gaming is normal, It's the standard for how people communicate, Use of specific language, lingo or jargon as soon as game	Game language	

	starts, Constant use of the words like 'F*ck, Sh*t, etc.' out of context, Pejorative language followed by laughter from others, Pejorative language becomes subculture with distinct characteristics, Multiple ways of modifying words.		
--	---	--	--

Table 5: Example of the different data collection iterations.

In addition to open coding, axial coding flexibly was employed in this proposed study. Axial coding was used to identify emerging linkages between concepts, sub-categories, and categories that can be discovered when using open coding (Glaser et al., 1968). The coding paradigm was employed to provide a more comprehensive picture of the research and opened the analysis rather than being used philosophically in the research study. An axial coding strategy was designed to increase theoretical awareness as regards identifying causal linkages, minimising influencing the dataset and maximising actual emergence (Charmaz & Belgrave, 2012; Glaser & Strauss, 2017; Glaser et al., 1968). The presentation of the many phases of coding used in research work promotes the reliability and validity of the findings, which is one of the appeals of grounded theory methodology. This reporting, also known as maintaining a chain of evidence, might consist of written comments on the choices and procedures made by the researcher during the research endeavour (Walsham, 1995). Many situations in the computer-mediated social settings are still unexplored due to their dynamic and changing nature. Reporting on the coding process is crucial because of this lack of familiarity and the fact that pre-existing categories shouldn't be taken for granted as fitting the empirical facts (Walsham, 1995).

In the present study, the researcher clearly outlined the choices made and actions taken. Comments were drafted in memos in order to maintain a chain of evidence. Whatever ideas, categories, propositions and linkage developed, was represented graphically and backed up by inscribed comments. The researcher also developed a plot that attempted to reflect the changing interpretation of the primary phenomena as part of the selective coding

process. Once the process of developing the theories was complete, the plot was concluded. Consolidative illustrations were used to illustrate any ambiguous connections between developing concepts, categories and subcategories. Previous studies suggest that as new relationships develop and are included, the complexity of the consolidative illustrations will gradually grow (Glaser & Strauss, 2017). The researcher kept track of her observational data, theoretical sampling, open, axial, and selective coding, as well as the research's procedural guidelines, using theoretical memos.

During qualitative research, member checking assists researchers in enhancing the study's reliability, validity, trustworthiness, and generalisability (Glaser & Strauss, 2017). For this study, the research participants were provided with the researcher's evaluation of the research findings during the member checking process, and their feedback was used to assess the validity of the study findings. This was so that the comments highlighted both accurate and inaccurate analyses as well as missing data that needed to be filled in before the research study was declared complete. If claims about the research study's reliability, validity, trustworthiness, and generalisability of the emerging theory were to be made, participants in the research study should be able to identify with the themes (Charmaz & Belgrave, 2012; Glaser & Strauss, 2017; Glaser et al., 1968)

3.7.5 DATA MANAGEMENT

The data for this research study was transcribed verbatim onto a Word document and analysed manually. This was done so that the researcher could better understand what the data represented. The data was then coded by highlighting similarities in the feedback given by participants. In this way the researcher was able to identify emerging themes and relationships between these themes. To simplify the coding process, the researcher took small samples of the responses, identified codes and categories within these smaller samples, highlighted and wrote down theoretical memos of themes and assigning labels to the responses to distinguish patterns and the meaning attached to them. These were intended to monitor and encourage coding as well as serve as a foundation for the consolidation of theory and, eventually, theory generation.

It is advised that researchers should not worry about producing poor memos because it's a low-risk activity, as memos will improve as knowledge and theories advance (Dick, 2005; Urquhart, 2007). The memos were used to consider and clarify the meanings that

participants and researcher had assigned to codes, to discover connections between codes, to organise and further develop ideas, and to jot down significant quotes or phrases. Memos offer a solid comprehension of the qualities of the focal core concept and important related concepts as well as the fundamental aspects of the phenomenon (Douglas, 2003). Following this, the researcher iteratively revised and refined the codes and themes by taking a larger sample of the data to ensure that the codes were accurate and consistent.

All identifying information was kept confidential, and pseudonyms were used to maintain anonymity. Participants are only known to the researcher who conducted the interviews and observations, after each interview was conducted, each transcript was renumbered and referred to as that of participant 1, etc in the dataset and during the write-up. There are therefore no references to any identifying information thereby ensuring that participants' data is confidential.

3.7.6 ETHICAL CONSIDERATIONS

Ethics speak to the virtues by which people conduct themselves and thus, researchers need to make ethical choices and be morally accountable when conducting research (Miller, Birch, Mauthner, & Jessop, 2012). When making these choices, the researcher must consider the welfare and dignity of the participants. To conduct this research ethically, the researcher requested permission from the Ethics Committee at the University of Pretoria. A consent letter detailing the nature of research was sent out to participants to sign before participating in the study. In addition, participants were informed that their participation is voluntarily and that they could withdraw from the study at any time if they felt uncomfortable, without any consequences. Participants were also informed that all identifying information would be kept confidential, and pseudonyms would be used to maintain anonymity. Participants were known to those present during the interviews (only the researcher) but thereafter, were renumbered and referred to as Participant 1, (2, 3, etc.) in the dataset and during the write-up. There is no reference to any identifying information.

The research was conducted under the main supervision and co-supervision of Prof M Hattingh and Prof M Matthee. During the data collection process, the collected data and backups remained password protected. The interviews were conducted with the utmost care, taking the well-being of participants into consideration. The researcher also strived to

interpret data with honesty, considering ethics and thus not intentionally manipulating or misinterpreting data in any way. Lastly, should any of the readers of this research require feedback pertaining this study, it will be made available.

3.8 GROUNDED THEORY WITHIN THE INFORMATION SYSTEMS DISCIPLINE

GTM initially shattered the glass barrier of IS publishing about three decades ago with Orlikowski (1993), and GTM works have since been explored numerous times and published in prominent IS journals (Birks et al., 2013). While the stated purpose of GTM is the building of theory, GTM research in the IS domain do not just focus on theory building. Rather, these works contribute three positive advances: theories, models, and detailed analysis (Wiesche, Jurisch, Yetton, & Krcmar, 2017).

The study titled “*Enriching our theoretical repertoire: the role of evolutionary psychology in technology acceptance*” by Abraham, Boudreau, Junglas and Watson (2013) is an example of excellent conventional GTM research, this work demonstrates how a body of research that was not anticipated at the start of the study was used to promote the construction of formal theory. The authors have found how evolutionary psychology can be used to better understand technology adoption across three organisational settings. They demonstrate how many variants of the technological adoption model have these theoretical underpinnings. They believe that focusing solely on the socio-cognitive lens can lead to missing out on improved explanations for technological acceptance, implying that new theoretical views are required.

Mattarelli, Bertolotti and Macri (2013) research on “*The use of ethnography and grounded theory in the development of a management information system*” pioneers the use of GTM in conjunction with other methodologies and techniques. They examined the possibility of integrating GTM with ethnography throughout a collaborative IS development process. GTM served as the foundation for a succession of focus groups where the different stakeholders were free to confront process conflict and define the needs for a new management in IS.

Vial (2021) inductively constructed a framework of digital transformation integrated over eight structural components through an evaluation of 282 studies. Their framework highlighted digital transformation as a procedure in which digital technologies cause

instability that prompt business strategy from organisations that want to make changes to their company's growth paths whilst also maintaining the fundamental changes and organizational barriers that influence the positive and negative effects of this method. Based on this framework, they developed a research strategy in which they recommended that subsequent systematic studies in IS focusing on digital transformation should consider the impact of dynamic capability and should take ethical considerations into account.

The work by Gasson and Waters (2013) is a practical demonstration of employing GTM in IS research, utilising data collected through trace analysis. In fields where learning theories are prevalent, there is a compelling argument for employing GTM. As a theoretical sampling method that uses complementary comparison to contribute into a new phase of ongoing comparison, the incorporation of mixed-data sources into an interpretive grounded theory process is referred to thus.

The study "*Using Grounded Theory as a method for rigorously reviewing literature*" by Wolfswinkel, Furtmueller and Wilderom (2013) shows how GTM may be effectively used to carry out a comprehensive and critical literature review on a given topic. The five stages of the literature review process by Webster and Watson (2002)—the emergence of new themes, issues, and opportunities; interdependencies inside or outside of a specific domain; and inconsistencies—are expanded upon by the authors using GTM. For almost ten years, this procedure has served as a reference for IS researchers doing literature reviews. In addition to these categories, the usage of GTM enables the researcher to generate new theories that may be used to either drive deductive investigations for theory testing or inductive studies for theory building.

3.9 GROUNDED THEORY AND MMOG

Several studies that have adopted grounded theory to study MMOGs, with the rationale that grounded theory is an acceptable methodology for accessing participants' thought processes and examining their subjective experiences (Beranuy, Carbonell, & Griffiths, 2013). In their study, Beranuy et al. (2013) set out to study online gaming addicts in treatment. The results of nine gamers who were receiving treatment for their compulsive use of massively multiplayer online role-playing games (MMORPGs) were presented in their publication. Nine online game addicts were the subjects of a face-to-face interview study employing grounded theory. Beranuy et al. (2013) conducted semi-structured interviews to

collect data and employed grounded theory procedures that includes selective, axial, and open coding to analyse their data. Axial coding is the procedure that connects themes (based on the qualities and attributes) while open coding involves the identification of concepts and their dimensions and properties. The process of incorporating and improving the theory is called selective coding. Interviews were coded in the beginning. Second, an inductive investigation was conducted using a flexible architecture that allowed for the integration of fresh data and the verification of the subsequent hypotheses. Additional inductive analysis was performed to look for signs of substance addiction (Glaser, 2001). The outcome of the research was that the onset of MMORPG addiction is accompanied by a large rise in playing time, a lack of control, and a narrow concentration on conduct. These elements contribute to issues, psychological dependence, and significant life conflicts. The impacts of MMORPG addiction are comparable to those of more well-established drug addictions, including reactivity, mood alteration, lack of control, yearning, and severe detrimental reactions. Resistance and relapsing may also be found in some instances (Beranuy et al., 2013).

Bytheway (2013) conducted a study titled “*The online-community culture in massively multiplayer online role-playing games affects language learners’ use of vocabulary learning strategies*”. In response to unofficial claims of vocabulary improvements from players at universities in New Zealand and the Netherlands, a case study of *World of Warcraft* players was done. Data from three areas of study—MMORPGs as learning contexts, vocabulary acquisition tactics, and online cultures—were combined using research methods fundamental to grounded theory. Data were gathered from currently available MMORPG literature as well as from six *World of Warcraft* seasoned ESL gamers who were observed and interviewed, as well as texts from their gameplay. Throughout the research, data was gathered, transcriptions were made, data were coded and sorted, literature was reviewed, mind maps were made, and memos were written. To identify similarities and contrasts and to help themes, processes, and patterns emerge, constant comparative analysis (Glaser & Strauss, 1967) was used. The completion of member and inter-rater checks helped reduce personal bias. Themes and techniques to explain how the MMORPG in-game culture impacted participants' vocabulary acquisition practices evolved through ongoing comparative study. The findings call for research into autonomous language learning in online multiplayer role-playing games and emphasise the importance of valuing how

MMORPG community culture influences ESL learners' choice of vocabulary learning tactics (Bytheway, 2013).

A study by Deterding (2016) analyses the role of social context of play. The author identified that playing serious games or using gamified software is frequently required, autonomy may be hampered so a qualitative interview study comparing gameplay experiences in leisure and professional environments was conducted to understand contextual elements that influence autonomy. Deterding (2016) chose a theory-generating strategy because much of the previous research is theory-derived rather than factually grounded. The purposive sample of interviews was enhanced by researchers' field notes on interviewing circumstances. In addition, following a grounded theory approach, interviews were recorded and transcribed. They adhered to the principles of constant comparison and theoretical sampling to make sure their concepts were anchored in actual data and to remain open to the emergence of new concepts: Simultaneous data collection and coding allowed for the comparing of each new datum to pre-existing notions. Ideas and relationships were changed or added as the data demanded, interview questions altered, and new participants selected depending on developing issues and predictions (Deterding, 2016). It was discovered that leisure settings, especially solo play, encouraged autonomy by providing a space and time free from external pressures, the freedom to interact with and alter the environment as desired, and the absence of social or physical consequences. When players' impulsive preferences conflict with socially required games, autonomy is impeded in both leisure and professional settings (Deterding, 2016).

3.10 SUMMARY

Due to its proven track record of effectiveness in IS research, the GTM was chosen as the methodology for this study (Birks et al., 2013; Hughes & Jones, 2003; Lehmann, 2001). This technique offers a way to reorient social research away from generalisations and the validation of established hypotheses and towards the study of unique perspectives on unexpected knowledge. A researcher might do this utilising the GTM by avoiding the use of predetermined hypotheses and by gaining knowledge on the spot.

The constructivist approach is one of the data collection and analysis techniques favoured by grounded method supporters in electronically controlled social settings because it aims to assist researchers in developing a theory that emerges naturally but is also as thorough

and systematic as possible from the study context (Urquhart, 2007; Vaast & Walsham, 2013). The purpose of this present study is to understand what players' perceptions of pejorative language use in MMOGs are. These discussions are a validation of the decision made to employ GMT in this present research as an accepted approach for studies within the IS domain. By understanding the subject in the context of the problem, the technique will assist the interpretative research approach. The next chapter explains the findings of this study.

CHAPTER 4: FINDINGS

4.1 INTRODUCTION

This chapter presents the findings from this PhD thesis. The findings presented in this chapter show players perceive the use of pejorative language in MMOGs, what the linguistic habits of gamers during gameplay are and how other players account for the strong presence of pejorative language and expletives in player discourse. An outline for this chapter is illustrated in Figure 12.



Figure 12: Outline of Chapter 4

4.2 THEORY BUILDING

The findings are arranged into seven categories. Each category emerged when initial codes were grouped into more focused codes. Table 6 summarises the focused and initial codes. The stressor-strain-outcome (SSO) model, first coined by Koeske and Koeske (1993) was used as a form of theoretical coding to help organise the codes. The model will be discussed in detail in sections to follow.

Category	Selective codes	Open codes	Observations and recordings

Type of game	Players with resources	<ul style="list-style-type: none"> • Roles taken 	<ul style="list-style-type: none"> • Role immersion (deep concentration/focus, commitment)
	Goals and rules of the game	<ul style="list-style-type: none"> • Rules of the game 	-
Gaming language	Normalised language	<ul style="list-style-type: none"> • General banter • Normality expressed • Multiple ways of modifying words 	<ul style="list-style-type: none"> • Emotional detachment • Friendliness during and after the game • Laughter when pejorative language is used
	Contextual language	<ul style="list-style-type: none"> • Depends on who says it • Swearing directed to oneself • Respect for others (e.g. children) • Use of pejorative language amongst friends • Context-dependent language use • Normality amongst predominantly male players 	<ul style="list-style-type: none"> • Joking with 'friends' • Language used casually • Lightheaded conversations • Camaraderie
Competitive nature of games	Intra-team competition	<ul style="list-style-type: none"> • Constructive feedback • Understanding and empathetic • Blunt with consideration • In-group dynamics • Group bonding 	<ul style="list-style-type: none"> • Mumbling • Rage swearing • Elevated temper • Shouting • Frustration/agitation

	Inter-team competition	<ul style="list-style-type: none"> • Conflict • Breaking morale 	<ul style="list-style-type: none"> • Emotional response
Individual characteristics	Demographics or background factors	<ul style="list-style-type: none"> • Background/Family influence • Influence of upbringing • Natural behaviour • Language norms at home 	<ul style="list-style-type: none"> • Non-offensive communication
	Gender	<ul style="list-style-type: none"> • Sexism • Gender remarks • Reaction to good female players 	<ul style="list-style-type: none"> • Name calling directed to females
Platform and Environment	Encouraged by anonymity	<ul style="list-style-type: none"> • Anonymity • Lack of restrictions 	-
	No accountability	<ul style="list-style-type: none"> • Blame shifting • Tolerance of bad behaviour • Deflecting 	-
	Conditioned behaviour	<ul style="list-style-type: none"> • Behaviour dependant on the setting • Ability to 'switch' on and off 	<ul style="list-style-type: none"> • Less pejorative language when observed
Actual language behaviour	Discrimination Sexist Homophobic Racist	<ul style="list-style-type: none"> • Racial slurs (Racist) • Homophobic language • Inappropriate language • Meanness and negativity (Teasing, Offensive, Abusive) • Sexist, Misogynistic • Temporary aggression (Rage, Swearing, 	<ul style="list-style-type: none"> • Mocking • Intimidation • Condescending language • Sarcasm • Dismissive gestures • Eye rolling

		Cursing, Aggressive, Disruptive) <ul style="list-style-type: none"> • Communication norm (Crass, Blunt, Direct) 	
Outcome	Formation of smaller communities	<ul style="list-style-type: none"> • Preference for acquainted players • Need for supportive 'community' • Isolation from hostile environments • Decision to stop playing 	-
	Remaining silent	<ul style="list-style-type: none"> • Social disconnect • Avoidance of negative behaviour • Disengaging or selective engagement • Withdrawal • Muting chats and audio 	<ul style="list-style-type: none"> • Playing with no sound/audio • Muting chat
	Retaliation	<ul style="list-style-type: none"> • Defensive reaction • Emotional reaction • Unable to remain silent • Wanting fairness • Reciprocating 	-

Table 6: Evidence base for codes on pejorative language use in MMOGs

Several stages were involved in the theory building process; this included data collection, analysing the interview data; coding, comparing, and categorising the data, and the emergence of an initial theory or theoretical explanation concerning correlations within and across emerging categories. The interview questions were modified throughout the research study considering the developing themes and concepts from earlier cycles, which impacted the choice and application of following data sources (observations and recordings).

As the research topic became clearer to the researcher, the emerging concepts allowed her to revise interview questions further. The researcher used the coding practices of open

coding and selective coding resulting in the development of the key concepts. The interview questions were modified throughout the research study in light of the developing themes and concepts from earlier cycles, which impacted the choice and application of the next data sources (observations and recordings). Some of the recordings were in Afrikaans and an Afrikaans-speaking person was requested to translate the audio.

This process of revision made it easier to confirm the credibility of the themes and associations underlying the emergent theory. Using the developing themes and associations as a basis for each subsequent data collection in the cycle, the researcher could perform her analysis after collecting subsequent data in accordance with the principles of the grounded theory technique. A sizable number of theoretical memos were also developed as a result of the identification of several categories and their attributes. Each of these categories were examined more thoroughly, resulting in the development of a framework displaying the relationships between them.

4.2.1 THE EMERGING CATEGORIES

Throughout the analysis phase, the researcher drafted different mind maps related to the emerging categories which outline gamers' major concerns and perceptions regarding pejorative language use in gaming.

4.2.1.1 Type of game played

The first category that was identified from the emerging patterns was the category of the type of game. It was important to understand how the type of game a player plays influence the type of language used. The concepts related to this category, according to the data, are players with resources, objects, rules, and goals. These categories are an instance of theoretical sensitivity where concepts from game theory are used to help with theorisation. According to the theory of social games discussed in previous chapters, the social aspect of the game occurs in game time and space, as well as in an increasingly broad society environment and a broader gaming setting. It determines the results of games and may serve one or more external function(s) (Stolz, 2023b). Loosely, in social games, players with resources use objects to engage in actions shaped by goals and rules.

Figure 13 illustrates the basic components of the concepts related to the type of game category.

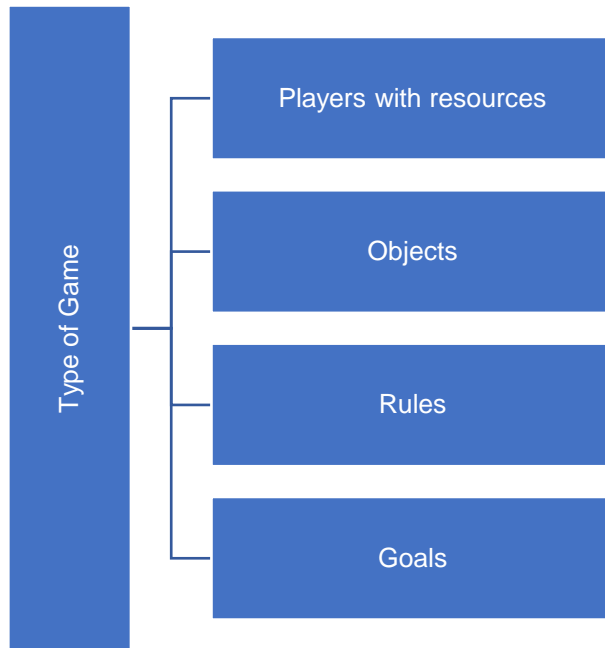


Figure 13: Type of Game mind-map.

Players have stated that the use of pejorative language in MMOGs depends on the type of game played. For example, it was found that games such as *FIFA* are more peaceful and fun with less pejorative language where else games such as *Call of Duty* are particularly bad. Participant 6 stated:

“It is normal, but it's bad. Yeah, yeah. But it's very bad. Like, let's take you play this game on FIFA it's peaceful. Like, “yeah, good game, man.” You know, like those things, I mean, “good game next time...”. Then you go when you go to Call of Duty, the language is just different, that's bad. There on another side it's just nice.”
[Participant 6]

- **Players with Resources – Roles taken**

The data showed that players usually get into character when playing games, and depending on the type of game played, the player may use a language that aligns to their character. For example, when asked about the roles they usually take on during game play, Participant 1 answered:

“It depends on the game, but on Battlefield I usually play the support role like healing other people, reviving them and giving them ammo and something like that and in League of Legends I'll play the jungle role like coming from the forest in the

jungle to help my teammates in different lanes and just yeah, I help everyone mostly.”

[Participant 1]

Participant 2 stated:

“So Dota is quiet (sic) a complex game actually, so there isn’t, I would say there’s an idea of which roles there are each game but its not locked in as other games such as overwatch for example. So in Dota you can pick any hero that you want but certain heroes take certain roles better but there isn’t any boundary like if you pick this hero you have to play this certain way, you can really do whatever you want but there are obviously specific ways where you maximise your chance to win which have been researched by the amount of Dota games that have been played. So people realise this certain things works, this doesn’t work. So the role I take I would say, so I normally play in the mid-lane...” [Participant 2]

This role emersion behaviour was also noted during observations and reactions in recordings.

The data also showed that players’ feelings of superiority or inferiority impact on players’ use of pejorative language during gaming. However, the data also shows that players tend to think of themselves as better or good players, thus giving them leeway to use bad language for the betterment of the game while other players’ (competitors and team members) use of pejorative language is deemed unacceptable. For example, Participant 2 reported:

“So when I’m talking to those type of people I tend to treat it a lot similarly to the way that I would generally speak to people in person, so it’s less direct and its more considerate where on the other hand if I don’t necessarily know the people and I feel that I have to say something or do something that I would feel is wrong or something like that and they’re being detrimental to our team’s advantage then I tend to be more direct and I must admit that in many of the times being more direct comes across as abusive and it can easily come across as abusive.” [Participant 2]

The player aspect addresses the individual characteristics and motivations and have specific roles to play. Table 7 provides excerpts of interview data that summarises how participants describe themselves as players, how they describe other players and their language use. The code next to the participant number in the first column describes players' language use.

Participant code	Interview excerpts
1: Blunt language	<p><i>"I would say use more direct language than usually. Usually yeah. I wouldn't be afraid to tell someone what they're doing wrong instead of like trying to help them in a more constructive way. I would maybe resort to being a bit more blunt so we can get the job done, yeah."</i></p> <p><i>"Well, most team members like uses my sort of communication but like ten times worse. Like I'm a bit more passive when using my language, but some people I know are not scared to go out and belittle someone for the end gain."</i></p>
2: Heat of the moment language use	<p><i>"I am very guilty of the same things that I have been talking about."</i></p> <p><i>"I tend to get not necessarily angry, but I get frustrated. I get stressed. I get irritated and stuff like that, which obviously it and impacts my mood for other things that I have to do or other things that I approach."</i></p>
4: Respectful language	<p><i>"Yes, actually we have we have to use the same language because it's actually in the rules that in each every server has their own rules like you can't use the racist slurs."</i></p> <p><i>"So I mean the language that other people use it just depends because we're all different. But usually a person may be violent, but the language is still respectable. It's not something that's gonna make you want to break character."</i></p>
5: Retaliative	<p><i>"I comply. Generally, I'm a nice playing the game, but if you wanna do a shitty thing to me, it's really hard to get me to do something bad in the game, but if you do it first to me, I will want to retaliate somehow."</i></p>
8: Accommodative language	<p><i>"If I see someone struggling, I'll give them feedback if they are infuriated for whatever reason and or wanting to not cooperate, I'll try and offer them support, but otherwise you can't always help people, and some people are just stuck in their ways, unfortunately."</i></p>

Table 7: How participants describe themselves and others as players

- **Goals and Rules**

The data also showed that the presence of rules and moderation in the gaming environments plays a role in the way gamers communicate and use language. Games have rules which modify gameplay as well as other factors such as language. Five (5) of the participants (Participants 3, 4, 6, 8 and 10) stated that there were rules that govern the different games they play. These include how players should conduct themselves, the type of language they use as well as how they play in the game. Participant 4 said that “...*its actually in the rules, each and every server has their own rules like you can't use the racist slurs...*” This is supported by Participant 6 who, when asked about his gaming language, said “...*It's based on the rules, because the rules they said you mustn't use offensive language. I don't use offensive language; I adhere to the rules of the game.*”

However the data also shows that players play with the goal of winning in mind and sometimes they overlook or are able to bypass these rules because there are minimal consequences. Participant 10 stated:

“So you can report them. So, I've done this lots, all they get is like a like a like a communication ban, so they can't type in chat or they can't use voice chat for three days, for example, there's no rule that will ban them permanently. We've had people say that N-word, call others the N-word. We mass reported them and they still play the game to this day. Businesses, these corporations, these gaming companies, can never ever ban someone permanently because of that kind of behaviour, which is really unfair and sad, because when a person gets in a game and uses hacks, they'll get permanently banned. And that says a lot to me. It says that you care about the integrity of the sport and the integrity of your community.” [Participant 10]

Participant 9 also said:

“I think I'm definitely a lot more forceful considering like uhh, I don't know. In it's like in in these games, especially the like competitive online ones, you know you you're out there to win at the end of the day. And sometimes there's like a person who just take charge like an in game lead or something like that. If that's the case, then yeah, I'm definitely more direct, more like commanding I guess.” [Participant 9]

Participant 1 said that they use more direct language when playing, which can sometimes be pejorative. The player attributed this to the fact that they play with a goal in mind which is 'to get the job done'. Participant 1:

"I would say use more direct language than usually. Usually yeah. I wouldn't be afraid to tell someone what they're doing wrong instead of like trying to help them in a more constructive way. I would maybe resort to being a bit more blunt so we can get the job done, yeah." [Participant 1]

Table 8 shows the general view of participants regarding the rules pertaining to the use of language in the game and whether they abide by them or not. A noteworthy observation on rules and moderations and the reason why there might still be pejorative language during gameplay is one from Participant 8. When asked a follow-up question about the reason players use pejorative language even though the rules are against it the participant responded:

"There's no free will in following the rules of the game. The rules are the rules. If they game had rules that were to the will of the person. Those are not game rules. You you have to follow some sort of rule...So I don't see any free will emerging from rules strictly speaking, but within the rules you have your free will." [Participant 8]

Participant	Interview excerpts
5	<i>"What I'd rather do is if you swear at me or you hurt me in the game, I will report you. There's better rewards in reporting someone when they do something to you, cause the game itself rewards people that report bad players. So there's something in for you by reporting a player that does something bad to you in the game or says a bad word to you in the game. So while that happens, the game asks you if you would like to report these players that have done what they've done. You agree to that and you can lock them from taking anything in your box like in your in your crates when you die, so you can block them from taking that..."</i>
6	<i>"The rule says that no offensive language must be used. But then there was this...in May yeah... this man, says he's gonna, I'm using precision, this man he was gonna expose like, what do you call this? He's going to go through and review all the language usage each user on Call of Duty, on the PS community, then some people there are being blocked, some are being removed like now it's starting, I don't know, but I don't think on Call of Duty they will reach the goal to cancel these racist comments, its bad comments on the game."</i>

8	<p><i>“If you are playing the game within rules and the game world affords it, there's nothing illegal. If it is illegal, it would be impossible. Whether or not there's a human factor to playing the game that's so adding in something extra to gameplay.”</i></p>
9	<p><i>“...Yeah, I mean, luckily games also have, like, language filtering capabilities. So there's always like an explicit language fault so that you can turn on and off in most online games these days, you know where it will censor strong language. Generally, games also do pretty decently well at censoring like slurs or like racist, sexist terminology, but obviously it doesn't stop somebody from still typing it...”</i></p> <p><i>“...But then you can like report a player et cetera, et cetera. So there are structures in place I guess to protect you to protect you online. Just about knowing how to use them to advantage...The filtering doesn't work for audio. No, we haven't gotten there yet. Hopefully they intake, they integrate AI to do that at some point.”</i></p>
10	<p><i>“And in gaming, you can't like no one will perma ban someone for a saying in which I think they should right? Like the the rules aren't in your favor. The rules allow people to act this way. And that's because it's in the best interest of the business to have more players. So yes, I'll give you a ban that's like, oh, you can't use the chat for with three day right. But they'll never give you a real ban where it's like ohh you're not you know allowed to play this game if you act this way and it's honestly like the the gaming community, like the developers of the games, the big corporations and the investors of games that let down the Community because they don't want to lose money so they don't enforce laws to protect people or rules to protect people.”</i></p> <p><i>“So you can report them. So, I've done this lots. All they get is like a like a like a communication ban, so they can't type in chat or they can't use voice chat for or three days, for example, there's no rule that will ban them permanently. We've had people say that N word, call others the N word. We reported them and they still play the game to this day. Businesses, these corporations, these gaming companies, can never ever ban someone permanently because of that kind of behaviour, which is really unfair and sad, because when a person gets in a game and uses hacks, they'll get permanently banned.”</i></p>

Table 8: Interview excerpts on rules and moderation in the game

4.2.1.2 Game Language

The second category that was identified was that of game language. The researcher sought to understand how pejorative language use is thought of as being part of the game, as well as players' perception of pejorative language use as general banter, something normal or

acceptable in competition or team-based activities. The mind-map of the category of game language is illustrated in Figure 14.

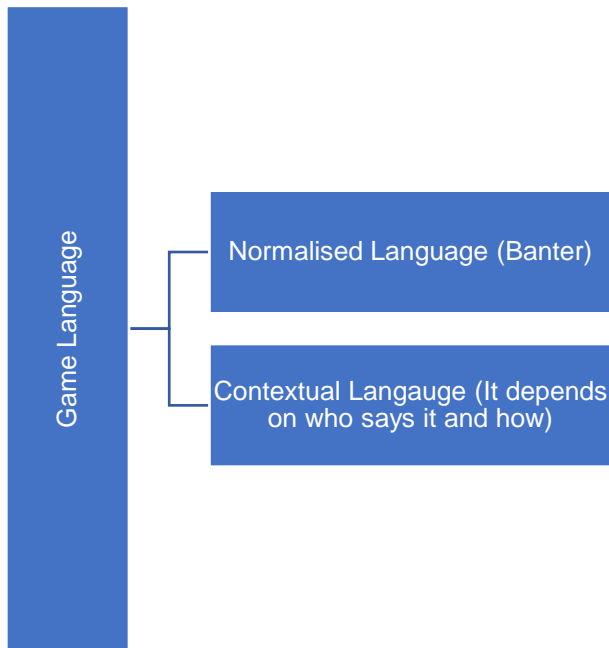


Figure 14: Game language mind-map.

Each of these concepts was thought to provide a suitable perspective for analysing and understanding game language. Players form their own language which is referred to as game language. Participant 5 stated:

“You know there's an entire language that they spoke within games that people understand...So, you end up learning a lot on the game. So I learned some Arab words in the game like, oh, Habibi, you know, it's weird these, these names. Yeah, there's a lot of names. There's a lot of stuff you learn when you, when you play online games as well, like on voice chat. And like the amount of words that I've learnt, I don't remember them all now, but there's phrases that were that were said in the game, even like gaming terms like gg. You know gg means great games. So you say that to the person if you enjoyed playing the game with them like “yo a nice game ‘gg’”. You know there's an entire language that they spoke within games that people understand...” [Participant 5]

Participant 11 also stated:

“I think just like the jargon could be different. Obviously, using more gaming terms, but yeah, I I don't think it's that different for me at least.” [Participant 11]

- **Normalised Language (Banter)**

The data showed that pejorative language is normalised language in gaming as players refer to it as general banter. Participants 3:

“...In real life it's, it's just normal. It's just reality, it is just me being me, whereas in the game, yeah, I can swear sometimes even, like we're just playing...” [Participant 3].

There were different perceptions from players regarding pejorative language use in MMOGs being harmless humour. Table 9 provides interview data excerpts that summarise what gamers had to say.

Participant	Interview excerpts
1	<i>“I don't think it's acceptable. It just unfortunately became the standard for how people communicate recently.”</i>
2	<i>“So I do think obviously that it's not like, yeah, so let's say, so inherently, it's definitely not a positive thing because it[s] evokes negative emotions and it allows people or it is a way for people to be very abusive towards other people with, I would say very little accountability, if any at all.”</i> <i>“For me by now it's a super normal thing. I don't take it like personally at all. So, I do admit that when I like, actively engage in the language itself, I myself like I get irritated and stuff. But when people are abusive towards me in game, I don't. I don't care like it has no absolutely no effect on me, so it doesn't impact how I feel about anything and stuff.”</i>
3	<i>“At this very moment It's nothing deep. It's nothing deep. It doesn't really hurt. Yeah, doesn't it. Because I have experience now, I know that people react differently when they play the game. But when I started, I didn't like it. Yeah, because one of the most common word that is used in Call of Duty its 'poes', you know, so as I started playing everyone is calling everyone 'poes' you know, black on black, black on white, white on white. That's when I saw that OK. It's a norm. It's a national anthem in the gaming community, so. Yeah, it doesn't. Doesn't. Yeah, it's not that deep.”</i>
4	<i>“I'm actually not a fan of it cause it can get quite annoying and you won't be able to maybe concentrate on the game if someone's constantly yelling like saying a lot of things that just come out of nowhere, so I'm not actually a fan of it.”</i>

5	<p><i>“Eish, well, I think it's bad if it's directed to someone directly but see there's situations where you make a mistake like you make a mistake like a like a mistake that you made and you swear to yourself and not at someone directly. I think it would be better if it's used to get off.”</i></p> <p><i>“I messed up, I didn't open the scope right.” “I threw the grenade too late.” Swearing at yourself is I think it's better, but it also depends on who you playing with, it wouldn't be nice to swear in front of a minor because we have kids that play the game as well, and yeah, yeah.”</i></p> <p><i>“Seeing as that I'm a guy, I'm kind of used to these conversations where amajita are talking and then they swear around each other or someone does something stupid and then a bit of swearing and strong language comes into the conversation, but in a funny way. Like it's, you know it's normal in the in that type of way.”</i></p>
6	<p><i>“It is normal, but it's bad. Yeah, yeah. But it's very bad. Like, let's take you play this game on FIFA it's peaceful. Like, ‘yeah, good game, man.’ You know, like those things, I mean, ‘good game next time...’. Then you go when you go to Call of Duty, the language is just different, that's bad. There on another side it's just nice.”</i></p>
7	<p><i>“Oh, that one is a tough one because the young kids will be swearing a lot. And it has come from us who are older. So I don't know. We do swear we do swear it's a very difficult, difficult one. I don't think it's a good thing cause the young kids take into reality and they use it against their peers, their teacher. So I think that could be better.”</i></p>
9	<p><i>“I guess it depends on severity of it, I mean, I also like swear during my daily life when things get a little like intense or whatever it is. I guess its just.one thing I will do is like I'll always make sure, like the people around me, if I'm playing with friends and stuff, are alright with it before I just go ahead with it. I think maybe that's something people should consider because it is a moral like issue at the end of the day there are people who would prefer not to hear, like foul language in their presence or for it to be used in their presence. So I think it's just about being socially aware and ensuring you're not, like, overstepping any boundaries with other people, you know.”</i></p>
10	<p><i>“I don't like to use it. I really don't. I think gaming like I love gaming and I feel like any use of like pejorative language will like mean meanness is just makes it ruins it for everyone. Like, like, so I like to, I prefer it if everyone was just nice and it was cool and easy, but it's not like that. You can't control the people that you're you're you're online with and when they're online, they feel really safe behind anonymity, like we've had people call like like people in our team, like the K word the N word. They don't even know what we are, but they'll just say it like it just gets really ugly and it makes you not want to play a game so definitely against.”</i></p>
11	<p><i>“I would say that there's a lot of banter with my friends and stuff. A lot of joking around... Yes, definitely. I think, I mean, with my friends there's not much difference in terms of the language that they use with each other.”</i></p>

	<p><i>Yeah, just a lot more banter. I guess it would be like making fun of each other, but it would be like in a very joking friendly way.”</i></p>
--	---

Table 9: Interview excerpts on gamers' perceptions of 'banter'

Findings from observations also show that players perceive game language as normal in that players were observed to be emotionally detached, i.e. they did not appear to display any emotions of hurt or sadness when pejorative language was used. Players were also observed making fun of each other and laughing together during and after the game even when pejorative language was used.

- **Contextual Language**

However, the pejorative language can be contextualised, i.e., it depends on who says it. During observations, players were seen joking with friends and using pejorative language casually without displaying emotions of disapproval. Players usually accept pejorative language in gaming if someone in their team or a friend uses it but may find it offensive when used by someone else.

Participant 9:

“I guess its just.one thing I will do is like I'll always make sure, like the people around me, if I'm playing with friends and stuff, are alright with it before I just go ahead with it”.

Participant 5 stated:

“Swearing at yourself is I think it's better, but it also depends who you are playing with, it wouldn't be nice to swear in front of a minor because we have kids that play the game as well, and yeah, yeah.” [Participant 5]

Participant 7 also said the acceptability of pejorative language in MMOGs depends on the people one is playing with. There were also mentions of the degree or extent of the game language, some players believe that as much as it is acceptable, some players tend to take it too far. Participants 4, 6 and 10 in particular believe that it is unnecessary and there is absolutely no need for it. With Participant 4 explaining that they are against pejorative language use “*when it comes to the other side*”, they explained this as when people are being mean and use pejorative language out of context. According to Participant 11,

sometimes people would just be mean and use pejorative language just because she is a girl and at times doesn't know how to play the game well. Other players then just get angry quickly and bring up her gender. However, when playing with male friends, they would bring up her gender but in a joking way and she doesn't take this seriously.

The interview excerpts for gamers' perceptions of contextualised language are presented in Table 10.

Participant	Interview excerpts
4	<i>"No, I think like I said before, the cursing, NO! But when it comes to the other side, yes, it does bother me cause I mean there's literally no reason for that. There's no reason for that."</i>
5	<i>"Most of the time predominantly the gamers that are playing games are usually males and some of them are your friends and you know in situation where you can use strong language in a funny way, yes, it's totally normal. But if it's being directed to bully someone, then it's a bit of a problem."</i>
6	<i>"My views, Ohh. My view is it's very bad and it has to stop because sometimes before I play Call of Duty I'm thinking now I'm going to face racism number one, the game is hard itself, so you're facing two things before, so at least if like the language was good maybe it'll be helpful."</i>
7	<i>"It depends because online is emotional people. There are people who find who find these things are offensive, some of them voice out, some of them don't. But if I have to speak from a general perspective, I think most of us are fine. You know most of us are fine with the language. So yeah, well."</i>
8	<i>"It depends if people are focused on winning then they will be opposed to anything that causes them to lose. Though that might mean that they will give feedback whether or not it's good, whether or not it's loaded with not so pleasant language. It's again on their own terms."</i>
10	<i>"I don't like to use it. I really don't. I think gaming like I love gaming and I feel like any use of like pejorative language will like mean meanness is just makes it ruins it for everyone. Like, like, so I like to, I prefer it if everyone was just nice and it was cool and easy, but it's not like that. You can't control the people that you're you're you're online with and when they're online, they feel really safe behind anonymity, like we've had people call like like people in our team, like the K word the N word. They don't even know what we are, but they'll just say it like it just gets really ugly and it makes you not want to play a game so definitely against."</i>
11	<i>"Yeah, just a lot more banter. I guess it would be like making fun of each other, but it would be like in a very joking friendly way. So it wouldn't be."</i>

	<i>It doesn't come out like the fact that you're girl doesn't come up in gameplay. Or it just it comes out in a joking way"</i>
--	---

Table 10: Interview excerpts on gamers' perceptions of contextualised language.

4.2.1.3 Competitive Nature of Games

The competitive nature of games is the third category, competition in games happens inter-teams and intra-teams. Competitiveness is important in gaming, within intra-group favouritism and inter-group antagonism influencing the level of reporting (Munn, 2023). Competitive Nature of Game mind-map is a mind-map of the category of the competitive nature of games.

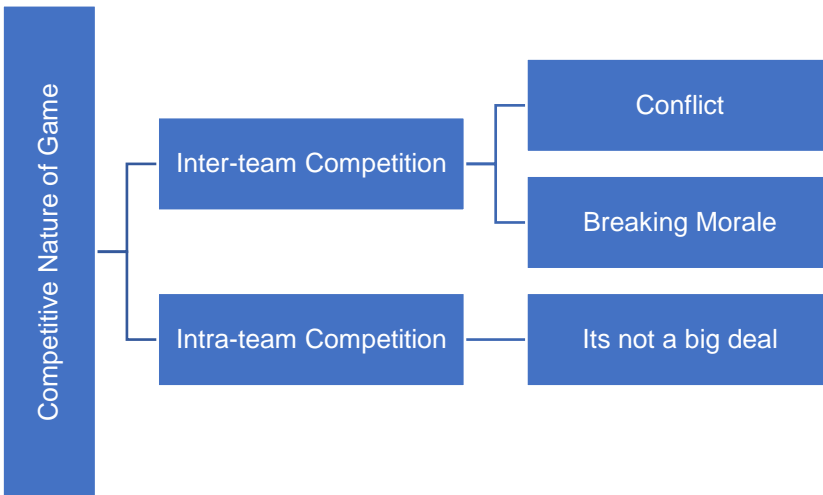


Figure 15: Competitive Nature of Game mind-map

The data has shown that MMOGs have both inter-team and intra-team competition. The differences between the two and how they each impact language in gaming will be discussed in detail. Participant 3 said:

“Yeah, yeah, definitely. Because when you're playing with your team, you guys must protect each other. That's number one. When you're a team like you work together, you guys need to work together so that you can win, you know, also communicate because Call of Duty is a gun game. We shoot, we kill each other and all those things. So if your teammates see someone running behind you as he's about to kill he's gonna tell you that there's someone behind you. You know? Else there's this guy somewhere is trying to kill you and all those things. So when you're playing obvious,

your teammate, you guys, you communicate with each other, you know, and all those things, but against the guys you're playing against? Yeah, it's a bit. Yeah. The, the communication is a bit different.” [Participant 3]

The data showed that pejorative language is used in both settings; however, it is meant to cause conflict and break morale inter-teams, but it is said not be a big deal intra-team. For example, when asked about pejorative language within a team, Participant 1 stated:

“I'm always... I don't want to hurt people and obviously some people in online matches can take something you say wrong and really hurt their feelings. So I just want to be careful for their emotions. So, when someone messes up in my team, I always try to maybe I try to be blunt but always a bit more considerate for the person, like try to help them in the process so they don't do it again.” [Participant 1]

When watching recordings from participant 1 and 5, players were seen frustrated and agitated when their teams were losing. In some instances some players would mumble to themselves or “speak under their breath”.

- **Inter-team Competition**

Participants in the study reported that there is competition that exists between players or teams during gameplay. It is the nature of the game. This is supported by Participant 2, who said:

“OK, so let's say I'm on a team where I don't know any of my teammates like I haven't built a previous relationship with any of my teammates and I'm against the team where I also don't have any relationships with the people on that team. So then it's everyone starts like on the default, but the default would be where I am favoured towards my own team and less so towards the other team just because of the pure nature of the competition. [Participant 2]

The data showed that there are increased chances of elevated tensions in games where players are paired randomly as they may have considerable competence disadvantages. An instance of this was explained by Participant 3:

*“In the game, yeah, I can swear sometimes even, like we're just playing. Maybe we're winning and we're winning comfortably. And then the other guys catch feelings because they don't want to lose. And even worse you're losing to a black guy. So they end up calling you K**** and all those things and you just can't keep quiet. You see. So those are the other things that they can make you swear sometimes, like you wanna prove a point. That. OK, we are the best team. There's nothing you can do and they come and you know they give you guys a tough match.” [Participant 3]*

Sometimes pejorative language is used between teams simply because they say their focus is on winning the game. This was supported by Participants 7 and 9, who said:

Participant 7:

“...Because I want to win, you know. I'm focused. I'm. I'm on my grind. We want to be the best in the game. So we have to be a bit more aggressive. Even the language we use, it's a bit more aggressive once we play because its very competitive and it's very challenging. So that's why we we're a bit more aggressive with it.” [Participant 7]

Participant 9:

“I think I'm definitely a lot more forceful considering like uh, I don't know. In it's like in in these games, especially the like competitive online ones. You know you you're out there to win at the end.” [Participant 9]

This is a typical example of competition between teams and the use of pejorative language resulting from one team losing to another. The player explains that the losing team will use pejorative language because they are losing, and this results in the winning team also acting the same.

Players also use pejorative language directed to the opposing team in order to demean them and break morale. Participant 8:

“Talking about intent of the language, it's it differs again in some games. It's actually a strategy to try and demean a person so that it breaks the morale and if it's a competitive game way winning in some sort of ranked mode matters.” [Participant 8]

Sometimes players use pejorative language towards the other team out of spite. Participant 3 stated:

*“In the game, yeah, I can swear sometimes even, like we're just playing. Maybe we're winning and we're winning comfortably. And then the other guys catch feelings because they don't want to lose. And even worse you're losing to a black guy. So they end up calling you K**** and all those things and you just can't keep quiet. You see. So those are the other things that they can make you swear sometimes, like you wanna prove a point...”* [Participant 3]

- **Intra-team Competition**

The data showed that competition within a team can happen when other team members are not performing up to standard resulting in the team losing the game. An example of an excerpt from Participant 8:

“...You find someone and they decide to not play the game as you would expect them to and as a result, maybe it costs you the game. So, for example, you lose the game because they decide to not play adequately and maybe throw the game by. effectively becoming one of the enemy while in your team by taking actions to bolster the enemies efforts as opposed to your own teams efforts.” [Participant 8]

Some players referred to the language they use intra-team during gaming as direct or firm. For example, Participant 1 said:

“I wouldn't be afraid to tell someone what they're doing wrong instead of like trying to help them in a more constructive way. I would maybe resort to being a bit more blunt so we can get the job done, yeah.” [Participant 1]

Participants 1 and 8 said that sometimes, a team member would want to give feedback to a person who is not performing well within the team, and at times they use pejorative language instead of giving constructive feedback.

Participant 1:

“...When a team member maybe makes a mistake, then it comes out in a yeah. It comes really out. So what's almost in, especially in games where you require much teamwork, there is a lot more toxicity. And yeah, and more cursing and everything because you have to rely more on each other and yeah” [Participant 1]

Participant 8:

“What I do care more about is if a person is trying to frame a performance in a certain light then I'll try and get little bit more decent feedback because people are more prone to using pejorative language than to give well-rounded feedback. [Participant 8]

When asked when and how bad language was used in the game Participant 5 explained:

“It's used in a situation where if the other another player is not pleased with something that another player did in the game or on their team, say maybe you're running in the game, you're just doing your thing and then someone knocks you out of the blue. You don't even know where the shots came from. The first thing you gonna scream “Hai, you're a hacker...” and then you start swearing them and all of that.

*“...there's times where you've gotten knocked and then maybe I'm 200 or 300 meters away from you and then you you're screaming, you're screaming at me on your mic like “yo come revive me. Come revive me now” and then I happen to not want to do that because you're a bit far from me and then people will rage because they will swear and call you a **noob**.” [Participant 5].*

The concept of pressure during the competition was also mentioned which leads to pejorative language use amongst team members. Participant 3 further explained:

“So when there is that adrenaline, the hype, the pressure, you know, and other teammates when they're not listening, when they just wanna do whatever that they wanna do. And yeah, things escalate very, very, very, very quickly.” [Participant 3]

Teams composed of strangers who believe they will never play together in the same team again, might amplify the negative effects of anonymity and the standardisation of hostility. This was also implied by Participant 2, who stated:

“...But if it so happens that I feel like some of my teammates are really not like bringing value to the team or they aren't doing their part It's an interesting occurrence, but It's almost like you would tend to look towards the other team for validation of your opinion of your own teammates, so you know you're still gonna lose because there's, I mean, there's absolutely no team coherence. If everyone's fighting against each other, but you almost make peace with that and you look for validation on the enemy team. Other times, they're like “Oh yea, that's pretty bad like you did well...” and then that's like another form where it's like this weird toxicity that ends up completely giving up in the game like it, it becomes a social argument rather than like the whole meaning of the game or the match, has completely gone lost.” [Participant 2]

Participant 7 also mentioned that pejorative language use amongst team members may also result from players wanting to be or sound more firm, aggressive, or passionate about the game:

*“...You also want to show the passion you have for the game. It's very boring to hear someone speak one tone. “Go left. Go right now...” [lazily] You need to be like “**go left. Go right. Look. Watch out. Hey, champ**”. You know, it adds to the game. It adds to the to the feel.” [Participant 7]*

4.2.1.4 Individual Characteristics

The next category is individual characteristics, it was shown in the data that participants' individual characteristics played a role in whether they use pejorative language during game play or not.

Figure 16 illustrates the concepts that form part of individual characteristics.

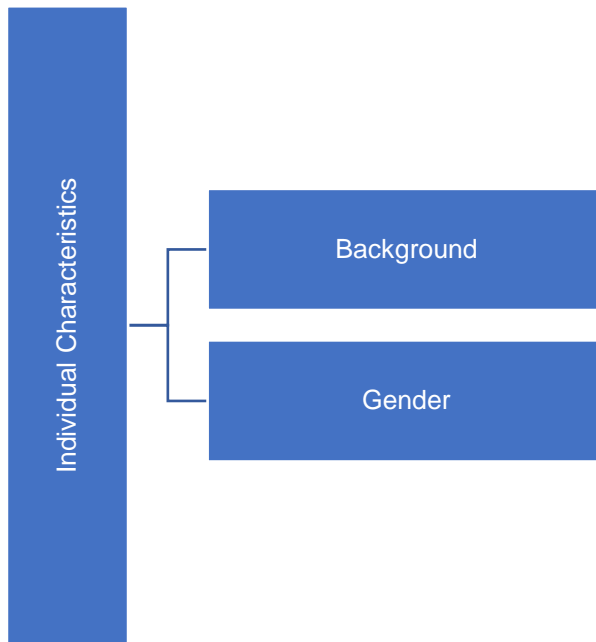


Figure 16: Individual Characteristics mind-map.

- **Background**

The data showed that player's upbringing or family background played a role in the type of language the use during gameplay. For example, when asked about how they account for the presence of pejorative language in MMOGs, Participant 6 said that they did not use pejorative language at all because of how they were raised at home. And the rules of the games had anything to do with them not engaging in the use of pejorative language the participant stated:

"I think its because of me like, naturally, because of me naturally, yeah. The way I grew up, I think and the way I grew up because at home like you know when you use that strong language. Hey. Yeah, yeah..." [Participant 6]

Therefore, the nature on the game does not change this fact for them.

- **Gender**

Gender also seems to play a role in the use of pejorative language use in MMOGs. They attribute this to gaming being a male dominated space. Participant 1 stated:

"UM. I would say most players you know the bad language is mostly swear words, but there is always the racist and gender remarks with it. Like for instance, when

playing CSGo, when you hear someone on the mic speaking and you hear it's a female, usually the people in the lobby just say, "oh, go back to the kitchen and make me a sandwich.." and stuff like that." [Participant 1]

Participant 5 also stated:

"Then it gets really bad. I won't lie, it's much more, especially for females. It gets really, really bad for females. And there's a lot of sexism that happens within the game where if a guy gets knocked up by a girl in the game he's gonna swear call her the B word and all of that gets really crazy, especially in South Africa. You know, females get picked on more than guys on the game. Females get picked on more than everyone. You get that, that typical, that one guy who just wants to take a swipe at a female. Maybe she didn't want to accept his advances in the game where he was giving her nice stuff and you don't want it.

Or maybe it's a female player that is known and then she knocks him. Yeah, she knocks him and then he gets salty over the fact that a female knocked him and he will say now you're a camper and your whore, you know, these really bad words. But yeah, they, they, they, they they really bully females on games, especially PUBG."
[Participant 5]

According to Participant 11, sometimes people would be mean and use pejorative language just because she is a girl and, at times, does not know how to play the game well. Other players then just get angry quickly and bring up her gender. However, when playing with male friends, they would bring up her gender, but in a joking way, and she does not take this seriously. This is what Participant 11 had to say:

"Yeah, just a lot more banter. I guess it would be like making fun of each other, but it would be like in a very joking friendly way. So it wouldn't be. It doesn't come out like the fact that you're girl doesn't come up in gameplay. Or it just it comes out in a joking way" [Participant 11]

4.2.1.5 Platform/Environment

The next category was based on the impact of the players' platform or environment, Figure 17. Players in this study reported that they experienced pejorative language differently

depending on the platform or medium of communication use. The platform or medium of communication in MMOGs is either chat or audio, and this plays a role on moderation within the game.

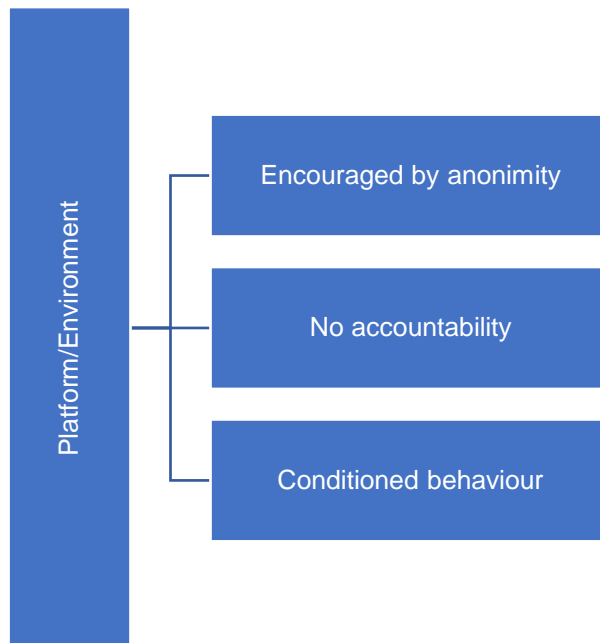


Figure 17: Platform/Environment mind map

Participant 4 reported different communication options in the servers they play in:

“OK, so the GT on GTA5 also has like the audio options, so everyone in the server is able to hear each other, so it's not like some sort of a chat. No, it's actually has a proximity chat. So if I'm right next to you, you can hear me. But if I'm far away from you, you cannot hear me in game.” [Participant 3]

Participant 5 mentioned that the moderating features of the games they play stop them from using pejorative language during gameplay:

“No, I would report I would report cause they would get banned. But even if I don't get any achievement, I would still report them because it would be nice for them to get banned. But if there was, if there was no banning in the game, I would definitely participate in swearing them back.” [Participant 5]

Participant 9 reported that there are in-game filters that you can turn on and off to filter out pejorative language:

“Yeah, I mean, luckily games also have, like, language filtering capabilities. So there's always like an explicit language filter so that you can turn on and off in most online games these days, you know where it will censor strong language. Generally, games also do pretty decently well at censoring like slurs or like racist, sexist terminology, but obviously it doesn't stop somebody from still typing it. You know and if you know, like if you have these filters off then you would see it you would know it.” [Participant 9]

When asked a follow-up question on whether the ban rules were the same via chat and audio. Participant 9 further explained:

“No Not audio. No, we haven't gotten there yet. Hopefully they intake, they integrate AI to do that at some point. So that's another thing is like I know when we play on Middle Eastern service for some of our games or even just any service people like to drop the N word a lot in chat once they figure out like you're a black person and they're like, they'll type it out in chat. And then obviously if if you have your language filter off, you'll see the full word or they'll say it in voice chat.” [Participant 9]

Participant 12 also said:

“I've been very lucky to not have too many toxic people, but there has every now and again being someone who just wants to cause trouble and they start swearing in chat and it is obviously, uhm, censored, but you can see that they are trying to swear.” [Participant 12]

According to Participant 4, moderation in MMOGs also depends on the type of game played:

“I think mostly well in GTA because in GTA5 the servers usually there's the moderators who are paying attention to what people to people's interactions and stuff. So in GTA5, five that's not actually a problem, but maybe when you play some games like Call of Duty, if you play online, that's where you get the problems, cause no one is listening, no one is able to check what the other people are saying.” [Participant 4]

- **Encouraged by Anonymity**

There were several instances during the interviews where participants spoke about anonymity and its role in pejorative language use in gaming. Anonymity seems to be a component that allows most players to do online what they wouldn't normally do in real life. Some views regarding anonymity in gaming were:

Participant 6: "...they know they can get away with it without any consequences..."

Participant 10:

"You can't control the people that you're you're you're online with and when they're online, they feel really safe behind anonymity, like we've had people call like like people in our team, like the K word the N word. They don't even know what we are, but they'll just say it like it just gets really ugly and it makes you not want to play a game so definitely against." [Participant 10]

- **Conditioned Behaviour**

It was also observed the pejorative language use in MMOGs could be conditioned behaviour. This is behaviour that is learned and voluntary and can be modified by players whenever they want. Some players said that they use pejorative language depending on who they play with. Participant 6 also said that they used pejorative language when playing in their residence room at school but when they are at home, they are more reserved. This shows that players are able to switch off the use of pejorative language under some circumstances.

Participant 6 also mentioned that they don't use pejorative language because of their background:

"The way I grew up, I think and the way I grew up because at home like you know when you use that strong language. Hey. Yeah, yeah..." [Participant 6]

However, when asked if they would use it if they were from a different background the participant said that maybe they would but also feared what their family would say when playing at home. But then also said that if they were to play at school, away from family, they might consider engaging if it wasn't hurtful:

“I probably, yeah, maybe I'd enjoy it, but yeah, no. The background thing, with the way I was raised, and I'm home, you imagine I'm using these those words at night around 3:00 AM. Obviously they are gonna wake up and be like, “hey, what's going on?” cause I'm using headsets to play. Then they'll chase me away. Then I don't want that...

Hey, I don't know, I don't know about that. I don't know. Maybe I'll be free and yeah. But then no, I will never use that cause it's hurtful.” [Participant 6]

An interesting comment in terms of moderation was from Participant 3, who mentioned some sort of self-moderation with players who were so good in the game that they even received sponsorships. The participant explained that these players make a living out of playing games and their language usually changes because they are in the public eye, and they are monitored

Participant 3:

“It (the language used) will definitely change. Because by then you are being monitored. Like for example, Coca-Cola might want to sponsor you or Mercedes-Benz or whoever you know so. In a way, you, you, you, you, you fall inside the professional category and then you know that when you are in that circle you need to watch what you do. Watch what you say, all those things. So even when people swear at you during the game, you won't retaliate...

They're like people get banned, we call it banning where someone was popular, making money like filthy rich. And they just said something, something very small. And it kinda offend the community and the community just raised it and then someone will get banned. Someone will lose sponsorship. Someone will you know, at that at that point some they realise that “Oh, shit I made a mistake” Then they'll make a public announcement that guys on Twitter or whatever. That uhhhm on this day, I say this and this and this. I'm from the bottom of my heart. I'm sorry. I didn't mean to, you know, throw racist, racist remarks, or say this or say this or say this, but when you are at that professional level, you really need to watch like everything that you do because it it's either make or break.” [Participant 3]

- **No Accountability**

Some of the participants said that other players tend to show their true selves when they are behind a screen and there is no accountability. This was supported by Participant 1, who states:

“Well, some games do ban you, like chat ban you. Maybe if you like, talk offensively towards each other because one of my friends were permanently banned, was permanently banned from League of Legends because someone trash talked him the game and he just wrote ‘woman brain’, like female brain and he got banned permanently because he said ‘women brain’. So it is a sort of accountability.”
[Participant 1]

Participant 2 stated:

“So I do think obviously that it's not like, yeah, so let's say, so inherently, it's definitely not a positive thing because it['s] evokes negative emotions and it allows people or it is a way for people to be very abusive towards other people with, I would say very little accountability, if any at all.” [Participant 2]

The data shows that there is accountability only when players are being monitored or when there are consequences for their actions.

An interview excerpt from Participant 1 states:

“There, there's no way to monitor the audio no, like only if you put something in chat that's majorly offensive according to the game, then there is accountability, but not just through mic or something.” [Participant 1]

Below are some of the participants' interview excerpts on reporting pejorative language in MMOGs which may result in some sort of accountability:

*“So if someone says ‘v****k’, they might get a warning. Just a warning. Like, “hey, watch your words. Someone reported you because you said this and this and this”, but if someone, says ‘k****r’ and you report them, they might get banned like you get*

*me. If someone says 'p**s', 'p**s' it's like people they really don't, they don't really take it that deep, you know, so it depends. It depends on the language that was used like it like that language depends, like what do you call it, it determines the severity of the punishment."* [Participant 3]

"Or maybe you have an argument about something, and you can contact the moderators and then they'll know what to do. Sometimes the other person who might get banned or just excluded from the server forever." [Participant 4]

"What I'd rather do is if you swear at me or you hurt me in the game, I will report you. There's better rewards in reporting someone when they do something to you, cause the game itself rewards people that report bad players. So there's something in for you by reporting a player that does something bad to you in the game or says a bad word to you in the game. You're able to like, "Yo, this person has sworn at me. They've said something racist or sexist" or whatever, and there's a possibility that the player can get banned." [Participant 5]

*"But it requires something extra, namely for example player reporting a culprit being a repeat offender. So some games would, for example, then take action which exists outside of the realm of the game. It's it's more than the game, it's a totally valid strategy to do ramming. But as for whether or not it's moral in the sense of what's agreeable to others, it's generally seen as negative. So there wouldn't be any moderation in terms of the language that people use. If it's got to do, if it's got to do with language and not gameplay, then language moderation, depending on the game, either it goes from very conservative in that, if you use the word n****r for the country, you would get banned from the game for 15 years."* [Participant 8]

"But then you can like report the play et cetera, et cetera. So there are structures in place I guess to protect you to protect you online. Just about knowing how to use them to advantage. But then you're able to report players after the games and say like listen, there was like some racist commentary done and then what most game developers will do is they'll have someone go through the chat logs, either voice chat or takes chat to figure out if the person really did like offend and they'll take action against it accordingly." [Participant 9]

4.2.1.6 Actual Language Behaviour

The category of actual language behaviour reemerged countless times during the interviews. The categories are shown in Figure 18 which is the actual language behaviour mind-map.

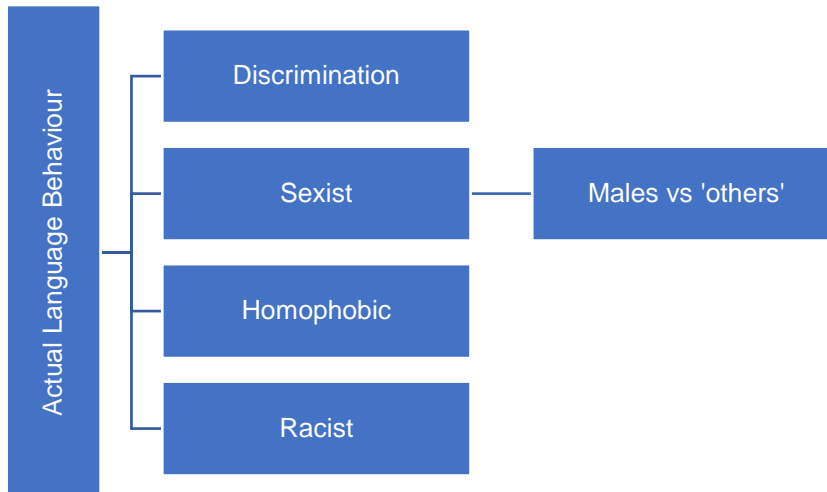


Figure 18: Actual Language Behaviour concepts mind map

The data showed that the actual language used in MMOGs, although normalised, is pejorative.

Participants stated that the language used in MMOGs is very different from their everyday language and have described the actual language in MMOGs as “vulgar”, “bad”, “offensive”, etc. Participant 7 stated:

“...Bad language. Oh, that one is a tough one because the young kids will be swearing a lot. And it has come from us who are older. So, I don't know. We do swear we do swear it's a very difficult, difficult one. I don't think it's a good thing cause the young kids take into reality and they use it against their peers, their teacher. So, I think that could be better.” [Participant 7]

When asked if pejorative language was often used by players, participant 5 agreed and attributed the amount of pejorative language in MMOGs to stress. He explained that during

COVID people were stressed so the swearing then was ‘off the chain’ and it is better now. This is what the participant said:

“It happens often, but it's I think now it's less frequent than it was in COVID, in COVID is off the chain. Yeah. Well, you can tell the people that were playing were stressed out. You could really tell the people that were playing were stressed out at the time, there was a lot of swearing. The first week I played, I played some Europeans, and they were just swearing from the get-go, the match hadn't even started yet and they were already swearing. Yeah, just cause my flag was South African.” [Participant 5]

Table 11 details the terms use by this study’s participants to describe the actual language used in MMOGs.

Participants	How players describe the actual language used in MMOGs
1, 3, 5, 7, 9, 11	A lot of swearing, cursing, vulgar language
1, 2	Blunt, Direct
1	Teasing
2	Comes across as abusive
4	Homophobic
1, 3, 4, 6, 7, 8, 10, 11	Racist
1, 5, 9, 10, 11	Sexist, Misogynistic
6, 9, 11	Bad, Harmful, Offensive, toxic
5, 7, 9	Rage, Aggressive, Disruptive, Forceful, Commanding
9	Crass, Targeted

Table 11: How players describe the actual language used in MMOGs

An exchange that happened during an observation of participant 3’s game play was as follows:

Opponent: *“I pray you and your family dies of cancer.”*

Participant 3: *“Yeah, you too. F****k...”*

Participant 3 seemed agitated before responding to his opponent but when asked about his thoughts and feelings regarding this conversation Participant 3 responded:

“Like he, he literally said that he so if you're not taking it that serious, then it's fine. It's chilled, but if you are really sensitive person, you might not even play Call of Duty again. So I'm saying from my side, it's not that deep like now it's not that deep.”
[Participant 3]

- **Discrimination**

It was evident that although discrimination is a common occurrence, it was deemed toxic and is frowned upon by many. Participant 1 explained that in some games players are discriminated and profiled against because of their race.

“And the racist thing is maybe like they believe, uh, for instance, people of colour can't play League of Legends or something like that. And then they just go on about that.” [Participant 1]

Data shows that players can be targeted and discriminated against because of factors such as their ethnicity, race, etc. Participant 11 is quoted:

“I think it's slurs like N word or the F word or yeah, just like targeting, I don't know like minority groups or like using sexuality or race or unknown ethnicity to kind of target someone.” [Participant 11]

Many of the players have positioned themselves as adversaries of this toxicity when it is deemed to be overly antagonistic since they respect the social and communal features of online gaming.

The research also found that some cultures are not progressive which leads them to use discriminatory pejorative language. An interview excerpt from Participant 10:

“I play on the Middle Eastern servers, OK in middle in the middle East they have very, very crazy views that they're not really progressive. Whether you're a woman or whether you're gay or you're a person of color sometimes they're very like, they they have very like Laws that against, like those minorities, right? So for example, in the Middle Eastern culture, being gay is like the worst thing you could possibly do or

something whatever. When I use a cosmetic that someone can see is representing LGBTQ I get attacked for it.” [Participant 10]

- **Sexist**

This could explain why some players have described the language used in MMOGs as sexist because gaming has always been male dominated. Participant 1 further supported this by saying:

“Like for instance, when playing CS-Go, when you hear someone on the mic speaking and you hear it's a female, usually the people in the lobby just say, “oh, go back to the kitchen and make me a sandwich...” and stuff like that.” [Participant 1]

Participant 5 also explained:

“And there's a lot of sexism that happens within the game where if a guy gets knocked up by a girl in the game he's gonna swear call her the B word and all of that gets really crazy, especially in South Africa.”

“Maybe the person has seven kills, and you just have one that's like, uh, you're a noob. Then it gets really bad. I won't lie, it's much more, especially for females. It gets really, really bad for females.” [Participant 5]

The term noob is a gaming slang word for newbie, it denotes incompetence in gaming. It's a general pejorative word that can be used to address criticism, point out poor gaming skills, engage in trash talk, or just to be rude (Blackburn & Kwak, 2014).

Participant 10 described the sexism in pejorative language as a gateway to bad behaviour. This, the participant explains, is due to the fact that some players may say things in a joking manner even though they mean them, or they affect the player on the receiving end. The participant stated:

“And I think there is a line like when it comes to sexism eventually, like someone will say something that's really disgusting. Like it could be very sexual or like it could go that far right. And and it becomes, it doesn't become funny. And I think like rub, like, brushing things. Awful, entertaining, even, like the little things that might be slightly

funny, like ohh make me a sandwich haha. I feel like that leads to bad behavior. I feel like it leads to like. It's almost like a gateway towards behaviour.” [Participant 10]

- **Homophobic**

Participants stated that the actual language used during gameplay can sometimes be homophobic. An interview excerpt from Participant 4:

“...But if they start going to the other side and maybe racial slurs and homophobic and the sexual part it's like “Is there's literally no reason to be talking like that?”. [Participant 4]

Participant 10: *“I don't like to use it. I really don't. I think gaming like I love gaming and I feel like any use of like pejorative language will like mean meanness is just makes it ruins it for everyone. Like, like, so I like to, I prefer it if everyone was just nice and it was cool and easy, but it's not like that.” [Participant 10]*

Participant 10:

“A lot of games like show allyship through in game cosmetics. So a banner frame or a band of frame that can be seen by everyone that you're in the lobby with or a Indian cosmetic that's promoting like pride, for example. A lot of games do that to show allyship. I feel like it's just them capitalizing on something to make money, but they'll show allyship through those cosmetics. And when I use those cosmetics because I want to use those cosmetics because I'm proud and I want, I want to, like, I want to, I want to use them right. I want to represent my community. And then when people see it, that's when they start being really mean.” [Participant 10]

Participant 4 stated:

“Well, I mean other servers because they're 18 and up, swearing is allowed. Well, you can use that in game, but not just the other languages like homophobic slurs and sexual slurs or racial slurs, so we can only maybe use the casual language of just swearing.” [Participant 4]

- **Racist**

The actual language use in MMOGs is also described as racist. When asked how team member interaction can be characterised during gameplay, Participant 6 said:

"Its harmful language most of the time, most of the time it's harmful language...My views, Ohh. My view is it's very bad and it has to stop because sometimes before I play Call of Duty, I'm thinking now I'm going to face racism number one, the game is hard itself, so you're facing two things before, so at least if like the language was good maybe it'll be helpful."

"Yoh the racist comments there, because I play, I put my headset so that we can communicate with each other now. So there the racist comments are very harsh if you're weak, I think you're just gonna switch off the game and just leave. But then, hey, if you focus on the comments, you won't enjoy the game." [Participant 6]

Participant 3 mentioned that the presence of pejorative language in MMOGs does not bother them except for when people become racist. Participant 3:

"It doesn't really bother me unless someone decides to be a racist. Unless someone decides to, you know call out 'nigga' here and there uhm yeah, that's when things can get escalated." [Participant 3]

Participant 3, 4 and 10 were against the use of racist slurs during gaming. They explained:

"" [Participant 3]

"And some people will just they just make weird noises. Maybe especially you find like 5 year olds making sex noises online, or just like they just using racial slurs, and that's not something I want to be involved in..."

"Even if maybe there is like a probable cause, but you cannot in any circumstances, just use sexual languages or you can use racial slurs." [Participant 4]

"It's like why people racist like and when is it OK to be racist? It's like racist racism in real life. Like, if you meet a racist, they might not be overtly racist to you because they know it's bad. If they say anything to you like the k-word, they can go to jail. No one on the Internet is like going to be racist for fun you know. Yeah, especially because people don't know you. So there's, like no reason to hide so people can give

themselves. Yeah, like, like how you treat a stranger is a good reflection of like who you are.” [Participant 10]

Participant 1 pointed out that in most cases, the pejorative language used is predominantly racist.

“Well, I mean other servers because they're 18 and up, swearing is allowed. Well, you can use that in game, but not just the other languages like homophobic slurs and sexual slurs or racial slurs, so we can only maybe use the casual language of just swearing.” [Participant 1]

Some players play with people of the same race because of the racism they encounter. This is backed up by participant 3 who said:

“Yeah, yeah, online, the online community in South Africa, it's mostly dominated by white people, Afrikaans, to be precise. So when you are black in that thing, you experience a lot of racism. I mean, like, a lot of racism. So that's why we have we have, like, our own community. So that if you want to play. Other guys are available and then we just open and play.” [Participant 3]

Table 12 shows examples of the pejorative language used in MMOGs.

Participants	Actual words used
1	“Woman brain”
3	“P**s”, “ma se p**s” “v*****k” (English: F*ck off)
5	“B*tch”
6, 10	“K*ffir”/ “K-word”
1, 6, 8, 9, 10, 11	“N*gger”/ “N-word”
3, 4, 11	“F*ck”/ “F-word”, “Sh*t”
Observations and Recordings Analysis	
Words used	Examples in context
“K*k” (Afrikaans for sh*t) Sh*t	“Ek blok die k*k uit hierdie ding uit...” – (English: “I block the sh*t out of this thing”)

	“ <i>Hier kom k*k...</i> ” – (English: “Sh*t is coming our way...”)
“ <i>F*k</i> ” (Afrikaans for f*ck) “ <i>F*kken</i> ” (Afrikaans for f*ckin)	“ <i>Ek gaan hom f*kken...</i> ” – (English: “I am going to f*ckin...”)
“ <i>K*nt</i> ” (Afrikaans for c*nt)	“ <i>Hierdie ou is ‘n k*nt, f*k hom, hou hom hostage</i> ” – (English: “This guy is a c*nt, f*ck him, keep him hostage”) “ <i>Hy is ‘n k*nt ek hou nie van hom nie</i> ” – (English: “He is a c*nt, I do not like him”)

Table 12: Examples of pejorative language used.

4.2.1.7 Outcome of pejorative language use

The last category that emerged was the category of outcome of pejorative language use. It is important to understand the outcome of the use of pejorative language in MMOGs. Concepts that formulate this category are the formulation of smaller groups, remaining silent, choice of medium, and retaliation. These are illustrated in Figure 19.

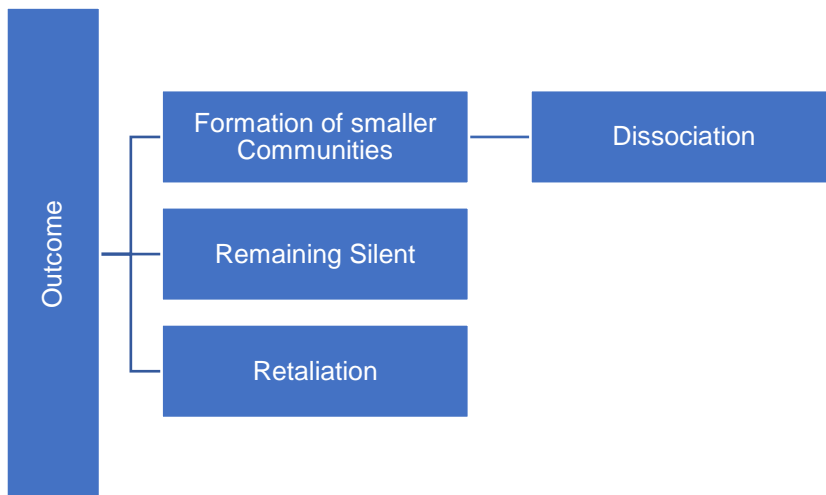


Figure 19: Outcome mind-map.

- **Formation Of Smaller Communities – Dissociation**

The concept of dissociation was picked up during the data gathering of this study. Participants described these using terms like “forming smaller groups” or “only playing with

friends”. This was their way of removing themselves from the toxic environment of gaming which is because of the use of pejorative language during gameplay. Participant 6 explained:

“I prefer playing with friends, with strangers it's very harsh.” [Participant 6]

Participant 10: “I only play with my friends if there's other people. If I want, I'll never play online alone. Because I get really like because people can be really mean like like it happens so often that I just rather not play on my own I'd rather play online games with my friends. But if I have no friends that are playing online. I'll go into a single player game that I that I love to play and just play by myself. [Participant 10]

Table 13 is a presentation of the interview excerpts related to dissociation.

Participant	Interview excerpts
3	<i>“So, when you are black in that thing, you experience a lot of racism. I mean, like, a lot of racism. So that's why we have we have, like, our own community. So that if you want to play. Other guys are available and then we just open and play.”</i>
4	<i>“...but if they start going to the other side and maybe racial slurs and homophobic and the sexual part it's like “Is there's literally no reason to be talking like that?” So, I actually do not like it. I will just not continue. I will just play offline games.”</i>
6	<i>“I prefer with friends, with strangers it's very harsh.”</i> <i>“I've never chatted with them. Even if we were chatting around, I don't think I'd be chatting with them, I'll be just quiet because they're not in my team, I'd rather talk with people who are in my team.”</i>
8	<i>“... I don't strictly blacklist them, but if they are intentionally causing grief, I see very little reason why I would want to play with them, be it in a casual mode or in a ranked mode.”</i>
9	<i>“Oh, yeah. Yeah. So, I know personally from people from, like, other women that I've spoken to and not only women, but people like from, for example, like within the LGBTQI community who actively stop playing games or certain games because of bad experiences they've had in those games, and like for anybody, it doesn't care how much they enjoy the game, how much they love it. It's just like it takes that really one bad experience or like really persistent series of bad experiences for them to turn around and say it's not worth my time anymore cause it's like at the end of the day it does hurt, and it does have an effect on people.”</i>

10	<p><i>“I only play with my friends if there's other people. If I want, I'll never play online alone. Because I get really like because people can be really mean like like it happens so often that I just rather not play on my own I'd rather play online games with my friends. But if I have no friends that are playing online. I'll go into a single player game that I that I love to play and just play by myself.”</i></p>
12	<p><i>“It was the same for me. Because especially in that other game that I had, there is a lot of people that are just. Trying to cause trouble and trying to stop you from playing and whenever you find a really nice person, you almost just. Hold on to them and you actually. Unknowingly form a UM group together”</i></p>

Table 13: Interview excerpts on dissociation

The data also shows that players tend to shy away from playing with players who intentionally break the rules of the game thus ruining the game for everyone. To support this, Participant 8 explained:

“If I see someone struggling, I'll give them feedback if they are infuriated for whatever reason and or wanting to not cooperate, I'll try and offer them support, but otherwise you can't always help people, and some people are just stuck in their ways, unfortunately. And you just let them match in, then move on. If the game allows for matchmaking, blacklisting, maybe that's an option. So, imagine for example, you find someone, and they decide to not play the game as you would expect them to and as a result, maybe it costs you the game. So, for example, you lose the game because they decide to not play adequately and maybe throw the game by effectively becoming one of the enemies while in your team by taking actions to bolster the enemies efforts as opposed to your own teams efforts. Then matchmaking blacklisting would allow you to say, OK, this person I do not want to queue with in the future or have in my matches and you to survive them from being able to be match made with you in games...I'll offer some sort of encouragement or words of support, and if it's a case that cannot be helped, I don't strictly blacklist them, but if they are intentionally causing grief I see very little reason why I would want to play with them, be it in a casual mode or in a ranked mode.” [Participant 8]

Participant 10 also corroborated this by saying:

“...Not me. I don't take anything lightly. It's not even directed at me. If it's someone on my team being like that to someone else, I get really mad about it, it's really upsetting for me.” [Participant 10]

- **Remaining Silent**

Participants reported resorting to ignoring the comments made in the games they play and just focusing on the game for enjoyment. Participant 2 stated:

“Honestly, when I play the game like I'll see someone say something horrendous towards me and then I'll just think like OK, whatever like, I don't care dude.”
[Participant 2]

The participant said that the reason for this could be because they have faced a lot of abuse in the past, so they don't really take the things said in games to heart.

Participant 9 supported this by stating:

“I've I take measures myself to make sure that like I I I can decrease the amount of the stuff that I that I see, and I'm exposed to. So, for example, I like in one of the games I play League of Legends, you have the option to turn your chat off entirely. Like you can mute everybody so that they still able to talk amongst each other, but you won't get any of those notifications, so that's like something I do. And that's just because it's a very it's a particularly toxic game and like my enjoyment of the game decreased as a result and I didn't and I didn't like that anymore. So yeah.” [Participant 9]

It was found that some participants say that they would rather keep quiet during a game because of the level of racism they've experienced. They only interact when playing with friends. An excerpt from Participant 6's interview:

“I prefer with friends, with strangers it's very harsh...I've never chatted with them. Even if we were chatting around, I don't think I'd be chatting with them, I'll be just quiet because they're not in my team, I'd rather talk with people who are in my team.”
[Participant 6]

Participant 8 also further stated:

“If there's someone that's annoyed and they decide to be quite outspoken to insult people then I just mentally ignore it, so not everything in chat is important.”

[Participant 8]

Participants 4 said:

“I never interact with people I just mute my mic and then maybe have my audio on so I can hear some other people, but if they're making noise, I can just mute them all.”

[Participant4].

The participant further explained their reason for this as:

Because I don't know. Maybe it's just that I think I'm too nervous or they're just gonna ask a lot of questions. And some people will just they just make weird noises. Maybe especially you find like five-year-olds making sex noises online, or just like they just using racial slurs, and that's not something I want to be involved in. [Participant 4]

- **Retaliation**

The data for this study showed that the use of pejorative language is a common occurrence in MMOGs, however, some participants said that they do not take part in pejorative language during gameplay. They do however say that they retaliate by also using pejorative language. Below is an example of this situation from Participants 3, 4 and 5:

Participant 3:

*“...So they end up calling you K**** and all those things and you just can't keep quiet. You see. So those are the other things that they can make you swear sometimes, like you wanna prove a point.” [Participant 3]*

Participant 4:

“So it's role-playing, so you. I mean, if someone's not being nice to you, you're also not being nice, so you're not going to be nice to them. But in anyway, you have to

keep it respectable and not use other like strong language and all of that? Well, I mean other servers because they're 18 and up, swearing is allowed. Well, you can use that in game, but not just the other languages like homophobic slurs and sexual slurs or racial slurs, so we can only maybe use the casual language of just swearing. Maybe the F word or the S word, things like that. So if someone is just being mean to me, I can be mean to them.” [Participant 4]

Participant 5:

“I comply. Generally, I'm a nice playing the game, but if you wanna do a shitty thing to me, it's really hard to get me to do something bad in the game, but if you do it first to me, I will want to retaliate somehow.” [Participant 5]

4.2.2 SUMMARY

The findings above illustrate the categories that have emerged from data. To identify the fundamental pattern, the initial category that was noteworthy was the type of game category. The other categories that were identified were game language, competitive nature of games, individual characteristics, actual language, platform/environment, and outcome. Understanding how these constructs influence the type of language used in gaming is an important aspect of this study.

The next chapter discusses these findings.

CHAPTER 5: DISCUSSION

“All’s fair in love and war.”

5.1 INTRODUCTION

This chapter discusses the findings of this study and outlines the researcher’s understanding of the interview data, the constructs that emerged from the data and how they related to each other. The stressor-strain-outcome (SSO) model is used to explain and expand on these relationships.

Figure 20 is the outline of Chapter 5.

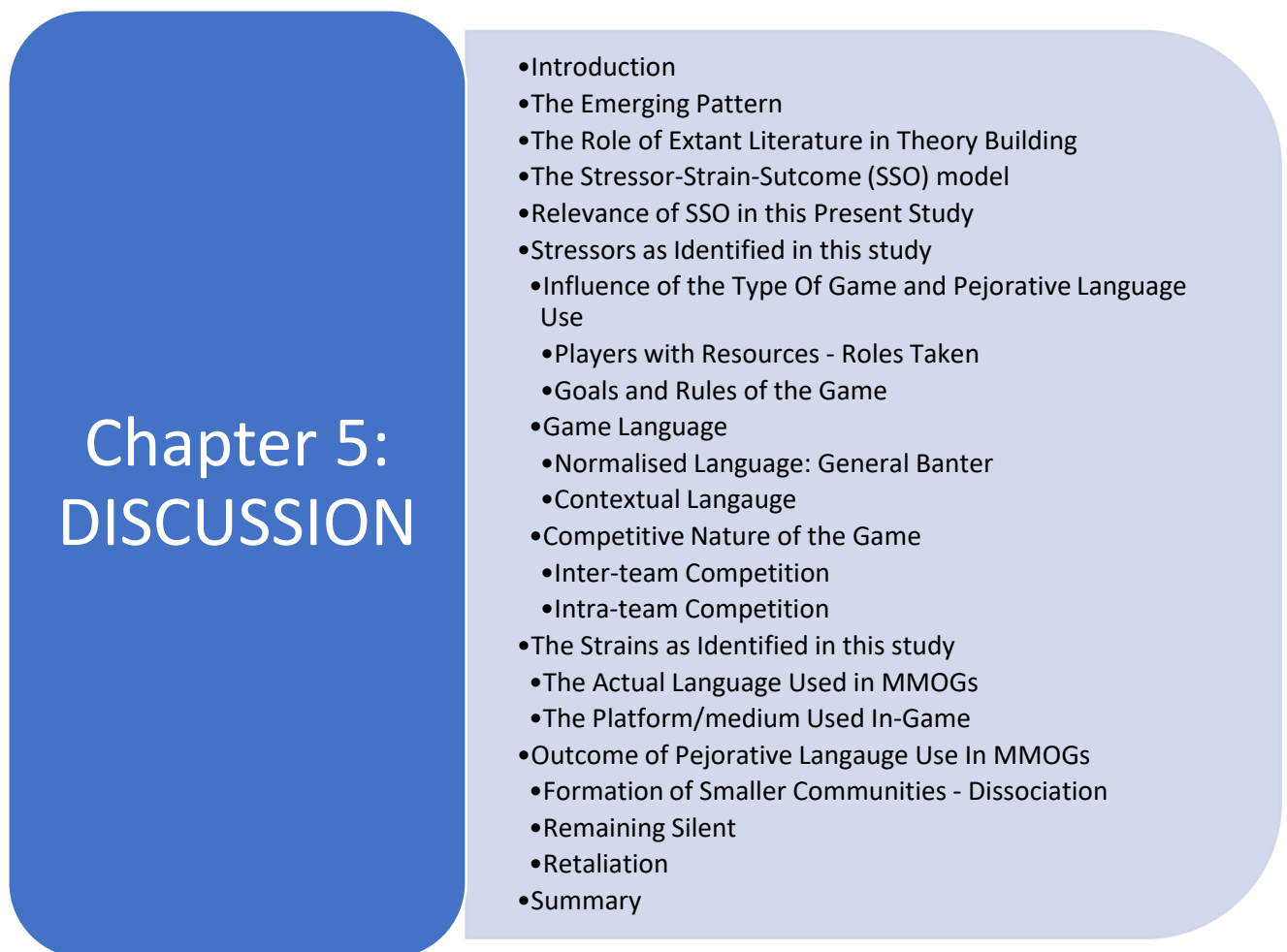


Figure 20: Outline of Chapter 5.

5.2 THE EMERGING PATTERN

The ability to make changes while collecting data is a crucial component of the theory-building process. These modifications may involve adding examples to explore certain patterns that arise, changing the data gathering tools, or adding data sources in certain circumstances (Cho & Lee, 2014; Urquhart, 2007; Wiesche et al., 2017). Further collection and analysis of data were prompted by insights from the initial data collection cycle and analysis. This entails selecting participants with varying views and experiences on the subject matter to investigate the subject's multiple facets. Following the initial five (5) interviews, the emerging pattern of pejorative language use started becoming apparent. The researcher could then return to some of the participants with follow-up questions, listen to more recordings and identify more participants to interview, who would aid in answering the research question.

The second constant comparative technique principle is to stop coding and write down your thoughts in a memo (Glaser & Strauss, 1967; Lehmann, 2001). Memos document the evolution of theory; therefore, few memos result in thin theory. Memos on the method document conflicts with the method and aid in writing the section on method. But the most significant point is that theoretical memos are written about concepts and their (possible) connections to other concepts (Lehmann, 2001). During the interviews, observations and listening to recording, the researcher wrote memos detailing her perspectives on significant conversations and situations. She reviewed and transcribed the material as soon as she had enough to read. Some of the memos were revisited and expanded upon during the different phases of data collection and analysis. This resulted in a total of approximately 60 memos ranging from scribbled noted to more detailed memos. Table 14 is a sample memo on normalised language which is a concept of the core category of game language.

Normalised language – Describes the nature and norms of the language used in the game.

Gamers note that pejorative language use is part of the game, some even state that it's a representation of good team spirit. BUT it all depends on how a message is conveyed and by whom. Pejorative language as an outcome of game environment creates stresses, as seen in the data.

The major concern for pejorative language use is that it is due to the competitiveness of the game, which lead to tension, frustration, stress, etc.

Participants 1, 5 and 6 all noted that they were used to these kinds of conversations because it was normal. But if it is being directed to bully someone, then it is a bit of a problem. Participants also stated that the pejorative language use is not necessarily due to conflict with each other but rather tension, stress or frustration.

Observation on the type of language used in stressful/cutthroat/competitive environments

The intense competitiveness and high-pressure environment that characterise gaming is one factor contributing to stress in MMOGs. Players are always under pressure to be effective and productive because of this. Gaming conditions may be quite competitive, and each participant must exert themselves to the fullest.

Table 14: Memo on normalised language.

The memo in Table 14 shows that pejorative language use forms part of the game language. An interesting observation made during observations and while listening and watching previous game recordings is that although players mention that sometimes the language in gaming hurts, recordings and observation shows that there are words and phrases that are acceptable (e.g. "F*kin", "d*ckhead", etc.). This gives the impression that pejorative language is part of how they interact and that no one takes it personally. This gives the impression of the normality of pejorative language use during MMOGs. It contributes to the overall unhealthy competition and banter as well as the evolving/normative perceptions of gaming/players. It is also noted that when gamers communicate when playing MMOGs, they usually use vocabulary exclusive to gaming. Like other social communities, gamers have established their own language and social network, resulting in the creation of a unique jargon.

The initial concepts that were simplified were then further broadened by constant comparison. The researcher noticed the recurrent theme of game language at this point in the investigation. In social games, participants are familiar with, for instance, the language and memes with game-related origins (Hsu, 2020). The distinct language and linguistic customs that emerge from the gaming world include linguistic allusions to games and leetspeak, a system of shorthand for efficient communication in video games. For instance, the signoff for a game is frequently “gg” for good game (Vdovichenko, 2015). The memos correlated to the interviews and were particularly concerned with what the participant was conveying regarding their feelings over the usage of pejorative language during gaming. The memos also looked at themes that came through in the participants' words. These included concepts such as the effects of normalised language, competitive language, not being able to express themselves (not knowing the correct English term), etc. The interviews used in this method led to more questions. In one such investigation, for instance, the researcher examined whether pejorative language was used out of habit. This approach led to the creation of categories, helped define how those categories differed, and provided documentation on how those categories came to be.

Table 15 is a memo on the category of game language, which stemmed from further investigation and expansion of the concept of normalised language in MMOGs.

Game Language – Describes the formation and/or use of game specific language/jargon in MMOGs.

Gamers note that the gaming society has specific language/jargon used during gameplay.

Participant 5: You know there's an entire language that they spoke within games that people understand. Participant 2 also stated that it was gaming language which makes it easy for them to be direct. There are multiple ways to modify words to make them “gamely”, as indicated by Participant 9.

What does the literature say about game language in social games?

Since language is a social act, social communities often invent new terms or alter old ones that are used in everyday speech.

Table 15: Memo on Game Language.

5.3 THE ROLE OF EXTANT LITERATURE IN THEORY BUILDING

Phasing is the most effective way to include literature into a GT study. Thus, the first stage entails a preliminary, flexible literature evaluation meant to aid the researcher in identifying the research problem (Birks et al., 2013; Davids, 2017; Dey, 1999; Fernandez, 2003). Urquhart (2007) advice on reviewing the initial flexible literature study again following theory development. An extra round of literature review based on the emergent theory is required in the second phase. The researcher therefore followed this approach in this study, the relevance of this review is determined by comparing it to the newly developed theory. At this stage, it's critical for GTM researchers to be theoretically sensitive in terms of identifying the appropriate and beneficial literature (Urquhart & Fernández, 2013). It was during this phase where the Stressor-Strain-Outcome (SSO) model was discovered. The stressor-strain-outcome (SSO) model, first coined by (Koeske & Koeske, 1993) can be used to assess how different stressors affect people and whether they have a detrimental effect on them. SSO's efficacy in comprehending stress-related behaviours has been extensively researched. Pejorative language is an outcome of game environment stresses. The researcher adopted the SSO model to explain and expand on the relationships between the categories that emerged. The SSO model will be discussed in detail in sections to follow.

Additionally, the researcher needs to integrate emergent theory with other extant theories in the area and talk about how emergent theory support, expand upon or challenge extant beliefs. This phase makes it easier to integrate theories and contributes to the development of the emerging theory. Analytic generalisability of this emerging theory is enhanced by comparison with other theories that have been published in the literature.

Various techniques for leveraging the existing literature were employed while the theoretical model was developed. This will help in understanding the concepts explaining perceptions of gamers regarding the use of pejorative language use in MMOGs in the upcoming chapters. In the chapters to follow, where the theoretical conclusions are offered, this method of employing existing literature to gain an understanding of the grounded concepts produced from data gathered was adopted. As a lens for the categories created by the grounding process, GTM allows the usage of already published literature.

5.4 THE STRESSOR-STRAIN-OUTCOME (SSO) MODEL

The stressor-strain-outcome (SSO) model, first coined by Koeske and Koeske (1993) can be used to assess how different stressors affect people and whether they have a detrimental effect on them. SSO's efficacy in comprehending stress-related behaviours has been extensively researched. Three elements make this widely recognised SSO framework: stressors, strains, and outcomes. Psychological strain, or simply emotional reactions to stress, such as anxiety, desperation or exhaustion, is a common occurrence among stressed persons (Singh, Gupta, Jasial, & Mahajan, 2023; Zheng & Ling, 2021). This ultimately has a detrimental effect on the way someone performs or how productive they are (Teng, Liu, & Luo, 2022). Any emotional stimulant, including those negative outcomes and technological excess, is referred to as a stressor (Cao, Masood, Luqman, & Ali, 2018; Koeske & Koeske, 1993). Figure 21 illustrates the SSO framework adapted from Kim, Park and Choi (2019).

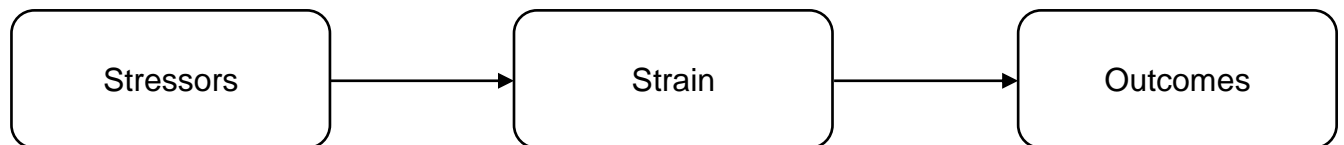


Figure 21: Stressor-Strain-Outcome (SSO) Framework (Kim et al., 2019)

The SSO model views strain as a mediating component and connects stressors to outcomes. This concept defines a stressor as an external stimulation that individuals view as bothersome or distracting. An individual's characteristics, feelings, and ability to concentrate are all disrupted by strain, which is brought on by external stimuli (Cao et al., 2018; Koeske & Koeske, 1993). At different stages throughout the suggested sequence of events, influencing factors including relationships as well as individual achievement have been defined by the SSO framework (Koeske & Koeske, 1993; Um & Harrison, 1998). Furthermore, in the association between stressors and strain, stress plays an intermediary function, and in the association between stress and outcome, strain plays an intermediary function. Therefore, the only people who should show negative effects are those who are burned out under circumstances of perceived stress (Um & Harrison, 1998).

5.5 RELEVANCE OF SSO IN THE PRESENT STUDY

MMOGs have a likelihood for negative behaviour as they tend to encourage less individuality and are generally very versatile, competitive, and stressful (Kordyaka et al., 2020; Nguyen & Zagal, 2016). In this study, we contend that stressors related to MMOGs as well as players'

psychological responses are as a result of strain. MMOGs can be harmful to M-gamers by exposing them to negative and toxic player behaviour (Nguyen & Zagal, 2016; Simpson et al., 2018). Substantial environmental inputs are critical in the development of toxic behaviours, such as pejorative language use, as previous research has indicated. These behaviours are ultimately connected to environmental cues that elicit habitual control (Adinolf & Turkay, 2018; Blackburn & Kwak, 2014; Kordyaka et al., 2020; Kwak et al., 2015; Neto et al., 2017). When a player encounters a bad event in a game and gets angry and frustrated, they engage in behaviour that may otherwise be deemed abusive, which then results in communication that is damaging, foul, and likely to spread beyond gameplay (Kordyaka et al., 2020; Neto et al., 2017).

Pejorative language as an outcome of game environment creates stresses. The researcher adopted the SSO model to explain and expand on the relationships between the categories that emerged in Chapter 4. According to Zhang, Zhao, Lu and Yang (2016), the stress-strain-outcome (SSO) hypothesis provides a concise and organised method for analysing the influence of technological features as environmental cues on users' online interactions. The SSO model is widely used in literature today as the theoretical foundation for comprehending the effects of inappropriate online behaviour (Lin & Zhou, 2022; Maier, Laumer, Eckhardt, & Weitzel, 2012; Masood, Luqman, Feng, & Shahzad, 2022). The researcher felt this theory was appropriate for this study inasmuch as it assists in organising the data since the major concern for pejorative language use is that it is due to the competitiveness of the game, which leads to tension, frustration, stress, etc. The researcher contends that the SSO model is useful in explaining the effect mechanism of pejorative language use in MMOGs, the resultant strain from the gaming environment, and possible outcomes. The SSO will thus help understand pejorative language use in MMOGs by mediating stresses in the gaming environment.

5.6 STRESSORS AS IDENTIFIED IN THIS STUDY

As described in Section 5.4, stressors are emotional stimulants, including negative outcomes and technological excess. In the context of this study, the type of game, game language, the competitive nature of games as well as individual characteristics are categories which have been identified as stressors as per Table 6. The data continues to show that the type of game played has an influence on pejorative language use, this according to the data can be described as game language. Players take on different roles

in MMOGs, these actors in the game engage in different actions to achieve a specific outcome. The games played also differ but in general the games are very competitive. Research shows that the competitive nature of games may result in aggression, including the use of pejorative language (Grandprey-Shores, He, Swanenburg, Kraut, & Riedl, 2014). The data also showed that participants' individual characteristics played a role in whether or not they use pejorative language during gameplay. Figure 22 illustrates the relationship between the constructs classified as stressors in this study. These different constructs are explained in detail in the sections that follow.

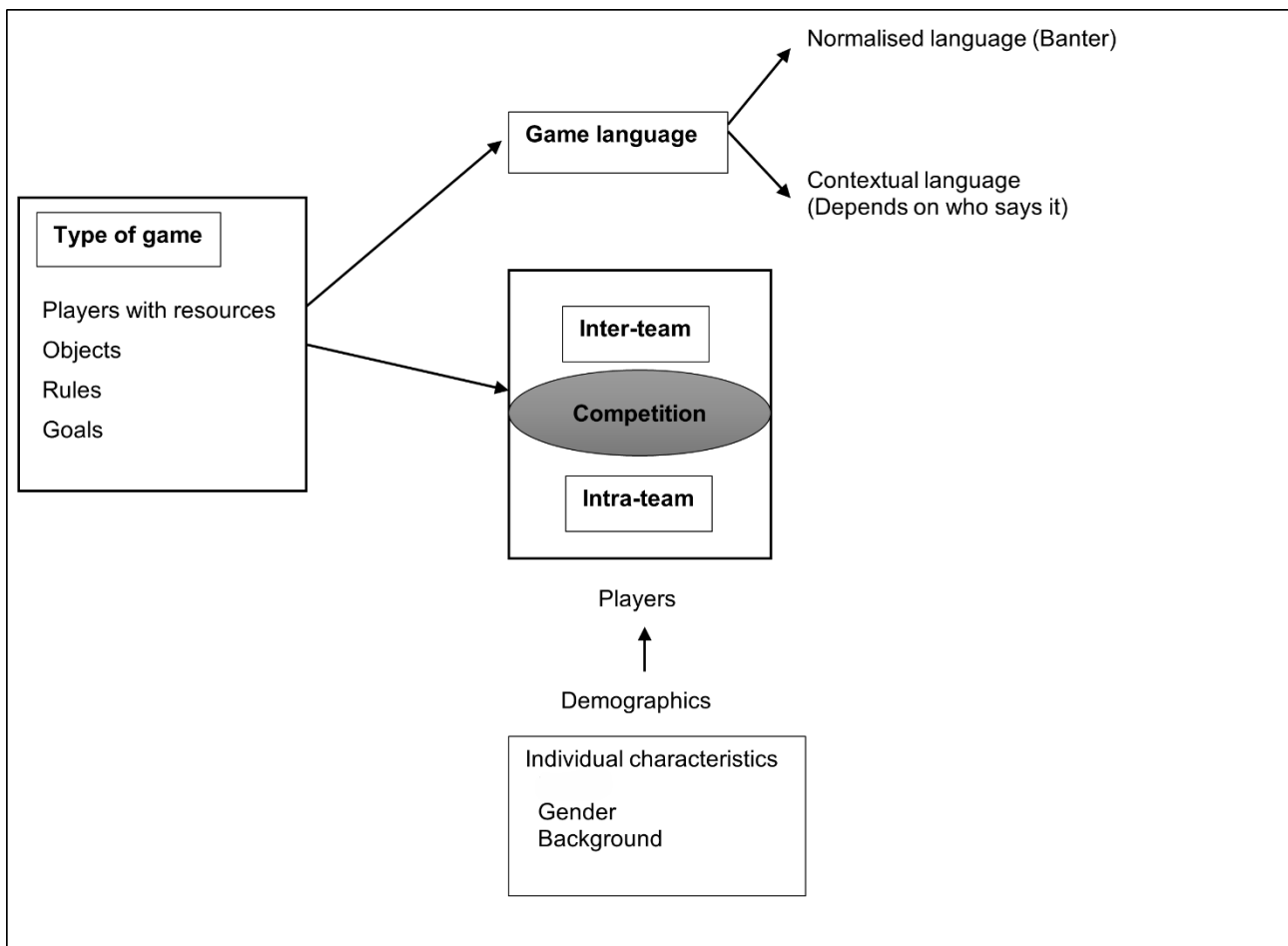


Figure 22: Stressors in MMOGs.

5.6.1 INFLUENCE OF THE TYPE OF GAME ON PEJORATIVE LANGUAGE USE

A social game is a way to structure a social setting wherein participants with particular characteristics participate in recurring behavioural patterns and interactions that are influenced by the rules, objectives, resources, models, and objects of the game being played. In addition to taking place within game time and dimension, the social game also

exists in a more generalised societal framework and a customised game environment (Stolz, 2023b). Many MMOG characters are recognisable to players, and the way that video games are structured practically lets players adopt aggressive personas. It has even been discovered that association with hostile media personas is linked to aggressiveness (Huesmann, Moise-Titus, Podolski, & Eron, 2003; Konijn, Nije Bijvank, & Bushman, 2007). Online gaming communities have established their distinct systems of social structure-related views and convictions, which are frequently correlated with beliefs shared by communities outside of the gaming context. These beliefs may be embraced by the entire community or be specific to a certain type of game or genre (Pearce, 2017). It is evident that the type of game played also has an influence of the language used.

MMOG gaming sessions can be both calming and stimulating. These activities can help moderate stress levels by diverting players' focus from real-world issues and offering a sense of relaxation (Snodgrass, Lacy, Dengah II, Eisenhauer, Batchelder, & Cookson, 2014). Players might seek solace from these psychological and physical pressures by engaging in cognitively stimulating MMOGs like *World of Warcraft*, but this can eventually result in problematic online gaming (Snodgrass et al., 2014), one of which the current study has found to be pejorative language use. Some gamers become uncontrollably immersed in the intensity of their gaming and overly consumed in virtual realms and end up playing games problematically (Meier, Meltzer, & Reinecke, 2018; Snodgrass, Lacy, Francois Dengah, Fagan, & Most, 2011). In these situations, playing in these virtual worlds turns into a cause of stress and anxiety (Blasi, Giardina, Giordano, Coco, Tosto, Billieux, & Schimmenti, 2019; Meier et al., 2018).

The type of game is played by players with resources who take on specific roles in the game, these players are referred to as actors in social games. Players have responsibilities and characteristics related to the game. Player qualities pertain to a player's characteristics that are significant to the game. The data showed that players usually take on roles such as healers, heroes, thieves, etc depending on the type of game. For example, participant 1 stated that the role taken depends on the type of game played. An excerpt from the participants interview quotes: *"It depends on the game, but on Battlefield I usually play the support role like healing other people, reviving them and giving them ammo and something like that and in League of Legends I'll play the jungle role like coming from the forest"*

in the jungle to help my teammates in different lanes and just yeah, I help everyone mostly.”

[Participant 1]

The players use objects such as guns and grenades, or items that the player perceives as part of the virtual world. These items are aimed at transforming their surroundings into players, game objects, and game activities that have a metaphorical reality that does not exist in the real world (Aichner & Jacob, 2015; Stolz, 2023b). The game types can have agreed upon or disputed rules and representations. A game may have one goal, but frequently has several. The usual states, instances, or objects that players aim towards while they play a game with other players are known as the game's goals. What is at risk and the purpose of the game are the same (Bourdieu, 2000).

The following sub-sections provide an understanding of how the type of game impacts on pejorative language use in MMOGs based on the data from this present study.

5.6.1.1 PLAYERS WITH RESOURCES - ROLES TAKEN

The activity of assuming a different identity in a virtual environment is known as role-playing, or RP, and it has roots in past in-person activities (Fox & Ahn, 2013; Turkle, 1995). It can be used as a means of adding more meaning to an event, as a personal development activity, for coping, for creative purposes, or for learning-focused objectives (Fox & Ahn, 2013; Williams, Kennedy, & Moore, 2011). Actors inhabit the role of players in games. Actors are unique individuals. An actor (or group of actors) who participates in the game and is acknowledged as such by other players, whether freely or involuntarily, is referred to as a player (Paavilainen, 2010; Stolz, 2023a, 2023b). Although players have agreed that the roles they take on depends on the type of game being played, there is a consensus that players tend to take on roles that are in line with their personalities or personas they'd like to identify with.

A variety of actors playing different roles in the game, often revolving and even hidden roles. Actors are interpretive, transformational, and creative entities with a restricted (or bounded) reason (Burns et al., 2017). Because they are a part of institutional and normative settings, they may also be moral creatures. Actors may collaborate to portray a single player, or they may be viewed as a group (a team, a nation) (Burns et al., 2017; Stolz, 2023a, 2023b).

The interview excerpts given in Table 7 show how differently participants view themselves as players compared to how they view other players. These different views are also seen in

how they explain their use of pejorative language during gameplay. Generally, participants see themselves as more considerate, and that they don't normally use pejorative language unless they have to. They described this use of language as being "more direct", "blunt", etc. The reason given for this is that it is for the advancement of the game or to motivate other players. According to Colman (2003), players have responsibilities and characteristics related to the game. Player qualities pertain to a player's characteristics that are significant to the game. These consist of the quantity or kind of social, physical, psychological, and corporeal resources or attributes, such as gender, intelligence, strength, number of friends, and stigmatising appearance, as well as the quantity or type of game resources, such as objects, currency, real estate, and documents (Colman, 2003; Shubik, 1982; Stolz, 2023b).

Authors like Jacques (1964) and Freud (2005) attribute this need to be better as a part of humans' collective set of innate characteristics or inclinations which have proved helpful for ensuring their survival. Similar to their innate desire to take chances in order to accomplish their goals, human beings also possess an innate conviction that they are fortunate or successful enough to succeed in achieving those objectives. People can also struggle with feelings of superiority or inferiority. They therefore treasure the fact that they are superior to others. The gaming society is characterised as vertically individualistic, that is, people are often focused on elevating their own position and making a statement by differentiating themselves from others via dominance, competitiveness, and accomplishment (Lee & Wohn, 2012). Therefore, the desire to excel is a prevalent mindset in such competitive settings. This kind of culture is prevalent in communities where people strive to excel in whatever they do or are passionate about (Lee & Wohn, 2012). They place a high importance on competitiveness and victory. Such communities have established hierarchies, with the victors at the top of the hierarchy and disadvantaged on the bottom. People are socially driven to be the greatest, thus they will do whatever it takes to succeed.

5.6.1.2 GOALS AND RULES OF THE GAME

Some gaming norms which are standards for behaviour in games and at events related to games. These can be classified as the games' goals, rules and representations (Stolz, 2023b). For instance, it can be expected that in the game space, players won't engage in a tactic known as camping or grinding, which involves playing a game repeatedly in order to quickly accumulate points and other incentives like powers (Kirkpatrick, 2015). Participant 8 explains: *"There's no free will in following the rules of the game. The rules are the rules. If*

they game had rules that were to the will of the person. Those are not game rules. You you have to follow some sort of rule...” [Participant 8]

There are also distinct social statuses present in the gaming society, such as the perception that computer gamers tend to be more devoted than console gamers. Similarly, gamers may earn social status as a result of their abilities or interactions with others inside gaming spaces (Kirkpatrick, 2015; Miller, 2007; Teng & Chen, 2014). Hand-eye coordination, response time, problem-solving abilities, awareness of surroundings, tactics, techniques, and rational thinking are all skills that video game enthusiasts can learn. These abilities may serve as a basis for admittance into specific gaming subcultures (Cary & Chasteen, 2022; Kirkpatrick, 2015; Miller, 2007).

Stolz (2023a) defines a rule as an interrelated set of guidelines that, in certain situations, may be used to (a) see or count as occurrences in specific instances or (b) refrain from acting or not have the authority to conduct oneself in certain ways (regulative rule). There is a wide range of rules. The game aspect they control may categorise them. Based on the interview excerpts in Table 8 from the findings in chapter 4, it is evident that the presence of rules does not stop some players from using pejorative language during gameplay. This is even after a review of literature found that whenever a user wants to use the MMO server programme to enter the gaming environment, all commercial MMOs require them to accept a set of conditions of play (Reynolds & de Zwart, 2011). The conditions usually state that you are only permitted to use the client software and the game content as long as you abide by the terms of service (ToS), the End User Licence Agreement (EULA), and any other relevant documents that the specific contract names. These may include guidelines for good behaviour, game rules, etc. (Reynolds & de Zwart, 2011). Some of the EULAs state that a player’s “continued access to the System and license to play the Game is subject to proper conduct”. However, the study found that in most cases the rules are not entirely enforced and, in some cases, where they are enforced, the punishment is not as severe according to participants. This then results in players’ continuation of the use of pejorative language because there is no permanent ban. To enforce rules and prevent rule infractions, gaming firms also depend on player assistance and player reporting (De Paoli, 2017; Kerr, De Paoli, & Keatinge, 2014). Therefore, holding each other accountable is fostered among players (De Paoli, 2017; De Paoli & Kerr, 2010).

Tosca (2003) investigated gaming activities and their regulatory principles, with a focus on role-playing and adventure-based games. By distinguishing between a given game's hard and soft rules, she analyses missions found in video games. According to her proposal, the gaming world's hard rules comprise object attributes, actions, and gameplay interactions, which also include the game's ultimate objective. The soft rules on the other hand are the specific goals in shorter patterns of actions that players may complete on their own. In a sense, the hard rules are specifically applied in these shorter patterns of actions (Ang, 2006; Tosca, 2003).

5.6.2 GAME LANGUAGE

MMOGs have grown in popularity over the past few years on a global scale leading to a steady increase in production and consumption (Bawa, 2018). In the context of playing and socialising through such games, players from a wide range of cultural, demographic, economic, geographic and linguistic backgrounds come together under the umbrella of MMOGs and spend a significant amount of time interacting and communicating with one another (Ballard & Welch, 2017; Bawa, 2018). The vast majority of contemporary research on video game culture focuses on massively multiplayer online games (MMOGs) such as *Everquest*, *World of Warcraft*, and *SecondLife* (Castronova, 2008; Chee, Vieta, & Smith, 2006; Ondrejka, 2006; Taylor, 2009; Williams, Yee, & Caplan, 2008).

Gaming culture refers to the conventions, signs, traditions, and norms that have developed around the common experience of playing video games (Castronova, 2008; Chen & Luppicini, 2017; Schott & Horrell, 2000). This is the definition that has been adopted in this study as players have described the language in gaming as part of the game. This can then be seen as one part of the norms and traditions of MMOGs. The present study takes on the definition of game language as the particular vocabulary, slang, and jargon that participants employ to set their discussions apart from ordinary, everyday interactions (Bawa, 2018). This subject is important because it illustrates how the communication among M-gamers develops into a subculture with unique traits and linguistic essences, resulting from the many ways that individual M-gamers choose to alter words and phrases (Bawa, 2018).

In social games, participants are familiar with the rules, cultural norms, distinctive strategies, and chances for success and failure and some are skilled players, while others are not (Hsu, 2020). For instance, language and memes have game-related origins. The distinct language and linguistic customs that emerge from the gaming world include linguistic allusions to games and leetspeak, a system of shorthand for efficient communication in video games. For instance, the signoff for a game is frequently “gg” for good game (Vdovichenko, 2015). The following sub-section discusses the two different components of game language which are normalised language and contextual language as found in the data.

5.6.2.1 NORMALISED LANGUAGE: GENERAL BANTER

The findings revealed that players describe game language as “normal” and a form of general “banter” amongst players. This can be seen in Table 9 in the finding where interview

excerpts on players' perception of banter are presented. Players used statements such as “it's acceptable”, “it's just normal”, “just a lot more banter”, “very joking friendly way” to describe game language.

The Dutch historian Johan Huizinga characterises play as a release of excessive impulses to satisfy the imitative desire in his most well-known study of play, *Homo Ludens: A Study of the Play Element in Culture* (Huizinga, 1950). Huizinga (1950) describes play as a non-committal pastime that is clearly outside of everyday life and is perceived as not serious, while also completely and deeply engrossing the player. It is a non-materialistic activity that offers no potential for financial benefit. It moves along according to set laws and in an orderly fashion inside its own suitable time and space bounds (Duncan, 2019; Huizinga, 1950). It causes the establishment of social groups that want to keep their activities private and emphasise how they differ from the rest of society through creative disguising or other tactics (Huizinga, 1950).

Huizinga argues that the fundamental qualities of play are pleasure, autonomy, and enjoyment: play must be enjoyable, open to everyone, spontaneous, and distinct from the everyday and mundane. In its most basic practical sense, play fosters, supports, and ignites deep connections (Huizinga, 1950). While play can be serious when participating in a play contest, play stops when participants are no longer having fun, enjoying themselves or feeling free. Huizinga stressed the need of play being uninhibited and involving individuals freely. Recent play scholars have embraced and included Huizinga's main aspects of play. As a result, Huizinga's definition of play widely encompasses the idea that banter is play or a component of its degeneration (Duncan, 2019).

The daily activities of many sporting competitions revolve around banter. It is usually recognised as alternately humour amongst teammates, which neither the person receiving it, nor the adversary should take seriously (Hickey & Roderick, 2022; Newman, Eccles, Rumbold, & Rhind, 2022a). Ever since Freud (1960) examination of vulgar banter, academics have neglected humour as a subject of study. However, banter is an intricate phenomenon and a necessary component of human interaction, much like pejorative language. In order to completely comprehend offensive jokes and banter, one must consider the role that humour plays in various cultural contexts (Timothy, 2000). Just as pejorative language cannot be understood by reading dictionaries of profanity, banter cannot be

grasped by merely gathering jokes. We need to comprehend the usage of curse words in banter and the role that banter plays in societal conversation in order to properly explain why we use them (Timothy, 2000).

Banter has long been a component of competitive activities, which MMOGs can also be classified as. Quick-witted players have produced countless examples of impulsive, imaginative, and amusing banter as an aspect of the game, which is frequently referred to as gamesmanship. In addition, it has widely been acknowledged as a component of sport, with certain sportsmen being praised for their capacity to divert opponents with cunning jabs or persistent, continuous sledges (Duncan, 2019). Even though it is generally accepted that joking about is not harmful in professional team and individual sports, their traits and frequent presence in football culture have striking similarities to abuse (Hickey & Roderick, 2022).

In professional sports, there is concern that banter is used to relieve pressure from the expectations of winning, despite the fact that the notion of banter is frequently seen positively within highly competitive sports, supporting beneficial characteristics of belonging to a group such as unity and camaraderie (Newman et al., 2022a; Parker, 2006; Wagstaff, Martin, & Thelwell, 2017). This concern made worse by research showing that those involved in organised sport may struggle to tell when friendly banter turns into bullying because of their gendered, homophobic vocabulary that seeks to 'enhance' performance (Hickey & Roderick, 2022; Newman et al., 2022a; Parker, 2006; Wagstaff et al., 2017). The combination of findings in these competing environments are concerning since there seems to be no understanding of the complexities of banter, especially when it involves peers, or when it becomes bullying (Newman et al., 2022a; Parker, 2006; Wagstaff et al., 2017).

The focus of this study is players' perceptions of pejorative language use in MMOGs. MMOGs are a competitive activity which players have often described as cut-throat. As described above, competing environments can be characterised by pejorative language, which players have described as general banter. Participant 3 stated: *"...In real life it's, it's just normal. It's just reality, it is just me being me, whereas in the game, yeah, I can swear sometimes even, like we're just playing..."* [Participant 3]

With numerous individuals involved in sporting suggesting that banter has advanced past amusing, friendly humour, the topic of banter and its role in sport has come under scrutiny

in more recent years. They contend that it is currently perceived as being cruel, disrespectful, offensive, and threatening and that it is, in many cases, no longer permissible (Duncan, 2019; Hickey & Roderick, 2022; Newman et al., 2022a; Newman, Warburton, & Russell, 2022b).

The interview excerpts in Table 9 illustrates players' views with regard to the idea that banter is part of the game. The data shows the different views of players interviewed for this study. As much as players seem to agree that it is part of the game culture as they know it, the majority do not necessarily think it's a good thing. Some authors believe that banter is ingrained in sporting culture and seems to be accepted by players as a natural part of the game (Abell, Buglass, Betts, & Morohunfola, 2023; Martin, 2013). While others believe that pejorative language, however, is "morally indefensible" (Dixon, 2007). It is said that any justifications for using trash talking as a tactic that shows no disrespect are false given that their success depends on offending the target audience (Dixon, 2007; Hickey & Roderick, 2022; Newman et al., 2022a).

5.6.2.2 CONTEXTUAL LANGUAGE

There are many aspects of game language that players consider relegating, purposeful, and harmful to their sense of self-worth. It is best seen as a sort of mental and emotional assault that is standardised as workplace insult humour (Hickey & Roderick, 2022). Although the topic of playful language as a social discourse in sporting environments has not yet been fully explored, research studies that have examined workplace bullying and the harmful effects of humour as a form of abuse have found that prior research in sport share many of the same traits (Magrath, 2016; White, 2017). The intricate social structures of competitive games serve to exacerbate this negative effect by legitimising and even promoting a bantering culture that is thought to strengthen team cohesiveness, boost mental toughness, and boost performance (Hickey & Roderick, 2022; Magrath, 2016; White, 2017). Banter or putdown humour, as defined by Terrion and Ashforth (2002), is the act of trying to amuse a person or thing at their expense, such as through a joke that makes fun of them, a remark that is offensive, or utterances that are dismissive or caustic. A putdown communicates an imminent face-threatening remark while also making it clear that it should be taken as non-threatening (Hickey & Roderick, 2022).

The present study showed that even though players accept pejorative language as part of the game, it depends on the context it is said in as it can ruin the aspect of enjoyment of the game for them and it is not something that they personally particularly like. Participant 5 stated:

“Swearing at yourself is I think it's better, but it also depends who you are playing with, it wouldn't be nice to swear in front of a minor because we have kids that play the game as well, and yeah, yeah.” [Participant 5]

Participant 7 also said the acceptability of pejorative language in MMOGs depends on the people one is playing with. There were also mentions of the degree or extent of the game language, some players believe that as much as it is acceptable, some players tend to take it too far. Participants 4, 6 and 10 in particular believe that it is unnecessary and there is absolutely no need for it. With Participant 4 explaining that they are against pejorative language use “when it comes to the other side”, they explained this as when people are being mean and use pejorative language out of context. According to Participant 11, sometimes people would just be mean and use pejorative language just because she is a girl and at times doesn't know how to play the game well. Other players then just get angry quickly and bring up her gender. However, when playing with male friends, they would bring up her gender but in a joking way and she doesn't take this seriously.

The discussions and interview excerpts in Table 10 show that when the playful humour in game language is removed, they show micro-aggression that can be distinguished as ridicule, invalidations, and harassment.

5.6.3 THE COMPETITIVE NATURE OF THE GAME

Competition was another factor that emerged from the interviews. This section describes how the competitive nature of the game contributes to the use of pejorative language in gaming. Competitiveness is important in gaming, within intra-group favouritism and inter-group antagonism influencing the level of reporting (Munn, 2023). A myriad of components surges and revolve in a dynamic dance in the world of competitiveness (Grandprey-Shores et al., 2014). The behaviour of these components, especially aggressive behaviour, stands out, casting both shadows and light on the arena of competitive contexts (Grandprey-Shores et al., 2014). It is a pattern that is clearly evolving and influencing the environments of competitive encounters by defining their bounds. According to some academics, there is a correlation between competitiveness and aggression (Grandprey-Shores et al., 2014). The highly competitive environment of gaming fosters conflict and hatred as opposed to collaboration and decorum. In gaming, this is most strongly influenced by competition as opposed to hostility (Adachi & Willoughby, 2011).

Competing games can be viewed as play that involves a lot of corruption, but it is crucial that all games, both professional and amateur, strive to uphold a sense of integrity and sportsmanship by permitting and enticing participants to compete in a way which somewhat resembles the fundamental elements of play (Hylton, 2018; Newman et al., 2022a; Newman et al., 2022b). The play strategies used by teams and individual players must be unbiased and respect ideals of sportsmanship. If gaming is viewed as unjust or unsportsmanlike, play will likely become even more perverted as the play traits of enjoyment and autonomy are most probably lessened (Dixon, 2007; Duncan, 2019; Newman et al., 2022b).

Altruism, or the tendency to help others even at the expense of pursuing one's own goals, and the tendency to become more hostile to those who are not part of one's social circle, are traits frequently seen in humans (Choi & Bowles, 2007; Diekhof, Wittmer, & Reimers, 2014). Participant 8 explained:

“You don't strictly need to play games to win. You can always play to see how long it can be played for. It can be move a journey in a certain sense. Though you could be deciding to play your own game as it's called, they might be the victory condition of the game, but then it might not be the same as a personal victory condition. So imagine, for example, my goal is to absolutely annoy the enemy and to receive as

much hate mail as possible from them. Because I have completely annoyed them, they may have won the match, but they are emotionally broken. And it might not even involve me using a single word, it could just involve me using some very specific setup that utterly infuriates them and by using certain in game facilities, maybe it's a certain movement or maybe it's like for example, the idea of using some sort of pop up to taunt, uh, that could be, for example, another objective of a player. So saying that the objectives of the game aligns with the objectives of the person, it's incorrect.”
[Participant 8]

Humans are inclined to promote norm-abiding behaviour even at great personal expense to free loaders who violate the norms of society. Additionally, they often show greater animosity as well as decreased empathy and trust towards outsiders and favour members of anatomically unrelated groups over members of detached outgroups, such as persons from the same language group, over those from a distant ingroup (Boyd, Gintis, Bowles, & Richerson, 2003; Diekhof et al., 2014). Because of this, persons from far-off outgroups who violate norms frequently face worse penalties than those who do so within the ingroup, and people defend their own against threats from outgroups even while doing so costs them money (Diekhof et al., 2014). This was further amplified by Participant 1, who stated:

“I'm always... I don't want to hurt people and obviously some people in online matches can take something you say wrong and really hurt their feelings. So I just want to be careful for their emotions. So, when someone messes up in my team, I always try to maybe I try to be blunt but always a bit more considerate for the person, like try to help them in the process so they don't do it again.” [Participant 1]

Participant 7 also stated:

“I guess most of the time when I play online, it's competitive. So I'm trying to win the game. If I do play teams then it's to assist my team to win. So I don't think there's a particular role you play, you know, by just being competitive and that's a role.”
[Participant 7]

5.6.3.1 INTER-TEAM COMPETITION

Participants in the study reported that there is competition that exists amongst players of different teams during gameplay. It is the nature of the game. Players can experience the

excitement of genuine competitiveness in multiplayer games. Players demonstrate their superiority over other people by acting in a way that is significantly more dynamic than any rival that is directed by a machine (Kwak et al., 2015; Nguyen & Zagal, 2016).

Fighting the opponent team in competitive game situations puts a lot of pressure on a team to compete at a level on par with or higher than the opposing team since losing the match results in a complex loss of resources, time, and reputation for members of the team (Kou & Nardi, 2013; Shen, Sun, Kim, Wolff, Ratan, & Williams, 2020). Although MMOG pairing mechanisms aim to provide equitable games whereby each team has an equal chance of winning, this is rarely the case in reality. There could still be a skill disparity amongst the two competing teams, which then results in the one team having an added advantage over the other (Grandprey-Shores et al., 2014; Kou & Nardi, 2013). There are increased chances of elevated tensions in game systems without matchmaking mechanisms since teams that are put together and paired at random may have considerable competence disadvantages (Johnson et al., 2015; Kou & Nardi, 2013).

5.6.3.2 INTRA-TEAM COMPETITION

Some multiplayer video games also add the element of teamwork. Now, it's beyond an assessment of competence between two people as teamwork, planning, and communication among players can also guarantee success. Inevitably, teammates' presence and their impact on success and failure can lead to toxic behaviour which is a strain (Kwak & Blackburn, 2015). Toxic behaviour frequently manifests when a team is losing or when they are not performing up to standard. This may result in the humiliation and blame of some of the team members for what others may perceive as subpar performance. Some research also found that toxic teams appear to be those that are underperforming or exhibit a substantial internal skill gap, for example, in situations where some team members perform better than others (Shen et al., 2020).

In its purest form, competition produces a range of behaviours as individuals compete for power, accomplishment, or development. In this context, aggressive behaviour has a specific identity that is defined by behaviours and attitudes that aim to defeat, dominate, or degrade others. It is an expression that extends beyond the material world and permeates the social, psychological, and moral facets of rivalry interactions. Insults and abuse are often

hurled while under strain as a means of shifting responsibility and coping with disappointment (Munn, 2023; Shen et al., 2020).

Aggression and assertiveness are not always mutually exclusive. There are usually instances where a competitive player sometimes unintentionally or intentionally causes harm to team members while pursuing victory. These actions cross the line into pejorative language use, which may be characterised by the infliction of slurs above and beyond what is considered acceptable in a competitive context, even though they may be justified as a fervent desire for win. This can initially lead to smaller offences like flaming, but they can quickly turn into more severely toxic behaviours (Johnson et al., 2015; Kou & Nardi, 2013; Shen et al., 2020). On the contrary, teams that are paired with good skilled players tend to more relaxed, enjoy the fun of the game and thus have less toxicity (Neto et al., 2017).

The concept of pressure during the competition was also mentioned which leads to pejorative language use amongst team members. The likelihood of toxicity spreading may be affected by a sense of the possibility of subsequent interactions. Playing in the same team with known friends improves both individual and team performance, perhaps as a result of more help and fewer betrayals (Grandprey-Shores et al., 2014; Shen et al., 2020). Teams composed of strangers who believe they will never play together in the same team again, might amplify the negative effects of anonymity and the standardisation of hostility (Grandprey-Shores et al., 2014; Shen et al., 2020). It is evident that this competitive nature of games results in conflict.

Conflict can be defined as an instance in which mutually dependent individuals exhibit, manifest, or latent differences in meeting their unique wants and interests and encounter obstructions from one another in achieving their objectives (Donohue, 1992). Although competing for limited resources or other real demands can lead to conflict among groups, empirical investigation has shown that collective goals frequently go beyond obtaining just enough tangible resources but also social supremacy and rank (Lumby & Morrison, 2006). This is explained by the realistic conflict theory (RCT). Realistic conflict theory (RCT) is the social psychological framework of intergroup conflict that is often referred to as realistic group conflict theory (RGCT). In addition to explaining how competing for scarce resources and competing objectives can lead to intergroup animosity, the theory also provides a

context for the sentiments of bias and exclusion towards the outgroup that accompany such hostility (Campbell, 1965). Realistic conflict theory is depicted in Figure 23.

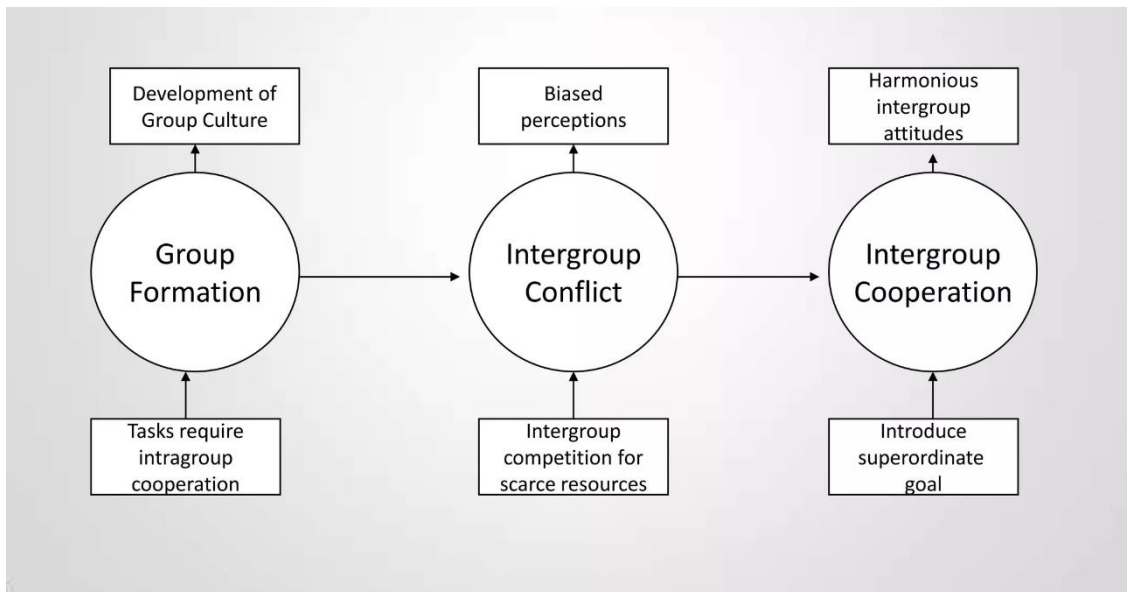


Figure 23: Realistic Conflict Theory (Sherif, 1966)

Competition between groups can arise from a perceived or actual shortage of resources such as social standing (Campbell, 1965). However, conflict can still occur in situations where resources are plentiful. The simplest action of grouping people together can cause conflict. (Alexander & Levin, 1998). But it could be challenging to separate arguments about the what, how, and why of an activity from a deeper desire to acquire resources. Stated differently, seeming differences in behaviour and morals could serve as a handy cover or means of competition (Lumby & Morrison, 2006). According to RTC, this is the situation. Nonetheless, an intriguing consequence of intergroup conflict is the rise in unity, spirit, and collaboration intra-group (Velez, Mahood, Ewoldsen, & Moyer-Gusé, 2014). This has to do with the positive bias in favour of the inner group and the adverse prejudice against the outer group that is one result of conflict between groups.

Individuals are more inclined to accept the views of their own group and be against those of another, as opposed to making a logical and impartial judgement of the validity of another's position (Jackson, 1993; Lumby & Morrison, 2006). People who are assigned to two distinct groups at random will consistently favour the ingroup and be biased towards the outgroup, according to the intergroup research. Intergroup competition or discrimination against an outgroup could be sparked by the simple sense of group membership (Velez et al., 2014).

From the data, it is evident that aggressive behaviour in competing environments, which encompasses pejorative language use in MMOGs gently unfolds its components within the realm of one's emotional aspects. For example participant 9 states: *"I think I'm definitely a lot more forceful considering like uh, I don't know. In it's like in in these games, especially the like competitive online ones. You know you you're out there to win at the end."* [Participant 9]. While another participant said: *"Talking about intent of the language, it's it differs again in some games. It's actually a strategy to try and demean a person so that it breaks the morale and if it's a competitive game way winning in some sort of ranked mode matters."* [Participant 8]. This shows that this aggressive behaviour is ingrained in the expressions used to humiliate, discredit, and threaten opponents. These delicate tactics try to weaken opponents' capacities for resilience by sowing the seeds of uncertainty, anxiety, and weakened self-belief. It can therefore be concluded that violent behaviour resulting in pejorative language use is strongly predicted by an individual's interest in the game's result, such as occurs in a truly competitive the environment.

5.7 THE STRAINS AS IDENTIFIED BY THIS STUDY

The SSO model views strain as a mediating component and connects stressors to outcomes, strain is a direct consequence of stress (Cao et al., 2018; Koeske & Koeske, 1993). The data identified the platform/environment, as moderators of the actual language used in MMOGs, which is a mediator. This section discusses these concepts in detail and the role they play in the pejorative language use in MMOGs. Figure 24 shows how strain in MMOGs is brought about by the stressors identified in the previous section.

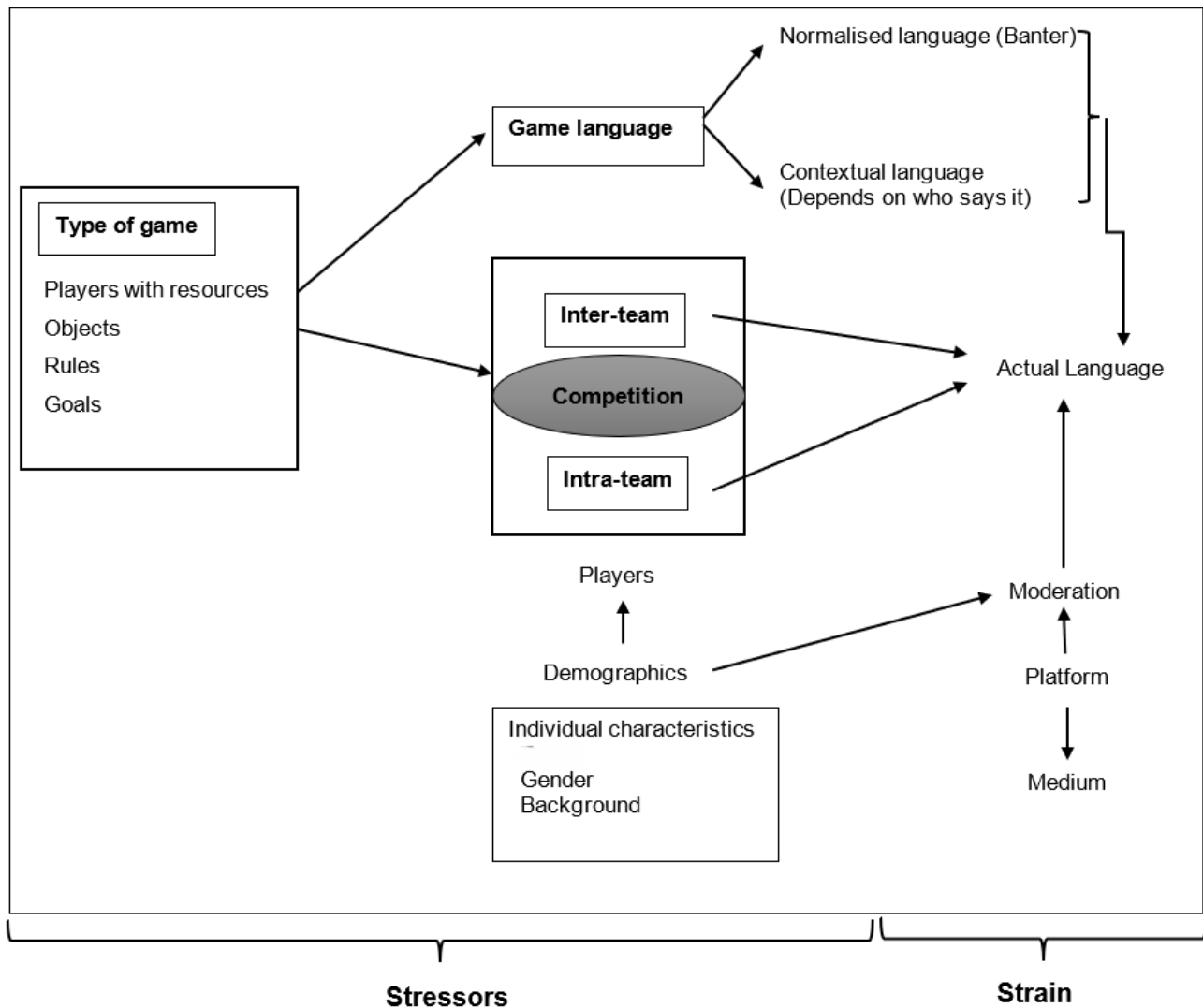


Figure 24: Strain as a direct consequence of stressors in MMOGs

5.7.1 THE ACTUAL LANGUAGE USED IN MMOGS

This research took a qualitative approach in examining the main concerns or most important aspects of the use of pejorative language in MMOGs. The data showed that the actual language used in MMOGs, although normalised, is sometimes pejorative. When asked if

pejorative language was often used by players, participant 5 agreed and attributed the amount of pejorative language in MMOGs to stress. He explained that during COVID people were stressed so the swearing then was 'off the chain' and it is better now. This further supports that strain is a direct consequence of stress (Cao et al., 2018; Koeske & Koeske, 1993), as stated earlier. This way of communicating can be likened to the language used by soldiers in combat. Serving as a soldier usually necessitates learning new vocabulary. The fear and humour, the rage and happiness, the camaraderie and disapproval of many thousands of troops all contributed to the emergence and formation of this soldiers' dialect in the immobile craters (Cook, 2013).

In situations when soldiers are constantly battling the inevitable risks of injury and death, it is common to seek solace in harsh words. Pejorative language served as an outlet for the anxiety and frustration caused by the abnormal stresses of contemporary combat (Brophy & Partridge, 1930). The language further became more seasoned since the male-dominated society of the battlefield was shielded and resistant to the civilising influences of women, family members, and society (Cook, 2013; Rottman, 2017). This could explain why some players have described the language used in MMOGs as sexist because gaming has always been male dominated.

Research shows that soldiers in war said that using pejorative language in the form of swearing was a resource that keeps their courage straight and delivers a lot of beauty (Stevenson, 2018). Swearing is seen as both a polite means to communicate and an inadvertent barrier that keeps them from going insane (Brophy & Partridge, 1930; Stevenson, 2018).

An interesting observation is that players will swear at each other during the game, yet later on they congratulate and thank each for their game. No one takes the swearing words personally in this specific encounter. This could be because the various aggression, variations, and bluntness of the language used by soldiers appealed greatly to them (Cook, 2013; Wilson, 2011). The many different soldiers are said to have been united by the language of combat and this 'manly' vulgarity, but they also set themselves apart with their own language, which further strengthened a constructed identity (Rottman, 2011; Wilson, 2011). In one of the recordings, three players in the team came up against a player Nicki. This player made life difficult for the other two players and the one player in the team said

the following: "*Hierdie ou is 'n kont, fok hom, hou hom hostage*" (This guy is a c*nt, f*ck him, keep him hostage).

Then on text on the screen appears the following words:

Nicki : *plz boys im w 4 brand new ppl*

J v S (text): *yet still you are being toxic, c*nt*

As the game continues the following text appears

Nicki: *let them end plz*

The one team member says: *Hy is 'n kont ek hou nie van hom nie* (he is a c*nt, I do not like him).

After a short while when the team gets out of trouble and the following text appears:

Nicki: *well played.*

J v S: *ty* (Thank you)

Nicki: *XD* (XD is an emoticon used for "LOL- Lough out Loud)

If we use the analogy of the language used in war by soldiers, Graves (1936) identifies a distinct physiological role for swearing and describes it as the nervous system's defence against rapid attacks of stress and violent stimuli. According to these perspectives, cursing is an especially potent way to respond to the type of extreme stress that isn't often expressed through casual or normal language (Graves, 1936; Stevenson, 2018).

5.7.2 THE PLATFORM/MEDIUM USED IN-GAME

The platform or medium of communication used during gameplay also has an impact on the actual language used in MMOGs as it moderates the actual language used. Players in this study reported that they experienced pejorative language differently depending on the platform or medium of communication use. The platform or medium of communication in MMOGs is either chat or audio, and this plays a role on moderation within the game.

Players reported that pejorative language via text is easily detected by the game and can be censored, however, this is not the case with audio. According to Li, Kou, Lee and Kobsa (2018), when playing games, players can choose to ignore or block pejorative language, or they use moderators, receptive players or bots to filter the language. In order to identify harassment such as pejorative language as it occurs, proactive measures against it are frequently addressed from a solution-based perspective. Because many MMOGs are so huge, AI or regulated game design are frequently recommended as mitigating techniques (Pakarinen, 2022).

Participant 6 also mentioned that they don't use pejorative language because of their background where they were brought up to not use pejorative language and with an emphasis on politeness to others. However, when asked if they would use it if they were from a different background the participant said that maybe they would but also feared what their family would say when playing at home. But then also said that if they were to play at school, away from family, they might consider engaging if it wasn't hurtful. This shows that although players say that pejorative language use is part of the game, they are able to control what they say depending on certain circumstances. Pakarinen (2022) finds that creating a distinct gaming identity and attitude that pervades every aspect of a gamer's play is a crucial skill for gaming.

Li et al. (2018) mention receptive players, these are fellow players in the game who are willing to be accountable to report pejorative language. Presenting a distinctive, easy-going, and enjoyable gaming character is a major component of experienced game play. The gaming community often plays an important part in successful moderating (Pellicone & Ahn, 2017). This is because a community that self-moderates can be established when players take ownership of ending hostility when it happens (Pakarinen, 2022). A community that

welcomes all players and is dedicated to working out problems amicably is necessary for massively multiplayer online games (MMOGs).

The findings also showed that there are players who are receptive and do report the use of pejorative language in MMOGs. Although some of the gaming platforms have repercussions for pejorative language during gameplay, the data shows that it is not all of them, or in some cases, the punishment is not severe. It is also evident that not all pejorative language use is reported as seen in the excerpts. Players themselves evaluate the severity of the language used before reporting.

5.8 OUTCOME OF PEJORATIVE LANGUAGE USE IN MMOGS

The SSO model states that strain plays an intermediary function in the association between stress and outcome. The study revealed that there were certain outcomes resulting from the use of pejorative language in MMOGs. The following section demonstrates that the use of pejorative language in MMOGs impacts on how players enjoy and engage with the game. The data showed that participants will dissociate, i.e., form smaller communities where they only play with people they know, remain silent during game play, choose different communication mediums, or retaliate when pejorative language is used. These outcomes will be discussed in detail in the sections that follow. Figure 25 is the final model of the emergent theory and shows how the outcome of pejorative language use in MMOGs fits in with the discussions from the sections above.

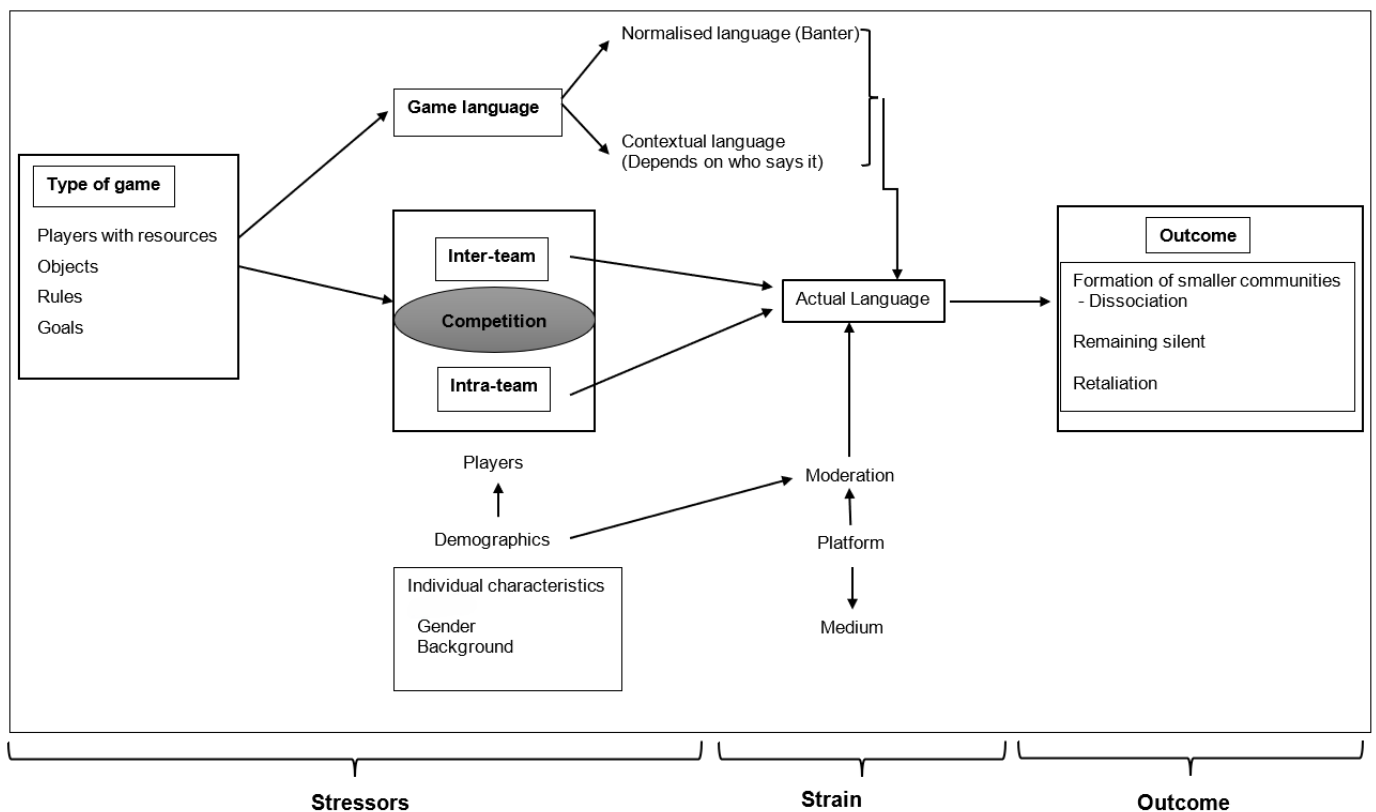


Figure 25: Outcome of pejorative language use in MMOGS

5.8.1 FORMATION OF SMALLER COMMUNITIES - DISSOCIATION

Dissociation is a strategy through which certain cognitive procedures that often interact with various other procedures supposedly act in a more segmented or automated manner, typically beyond the range of conscious perception or retention of memories (Van der Hart & Horst, 1989). This is explained by dissociation theory. "*L'automatisme psychologique*,"

Janet (1889) was the first work exploring the psychological mechanisms underlying the development of psychosis from traumatic experiences, was published in 1889 (Van der Kolk & Van der Hart, 1989). Contrarily, some scholars later conceived of dissociation as a multidimensional process that exists along a spectrum from mildly dissociative activities like daydreaming to severely dissociative ways like the dissociative mental disorders (James, 2007; Prince, 1906; Putnam, 1991; Ross, 1996).

The process of dissociation is extremely valuable for the survival of both humans and populations. In some circumstances, it helps assist with seven key processes: automatizing behaviours, increasing effectiveness and simplicity of effort, resolving intractable conflicts, escaping from the confines of reality, isolating traumatic experiences, releasing certain emotions catatonically, and enhancing herd sense (e.g., lowering one's ego for the group identity, leading to elevated susceptibility) (Ludwig, 1983). Given the lack of consensus over the exact definition of dissociation, Cardefia (1994) comprehensive and methodical exposition of the term's applications was a welcome contribution. He defined dissociation as an altered state of consciousness, a defence mechanism, and a breakdown in the coordination between cognitive components or processes. Both of the first and second categories are significantly distinct from one another, but the third category essentially replicates the role of the preceding two (Cardefia, 1994; Spitzer, Barnow, Freyberger, & Grabe, 2006).

The concept of dissociation was picked up during the data gathering of this study. Participants described these using terms like “forming smaller groups” or “only playing with friends”. This was their way of removing themselves from the toxic environment of gaming which is because of the use of pejorative language during gameplay. Research studies focusing on the role of dissociation in gaming behaviour have found that there is a positive correlation between inappropriate gaming and different dissociative symptoms such as amnesia, dehumanisation, detachment, or disengagement (Guglielmucci, Monti, Franzoi, Santoro, Granieri, Billieux, & Schimmenti, 2019). Dissociation is a natural psychological process that enables people to defend themselves against experiences that exceed their ability for cognitive and empathetic processing. It involves momentarily cutting ties to the outside world and segregating actions, emotions, ideas, and experiences associated with the upsetting events (Guglielmucci et al., 2019). Numerous groups in MMOGs have also

failed due to drama, which is defined as open confrontation between several group members, and internal conflicts (Ducheneaut, Yee, Nickell, & Moore, 2007b).

According to Lu and Wang (2008), playing multiplayer games with friends increases an individual's enjoyment of the experience. Saarinen (2017b) also explains that this statement about online team games may also include an additional concealed aspect: Since there is a maximum number of players allowed in online team games, having a friend fill an available slot means that there is one less spot for a potentially toxic unknown player, which could increase the general enjoyment of the game. Anyone using an online social space consents to an unwritten social agreement that specifies acceptable behaviour there. Players may in their smaller communities be prohibited from engaging in toxic behaviours like using pejorative language on an unwritten, completely understood basis (Boucher & Kelly, 2003; Saarinen, 2017b).

Studies have also found that gamers tend to detest people who disobey the rules and that there is usually a very low tolerance for actions that frequently violate the game's rules, both explicitly and implicitly, such as pejorative language use. Furthermore, players who violate the unspoken norms of the social group are frequently despised and shunned (Blackburn, Simha, Kourtellis, Zuo, Ripeanu, Skvoretz, & Iamnitshi, 2012; Boucher & Kelly, 2003; Saarinen, 2017b).

5.8.2 REMAINING SILENT

Remaining silent and not engaging during gameplay is another outcome that came from this study's data. As per the open codes in Table 6, players mentioned that they prefer playing with their friends, choose to avoid negative behaviour, withdraw from engaging during game play, and sometimes just play with their audio turned off. The spiral of silence theory is a theory of mass communication and political science which was first coined by Noelle-Neumann (1974). The theory posits that a person's readiness to voice his own thoughts is influenced by how he perceives the dispersion of general public consensus, which subsequently informs the views of others and, eventually, how keen they are to voice their views (Glynn, Ostman, & McDonald, 1995; Noelle-Neumann, 1974). The primary proposition is that social interactions allow people to affect each other's propensity to voice their ideas (Glynn et al., 1995; Taylor, 1982). According to Noelle-Neumann (1974), when people see that other people in the group share their own opinion, they will become more self-assured and outspoken. However, the person will be more likely to be reserved and keep quiet if he observes that the group does not agree with his opinion (Glynn et al., 1995; Noelle-Neumann, 1974; Taylor, 1982). That is, a person believes that staying within the group and not alienating themselves is of greater significance than making his own decisions, thus he values this viewpoint more than the necessity to voice out his opinion (Noelle-Neumann, 1974). Figure 26 is the spiral of silence theory.

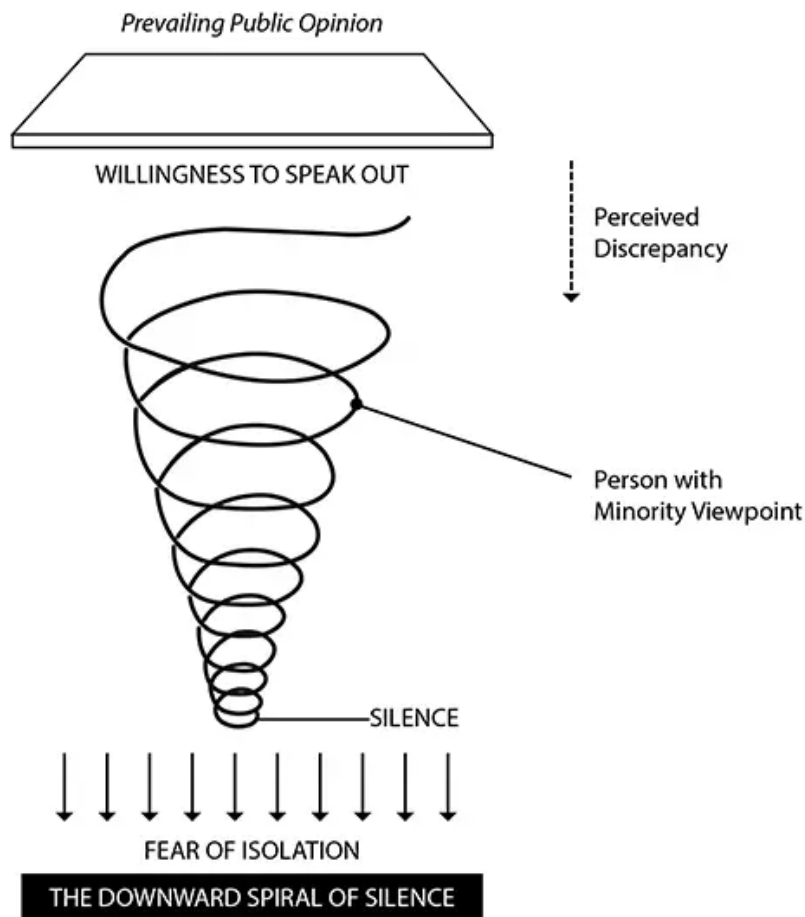


Figure 26: Elisabeth Noelle-Neumann's Spiral of Silence Theory (Noelle-Neumann, 1974)

Figure 26 illustrating the spiral of silence theory shows a spiral containing two endpoints. The broad majority perspective is at the top of the spiral. The viewpoints of the minority are found in the bottom half, which is made up of the shallowest portion. The theory demonstrates that individuals of minority do not speak out about issues that concern them (Palekar, Atapattu, Sedera, & Lokuge, 2018). Glynn et al. (1995) state that "the major components of the spiral of silence include:

- (1) an issue of public interest
- (2) divisiveness on the issue
- (3) a quasi-statistical sense that helps an individual perceive the climate of opinion as well as estimate the majority and minority opinion
- (4) 'fear of isolation' from social interaction
- (5) an individual's belief that a minority (or 'different') opinion isolates oneself from others; and
- (6) a 'hardcore' group of people whose opinions are unaffected by others' opinions."

The responses of some of the participants regarding how they react to the use of pejorative language during gameplay correlate with some of the components on the Spiral of Silence model especially Points 5 and 6 listed above. This is because participants resorted to keeping quiet during a game because of the level of racism they've experienced. However, the spiral of silence theory has been criticised. The critics claim that character traits affect whether or not individuals voice their thoughts. Those who are overly confident or arrogant can say whatever they want, regardless of whether they belong to a minority group (Katz, 1981; Kennamer, 1990).

5.8.3 RETALIATION

Previous literature indicates that retaliation is reactionary, it is a reaction to something where a gamer will do something instinctively when trolled rather than with a specific goal or intention in mind. This is regarded as being motivated by retribution because they must be trolled first before acting, this is known as a trigger (Chess & Shaw, 2015; Cook et al., 2018; Massanari, 2017; Mortensen, 2018; Vermeulen et al., 2016). Players who retaliate, are often players who have been wronged themselves first, they do this because they want to bring about either or both the suffering and downfall of the player who wronged them or to change that players' actions by demonstrating to them how their actions negatively impact other people (Cook et al., 2018).

The findings of this study showed that the use of pejorative language is a common occurrence in MMOGs, however, some participants said that they do not take part in pejorative language during gameplay. They do however say that they retaliate by also using pejorative language. It is evident that aggressive conduct might lead to more aggressive and retaliatory actions in MMOGs. Vicious cycles identified by Fox, Gilbert and Tang (2018) show how harassment may occasionally lead to further harassment, creating feedback loops where players abuse one another nonstop and ruin the atmosphere for playing the game. Liu and Agur (2023) explain that the motivation for retaliation is that it resulted in a certain psychological reprieve for some players. Typically, toxic behaviour from other players such as the use of pejorative language as seen in the present study's data sets off this kind of retaliation.

5.9 SUMMARY

The chapter outlined the researcher's understanding of the interview data, the constructs that emerged from the data and how they related to each other. The stressor-strain-outcome (SSO) model was used as a way of relating categories i.e. for theoretical coding and theoretical integration by category.

CHAPTER 6: CONCLUSION

6.1 INTRODUCTION

Chapter 6 concludes this paper by presenting a summary of the proposed theoretical model for understanding the use of pejorative language in MMOGs and propositions that were formed. Also discussed here are the study's contribution to the body of knowledge, conclusions about the research approach, the evaluation of the methodological process and well as recommendations for future research. Figure 27 outlines the structure of this chapter.

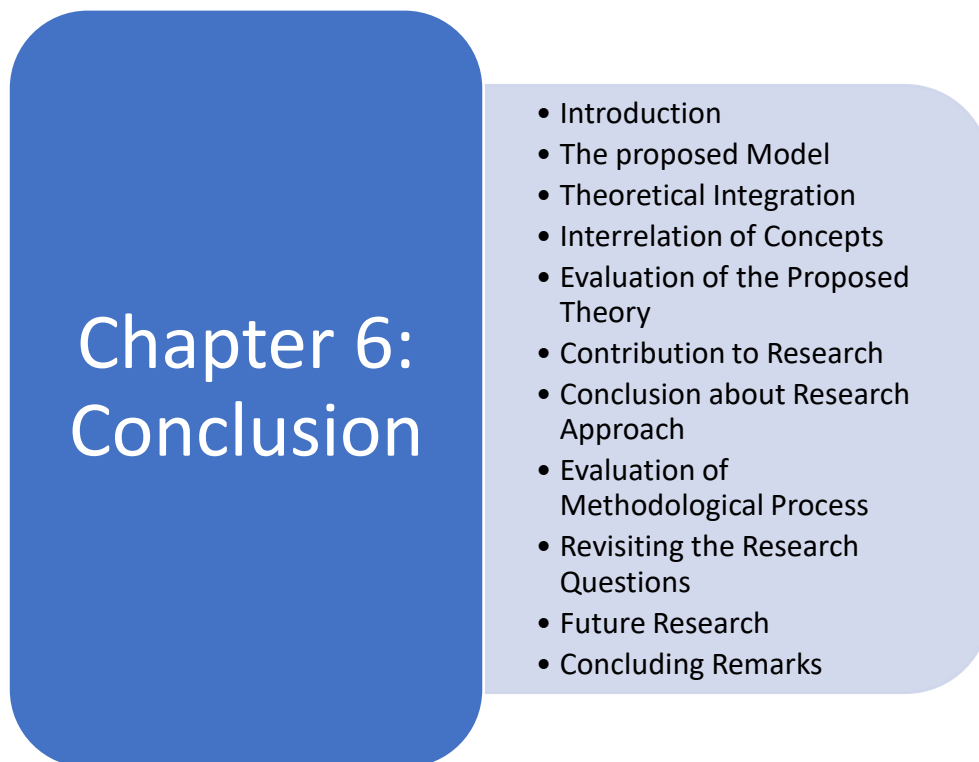


Figure 27: Outline of Chapter 6

6.2 THE PROPOSED MODEL

The theory proposes that game language and competition (both inter-team and intra-team) are influenced by the type of game played. The influence of these core categories will in turn play a role in the actual language behaviour, which, in the context of this study has been identified as pejorative. The actual language behaviour depends on the different gaming platforms and the moderation and medium of communication used in these platforms. There are then outcomes that result from the actual language behaviour. The developed categories were placed into the overall SSO framework in order to build an emergent theory. The theory building process involved the identification of categories and the concepts that are the

building blocks of these categories. The proposed model reflects the relationships between the core categories which emerged. Players who participated in the study mentioned that there were different types of games that they play, and these games had different goals and objectives and were governed by different rules. This led to the development of the first category of “the type of game”.

As the theory matured, it became apparent that the types of MMOGs played were very competitive and that the type of game played influenced their language use. Players referred to the use of pejorative language as being part of the game, this was further supported by how there would be different reactions to the language used, thus, the category “Game language”, which was categorised as players forming their own language. It became apparent that at times, the use of pejorative language in MMOGs was normalised, players explained that at times it was just general banter and that how pejorative language use was perceived also depended on the context in which the language was used. The category of the competitive nature of games emerged from how participants described their interactions with players on their teams versus the interaction with players who were not on their teams. The emergence of these concepts led to the need for understanding how the game language as well as the competitive nature of the game resulted in the actual language that was used. Although the competitive nature of the game, individual characteristics, and the game language resulted in the use of pejorative language in MMOGs, it was apparent that players’ use of pejorative language was determined and influenced by the platform or environment in which they played, as well as the medium of communication that they use. The use of pejorative language in MMOGs, as found in the study, led to some players resorting to forming their own small communities, choosing to remain silent or retaliating. This is how the category of the outcome of pejorative language use emerged.

Figure 28 is an illustration of the proposed theoretical model which explains the emerging theory for this study. It shows the relationships between the core categories that explain players’ perceptions regarding the use of pejorative language in MMOGs.

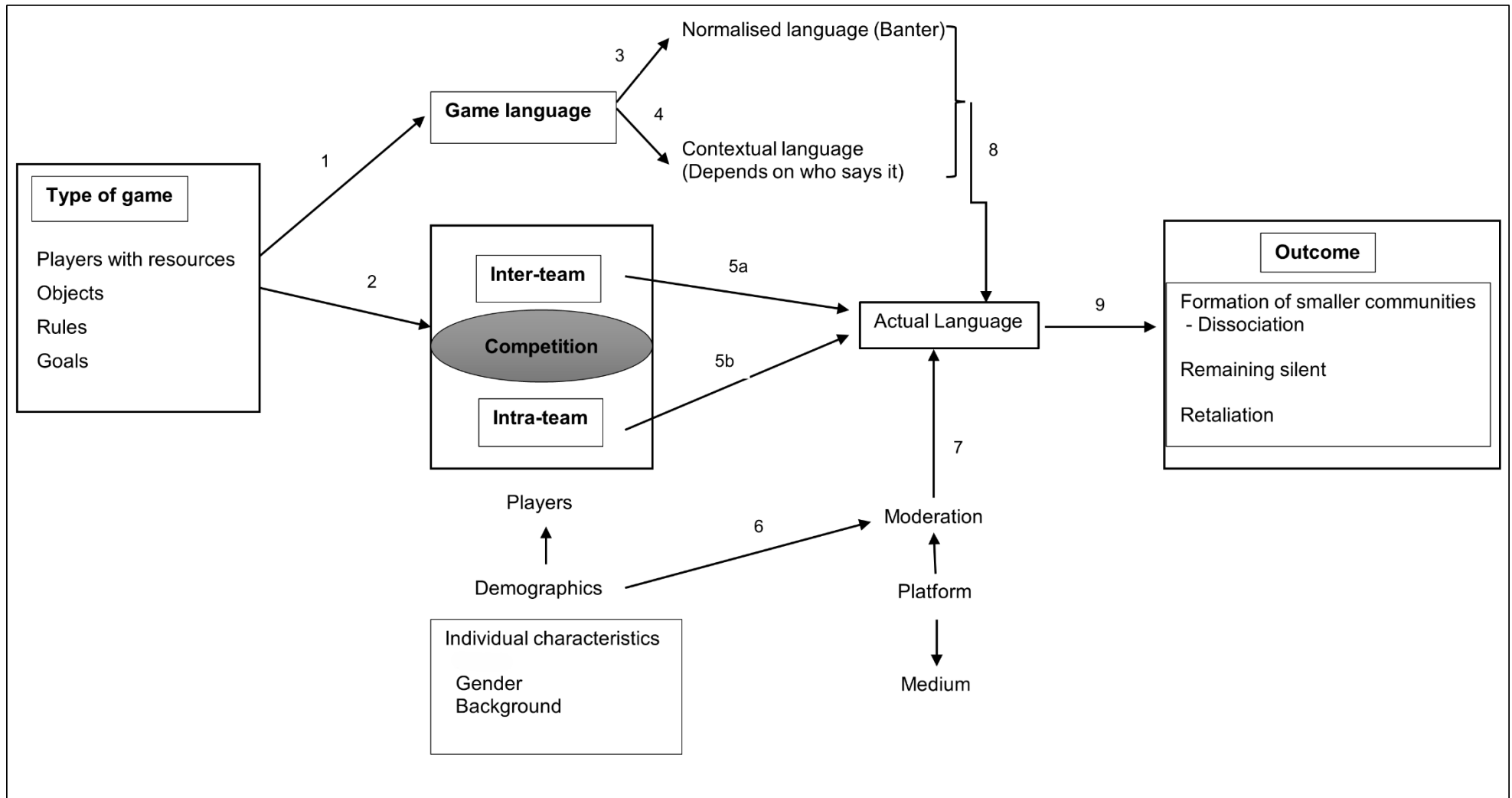


Figure 28: Proposed Model for Understanding the Use of Pejorative Language in MMOGs.

6.3 THEORETICAL INTEGRATION

The grounded theory methodology has been criticised for producing superficial theoretical models centred around micro-phenomena (Layder, 1993, 1998). Urquhart et al. (2010) suggest that a GTM researcher "scale up the theory" and integrate the emergent theory with pre-existing theories in the field of study to counter this argument. The researcher scales up the theory by organising concepts into broad categories, this is done with the sole purpose of "raising the degree of abstraction", and then connecting these categories to produce constructs (Urquhart & Fernández, 2013; Urquhart et al., 2010). The last and most crucial stage in developing a theory utilising the GTM is theoretical integration (Urquhart & Fernández, 2013).

Glaser and Strauss (1967)'s original work and the additional advancement of GT, dubbed classic GT by Glaser and his supporters (Glaser, 1998, 2001, 2005), supports holding off on conducting a literature review in the researcher's factual area of study until the analysis is almost finished. They argue that deferring the literature review will help the researcher develop a hypothesis that is anchored in empirical reality and fits with it. Their dictum is primarily intended to: (a) keep the researcher as independent and open to discovery as reasonable; and (b) prevent bias, such as fitting data into pre-existing conceptions that alter the data, do not represent the data, or are unrelated to the substantive field. The researcher followed these guidelines and compared the emergent theory with existing literature in Chapter 2. The researcher was mindful about reading literature related to language use in MMOGs and keeping an open mind during this process. Additionally, the researcher examined how the emergent theory supports, expands upon, or contradicts other ideas in the area by integrating it with them. Analytical generalisability of the emergent theory is enhanced when compared to other established theories in the literature (Urquhart & Fernández, 2013).

Upon conducting literature review, the researcher identified the stressor-strain-outcome (SSO) model (Koeske & Koeske, 1993) discussed in Chapter 5 as a relevant model in explaining the proposed model for understanding the use of pejorative language in MMOGs. The stressor-strain-outcome (SSO) model, first coined by (Koeske & Koeske, 1993) can be used to assess how different stressors affect people and whether they have a detrimental effect on them. According to this model, long-term adjustments to one stressor should cause matching adjustments to the strain elements, which should then influence the outcome

element. The model describes stressors as emotional stimulants including negative outcomes and technological excess. To better understand the stress process, this study model is based on the SSO model (Koeske & Koeske, 1993). From the standpoint of MMOGs, the type of game played, game language, and the competitive nature of games can be identified as stressors. These will result in strains that have unfavourable effects (Um & Harrison, 1998). Previous studies have demonstrated the significant influence that the environment has on the development of behaviours that result in harmful behaviour (Adinolf & Turkay, 2018; Beres et al., 2021; Kordyaka et al., 2020; Turley & Milliman, 2000) such as pejorative language. Accordingly, the SSO model offers a constrained and organised way to investigate how technological characteristics function as social stimuli and impact users' online experiences (Zhang et al., 2016). Stress is thought to be a significant early predictor of strains and is brought on by an imbalanced relationship between environmental demands and users' management capacities.

In terms of MMOGs, this study found that the type of game played has an influence on pejorative language use. Players take on different roles in MMOGs, these actors in the game engage in different actions to achieve a specific outcome (Stolz, 2023b). It was evident from this study that the type of game played has an influence on the use of pejorative language (game language) during gameplay. It emerged from the study that players use more “direct” language when playing which can sometimes be pejorative. Players also stated that some games are more peaceful and fun with less pejorative language than others. The games played also differ but in general the games are very competitive and the study found that competition can be both inter-team and intra-team. Research shows that the competitive nature of games may result in aggression, including the use of pejorative language (Grandprey-Shores et al., 2014).

In the current study it is argued that when a player encounters a bad event in a game and gets stressed, they engage in behaviour that may otherwise be deemed abusive, which then results in communication that is damaging, foul, and likely to spread beyond gameplay (Kordyaka et al., 2020; Neto et al., 2017), i.e., pejorative language. From the data, it is evident that aggressive behaviour in competing environments, which encompasses pejorative language use in MMOGs gradually unfolds its components within the realm of one's emotional aspects. It's ingrained in the expressions used to humiliate, discredit, and threaten opponents. These subtle tactics try to weaken opponents' capacities for resilience

by sowing the seeds of uncertainty, anxiety, and weakened self-belief. It can therefore be concluded that violent behaviour resulting in pejorative language use is strongly predicted by an individual's interest in the game's result, such as occurs in a truly competitive the environment.

The SSO model views strain as a mediating component and connects stressors to outcomes, strain is a direct consequence of stress (Cao et al., 2018; Koeske & Koeske, 1993) In terms of SSO, the actual language used in MMOGs is a mediator, it gets moderated by the platform/environment and thus has an influence on the outcome. The actual language used in MMOGs, which is pejorative language, is thus a direct consequence of the stressors identified. This way of communicating was likened to the language used by soldiers in combat. Serving as a soldier usually necessitates learning new vocabulary (Cook, 2013). In situations when soldiers are constantly battling the inevitable risks of injury and death, it is common to seek solace in harsh words. Pejorative language served as an outlet for the anxiety and frustration caused by the abnormal stresses of contemporary combat (Brophy & Partridge, 1930).

The proposed theory, grounded in data and using SSO for theoretical coding is unique in the sense of classifying contexts, i.e., game language and competition as stressors and actual language use as an outcome of the stressful context. Previous studies on language use in gaming environment only focused on its educational benefits and second language learning (Chotipaktanasook & Reinders, 2018) as discussed in Sections 2.4.2 and 2.4.4. This proposed theory provides new insight by offering a more thorough and intuitive view of the communication and language patterns as found in MMOGs. The proposed theory also offers a fresh perspective on existing literature by considering how players perceive the use of pejorative language during gameplay, and this new viewpoint improves our understanding of the use of pejorative language in MMOGs. This study responds to the demand for more investigation into pejorative language use in MMOGs.

6.4 INTERRELATION OF CONCEPTS

The relationship between the ideas found in the study will be further explained in the section that follows. Figure 28 shows the relationships between the categories that emerged. Analysing the empirical data revealed that the type of game played, together with its rules and goals influence the use of pejorative language in MMOGs. Chapter 5 explained that the

type of game is played by players with resources who take on specific roles in the game. These players are referred to as actors in social games. Players have responsibilities and characteristics related to the game. Player qualities pertain to a player's characteristics that are significant to the game. The data showed that players usually take on roles such as healers, heroes, thieves, etc depending on the type of game. The players use objects such as guns and grenades, or items that the player perceives as part of the virtual world. This relationship informed Proposition 1.

Proposition 1: The type of game played by MMOG players has an influence on the use of pejorative language (game language) during gameplay.

The game types can have agreed upon or disputed rules and representations. A game may also have one goal, but frequently it has several. The data showed that players usually get into character when playing games, and depending on the type of game played, the player may use a language that aligns to their character. Players have reported that they use more direct language when playing, which can sometimes be pejorative. It was also stated that some games are more peaceful and fun with less pejorative language than others.

Proposition 2: The type of game played impacts both intra-team and inter-team competition.

Competing games can be viewed as corrupted play, but it is crucial that all games, both professional and amateur, strive to uphold a sense of integrity and sportsmanship by permitting and enticing participants to compete in a way that somewhat resembles the fundamental elements of play (Hylton, 2018; Newman et al., 2022a; Newman et al., 2022b). Altruism, or the tendency to help others even at the expense of pursuing one's own goals, and the tendency to become more hostile to those who are not part of one's social circle, are traits frequently seen in humans (Choi & Bowles, 2007; Diekhof et al., 2014). From the data, it is evident that aggressive behaviour in competing environments, which encompasses pejorative language use in MMOGs gently unfolds its components within the realm of one's emotional aspects. It's ingrained in the expressions used to humiliate, discredit, and threaten opponents. These tactics try to weaken opponents' capacities for resilience by sowing the seeds of uncertainty, anxiety, and weakened self-belief. Therefore, it can be concluded that violent behaviour resulting in pejorative language use is strongly predicted by an individual's interest in the game's result, such as occurs in a truly competitive environment.

Proposition 3: Pejorative language use in MMOGs is normalised and perceived as part of the game/game language.

Players form their own language, referred to as game language. Participant 5 stated: “You know there's an entire language that they spoke within games that people understand...” Pejorative language is normalised language in gaming as players refer to it as general banter. During the study, it became evident that pejorative language was a major component of MMOGs. This was seen from the interview data as well as observations of gameplay and recordings. Players use pejorative language loosely and sometimes out of context, and no one takes it personally. Players indicated that this is a component of MMOGs which are classified as competitive. Players have produced countless examples of impulsive, imaginative, and amusing banter as an aspect of the game, which is frequently referred to as gamesmanship. However, not all pejorative language is accepted by players, this gave rise to the next proposition.

Proposition 4: The acceptability of pejorative language use as game language depends on who says it (contextual language).

Although pejorative language use is accepted by players in some instances, there are instances where they perceive it as bad. Players are more lenient and accepting of the use of pejorative language if it comes from someone that they like. On top of this, it also depends on the context it is said in as it can ruin the aspect of enjoyment of the game for players and it is not something that they personally particularly like. Participant 7 also said the acceptability of pejorative language in MMOGs depends on the people one is playing with. There was also mention of the degree or extent of the game language: some players believe that as much as it is acceptable, some players tend to take it too far.

Participants 4, 6 and 10 believe that it is unnecessary and there is absolutely no need for it. With Participant 4 explaining that they are against pejorative language use “when it comes to the other side”, they explained this as when people are being mean and use pejorative language out of context. According to Participant 11, sometimes people would be mean and use pejorative language just because she is a girl and, at times, does not know how to play the game well. Other players then just get angry quickly and bring up her gender. However, when playing with male friends, they would bring up her gender, but in a joking way, and she does not take this seriously.

Proposition 5: The competitive nature of MMOGs has an influence on the type of language used.

Participants in the study reported that there is competition that exists among players or teams during gameplay. It is the nature of the game. This study indicated players perceive MMOGs as very competitive, the competitive nature of MMOGs influences the type of language used by players. Factors like frustration and pressure during competitive gameplay result in the use of pejorative language.

Proposition 5a: Inter-team competition negatively influences players' perception of pejorative language use in MMOGs.

Fighting the opponent team in competitive game situations puts a lot of pressure on a team to compete at a level on par with or higher than the opposing team since losing the match results in a complex loss of resources, time, and reputation for members of the team (Kou & Nardi, 2013; Shen et al., 2020). The study showed that competition in games happens inter-teams and intra- teams. Competitiveness is important in gaming, within intra-group favouritism and inter-group antagonism influencing the level of reporting (Munn, 2023). The data showed that pejorative language is used in both settings, however, it is meant to cause conflict and break morale inter-teams, but it is said not be a big deal intra-team.

Proposition 5b: Intra-team competition positively influences players' perception of pejorative language use in MMOGs.

From this study, it is evident that aggressive behaviour in competing environments, which encompasses pejorative language use in MMOGs gently unfolds its components within the realm of one's emotional aspects. It's ingrained in the expressions used to humiliate, discredit, and threaten opponents. These delicate tactics try to weaken opponents' capacities for resilience by sowing the seeds of uncertainty, anxiety, and weakened self-belief. It can therefore be concluded that violent behaviour resulting in pejorative language use is strongly predicted by an individual's interest in the game's result, such as occurs in a truly competitive the environment.

Proposition 6: Individual characteristics moderate the actual language use.

The results of this study showed that individual characteristics moderate the actual language used in MMOGs. These individual characteristics include gender and background. The data

showed that gender plays a role in the language used during gameplay with Participant 5 mentioning that pejorative language was normal during gameplay since they are *amajita* (men). The participant stated:

“Seeing as that I’m a guy, I’m kind of used to these conversations where amajita are talking and then they swear around each other or someone does something stupid and then a bit of swearing and strong language comes into the conversation, but in a funny way. Like it’s, you know it’s normal in the in that type of way. Most of the time predominantly the gamers that are playing games are usually males and some of them are your friends and you know in situation where you can use strong language in a funny way, yes, it’s totally normal. But if it’s being directed to bully someone, then it’s a bit of a problem.”

However, the language changes when male players realise that they are playing against a female player. Participant 1 stated:

“UM. I would say most players you know the bad language is mostly swear words, but there is always the racist and gender remarks with it. Like for instance, when playing CSGo, when you hear someone on the mic speaking and you hear it’s a female, usually the people in the lobby just say, “oh, go back to the kitchen and make me a sandwich...” and stuff like that.” [Participant 1]

An excerpt from Participant 6’s interview shows that players’ backgrounds moderate the actual language used during gameplay. Participant 6 also mentioned that they do not use pejorative language because of their background. However, when asked if they would use it if they were from a different background, the participant said that maybe they would but also feared what their family would say when playing at home. But then also said that if they were to play at school, away from family, they might consider engaging if it was not hurtful.

“The way I grew up, I think and the way I grew up because at home like you know when you use that strong language. Hey. Yeah, yeah...” [Participant 6]

“I probably, yeah, maybe I’d enjoy it, but yeah, no. The background thing, with the way I was raised, and I’m home, you imagine I’m using these those words at night around 3:00 AM. Obviously they are gonna wake up and be like, “hey, what’s going on?” cause I’m using headsets to play. Then they’ll chase me away. Then I don’t want

that...Hey, I don't know, I don't know about that. I don't know. Maybe I'll be free and yeah. But then no, I will never use that cause it's hurtful." [Participant 6]

Proposition 7: The platform or medium of communication is a physical moderator for the actual language use.

The actual language used is moderated by the platform. This study reported that players experienced pejorative language differently depending on the platform or medium of communication use. The platform in MMOGs is either chat or audio, and this plays a role on moderation within the game. Pejorative language via text is easily detected by the game and can be censored, however, this is not the case with audio. The study found that the moderating features of the games players play stop them from using pejorative language during gameplay. The players also describe that the level of moderation depends on the type of game played, some games have censoring capabilities and players can be banned from the game if they are reported for using pejorative language or if it is censored by the game.

Proposition 8: The actual language used in MMOGs, although normalised, is perceived as pejorative.

The results of this study showed that the actual language used in MMOGs, although normalised, is pejorative. Participants stated that the language used in MMOGs is very different from their everyday language and have described the actual language in MMOGs as "*vulgar*", "bad", "offensive", etc. Participant 7 stated:

"...Bad language. Oh, that one is a tough one because the young kids will be swearing a lot. And it has come from us who are older. So, I don't know. We do swear we do swear it's a very difficult, difficult one. I don't think it's a good thing cause the young kids take into reality and they use it against their peers, their teacher. So, I think that could be better." [Participant 7]

Proposition 9a: The use of pejorative language in MMOGs results in the formation of smaller communities.

The actual language used has an influence on the outcome. Numerous groups in MMOGs have failed due to "drama," which is defined as open confrontation between several group members, and internal conflicts (Ducheneaut et al., 2007b). Participants described these

using terms like “forming smaller groups” or “only playing with friends”. This was their way of removing themselves from the toxic environment of gaming which is because of the use of pejorative language during gameplay. Research studies focusing on role of dissociation in gaming behaviour have found that there is a positive correlation between inappropriate gaming and different dissociative symptoms such as amnesia, dehumanisation, detachment, or disengagement (Guglielmucci et al., 2019). Playing MMOGs with friends increases an individual's enjoyment of the experience.

Proposition 9b: The use of pejorative language in MMOGs results in players choosing to remain silent.

Remaining silent and not engaging during gameplay is another outcome of the actual language used in MMOGs that came up from this study's data. Participants reported resorting to ignoring the comments made in the games they play and just focusing on the game for enjoyment. Participant 2 stated:

“Honestly, when I play the game like I'll see someone say something horrendous towards me and then I'll just think like OK, whatever like, I don't care dude.”

[Participant 2]

Pejorative language ruins players' enjoyment of the game so they choose to play in silence and not participate in game conversations instead of quitting gaming altogether.

Proposition 9c: Players will retaliate to the use of pejorative language during gameplay.

The study also showed that the use of pejorative language is a common occurrence in MMOGs, however, some participants said that they do not take part in pejorative language during gameplay. They do however say that they retaliate by also using pejorative language. For example, Participants 3, 4 and 5 stated that they will retaliate when someone is being mean to them even though this was not their intention. It is evident that aggressive conduct might lead to more aggressive and retaliatory actions in MMOGs. Vicious cycles identified by (Fox et al., 2018) show how harassment may occasionally lead to further harassment, creating feedback loops where players abuse one another nonstop and ruin the atmosphere for playing the game. Typically, toxic behaviour from other players such as the use of pejorative language, as seen in the present study's data, sets off this kind of retaliation.

6.5 EVALUATION OF THE PROPOSED THEORY

Studies using grounded theory are frequently criticised as being inconsistent, unreliable, and having a weak grasp of the grounded theory methodology (Linden & Palmieri, 2021). This section will examine the theory developed in this research study to see whether it was methodologically sound. Fit, relevance, work, and modifiability were presented by Glaser and Strauss (1967) as standards for evaluating quality. Glaser and Strauss (1967) propose that both the substitute area and the data must closely fit the theory. Professionals and laypeople involved in the field should find the theory relevant since it fits in with the facts and substantive areas. A theory frequently has grab, that is, it is captivating and memorable to people in the relevant field, when it is relevant (Linden & Palmieri, 2021; Lomborg & Kirkevold, 2003). To enable the theory to work by explaining what happened, projecting what will happen, and interpreting what is happening in the substantive area while giving individuals some degree of control over the situation, it must also be easily adaptable to a numerous of diverse everyday situations within the substantive area (Linden & Palmieri, 2021; Lomborg & Kirkevold, 2003). Lastly, the theory needs to be sufficiently flexible to be modified when the substantive area is presented with new data and the subject matter evolves (Glaser & Strauss, 1967; Linden & Palmieri, 2021; Lomborg & Kirkevold, 2003).

To evaluate the theory developed in this study, the researcher followed the set of questions proposed by Introna (1992) which the researcher further expanded based on the standards proposed by Glaser and Strauss (1967) and were therefore better suited for the purpose of this study.

Does the theory raise problems previously not perceived, such as problems of an increasing depth, and does it display an ever-increasing fertility in suggesting new problems?

The proposed theoretical model was developed with the aim of closing the gap that was identified in IS literature concerning the perceptions of players regarding the use of pejorative language in MMOGs as identified in Section 1.2. The reason for this study was to grasp the concept of what players' perceptions of pejorative language use in MMOGs are and to understand how other players account for the strong presence of pejorative language and expletives in player discourse. The study emphasises the crucial role of understanding players' perspectives of the use of pejorative language in MMOGs and the proposed theory offered a fresh perspective on existing literature. Existing literature instead focuses on

language learning, as discussed in Section 2.4.2 and abuse language such as trolling, explained in Section 2.4.5. By considering how players perceive the use of pejorative language during gameplay, this new viewpoint improves our understanding of the use of pejorative language in MMOGs.

This study responds to the demand for more investigation into pejorative language use in MMOGs. The researcher provides possibilities to spark fresh and advance existing academic conversations in Section 9.2, Contribution of research to literature and Section 9.6, Future research prospects. This study's primary contribution to the information systems body of knowledge is its analysis of what MMOG players' perceptions of pejorative language use in MMOGs are. To the best of the researcher's knowledge, this study offers the first native analysis of the use of pejorative language in MMOGs supported by qualitative data. The study adopted the grounded theory methodology with the intention to build comprehensive theory grounded in research data that explains players' perceptions of the use of pejorative language in MMOGs. The outcome of the study was a model for understanding the use of pejorative language in MMOGs.

Section 9.6 explains that future research can benefit from comprehensive observation of MMOG players and thoroughly assessing their contribution and reactions to pejorative language use, as well as how they respond to it. The present study also looked at MMOGS in general regarding the types of games played. There were many different games that were mentioned by players, but the focus of this study was MMOGs holistically. Future research can make comparisons of various games and investigate how and why pejorative language is used in the different games.

Does the theory anticipate novel facts and auxiliary theories?

The novel use of the SSO model (Koeske & Koeske, 1993) discussed in Chapter 5 is a relevant model theoretical coding in order to build the proposed model for understanding the use of pejorative language in MMOGs. According to this model, long-term adjustments to one stressor should cause matching adjustments to the strain elements, which should then influence the outcome element. The theory proposes that stressors (game language and competition) are influenced by the type of game played. The actual language used in MMOGs is a mediator, it is moderated by the platform/environment and individual characteristics, and thus has an influence on the outcome. Previous studies have

demonstrated the significant influence that the environment has on the development of behaviours that result in harmful behaviour (Adinolf & Turkay, 2018; Beres et al., 2021; Kordyaka et al., 2020; Turley & Milliman, 2000) such as pejorative language. Accordingly, the SSO model offers a constrained and organised way to investigate how technological characteristics function as social stimuli and impact users' online experiences (Zhang et al., 2016). Stress is thought to be a significant early predictor of strains and is brought on by an imbalanced relationship between environmental demands and users' management capacities.

However, there is still a lack of persuasive data to support this (Chesney et al., 2009; Cook et al., 2018; Kwak & Blackburn, 2015; Kwak et al., 2015; Märten et al., 2015). It could be helpful to find out if M-gamers are aware of the violence in the games and give it the same consideration or importance that outsiders might be giving it while speaking within their subgroup (Bawa, 2018).

The spiral of silence theory discussed in Section 5.8.2 also shines some light on the proposed theory. The spiral of silence theory posits that a person's readiness to voice his own thoughts is influenced by how he perceives the dispersion of general public consensus, which subsequently informs the views of others and, eventually, how keen they are to voice their views (Glynn et al., 1995; Noelle-Neumann, 1974). Remaining silent and not engaging during gameplay is another outcome that came up from this study's data. Participants reported resorting to ignoring the comments made in the games they play and just focusing on the game for enjoyment. The present study was a grounded theory study, which presented a theory-based, holistic understanding of the experiences of the players themselves and as a result produced a theoretical model that aids in our understanding of player's perspectives of the use of pejorative language in MMOGs.

Is the theory more precise in its assertions and in the facts it explains than previous theories?

Yes, this theory has used elements from previous theories found in the literature to develop a distinct theoretical model for understanding the use of pejorative language in MMOGs. The proposed theoretical model differs from existing models in that it identified different factors in MMOGs that result in pejorative language use. Existing literature explain that games are being used more frequently in all stages of education, including language

learning. A growing body of research has shown how successful digital games are for teaching and learning languages (Chotipaktanasook & Reinders, 2018; Kongmee et al., 2011; Lin & Guo, 2021; Ng et al., 2021; Peterson, 2012; Wang, 2017). The *World of Warcraft*, which is a globally popular MMOG, was used as a context to conduct research on the semiotic ecology and linguistic complexity of an online game world by (Thorne et al., 2012). The main goal of their study was to evaluate the linguistic ambiguity of game-presented texts explicitly and impartially (or quest texts, the tasks that players are given that structure their gameplay) as well as game-external websites that are frequently used by, and typically created by, active gamers. Other researches on language and communication in MMOGs also include studies by (Pearce, 2017) who touched on how *World of Warcraft* users practice gender identities through language, as well as (Blake, 2011) who studied how games, including MMOGs, can be influential in online language learning.

The proposed theory, grounded in data and explained by SSO is unique in the sense of classifying contexts i.e. game language and competition as stressors and actual language use as an outcome of the stressful context. Previous studies on language use in gaming environment only focused on its educational benefits and second language learning (Chotipaktanasook & Reinders, 2018), as discussed in Sections 2.4.2 and 2.4.4. The proposed theory provides new insight by offering a more thorough and intuitive view of the communication and language patterns as found in MMOGs. The proposed theory also offers a fresh perspective on existing literature by considering how players perceive the use of pejorative language during gameplay and this new viewpoint improves our understanding of the use of pejorative language in MMOGs. This study responds to the demand for more investigation into pejorative language use in MMOGs. The present study combined different theories in different fields of study to produce a model that presents a holistic view of pejorative language use in MMOGs and not only language learning in MMOGs.

Has the theory unified or connected various hitherto unrelated problems, or concepts?

The theoretical model has discovered novel concepts in literature on understanding the use of pejorative language in MMOGs and linked them to those found in existing literature such as the discussions in Chapter 5. The identified themes and categories are presented in Table 6. The themes that came through in the participants' words included concepts such as the effects of normalised language, competitive language, not being able to express

themselves (not knowing the correct English term), etc. Previous studies on language use in MMOGs focused on language learning (Chotipaktanasook & Reinders, 2018; Kongmee et al., 2011; Lin & Guo, 2021; Ng et al., 2021; Peterson, 2012; Wang, 2017). These studies have demonstrated the value of digital games for second language (L2) learning and how their design aspects are in line with second language acquisition (SLA) ideas. To shed light on how humans acquire languages, there are three primary theoretical stances on language learning and acquisition. The three schools of thought on language learning and acquisition are behaviourist, interactionist, and innatist (Nor & Ab Rashid, 2018).

- Behaviourist theory – The behaviourist theory, which is really a theory of first language acquisition was developed, in part, by Watson (1913) in opposition to conventional grammar. This theory's central idea is that human behaviour may be analysed in terms of the obvious associations and interactions between stimuli and responses (Mehrpour & Forutan, 2015; Nor & Ab Rashid, 2018). In accordance with the Behaviourist Theory, Skinner (1985) connected language acquisition to spoken behaviour. Rather than attempting to explain the brain structures underpinning these kinds of behaviours, he argues that language learning may be seen like any other behaviour.
- Interactionist theory - Asserts that the intricate interplay between the environment and traits that are exclusive to humans results in language learning. This perspective is further supported by Vygotsky (1978), who claims that discussions between children and adults, as well as with other children are crucial because they are the source of mental and language processes. According to Vygotsky (1978), thought is essentially internalised speech, and speech is formed through social interaction.
- Innatist theory - States that children quickly acquire language even though language is incredibly abstract because they are born with an inbuilt template or the foundation for language known as the Language Acquisition Device (LAD). It is thought that when it comes to language acquisition, children do not start from zero because they are able to acquire sophisticated grammar swiftly, without any special assistance after being exposed to a first language (Chomsky, 1996; Nor & Ab Rashid, 2018).

Thus, the proposed theoretical model for understanding the use of pejorative language in MMOGs cohesively presented a high-level conceptualisation of the themes and patterns derived from the interview data, observations, and game recordings. The model better

explains the use of pejorative language in MMOGs by not only focusing on language learning in MMOGs, but also providing an understanding of what MMOG players' perceptions of pejorative language use in MMOGs are. The researcher identified a gap in IS literature focused on the language and communication patterns as found in MMOGs which makes it difficult to identify what M-gamers consider the main concerns regarding pejorative language use in MMOGs and what players' perceptions of pejorative language use in MMOGs are.

Does the theory have positive and negative heuristic power?

Positive heuristic power proposes that in order to ensure that the suggested model is ready to manage any contradictions and variations, the researcher should consider the kinds of adjustments and modifications that would be necessary. The theoretical model's positive heuristic power implies the following:

To understand players' perspectives of pejorative language use in MMOGs comprehensively, qualitative constructivist research was required. The explanations of the participants' experiences were used to create innovative data that aims to also broaden existing hypotheses. The purpose of qualitative research is to comprehend a phenomenon from the viewpoint of the participant, the aspiration to want to understand people's thoughts from their point of view is embedded in the subjective paradigm (Locke, 2000). The researcher's aim was to gather subjective data from participants' personal perspectives and their interpretations of their use and acceptance of pejorative language during gameplay. According to Charmaz (2017), this can only be done when the researcher starts with an open-ended, fundamental term like social interaction. She went on to say that comprehension requires a researcher to be considerate of a participant's anonymity as well as their perspective and self-awareness.

The only way the researcher could understand players' perceptions of the use of pejorative language in MMOGs was by conducting a grounded theory study.

Negative heuristic power describes factors and concepts that researchers should exclude since their premises do not address the core of the theory. Negative heuristic power implies the following based on the discussions in Chapters 2 and 5:

- Section 2.4.6 discussed the approaches taken in previous literature to explain toxic behaviour, which includes the use of pejorative language in MMOGs. The online disinhibition effect explains that people are more likely to display characteristics that present disinhibition online as opposed to in person. It also explains that the anonymous nature of the internet encourages disinhibition, which leads to pejorative language use. However, the study showed that gaming language is much more than originally anticipated as it is influenced by several things. The self-moderation influences gaming language. This shows that besides what is currently presented in literature (anonymity, disinhibition, etc.), players' backgrounds should also be taken into consideration.
- The type of game played also influences gaming language. As explained in Section 5.6.1, the roles taken in the game, the games' rules and goals play a role in understanding the proposed theory in terms of the type of language used. Players don't just use pejorative language all the time, but they adapt to their surrounding (nature of the game and the rules of the game).
- All MMOG gamers are different. This study indicated that distinctions should be made between players' gaming experience and the duration they play for. But also, as gamers' gender should be taken into consideration as it has an influence on the type of language used, this is also supported by prior studies as indicated in Section 2.4.11. The actual language used in gaming differs depending on the player's gender.
- It is also possible that due to some gamers' previous gaming experience, they choose to disengage from all interaction and just play the game.

Has the theory produced a new perspective on existing problems and thus created a new understanding of these existing problems?

Yes, the proposed model presented new perspective on existing literature that focuses on language use in MMOGs by attempting to understand what the components and relationships between components of a theory are, that explain the perceptions of players of the use of pejorative language in MMOGs. The new perspective builds on the IS body of literature by explaining and clarifying what gamers' perceptions of pejorative language use in MMOGs are, what the linguistic habits of gamers during gameplay are, the main concerns regarding pejorative language use in MMOGs and how other players account for the strong presence of pejorative language and swearwords in player discourse.

Has the theory produced unconventional ideas, ideas that radically challenge current preconceptions?

Current literature shows growing concerns of harmful language use during MMOGs as discussed in Section 2.4.5 (Breuer, 2017; Chesney et al., 2009; Cook et al., 2018; S. Costa et al., 2020; de Mesquita Neto & Becker, 2018; Ictech II, 2021; Kou, 2020; Kowert et al., 2014; Kwak & Blackburn, 2015; Kwak et al., 2015; Maloney et al., 2020; Märtens et al., 2015; Saarinen, 2017a; Stark, 2019; Takano & Tsunoda, 2019). The lack of research focused on the language and communication patterns as found in MMOGs makes it difficult to identify what M-gamers consider to be the main concerns regarding pejorative language use in MMOGs and what players' perceptions of pejorative language use in MMOGs are.

When confused by unsolved questions about occurrences of a certain phenomenon, researchers conduct research. This exploratory trip aims to provide answers to these queries. The purpose of a grounded theory study is to produce new knowledge contributing to the existing body of knowledge. This was the purpose of this study, to build theory that will make a contribution to the understanding of the use of pejorative language in MMOGs. The proposed model for understanding the use of pejorative language in MMOGs provides insight into the concerns raised. The findings on the true meaning or significance of gamers' language can be helpful for non-gamers who have players in their families or friends to better comprehend why and how their loved ones are talking the way they do within the gaming environments. This will help them understand whether these communications will have an impact on their real-world lives outside of the games.

The answers to the questions above make it clear that the study described in this thesis satisfies the standards for evaluation established by Introna (1992) and, as a result, represents advancements in science. It is true that the suggested idea advances our understanding of the use of pejorative language in MMOGs.

6.6 CONTRIBUTION OF RESEARCH

The purpose of this study was to gain an understanding of what MMOG players perceptions of pejorative language use in MMOGs are. The researcher identified a gap in IS literature focused on the language and communication patterns as found in MMOGs which makes it difficult to identify what M-gamers consider to be the main concerns regarding pejorative

language use in MMOGs and what players' perceptions of pejorative language use in MMOGs are. This is an area that requires more research attention because of the extreme repercussions of the harmful language used during gameplay, as a result the present study aimed to contribute to filling this gap in knowledge by understanding what are the linguistic habits of gamers during gameplay to grasp the concept of what gamers perceptions of pejorative language use in MMOGs are and to understand how other players account for the strong presence of pejorative language and expletives in particular in player discourse.

This research took a qualitative approach in examining main concerns or most important aspects of the use of pejorative language in MMOGs. The research question was "*What are gamers' perceptions of pejorative language use in MMOGs?*". This research question was answered by developing a theory that is aimed at understanding the use of pejorative language in MMOGs which explains different stressors and strains that result in the use of pejorative language in MMOGs. Twelve interviews were conducted before theoretical saturation was reached. These participants supplied rich data for the researcher to draw on because of their gaming experience. The data gathered lead to the emergence of the substantive theory "Understanding the Use of Pejorative Language in MMOGs".

The discussions thus add to the IS body of knowledge by explaining players' main concerns with regards to pejorative language use in MMOGs resulting in understanding the way in which participants perceive the use of pejorative language during game play, observing and differentiating the linguistic habits of gamers during gameplay and understanding how players account for the strong presence of pejorative language and expletives in a particular player discourse.

Every research project seeks to use research methods and systematic methodologies either or both to develop, improve, and enhance a body of knowledge, uncover facts, and draw novel findings (Chun Tie et al., 2019). Grounded theory is a research methodology that focuses on developing theories that are grounded in data that has been logically gathered and scrutinised. It is employed to clarify social processes, also referred to as group behaviours and social interactions (Orlikowski, 1993; Walsh et al., 2015).

This study's primary contribution to the information systems body of knowledge is its analysis of what MMOG players perceptions of pejorative language use in MMOGs are. To the best

of the researcher's knowledge, this study offers the first native analysis of the use of pejorative language in MMOGs supported by qualitative data. The study adopted the grounded theory methodology with the intention to build comprehensive theory grounded in research data that explains players' perceptions of the use of pejorative language in MMOGs. The outcome of the study was a theoretical model for understanding the use of pejorative language in MMOGs.

Despite being a qualitative study with just twelve individuals, the in-depth richness of the data present in grounded theory studies allows this analysis to add to our understanding of the subject matter. By providing a solid theory that may aid in answering and explaining the research question, this study sought to advance our comprehension of this complex topic. Every significant emerging category covered in this thesis, such as the type of game played, calls for more research.

6.7 CONCLUSION ABOUT RESEARCH APPROACH

This research took a qualitative approach in examining main concerns or most important things of the use of pejorative language in MMOGs. The research question was "*What are gamers' perceptions of pejorative language use in MMOGs?*". The constructivist GTM version, as described in Chapter 3, was the adopted research approach to help answer the research question as it was developed with the intention of finding an acceptable compromise between positivism and the concept of postmodernism (Charmaz et al., 2003). Rather than focusing on finding trends in the data, constructivist GT theorists suggested that both researchers and the respondents create a shared reality, with the researcher's goal being to create this shared reality (Charmaz, 2006a).

This approach allowed the researcher to examine new and evolving occurrences regarding the pejorative language use in MMOGs and use the facts gathered from MMOG players' reality about how they perceive the use of the pejorative language in MMOGs to create a theory that helps to understand their experiences instead of basing the study on predetermined theories.

The researcher was sceptical about this research approach because of her inexperience; however, after doing some reading on the subject it became the best-suited choice for this study. The constructivist GMT provided clear instructions with well-formulated methods that

are helpful for the inexperienced researcher (Hughes & Jones, 2003; Kelle, 2007); and it enabled the researcher to be open and honest about their research findings, establishing a 'chain of evidence' and lending legitimacy to the study (Walsham, 1995).

The snowballing method was used to recruit the initial participants, this was followed by theoretical sampling to recruit the participants that followed. The main source of data collection for this study was therefore semi-structured interviews which were then augmented by participant-recorded games, researcher observations of participants' game play and memos. Data collection, coding, and analysis in this study were all carried out in an iterative manner. The researcher took advantage of this method to benefit from an early start on analysis by iteratively conducting interviews, doing observations, and listening to recordings of games whilst also coding, and analysing the data in the process.

To consistently improve concepts and categories that are theoretically pertinent, the constant comparison was employed to identify similarities and contrasts. The researcher wrote memos during the process detailing her perspectives on significant conversations and situations. Theoretical saturation was reached when analysing data from the last two interviews where no new concepts emerging.

6.8 EVALUATION OF METHODOLOGICAL PROCESS

Grounded theory is evaluated not just by qualitative criteria but also by using the very conceptions that helped to generate it. This is because each research technique should be evaluated using criteria that are appropriate for the approach (Berthelsen, Grimshaw-Aagaard, & Hansen, 2018). Strauss and Corbin (1990b) stated that grounded theory research quality is assessed using three criteria: validity, reliability, and credibility. The reasoning is that this criteria tackle both the artistic and scientific aspects in undertaking qualitative research (Corbin & Strauss, 2008). It can be confirmed by most field workers that by the time the study is done, the researcher will be challenged to change his mind about his own idea. This trust in the analysis' legitimacy does not imply that it is the only one that makes sense in light of the evidence he has collected (Corbin & Strauss, 2014; Glaser & Strauss, 1967). Glaser and Strauss (1967) justify their confidence by pointing out that the researcher can provide a "plausible" explanation for the social reality under study because they have been so deeply involved in it. The researcher chose to use the expanded

evaluation criteria by (Corbin & Strauss, 2014) to do a reflection on this present work's methodological process.

6.8.1 Do the findings fit the experiences of the readers and the participants as well?

The fit between the responses of participants and how the researcher represents them is what determines credibility (Tobin & Begley, 2004). The researcher ensured that there was extended interaction as well as follow-ups with the participants to ensure that there was a clear understanding of what participants were saying. Following the interviews, the researcher also observed participants play and analysed their recordings as a way of verifying that their responses correlated with the observations and recordings. The researcher verified early findings and interpretations against the data gathered with supervisors as a way to offer an outside audit of the research process, this was done to boost credibility of the findings.

6.8.2 How applicable/useful are the findings for policy and practice?

The findings on the true meaning or significance of gamers' language can be helpful for non-gamers who have players in their families or friends to better comprehend why and how their loved ones are talking the way they do within the gaming environments. This will help them understand whether these communications will have an impact on their real-world lives outside of the games.

In the context of education, the findings of this study contribute to understanding how M-gamers communicate and adopt specialized language which is important especially in light of game-based learning as an instructional strategy because learners frequently double as game players and end users during teaching and training settings (Bodomo, 2009).

6.8.3 Are the findings organised around concepts rather than a mass of uninterpreted data?

The findings are organised according to concepts/themes, as presented in Chapter 4, in the presentation of the findings, the facts are also interpreted so that the reader is not left unsure of how to interpret them. The researcher also ensured to substantiate the findings. Concepts were established with consideration of their dimensions and attributes during the theory building process in order to ensure density and differences.

6.8.4 Is the context described so that the reader can more fully understand the findings and its concepts?

Yes, the thesis is presented in a logical flow. Throughout the thesis, the researcher clearly introduces each section and draws a picture for the reader regarding the contents of each chapter. Each of the chapters are a build up to help the reader understand the background of the area of study and understand the problem.

Chapter 1 introduced the research area and provided the reason for this study. It briefly evaluated the phenomenon of language and communication patterns as found in MMOGs, especially players' perceptions of pejorative language use in MMOGs. The study adopts the grounded theory methodology (GTM) to understand the phenomenon at hand to build a future theory. The chapter subsequently described the purpose, limitations, delimitations, and assumptions of the present study.

Chapter 2 provided an overview of much argumentation applicable to research on massively multiplayer online games (MMOGs).

Chapters 3 is the methodology discussion which established the conceptual and methodological foundations of this study. Chapter 3 examines the theory and application of the grounded theory methodology (GTM), which is connected to the work of Glaser (Glaser & Strauss, 1967; Glaser, 1978, 1992, 1998; Glaser et al., 1968). This chapter explains the usage of GTM in this study. Knowing how the grounded theory methodology (GTM) suits the field of research is essential to comprehending what makes a study legitimate.

Chapter 4 followed by presenting the findings of this study. This chapter offers a brief explanation and examples showing how the evidence was utilised to create the suggested substantive theory.

Chapter 5 described the relationship between the different constructs introduced in Chapter 4. The chapter outlined the researcher's understanding of the interview data, the constructs that emerged from the data and how they are related to each other. The stressor-strain-outcome (SSO) model was used to explain and expand on these relationships.

Chapter 6 concluded this paper by presenting the proposed theoretical model for this study as well as how it integrates with existing literature. The interrelation of concepts is also discussed here. The chapter further presents the study's contribution to the literature, followed by suggestions for future research. Finally, the reflections on theoretical contribution are presented before the concluding remarks.

6.8.5 Do the findings make sense by presenting a logical flow of ideas or are there gaps or missing links in the logic?

The findings do represent a logical flow of ideas. In Chapter 3, the researcher presented a logical flow of the data collection and analysis of findings process. Here the researcher explained how the theory was built from the data collected. The step-by-step process involved a presentation of the initial concepts that were derived from the initial sample, this was followed by emerging concepts were identified leading to the development of key concepts. The researcher explains this by showing the iterative process of data collection for the study. This process of revision made it easier to verify the themes and associations underlying the emergent theory. Next to be presented was the formation of the emerging pattern and categories, which lead to the proposed theoretical model.

6.8.6 Are there depth in the findings, i.e., descriptive details that add richness and variation in addition to the presentation of concepts and links between concepts?

The researcher supports concepts and links to these concepts with interview excerpts from participants which add richness to the findings. The findings are further supported by and integrated with literature to provide motivation for occurrences.

6.8.7 Has variation been built into the findings to demonstrate the complexity of human life?

The findings present some instances of differing ideas that don't match the pattern or exhibit variations in certain qualities or attributes. For example, how some participants would attribute the use of pejorative language to being part of the game and accept this as the norm while others are firmly against it. These differences show that human life is complex and there is no one size fits all formula to explain occurrences and experiences.

6.8.8 Are there creative aspects in the findings, i.e., do the findings say something new, put old ideas together in new ways, or lead to new understandings?

Yes, by emphasising the crucial role of understanding players' perspectives of the use of pejorative language in MMOGs, the proposed theory offered a fresh perspective on existing literature. By taking into account how players perceive the use of pejorative language during gameplay, this new viewpoint improves our understanding of the use of pejorative language in MMOGs. This study responds to the demand for more investigation into pejorative language use in MMOGs. The researcher provides possibilities to spark fresh and advance existing academic conversations in Chapter 5, where data is integrated with literature, Section 8.3, Contribution of research to literature and Section 8.5, Future research prospects.

6.8.9 Does the researcher demonstrate sensitivity to the participants and to the data?

Yes, during the course of this study, the researcher considered the welfare and dignity of the participants. The researcher requested permission to conduct the study from the Ethics Committee at the University of Pretoria. A consent letter detailing the nature of research was sent out to participants to sign before taking part in the study. In addition, participants were informed that their participation is voluntarily and that they could withdraw from the study at any time if they felt uncomfortable without any consequences. In the reporting of the findings, all identifying information was kept confidential, and pseudonyms were used to maintain anonymity. Participants were only known to those present during the interviews (only the researcher) but thereafter they were renumbered and referred to as Participant 1 (2, 3, etc.) in the dataset and during the write-up. There is no reference to any identifying information.

During the data collection process, the collected data and backups were kept password protected. The interviews were conducted with the utmost care, taking the participants' well-being into consideration. The researcher also strived to interpret data with honesty, considering ethics and thus not intentionally manipulating or misinterpreting data in any way.

6.8.10 Have the memos grown in depth and degree of abstraction as the research moves along?

During the interviews, observations and listening to recording, the researcher wrote memos detailing her perspectives on significant conversations and situations. She reviewed and

transcribed the material as soon as she had enough to read. Examples of some of the memos written are presented in Section 6.5.1. The memos were used to consider and clarify the meanings that participants and researcher had assigned to codes, to discover connections between codes, to organise and further develop ideas, and to jot down significant quotes or phrases. To simplify the coding process, the researcher took small samples of the responses, identified codes and categories within these smaller samples, highlighted and wrote down theoretical memos of themes and assigning labels to the responses to distinguish patterns and the meaning attached to them. These were intended to monitor and encourage coding as well as serve as a foundation for the consolidation of theory and, eventually, theory generation.

The memos were revisited and built upon during the different phases of data collection and analysis resulting in rich memos. This resulted in a total of approximately 60 memos, ranging from scribbled noted to more detailed memos which came about as the research progressed. The memos were further expanded upon as the concepts and their possible connections to other concepts became apparent and knowledge and theories advanced.

6.9 REVISITING THE RESEARCH QUESTIONS

The purpose of this study was to gain an understanding of MMOG players perceptions of pejorative language use in MMOGs. This research took a qualitative approach in examining the main concerns or most important things of the use of pejorative language in MMOGs. The primary research question is:

- What are gamers' perceptions of pejorative language use in MMOGs?

The research question was deconstructed into sub-questions to provide a holistic view of gamers' perceptions of pejorative language use in MMOGs. The results of the research provided answers to the research question, as discussed below.

1. What are the linguistic habits of gamers during gameplay?

The data shows that gamers perceive the actual language used in MMOGs as pejorative, this is represented by Propositions 3, 4 and 8 in Figure 29. The propositions were further discussed in Section 6.4 and have been framed as follows:

- Proposition 3: Pejorative language use in MMOGs is normalised and perceived as part of the game/game language.

- Proposition 4: The acceptability of pejorative language use as game language depends on who says it (contextual language).
- Proposition 8: The actual language used in MMOGs, although normalised, is perceived as pejorative.

Gamers note that pejorative language use is part of the game, some even state that it's a representation of good team spirit. But it all depends on how a message is conveyed and by whom. This game language, as described by participants, was discussed in Sections 5.6.2 and 5.7.1. This way of communicating can be likened to the language used by soldiers in combat. Serving as a soldier usually necessitates learning new vocabulary. The fear and humour, the rage and happiness, the camaraderie and disapproval of many thousands of troops all contributed to the emergence and formation of this soldiers' dialect in the immobile craters (Cook, 2013). In situations when soldiers are constantly battling the inevitable risks of injury and death, it is common to seek solace in harsh words. Pejorative language served as an outlet for the anxiety and frustration caused by the abnormal stresses of contemporary combat (Brophy & Partridge, 1930).

The present study showed that even though players accept pejorative language as part of the game, it depends on the context it is said in as it can ruin the aspect of enjoyment of the game for them and it is not something that they personally particularly like. According to Hickey and Roderick (2022) and Newman et al. (2022a), the daily activities of many sporting competition revolve around banter. It is usually recognised as alternately humour amongst teammates, which neither the person receiving it, nor the adversary should take seriously. Banter is an intricate phenomenon and a necessary component of human interaction, much like pejorative language (Timothy, 2000). Research further shows that in professional sports, there is concern that banter is used to relieve pressure from the expectations of winning, despite the fact that the notion of banter is frequently seen positively within highly competitive sports, supporting beneficial characteristics of belonging to a group, such as unity and camaraderie (Newman et al., 2022a; Parker, 2006; Wagstaff et al., 2017). This concern is worsened by research showing that those involved in organised sport may struggle to tell when friendly banter turns into bullying because of their gendered, homophobic vocabulary that seeks to enhance performance (Hickey & Roderick, 2022; Newman et al., 2022a; Parker, 2006; Wagstaff et al., 2017).

2. How do other players account for the strong presence pejorative language and expletives in particular in player discourse?

This sub-question was answered by Propositions 5a, 5b and 6 represented in Figure 29.

- Proposition 5a: Inter-team competition negatively influences players' perception of pejorative language use in MMOGs.
- Proposition 5b: Intra-team competition positively influences players' perception of pejorative language use in MMOGs.

The results of this study showed that players agreed to contributing to the presence of pejorative language in MMOGs. This is due to the competitive nature of the game and the fact that they want to win the game. The study found that pejorative language is used in both inter-team and intra-team settings, however, it is meant to cause conflict and break morale inter-teams, but it is said not be a big deal intra-team. Pejorative language is frequently used when a team is losing or when they are not performing up to standard. This results in the humiliation and blame of some of the team members for what others may perceive as subpar performance. The data showed that team members who took accountability for the presence of pejorative in MMOGs say it is because the team would be underperforming or exhibiting a substantial internal skills gap, for example, in situations where some team members perform better than others.

Competitiveness is important in gaming, within intra-group favouritism and inter-group antagonism influencing the level of reporting (Munn, 2023). The MMOG world has a competitive atmosphere, therefore M-gamers usually present a hostile and aggressive mindset automatically (Moor, 2007). MMOG players are driven by a range of factors, including social interaction, competitiveness, collaboration, interaction, fantasy, and general game design (Saarinen, 2017a). Players collaborate and form part of groups to get through their games faster and to conquer difficult tasks for the benefit of all team members. MMOGs therefore offer multiple benefits and opportunities for social interaction in the gaming world (Ballard & Welch, 2017; Zhang & Kaufman, 2016).

The results of this study also showed that during gameplay, the losing team will use pejorative language because they are losing, and this results in the winning team also acting the same. According to some academics, there is a correlation between competitiveness and aggression (Grandprey-Shores et al., 2014), the highly competitive environment of

gaming fosters conflict and hatred as opposed to collaboration and decorum. in gaming is most strongly influenced by competition as opposed to hostility (Adachi & Willoughby, 2011). Players can experience the excitement of genuine competitiveness in multiplayer games and they demonstrate their superiority over other people by acting in a way that is significantly more dynamic than any rival that is directed by a machine (Kwak et al., 2015; Nguyen & Zagal, 2016). Fighting the opponent team in competitive game situations puts a lot of pressure on a team to compete at a level on par with or higher than the opposing team since losing the match results in a complex loss of resources, time, and reputation for members of the team (Kou & Nardi, 2013; Shen et al., 2020).

- Proposition 6: Individual characteristics moderate the actual language use.

The results of this study showed that individual characteristics moderate the actual language used in MMOGs. Participants' individual characteristics played a role in whether they use pejorative language during game play or not. Some players did not take accountability for the presence of pejorative language in MMOGs, they said they do not use it because of factors such as the way they were raised, their gender or because they just do not like it. Therefore, the nature on the game does not change this fact for them. This shows that although players say that pejorative language use is part of the game, they are able to control what they say depending on certain circumstances. Pakarinen (2022) found that creating a distinct gaming identity and attitude that pervades every aspect of a gamer's play is a crucial skill for gaming.

Gender was also another moderating factor as found in this study. Though identity in the physical world may be linked to unchangeable traits like looks, identity in anonymized settings, like those of virtual communities, is always subject to modification (Marwick, 2013; Pearce, 2017). Online, the usual player is considered to be white, male, and heterosexual except if they are marked otherwise, which is an intriguing observation (Marwick, 2013). There are no other characteristics besides playing ability that can be used to establish identities, if a player takes on an identity that is not consistent with being female, then their fan base can simply be able to modify their view toward the player being male (Pearce, 2017). Although gender is not strictly confined to the binary categories of male and female, prejudices from online platforms carry considerably greater significance, and it can be very difficult to develop non-stereotypical personas. There is currently no dominant social

language that includes prejudices and moral standards for those who do not fit within the male/female dichotomy (Pearce, 2017). This is important as social prejudices and standards influence how people perform their male and female gendered identities and supply them with resources (Pearce, 2017).

3. What are the main concerns (most important things) of pejorative language use in MMOGs?

Propositions 9a, 9b and 9c, as represented in Figure 29, answer this question. The study found that there were certain outcomes resulting from the use of pejorative language in MMOGs. These are concerns regarding the use of pejorative use in MMOGs as they have an impact on how players enjoy and engage with the game.

- Proposition 9a: The use of pejorative language in MMOGs results in the formation of smaller communities.

The study found that participants will dissociate, i.e., form smaller communities where they only play with people they know, remain silent during game play, choose different communication mediums, or retaliate when pejorative language is used. One such concern was described using expressions like forming smaller groups or only playing with friends. This was the players' way of removing themselves from the toxic environment of gaming which is because of the use of pejorative language during gameplay. Research studies focusing on role of dissociation in gaming behaviour have found that there is a positive correlation between inappropriate gaming and different dissociative symptoms, such as amnesia, dehumanisation, detachment, or disengagement (Guglielmucci et al., 2019). Dissociation involves momentarily cutting ties to the outside world and segregating actions, emotions, ideas, and experiences associated with the upsetting events (Guglielmucci et al., 2019). According to Lu and Wang (2008), playing multiplayer games with friends increases an individual's enjoyment of the experience. Saarinen (2017b) also explains that this statement about online team games may also include an additional concealed aspect: Since there is a maximum number of players allowed in online team games, having a friend fill an available slot means that there is one less spot for a potentially toxic unknown player, which could increase the general enjoyment of the game.

- Proposition 9b: The use of pejorative language in MMOGs results in players choosing to remain silent.

Remaining silent and not engaging during gameplay is another outcome that came up from this study's data. Pejorative language ruins players' enjoyment of the game so they choose to play in silence and not participate in game conversations instead of quitting gaming altogether. Participants reported resorting to ignoring the comments made in the games they play and just focusing on the game for enjoyment. Section 5.8.2 explains the spiral of silence theory. The theory posits that a person's readiness to voice his own thoughts is influenced by how he perceives the dispersion of general public consensus, which subsequently informs the views of others and, eventually, how keen they are to voice their views (Glynn et al., 1995; Noelle-Neumann, 1974). The theory demonstrates that individuals of minority don't speak out about issues that concern them. According to Noelle-Neumann (1974), when people see that other people in the group share their own opinion, they will become more self-assured and outspoken. However, the person will be more likely to be reserved and keep quiet if he observes that the group does not agree with his opinion (Glynn et al., 1995; Noelle-Neumann, 1974; Taylor, 1982). That is, a person believes that staying within the group and not alienating themselves is of greater significance than making his own decisions, thus he values this viewpoint more than the necessity to voice out his opinion.

- Proposition 9c: Players will retaliate to the use of pejorative language during gameplay.

The data for this study showed that the use of pejorative language is a common occurrence in MMOGs, however, some participants said that they do not take part in pejorative language during gameplay. They do however say that they retaliate by also using pejorative language. Retaliation-driven gamers are only reactionary, i.e., a reaction to something where a gamer will troll instinctively when trolled rather than with a specific goal or intention in mind. This is regarded as being motivated by retribution because something must be done to them first before acting (Chess & Shaw, 2015; Cook et al., 2018; Massanari, 2017; Mortensen, 2018; Vermeulen et al., 2016). Players who retaliate are often players who have been wronged themselves first, they do this because they want to bring about either or both the suffering and downfall of the player who wronged them or to change that players' actions by demonstrating to them how their actions negatively impact other people (Cook et al., 2018). A new study demonstrates that being a victim of toxic abuse in multiplayer online battle

arena (MOBA) games enhances a player's likelihood of reproducing toxic conduct, which is one reason exposure to toxic behaviour is known to cause it to occur (Kordyaka et al., 2020).

4. What should the components and relationships between components of a theory be, that explains the perceptions of players of the use of pejorative language in MMOGs?

The proposed theoretical model in Figure 29 answers this sub-question in its entirety. The theory-building process involved the identification of categories and the concepts that are the building blocks of these categories. The proposed model reflects the relationships between the core categories which emerged. The theory proposes that game language and competition (both inter-team and intra-team) are influenced by the type of game played. The influence of these core categories will in turn play a role in the actual language behaviour, which, in the context of this study has been identified as pejorative. The actual language behaviour depends on the different gaming platforms and the moderation and medium of communication used in these platforms. There are then outcomes that result from the actual language behaviour.

These relationships are best explained by the SSO model, which was discussed in Chapter 5. Three elements make this widely recognised SSO framework: stressors, strains, and outcomes. These elements, and their applicability to the components and relationships found in this study are represented in Figure 25. Psychological strain, or simply emotional reactions to stress, such as anxiety, desperation, or exhaustion, is a common occurrence among stressed persons (Singh et al., 2023; Zheng & Ling, 2021). This ultimately has a detrimental effect on the way someone performs or how productive they are (Teng et al., 2022). Any emotional stimulant, including those negative outcomes and technological excess, is referred to as a stressor (Cao et al., 2018; Koeske & Koeske, 1993). In the context of this study, the stressors were identified as the type of game, game language, the competitive nature of games as well as individual characteristics. The SSO model views strain as a mediating component and connects stressors to outcomes, strain is a direct consequence of stress (Cao et al., 2018; Koeske & Koeske, 1993). The data identified the platform/environment, as moderators of the actual language used in MMOGs which is a mediator. The SSO model states that strain plays an intermediary function in the association between stress and outcome. Therefore, the only people who should show negative effects

are those who are burned out under circumstances of perceived stress (Um & Harrison, 1998). The study found that there were certain outcomes resulting from the use of pejorative language in MMOGs.

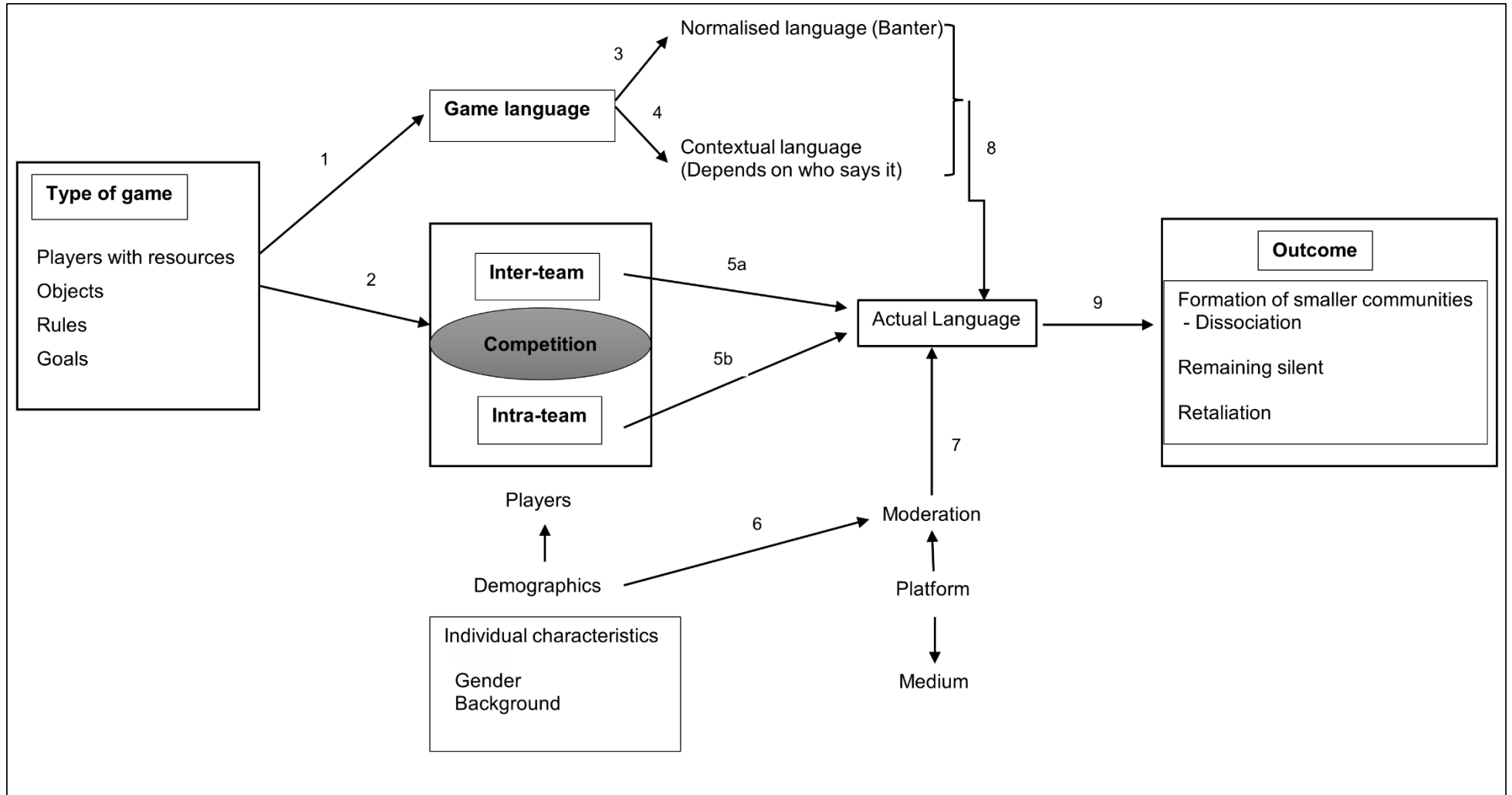


Figure 29: Proposed Model for Understanding the Use of Pejorative Language in MMOGs

6.10 FUTURE RESEARCH

The proposed theory for this study offers an understanding the use of pejorative language in MMOGs. However, throughout the course of this study, several issues were brought to light that would benefit from more investigation. The main source of data collection for this study were interviews, with observations and recordings serving as supporting sources. In some instances, the respondents would paint themselves in an innocent light with regards to their role in the presence of pejorative language in MMOGs, however, observations and recordings presented a different story. Therefore, future research can benefit from comprehensive observation of MMOG players and thoroughly assessing their contribution and reactions to pejorative language use, as well as how they respond to it.

The present study also looked at MMOGS in general regarding the types of games played. There were many different games that were mentioned by players, but the focus of this study was MMOGs holistically. Future research can make comparisons of various games and investigate how and why pejorative language is used in the different games.

6.11 CONCLUDING REMARKS

The purpose of this study was to gain an understanding of what MMOG players perceptions of pejorative language use in MMOGs are. The objectives of the research were to explore the main concerns regarding pejorative language use in MMOGs, i.e., to understand the way in which participants perceive the use of pejorative language during game play. The second objective was to observe and differentiate the linguistic habits of gamers during gameplay, and lastly, to understand how players account for the strong presence of pejorative language and expletives in a particular player discourse.

This grounded theory work broadens the understanding of MMOG players perceptions of pejorative language use in MMOGs and contributes to the gap in literature that was identified. This study proposed that game language and competition (both inter-team and intra-team) are influenced by the type of game played. The influence of these core categories will in turn play a role in the actual language behaviour, which, in the context of this study has been identified as pejorative. The actual language behaviour depends on the different gaming platforms and the moderation and medium of communication used in these platforms. There are then outcomes that result from the actual language behaviour.

The thesis presented a comprehensive theoretical framework that offers a more detailed account for understanding the use of pejorative language in MMOGs. Section 8.6 provided an evaluation of the theory and showed that progress has been made in addressing the research problem related to this study and meeting the specific objectives. In addition, the proposed theory indicated multiple avenues for prospective research that would enhance and broaden the understanding of the suggested model. Understanding MMOG players perceptions of pejorative language use in MMOGs as presented in this thesis just as a preliminary step on which future studies can build upon.

REFERENCES

- 7001:2007, I. (2013). *Graphical symbols — Public information symbols*. Retrieved from <https://www.iso.org/standard/41081.html>
- Abell, L., Buglass, S. L., Betts, L. R., & Morohunfola, T. (2023). "It's all part of the culture": undergraduate students' experiences of banter in university sports clubs and societies. *Current Psychology*, 1-13.
- Abraham, C., Boudreau, M.-C., Junglas, I., & Watson, R. (2013). Enriching our theoretical repertoire: the role of evolutionary psychology in technology acceptance. *European journal of information systems*, 22, 56-75.
- Adachi, P. J., & Willoughby, T. (2011). The effect of video game competition and violence on aggressive behavior: Which characteristic has the greatest influence? *Psychology of violence*, 1(4), 259.
- Adinolf, S., & Turkay, S. (2018). Toxic behaviors in Esports games: player perceptions and coping strategies. Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts,
- Aichner, T., & Jacob, F. (2015). Measuring the degree of corporate social media use. *International Journal of market research*, 57(2), 257-276.
- Aiken, M., & Waller, B. (2000). Flaming among first-time group support system users. *Information & Management*, 37(2), 95-100.
- Aldiabat, K. M., & Le Navenec, C.-L. (2018). Data saturation: The mysterious step in grounded theory methodology. *The Qualitative Report*, 23(1), 245-261.
- Alexander, M. G., & Levin, S. (1998). Theoretical, empirical, and practical approaches to intergroup conflict. *Journal of social issues*, 54(4), 629-639.
- Alonzo, M., & Aiken, M. (2004). Flaming in electronic communication. *Decision Support Systems*, 36(3), 205-213.
- Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of social sciences, literature and languages*, 1(1), 9-16.
- Amini, F., Riche, N. H., Lee, B., Leboe-McGowan, J., & Irani, P. (2018). Hooked on data videos: assessing the effect of animation and pictographs on viewer engagement. Proceedings of the 2018 International Conference on Advanced Visual Interfaces,
- Ang, C. S. (2006). Rules, gameplay, and narratives in video games. *Simulation & Gaming*, 37(3), 306-325.
- Appleton, J. V., & King, L. (2002). Journeying from the philosophical contemplation of constructivism to the methodological pragmatics of health services research. *Journal of advanced nursing*, 40(6), 641-648.
- Argyle, M. (2013). *Bodily communication*. Routledge.
- Ballard, M. E., & Welch, K. M. (2017). Virtual warfare: Cyberbullying and cyber-victimization in MMOG play. *Games and culture*, 12(5), 466-491.
- Bandura, A. (2002). Social cognitive theory in cultural context. *Applied psychology*, 51(2), 269-290.
- Barlett, C. P., & Helmstetter, K. M. (2018). Longitudinal relations between early online disinhibition and anonymity perceptions on later cyberbullying perpetration: A theoretical test on youth. *Psychology of Popular Media Culture*, 7(4), 561.
- Barrett, D., & Twycross, A. (2018). Data collection in qualitative research. In (Vol. 21, pp. 63-64): Royal College of Nursing.
- Bawa, P. (2018). Massively multiplayer online gamers' language: Argument for an m-gamer corpus. *The Qualitative Report*, 23(11), 2714-2753.
- Bawa, P., Watson, W., & Watson, S. L. (2017). To Game or Not to Game? How Using Massively Multiplayer Online Games Helped Motivation and Performance in a

- College Writing Course: A Mixed Methods Study. *Journal of Research Initiatives*, 3(1), 12.
- Bennerstedt, U., & Ivarsson, J. (2010). Knowing the way. Managing epistemic topologies in virtual game worlds. *Computer Supported Cooperative Work (CSCW)*, 19(2), 201-230.
- Bente, G., & Krämer, N. C. (2011). Virtual gestures: embodiment and nonverbal behavior in computer-mediated communication. *Face-to-face communication over the internet: issues, research, challenges*, 176-209.
- Beranuy, M., Carbonell, X., & Griffiths, M. D. (2013). A qualitative analysis of online gaming addicts in treatment. *International journal of mental health and addiction*, 11, 149-161.
- Beres, N. A., Frommel, J., Reid, E., Mandryk, R. L., & Klarkowski, M. (2021). Don't you know that you're toxic: Normalization of toxicity in online gaming. Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems,
- Berthelsen, C. B., Grimshaw-Aagaard, S., & Hansen, C. (2018). Developing a guideline for reporting and evaluating grounded theory research studies (GUREGT). *International Journal of Health Sciences*, 6(1), 64-76.
- Birks, D. F., Fernandez, W., Levina, N., & Nasirin, S. (2013). Grounded theory method in information systems research: its nature, diversity and opportunities. *European journal of information systems*, 22(1), 1-8.
- Birks, M., & Mills, J. (2015). *Grounded theory: A practical guide*. Sage.
- Bishop, J. (2014). Representations of 'trolls' in mass media communication: a review of media-texts and moral panics relating to 'internet trolling'. *International Journal of Web Based Communities*, 10(1), 7-24.
- Blackburn, J., & Kwak, H. (2014). STFU NOOB! predicting crowdsourced decisions on toxic behavior in online games. Proceedings of the 23rd international conference on World wide web,
- Blackburn, J., Simha, R., Kourtellis, N., Zuo, X., Ripeanu, M., Skvoretz, J., & Iamnitchi, A. (2012). Branded with a scarlet "C" cheaters in a gaming social network. Proceedings of the 21st international conference on World Wide Web,
- Blake, R. J. (2011). Current trends in online language learning. *Annual review of applied linguistics*, 31, 19-35.
- Blasi, M. D., Giardina, A., Giordano, C., Coco, G. L., Tosto, C., Billieux, J., & Schimmenti, A. (2019). Problematic video game use as an emotional coping strategy: Evidence from a sample of MMORPG gamers. *Journal of behavioral addictions*, 8(1), 25-34.
- Bliss, C. K. (1965). Semantography (Blissymbolics) A simple system of 100 logical pictorial symbols, which can be operated and read like 1+ 2] 3 in all languages.
- Blumer, H. (1980). Mead and Blumer: The convergent methodological perspectives of social behaviorism and symbolic interactionism. *American Sociological Review*, 409-419.
- Bodomo, A. B. (2009). *Computer-Mediated Communication for Linguistics and Literacy: Technology and Natural Language Education: Technology and Natural Language Education*. IGI Global.
- Bonetti, F., & Tonelli, S. (2020). A 3D role-playing game for abusive language annotation. Workshop on Games and Natural Language Processing,
- Boucher, D., & Kelly, P. (2003). *The social contract from Hobbes to Rawls*. Routledge.
- Boudon, R. (2016). *The unintended consequences of social action*. Springer.
- Bourdieu, P. (2000). *Propos sur le champ politique*. Presses Universitaires Lyon.
- Boyd, R., Gintis, H., Bowles, S., & Richerson, P. J. (2003). The evolution of altruistic punishment. *Proceedings of the National Academy of Sciences*, 100(6), 3531-3535.

- Breen, R. (2009). Formal theory in the social sciences. In *Frontiers of sociology* (pp. 209-230). Brill.
- Breuer, J. (2017). Hate speech in online games. *Online Hate Speech. Perspektiven auf eine neue Form des Hasses. Kopaed: Düsseldorf*, 107-112.
- Brophy, J., & Partridge, E. (1930). Songs and slang of the British soldier: 1914-1918. (*No Title*).
- Bruce, C. (2007). Questions arising about emergence, data collection, and its interaction with analysis in a grounded theory study. *International journal of qualitative methods*, 6(1), 51-68.
- Bryant, A. (2009). Grounded theory and pragmatism: The curious case of Anselm Strauss. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*,
- Bryant, A., Bryant, A., Bryant, A., & Casper, M. (2007). The SAGE Handbook of Grounded Theory. In. SAGE Publications Ltd. <https://doi.org/10.4135/9781848607941>
- Bryant, A., & Charmaz, K. (2007). *The Sage handbook of grounded theory*. Sage.
- Buckels, E. E., Trapnell, P. D., & Paulhus, D. L. (2014). Trolls just want to have fun. *Personality and Individual Differences*, 67, 97-102.
- Burns, T. R., & Gomolińska, A. (2000). The theory of socially embedded games: the mathematics of social relationships, rule complexes, and action modalities. *Quality and Quantity*, 34, 379-406.
- Burns, T. R., & Roszkowska, E. (2005). Generalized game theory: Assumptions, principles, and elaborations grounded in social theory. *Studies in Logic, Grammar, and Rhetoric*, 8(21), 7-40.
- Burns, T. R., & Roszkowska, E. (2007). Multi-value decision-making and games: the perspective of generalized game theory on social and psychological complexity, contradiction, and equilibrium. *Advances in Multiple Criteria Decision Making and Human System Management: Knowledge and Wisdom*, IOS Press, Amsterdam, 75-107.
- Burns, T. R., & Roszkowska, E. (2008). The social theory of choice: from Simon and Kahneman-Tversky to GGT modelling of socially contextualized decision situations. *Optimum-Studia Ekonomiczne*, 3(39), 3-44.
- Burns, T. R., Roszkowska, E., Corte, U., & Machado, N. (2017). Sociological game theory: agency, social structures and interaction processes. *Optimum. Studia Ekonomiczne*, 5.
- Burr, V. (2015). *Social constructionism*. Routledge.
- Bytheway, J. (2013). The online-community culture in massively multiplayer online role-playing games affects language learners' use of vocabulary learning strategies. *World Call: Global perspectives on Computer-Assisted Language Learning*, 39-42.
- Calhoun, C. (2002). *Dictionary of the social sciences*. Oxford University Press.
- Campbell, D. T. (1965). Ethnocentric and other altruistic motives, in David Levine (ed.), *Nebraska Symposium on Motivation*, Lincoln: University of Nebraska Press.
- Cao, X., Masood, A., Luqman, A., & Ali, A. (2018). Excessive use of mobile social networking sites and poor academic performance: Antecedents and consequences from stressor-strain-outcome perspective. *Computers in Human Behavior*, 85, 163-174.
- Cardefia, E. (1994). The domain of dissociation. *Dissociation: Clinical and theoretical perspectives*, 15-31.
- Caruso, R. (2021). Negative and positive sanctions. In *Research Handbook on Economic Sanctions* (pp. 297-308). Edward Elgar Publishing.
- Cary, L. A., & Chasteen, A. L. (2022). Prejudice norms in online gaming: Game context and gamer identification as predictors of the acceptability of prejudice. *Psychology of Popular Media*, 11(4), 367.

- Castronova, E. (2008). Synthetic worlds: The business and culture of online games. In *Synthetic Worlds*. University of Chicago press.
- Castroviejo, E., Fraser, K., & Vicente, A. (2021). More on pejorative language: Insults that go beyond their extension. *Synthese*, 198(10), 9139-9164.
- Cervone, C., Augoustinos, M., & Maass, A. (2021). The language of derogation and hate: Functions, consequences, and reappropriation. *Journal of language and social psychology*, 40(1), 80-101.
- Chamberlain, J. M. (2013). Grounded theory analysis. *Understanding criminological research: A guide to data analysis*, 74-105.
- Charmaz, K. (1990). 'Discovering' chronic illness: using grounded theory. *Social science & medicine*, 30(11), 1161-1172.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. *Handbook of qualitative research*, 2(1), 509-535.
- Charmaz, K. (2006a). *Constructing grounded theory: A practical guide through qualitative analysis*. sage.
- Charmaz, K. (2006b). *Constructing grounded theory: Methods for the 21st century*. UK: SAGE.
- Charmaz, K. (2008). Constructionism and the grounded theory method. *Handbook of constructionist research*, 1(1), 397-412.
- Charmaz, K. (2009). Shifting the grounds: constructivist grounded theory methods: In: Morse J. *Stern PN*.
- Charmaz, K. (2014). *Constructing Grounded Theory A Practical Guide Through Qualitative Analysis*. California, SAGE Publications Inc.
- Charmaz, K. (2017). The power of constructivist grounded theory for critical inquiry. *Qualitative inquiry*, 23(1), 34-45.
- Charmaz, K., & Belgrave, L. (2012). Qualitative interviewing and grounded theory analysis. *The SAGE handbook of interview research: The complexity of the craft*, 2, 347-365.
- Charmaz, K., & Belgrave, L. L. (2019). Thinking about data with grounded theory. *Qualitative inquiry*, 25(8), 743-753.
- Charmaz, K., Denzin, N., & Lincoln, Y. (2003). Strategies of qualitative inquiry. *Grounded theory: Objectivist and constructivist methods*, 249-291.
- Chee, F., Vieta, M., & Smith, R. (2006). Online gaming and the interactional self: Identity interplay in situated practice.
- Chen, B., & Luppicini, R. (2017). The New Era of Bullying: A Phenomenological Study of University Students' Past Experience with Cyberbullying. *International Journal of Cyber Behavior, Psychology and Learning (IJCBL)*, 7(2), 72-90.
- Chesney, T., Coyne, I., Logan, B., & Madden, N. (2009). Griefing in virtual worlds: causes, casualties and coping strategies. *Information Systems Journal*, 19(6), 525-548.
- Chess, S., & Shaw, A. (2015). A conspiracy of fishes, or, how we learned to stop worrying about# GamerGate and embrace hegemonic masculinity. *Journal of Broadcasting & Electronic Media*, 59(1), 208-220.
- Cho, J. Y., & Lee, E.-H. (2014). Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *Qualitative report*, 19(32).
- Choi, D., & Kim, J. (2004). Why people continue to play online games: In search of critical design factors to increase customer loyalty to online contents. *CyberPsychology & behavior*, 7(1), 11-24.
- Choi, J.-K., & Bowles, S. (2007). The coevolution of parochial altruism and war. *science*, 318(5850), 636-640.
- Chomsky, N. (1996). *A review of BF Skinner's" verbal behavior"*. na.

- Chong, C.-H., & Yeo, K.-J. (2015). An overview of grounded theory design in educational research. *Asian Social Science*, 11(12), 258.
- Chotipaktanasook, N., & Reinders, H. (2018). A massively multiplayer online role-playing game and its effects on interaction in the second language: Play, interact, and learn. In *Handbook of research on integrating technology into contemporary language learning and teaching* (pp. 367-389). IGI Global.
- Chun Tie, Y., Birks, M., & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *SAGE open medicine*, 7, 2050312118822927.
- Clarke, A. (2005). *Situational analysis: grounded theory after the postmodern turn*. Sage. Thousand Oaks, CA.
- Clement, J. (2024). *Online gaming - Statistics & Facts*. Retrieved 28 August from <https://www.statista.com/topics/1551/online-gaming/#topicOverview>
- Cmeciuc, C. (2010). Echo objects: The cognitive work of images. *Visual Studies*, 25(2), 195-196.
- Coghlan, D., & Brydon-Miller, M. (2014). *The SAGE encyclopedia of action research*. Sage.
- Coleman, J. S. (1969). Games as vehicles for social theory. *American Behavioral Scientist*, 12(6), 2-6.
- Coleman, J. S. (1994). *Foundations of social theory*. Harvard university press.
- Colman, A. M. (2003). Cooperation, psychological game theory, and limitations of rationality in social interaction. *Behavioral and brain sciences*, 26(2), 139-153.
- Cook, C., Schaafsma, J., & Antheunis, M. (2018). Under the bridge: An in-depth examination of online trolling in the gaming context. *new media & society*, 20(9), 3323-3340.
- Cook, C. L. (2019). Between a troll and a hard place: The demand framework's answer to one of gaming's biggest problems. *Media and Communication*, 7(4), 176-185.
- Cook, T. (2013). Fighting words: Canadian soldiers' slang and swearing in the Great War. *War in History*, 20(3), 323-344.
- Corbin, J., & Strauss, A. (2008). Techniques and procedures for developing grounded theory. *Basics of qualitative research*, 15.
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage publications.
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative sociology*, 13(1), 3-21.
- Costa, S., Tavares, M., da Silva, B. M., Isca, B., & Cerol, F. (2020). HATE SPEECH IN VIDEO GAMES AND IN ONLINE GAMING COMMUNITIES—A STATE OF ART Discurso de ódio nos videojogos e nas comunidades de jogos online—Estado da arte.
- Costa, S. R., Tavares, M. N., Silva, B. M., Alves, P. F., Cerol, F., & Isca, B. (2020). Playing Against Hate Speech. *Journal of Digital Media & Interaction*, 3(6), 34-52.
- da Silva, B. M., Tavares, M., Cerol, F., da Silva, S. M., Falcão, P., & Alves, B. I. (2020). Playing Against Hate Speech—How Teens See Hate Speech in Video Games and Online Gaming Communities. *Journal of Digital Media & Interaction*, Vol. 3, No. 6, 3(6), 34-52.
- Dakpa, T., & Augustine, P. (2017). Study of phishing attacks and preventions. *International Journal of Computer Applications*, 163(2), 5-8.
- Davids, M. (2017). The use of social media by organisations when engaging with their online community: the collective storytelling phenomenon.
- de Mesquita Neto, J. A., & Becker, K. (2018). Relating conversational topics and toxic behavior effects in a MOBA game. *Entertainment computing*, 26, 10-29.
- De Paoli, S. (2017). Not all the bots are created equal: the ordering turing test for the labeling of bots in MMORPGs. *Social Media+ Society*, 3(4), 2056305117741851.

- De Paoli, S., & Kerr, A. (2010). The assemblage of cheating: How to study cheating as imbroglia in MMORPGs. *The Fibreculture Journal*, 16.
- Denzin, N. K., & Lincoln, Y. S. (2008). Introduction: The discipline and practice of qualitative research.
- Deterding, S. (2016). Contextual autonomy support in video game play: a grounded theory. Proceedings of the 2016 chi conference on human factors in computing systems,
- Deterding, S. (2017). The pyrrhic victory of game studies: Assessing the past, present, and future of interdisciplinary game research. *Games and culture*, 12(6), 521-543.
- Dey, I. (1999). Grounding grounded theory: Introduction; Grounding grounded theory: Bibliography. *Grounding grounded theory*, 1-24.
- DiCicco-Bloom, B., & Gibson, D. R. (2010). More than a game: Sociological theory from the theories of games. *Sociological Theory*, 28(3), 247-271.
- Dick, B. (2005). Grounded theory: a thumbnail sketch.
- Diekhof, E. K., Wittmer, S., & Reimers, L. (2014). Does competition really bring out the worst? Testosterone, social distance and inter-male competition shape parochial altruism in human males. *PLoS one*, 9(7), e98977.
- Dinu, L. P., Iordache, I.-B., Uban, A. S., & Zampieri, M. (2021). A computational exploration of pejorative language in social media. Findings of the Association for Computational Linguistics: EMNLP 2021,
- Dixon, N. (2007). Trash talking, respect for opponents and good competition. *Sport, Ethics and Philosophy*, 1(1), 96-106.
- Donohue, W. A. (1992). *Managing interpersonal conflict*. Sage Publications.
- Douglas, D. (2003). Grounded theories of management: A methodological review. *Management research news*, 26(5), 44-52.
- Drachen, A., Yancey, M., Maguire, J., Chu, D., Wang, I. Y., Mahlmann, T., Schubert, M., & Klabajan, D. (2014). Skill-based differences in spatio-temporal team behaviour in defence of the ancients 2 (dota 2). 2014 IEEE Games Media Entertainment,
- Ducheneaut, N., & Moore, R. J. (2004). The social side of gaming: a study of interaction patterns in a massively multiplayer online game. Proceedings of the 2004 ACM conference on Computer supported cooperative work,
- Ducheneaut, N., Moore, R. J., & Nickell, E. (2007a). Virtual “third places”: A case study of sociability in massively multiplayer games. *Computer Supported Cooperative Work (CSCW)*, 16(1), 129-166.
- Ducheneaut, N., Yee, N., Nickell, E., & Moore, R. J. (2007b). The life and death of online gaming communities: a look at guilds in world of warcraft. Proceedings of the SIGCHI conference on Human factors in computing systems,
- Duncan, S. (2019). Sledging in sport—playful banter, or mean-spirited insults? A study of sledging’s place in play. *Sport, Ethics and Philosophy*, 13(2), 183-197.
- Edge, N. (2013). Evolution of the gaming experience: live video streaming and the emergence of a new web community. *Elon Journal of Undergraduate Research in Communications*, 4(2).
- Eisenschlas, S. A. (2013). Gender roles and expectations: Any changes online? *SAGE Open*, 3(4), 2158244013506446.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, 14(4), 532-550.
- Elliott, T. (2012). *Flaming and gaming—computer-mediated-communication and toxic disinhibition* [University of Twente].
- Ellison, N., Heino, R., & Gibbs, J. (2006). Managing impressions online: Self-presentation processes in the online dating environment. *Journal of Computer-Mediated Communication*, 11(2), 415-441.

- Elveljung, D. (2018). The use of homophobic pejoratives among gamers A critical discourse analysis of slurs within the gaming sphere.
- Embler, W. (1972). Metaphor of the game. *ETC: A Review of General Semantics*, 387-399.
- Engka, N. H., Tulung, J. E., & Arie, F. V. (2021). EXPLORING THE EMERGENCE OF ONLINE GAMES AND THE IMPACT TO OTHER CONVENTIONAL GAMING PLATFORMS IN MANADO. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 9(4), 43-52.
- Ensslin, A. (2017). *The language of gaming*. Bloomsbury Publishing.
- Ensslin, A., & Finnegan, J. (2019). Bad language and bro-up cooperation in co-sit gaming. *Approaches to videogame Discourse: Lexis, interaction, textuality*, 139-156.
- Etikan, I., Alkassim, R., & Abubakar, S. (2016). Comparison of snowball sampling and sequential sampling technique. *Biometrics and Biostatistics International Journal*, 3(1), 55.
- Evans, G. L. (2013). A novice researcher's first walk through the maze of grounded theory: Rationalization for classical grounded theory. *Grounded Theory Review*, 12(1).
- Fabricatore, C. (2018). Gameplay and game mechanics design: A key to quality in Videogames (2007). Retrieved Sep 15, 2018. In.
- Fernandez, W. (2003). Using the Glaserian approach in grounded studies of emerging business practices. *Electronic Journal of Business Research Methods*, 2(2), pp109-120-pp109-120.
- Finlay, L. (2002). Negotiating the swamp: the opportunity and challenge of reflexivity in research practice. *Qualitative research*, 2(2), 209-230.
- Fox, J., & Ahn, S. J. (2013). Avatars: portraying, exploring, and changing online and offline identities. In *Handbook of research on technoself: identity in a technological society* (pp. 255-271). IGI Global.
- Fox, J., Gilbert, M., & Tang, W. Y. (2018). Player experiences in a massively multiplayer online game: A diary study of performance, motivation, and social interaction. *new media & society*, 20(11), 4056-4073.
- Fragoso, S. (2015). HUEHUEHUE I'm BR": Spam, trolling and grieving in online games. *Revista Famecos*, 22(3), 147-163.
- Freud, S. (1960). *Jokes and their relation to the unconscious*. WW Norton & Company.
- Freud, S. (2005). *A general introduction to psychoanalysis*. Boni and Liveright.
- Friedman, D., Steed, A., & Slater, M. (2007). Spatial social behavior in second life. International Workshop on Intelligent Virtual Agents,
- Fryling, M. (2018). GENDER, OVER SHARING, AND CYBERBULLYING IN ONLINE MULTI-PLAYER GAMING (MMOG) ENVIRONMENTS. *Issues in Information Systems*, 19(2).
- Garfinkel, H., & Rawls, A. (2015). *Toward a sociological theory of information*. Routledge.
- Gasson, S., & Waters, J. (2013). Using a grounded theory approach to study online collaboration behaviors. *European journal of information systems*, 22(1), 95-118.
- Gee, J. P. (2014). *An introduction to discourse analysis: Theory and method*. routledge.
- Gibbs, J. L., Ellison, N. B., & Lai, C.-H. (2011). First comes love, then comes Google: An investigation of uncertainty reduction strategies and self-disclosure in online dating. *Communication Research*, 38(1), 70-100.
- Giddens, A. (2004). The constitution of society: Outline of the theory of structuration: Elements of the theory of structuration. In *Practicing History* (pp. 121-142). Routledge.
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British dental journal*, 204(6), 291-295.

- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory: Strategies for qualitative research. Mill Valley. In: CA: Sociology Press.
- Glaser, B. G. (1978). Theoretical Sensitivity: Advances in the methodology of grounded theory. In: Sociology Press: Mill Valley, CA.
- Glaser, B. G. (1992). *Glaser. Basics of Grounded Theory Analysis*. Sociology Press.
- Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Sociology Press.
- Glaser, B. G. (2001). The grounded theory perspective: Conceptualization contrasted with description. Mill Valley. In: CA: Sociology Press.
- Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*. Sociology Press.
- Glaser, B. G. (2013). Staying Open: The Use of Theoretical Codes in GT. *Grounded Theory Review*, 12(1).
- Glaser, B. G., & Holton, J. (2004). Remodeling grounded theory. *Forum qualitative sozialforschung/forum: qualitative social research*,
- Glaser, B. G., & Strauss, A. L. (2017). *The discovery of grounded theory: Strategies for qualitative research*. Routledge.
- Glaser, B. G., Strauss, A. L., & Strutzel, E. (1968). The discovery of grounded theory; strategies for qualitative research. *Nursing research*, 17(4), 364.
- Glynn, C. J., Ostman, R. E., & McDonald, D. G. (1995). Opinions, perception, and social reality. *Public opinion and the communication of consent*, 249-277.
- Goffman, E. (2002). The presentation of self in everyday life. 1959. *Garden City, NY*, 259.
- Goffman, E. (2009). *Relations in public*. Transaction Publishers.
- Goffman, E. (2021). *The presentation of self in everyday life*. Anchor.
- Goldthorpe, J. H. (2000). *On sociology: Numbers, narratives, and the integration of research and theory*. Oxford University Press, USA.
- González-Bailón, S. (2017). *Decoding the social world: Data science and the unintended consequences of communication*. MIT Press.
- Goodwin, C. (2007). Environmentally coupled gestures. *Gesture and the dynamic dimensions of language*, 195-212.
- Grandprey-Shores, K., He, Y., Swanenburg, K. L., Kraut, R., & Riedl, J. (2014). The identification of deviance and its impact on retention in a multiplayer game. *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing*,
- Graves, R. (1936). *The future of swearing and improper language* (Vol. 44). Kegan Paul, Trench, Trubner.
- Gray, K. L. (2012). Intersecting oppressions and online communities: Examining the experiences of women of color in Xbox Live. *Information, Communication & Society*, 15(3), 411-428.
- Griffiths, M. D. (2014). Adolescent trolling in online environments: A brief overview. *Education and Health*, 32(3), 85-87.
- Guglielmucci, F., Monti, M., Franzoi, I. G., Santoro, G., Granieri, A., Billieux, J., & Schimmenti, A. (2019). Dissociation in problematic gaming: a systematic review. *Current Addiction Reports*, 6, 1-14.
- Hall, E. T., & Hall, T. (1959). *The silent language* (Vol. 948). Anchor books.
- Halloran, J., Fitzpatrick, G., Rogers, Y., & Marshall, P. (2004). Does it matter if you don't know who's talking? Multiplayer gaming with voiceover IP. *CHI'04 extended abstracts on Human factors in computing systems*,
- Hardaker, C. (2010). Trolling in asynchronous computer-mediated communication: From user discussions to academic definitions.
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. Suny Press.

- Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: a comparison of Glaser and Strauss. *International journal of nursing studies*, 41(2), 141-150.
- Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2017). Code saturation versus meaning saturation: how many interviews are enough? *Qualitative Health Research*, 27(4), 591-608.
- Henry, M. E. (1992). School rituals as educational contexts: Symbolizing the world, others, and self in Waldorf and college prep schools. *Qualitative Studies in Education*, 5(4), 295-309.
- Henwood, K., & Pidgeon, N. (2003). Grounded theory in psychological research.
- Hertwig, R., & Hoffrage, U. (2013). *Simple heuristics in a social world*. Oxford University Press.
- Hickey, C., & Roderick, M. (2022). When jokes aren't funny: banter and abuse in the everyday work environments of professional football. *European Sport Management Quarterly*, 1-21.
- Hilvert-Bruce, Z., & Neill, J. T. (2020). I'm just trolling: The role of normative beliefs in aggressive behaviour in online gaming. *Computers in Human Behavior*, 102, 303-311.
- Hocks, M. E., & Kendrick, M. R. (2005). *Eloquent images: Word and image in the age of new media*. The MIT Press.
- Holton, J. A. (2007). The coding process and its challenges. *The Sage handbook of grounded theory*, 3, 265-289.
- Holton, J. A., & Walsh, I. (2016). *Classic grounded theory: Applications with qualitative and quantitative data*. Sage Publications.
- Hsu, C. (2020). Gaming Language and How It Is Characterized.
- Huesmann, L. R., & Eron, L. D. (1984). Cognitive processes and the persistence of aggressive behavior. *Aggressive behavior*, 10(3), 243-251.
- Huesmann, L. R., Moise-Titus, J., Podolski, C.-L., & Eron, L. D. (2003). Longitudinal relations between children's exposure to TV violence and their aggressive and violent behavior in young adulthood: 1977-1992. *Developmental psychology*, 39(2), 201.
- Hughes, J., & Jones, S. (2003). Reflections on the use of grounded theory in interpretive information systems research. *ECIS 2003 proceedings*, 62.
- Huizinga, J. (1950). *Homo Ludens: A Study of the Play Element in Culture*. New York: Roy Publishers.
- Hylton, K. (2018). I'm not joking! The strategic use of humour in stories of racism. *Ethnicities*, 18(3), 327-343.
- Ictech II, O. B. (2021). *Virtual Worlds: Social Interactions Among Online Gamers Through Voice Chat* Louisiana State University and Agricultural & Mechanical College].
- Innocent, T., & Haines, S. (2007). Nonverbal communication in multiplayer game worlds. Proceedings of the 4th Australasian conference on Interactive entertainment,
- Innocent, T. C. (2003). Exploring the nature of electronic space through semiotic morphism. *Digital Arts and Culture*,
- Introna, L. (1992). *Towards a theory of management information* [Unpublished Thesis for D.Com degree]. University of Pretoria.
- Jackson, J. W. (1993). Realistic group conflict theory: A review and evaluation of the theoretical and empirical literature. *The Psychological Record*, 43(3), 395.
- Jacques, L. (1964). The Seminar. *Book XI. The Four Fundamental Concepts of Psychoanalysis*.
- James, W. (2007). *The principles of psychology* (Vol. 1). Cosimo, Inc.
- Janet, P. (1889). *L'automatisme psychologique: essai de psychologie expérimentale sur les formes inférieures de l'activité humaine*. Alcan.

- Jenkins, R. (2014). *Social identity*. Routledge.
- Jha, A. K. (2014). Communication in Multiplayer Gaming: Examining Player Responses to Gender cues. *SCHOLAR'S VIEW*, 35.
- Johnson, D., Nacke, L. E., & Wyeth, P. (2015). All about that base: differing player experiences in video game genres and the unique case of moba games. Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems,
- Johnston, L. G., & Sabin, K. (2010). Sampling hard-to-reach populations with respondent driven sampling. *Methodological innovations online*, 5(2), 38-48.
- Jørgensen, K. (2008). Audio and gameplay: An analysis of PvP battlegrounds in World of Warcraft. *Game Studies*, 8(2), 1-19.
- Kapidzic, S., & Herring, S. C. (2011). Gender, communication, and self-presentation in teen chatrooms revisited: Have patterns changed? *Journal of Computer-Mediated Communication*, 17(1), 39-59.
- Katz, E. (1981). *Publicity and pluralistic ignorance: Notes on 'the spiral of silence'*. Springer.
- Kelle, U. (2007). "Emergence" vs. "forcing" of empirical data? A crucial problem of "grounded theory" reconsidered. *Historical Social Research/Historische Sozialforschung. Supplement*, 133-156.
- Kendon, A. (2004). *Gesture: Visible action as utterance*. Cambridge University Press.
- Kenamer, J. D. (1990). Self-serving biases in perceiving the opinions of others: Implications for the spiral of silence. *Communication Research*, 17(3), 393-404.
- Kerr, A., De Paoli, S., & Keatinge, M. (2014). Surveillant assemblages of governance in massively multiplayer online games: A comparative analysis. *Surveillance & Society*, 12(3), 320-336.
- Kim, S., Park, H., & Choi, M. J. (2019). Negative impact of social network services based on stressor-stress-outcome: The role of experience of privacy violations. *Future Internet*, 11(6), 137.
- Kirkpatrick, G. (2015). *The formation of gaming culture: UK gaming magazines, 1981-1995*. Springer.
- Klabbers, J. H. (2009). The magic circle: Principles of gaming & simulation. In *The Magic Circle: Principles of Gaming & Simulation*. Brill.
- Koeske, G. F., & Koeske, R. D. (1993). A preliminary test of a stress-strain-outcome model for reconceptualizing the burnout phenomenon. *Journal of Social Service Research*, 17(3-4), 107-135.
- Komaç, G., & Çağiltay, K. (2019). An overview of trolling behavior in online spaces and gaming context. 2019 1st International Informatics and Software Engineering Conference (UBMYK),
- Kongmee, I., Strachan, R., Pickard, A., & Montgomery, C. (2011). Moving between virtual and real worlds: second language learning through massively multiplayer online role playing games (MMORPGs). 2011 3rd Computer Science and Electronic Engineering Conference (CEEC),
- Konijn, E. A., Nije Bijvank, M., & Bushman, B. J. (2007). I wish I were a warrior: the role of wishful identification in the effects of violent video games on aggression in adolescent boys. *Developmental psychology*, 43(4), 1038.
- Kordyaka, B., Jahn, K., & Niehaves, B. (2020). Towards a unified theory of toxic behavior in video games. *Internet Research*.
- Kou, Y. (2020). Toxic behaviors in team-based competitive gaming: The case of league of legends. Proceedings of the annual symposium on computer-human interaction in play,
- Kou, Y., & Nardi, B. (2013). Regulating anti-social behavior on the Internet: The example of League of Legends.

- Kowert, R., Domahidi, E., & Quandt, T. (2014). The relationship between online video game involvement and gaming-related friendships among emotionally sensitive individuals. *Cyberpsychology, Behavior, and Social Networking*, 17(7), 447-453.
- Kozlenkova, I. V., Palmatier, R. W., Fang, E., Xiao, B., & Huang, M. (2017). Online relationship formation. *Journal of Marketing*, 81(3), 21-40.
- Krueger, J. I., Heck, P. R., Evans, A. M., & DiDonato, T. E. (2020). Social game theory: Preferences, perceptions, and choices. *European review of social psychology*, 31(1), 222-253.
- Krueger, J. I., Ullrich, J., & Chen, L. J. (2016). Expectations and decisions in the volunteer's dilemma: Effects of social distance and social projection. *Frontiers in psychology*, 7, 1909.
- Kuznekoff, J. H., & Rose, L. M. (2013). Communication in multiplayer gaming: Examining player responses to gender cues. *new media & society*, 15(4), 541-556.
- Kwak, H., & Blackburn, J. (2015). Linguistic analysis of toxic behavior in an online video game. Social Informatics: SocInfo 2014 International Workshops, Barcelona, Spain, November 11, 2014, Revised Selected Papers 6,
- Kwak, H., Blackburn, J., & Han, S. (2015). Exploring cyberbullying and other toxic behavior in team competition online games. Proceedings of the 33rd annual ACM conference on human factors in computing systems,
- Layder, D. (1993). New strategies in social research: An introduction and guide. (*No Title*).
- Layder, D. (1998). Sociological practice: Linking theory and social research.
- Leavitt, A., Keegan, B. C., & Clark, J. (2016). Ping to win? Non-verbal communication and team performance in competitive online multiplayer games. Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems,
- Lee, J., & Lee, H. (2010). The computer-mediated communication network: Exploring the linkage between the online community and social capital. *new media & society*, 12(5), 711-727.
- Lee, Y.-H., & Wohn, D. Y. (2012). Are there cultural differences in how we play? Examining cultural effects on playing social network games. *Computers in Human Behavior*, 28(4), 1307-1314.
- Lehmann, H. (2001). *A grounded theory of international information systems* [ResearchSpace@ Auckland].
- Leifer, E. M. (1988). Interaction preludes to role setting: Exploratory local action. *American Sociological Review*, 865-878.
- Li, L., & Whang, S. (2002). Game theory models in operations management and information systems. In *Game theory and business applications* (pp. 95-131). Springer.
- Li, Y., Kou, Y., Lee, J. S., & Kobsa, A. (2018). Tell me before you stream me: Managing information disclosure in video game live streaming. *Proceedings of the ACM on Human-Computer Interaction*, 2(CSCW), 1-18.
- Ligita, T., Harvey, N., Wicking, K., Nurjannah, I., & Francis, K. (2020). A practical example of using theoretical sampling throughout a grounded theory study: a methodological paper. *Qualitative Research Journal*, 20(1), 116-126.
- Lin, C.-Y., & Guo, Y.-H. (2021). ENHANCING EFL ADOLESCENT LEARNERS' VOCABULARY ACQUISITION VIA ONLINE SINGLE PLAYER ROLE-PLAY GAMES. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, 5(1), 10-22.
- Lin, Y., & Zhou, X. (2022). Bedtime smartphone use and academic performance: A longitudinal analysis from the stressor-strain-outcome perspective. *Computers and Education Open*, 3, 100110.

- Linden, K. L. V., & Palmieri, P. A. (2021). Criteria for Assessing a Classic Grounded Theory Study: A Brief Methodological Review with Minimum Reporting Recommendations. *Grounded Theory Review, 20*(2).
- Liu, T.-Y., & Chu, Y.-L. (2010). Using ubiquitous games in an English listening and speaking course: Impact on learning outcomes and motivation. *Computers & Education, 55*(2), 630-643.
- Liu, Y., & Agur, C. (2023). "After all, they don't know me" Exploring the psychological mechanisms of toxic behavior in online games. *Games and culture, 18*(5), 598-621.
- Locke, K. D. (2000). *Grounded theory in management research*. Sage.
- Lomborg, K., & Kirkevold, M. (2003). Truth and validity in grounded theory—a reconsidered realist interpretation of the criteria: fit, work, relevance and modifiability. *Nursing Philosophy, 4*(3), 189-200.
- Lowry, P. B., Zhang, J., Wang, C., & Siponen, M. (2016). Why do adults engage in cyberbullying on social media? An integration of online disinhibition and deindividuation effects with the social structure and social learning model. *Information Systems Research, 27*(4), 962-986.
- Lu, H. P., & Wang, S. m. (2008). The role of Internet addiction in online game loyalty: an exploratory study. *Internet Research, 18*(5), 499-519.
- Ludwig, A. M. (1983). The psychobiological functions of dissociation. *American Journal of Clinical Hypnosis, 26*(2), 93-99.
- Luker, J. M. (2015). Perceptions of cyberbullying within higher education.
- Lumby, J., & Morrison, M. (2006). Partnership, conflict and gaming. *Journal of Education Policy, 21*(03), 323-341.
- Luzón, M. J. (2011). 'Interesting post, but I disagree': Social presence and antisocial behaviour in academic weblogs. *Applied linguistics, 32*(5), 517-540.
- Magrath, R. (2016). *Inclusive masculinities in contemporary football: Men in the beautiful game*. Taylor & Francis.
- Maier, C., Laumer, S., Eckhardt, A., & Weitzel, T. (2012). WHEN SOCIAL NETWORKING TURNS TO SOCIAL OVERLOAD: EXPLAINING THE STRESS, EMOTIONAL EXHAUSTION, AND QUITTING BEHAVIOR FROM SOCIAL NETWORK SITES'USERS.
- Malliet, S. (2012). Play Redux: The Form of Computer Games. *American journal of play, 4*(3), 388.
- Maloney, D., Freeman, G., & Wohn, D. Y. (2020). " Talking without a Voice" Understanding Non-verbal Communication in Social Virtual Reality. *Proceedings of the ACM on Human-Computer Interaction, 4*(CSCW2), 1-25.
- Manstead, A. S., & Parker, D. (1995). Evaluating and extending the theory of planned behaviour. *European review of social psychology, 6*(1), 69-95.
- Markey, K., Tilki, M., & Taylor, G. (2014). Reflecting on the challenges of choosing and using a grounded theory approach. *Nurse Researcher, 22*(2).
- Märtens, M., Shen, S., Iosup, A., & Kuipers, F. (2015). Toxicity detection in multiplayer online games. 2015 International Workshop on Network and Systems Support for Games (NetGames),
- Martin, L. (2013). Don't be so sensitive, sledging is part of the game. *The Conversation, 5*.
- Marwick, A. E. (2013). Online identity. *A companion to new media dynamics, 355-364*.
- Masood, A., Luqman, A., Feng, Y., & Shahzad, F. (2022). Untangling the adverse effect of SNS stressors on academic performance and its impact on students' social media discontinuation intention: the moderating role of guilt. *SAGE Open, 12*(1), 21582440221079905.

- Massanari, A. (2017). # Gamergate and The Fapping: How Reddit's algorithm, governance, and culture support toxic technocultures. *new media & society*, 19(3), 329-346.
- Mattarelli, E., Bertolotti, F., & Macrì, D. M. (2013). The use of ethnography and grounded theory in the development of a management information system. *European journal of information systems*, 22(1), 26-44.
- McCann, T., & Polacsek, M. (2022). Understanding, choosing and applying grounded theory: Part 1. *Nurse Researcher*, 30(2).
- McKane, J. (2016). There are 1.8 billion gamers in the world, and PC gaming dominates the market. [Online]. <https://mygaming.co.za/news/features/89913-there-are-1-8-billion-gamers-in-the-world-and-pc-gaming-dominates-the-market.html>.
- McKenna, K. Y., Green, A. S., & Gleason, M. E. (2002). Relationship formation on the Internet: What's the big attraction? *Journal of social issues*, 58(1), 9-31.
- Mead, G. H., & Schubert, C. (1934). *Mind, self and society* (Vol. 111). University of Chicago press Chicago.
- Mehrpour, S., & Forutan, A. (2015). Theories of first language acquisition. *Journal of Language, Linguistics and Literature*, 1(2), 30-40.
- Meier, A., Meltzer, C. E., & Reinecke, L. (2018). Coping with stress or losing control? Facebook-induced strains among emerging adults as a consequence of escapism versus procrastination. *Youth and media*,
- Merton, R. K. (1968). *On sociological theories of the middle range [1949]*. na.
- Miller, C. L. (2007). The video game industry and video game culture dichotomy: Reconciling gaming culture norms with the anti-circumvention measures of the DMCA. *Tex. Intell. Prop. LJ*, 16, 453.
- Miller, T., Birch, M., Mauthner, M. L., & Jessop, J. (2012). *Ethics in qualitative research* (Second edition. ed.). London. <https://dx.doi.org/10.4135/9781473913912>
- Mills, J., Bonner, A., & Francis, K. (2006a). Adopting a constructivist approach to grounded theory: Implications for research design. *International journal of nursing practice*, 12(1), 8-13.
- Mills, J., Bonner, A., & Francis, K. (2006b). The development of constructivist grounded theory. *International journal of qualitative methods*, 5(1), 25-35.
- Moghaddam, A. (2006). Coding issues in grounded theory. *Issues in educational research*, 16(1), 52-66.
- Moor, P. J. (2007). *Conforming to the flaming norm in the online commenting situation* [University of Twente].
- Moor, P. J., Heuvelman, A., & Verleur, R. (2010). Flaming on youtube. *Computers in Human Behavior*, 26(6), 1536-1546.
- Mortensen, T. E. (2018). Anger, fear, and games: The long event of # GamerGate. *Games and culture*, 13(8), 787-806.
- Moulin, H. (1986). *Game theory for the social sciences*. NYU press.
- Münch, R. (1996). *Autopoesis per Definition*.
- Munn, L. (2023). Toxic play: Examining the issue of hate within gaming. *First Monday*.
- Nelsonmandela, D. S., & Raja, D. G. B. (2020). An Introduction To Massively Multi-Player Online Social Games (Mmosg) And 3d Chat Games: Understanding The Need For Parents' Critical Digital Literacy And Parental Mediation. *European Journal of Molecular & Clinical Medicine*, 7(3), 4560-4566.
- Neto, J. A., Yokoyama, K. M., & Becker, K. (2017). Studying toxic behavior influence and player chat in an online video game. Proceedings of the international conference on web intelligence,

- Neurath, O. (1980). *International Picture Language: A Facsimile Reprint of the (1936) English Edition: Ein Faksimile-Neudruck Der Englischen Ausgabe (1936)*. Department of Typography & Graphic Communication, University of Reading.
- Newman, J. A., Eccles, S., Rumbold, J. L., & Rhind, D. J. (2022a). When it is no longer a bit of banter: coaches' perspectives of bullying in professional soccer. *International journal of sport and exercise psychology*, 20(6), 1576-1593.
- Newman, J. A., Warburton, V. E., & Russell, K. (2022b). It can be a "very fine line": professional footballers' perceptions of the conceptual divide between bullying and banter. *Frontiers in psychology*, 13, 361.
- Ng, L. L., Azizie, R. S., & Chew, S. Y. (2021). Factors influencing ESL players' use of vocabulary learning strategies in massively multiplayer online role-playing games (MMORPG). *The Asia-Pacific Education Researcher*, 1-13.
- Ng, P., Nesbitt, K., & Blackmore, K. (2015). Sound improves player performance in a multiplayer online battle arena game. Australasian Conference on Artificial Life and Computational Intelligence,
- Nguyen, C. T., & Zagal, J. P. (2016). Good Violence, Bad Violence: The Ethics of Competition in Multiplayer Games. DiGRA/FDG,
- Noelle-Neumann, E. (1974). The spiral of silence a theory of public opinion. *Journal of communication*, 24(2), 43-51.
- Nor, N. M., & Ab Rashid, R. (2018). A review of theoretical perspectives on language learning and acquisition. *Kasetsart Journal of Social Sciences*, 39(1), 161-167.
- Nordvall, M. (2012). Communication in Games. In.
- Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of social research methodology*, 11(4), 327-344.
- Okazaki, S., Rubio, N., & Campo, S. (2014). Gossiping behavior on social networking sites: Does gender matter? *International Journal of Human-Computer Interaction*, 30(9), 718-726.
- Olesen, V. L. (2007). Feminist qualitative research and grounded theory: Complexities, criticisms, and opportunities. *The Sage handbook of grounded theory*, 417-436.
- Ondrejka, C. (2006). Finding common ground in new worlds. *Games and culture*, 1(1), 111-115.
- Orlikowski, W. J. (1993). CASE tools as organizational change: Investigating incremental and radical changes in systems development. *MIS quarterly*, 309-340.
- Orlikowski, W. J., & Baroudi, J. J. (1991). Studying information technology in organizations: Research approaches and assumptions. *Information Systems Research*, 2(1), 1-28.
- Osborne, M. J. (2004). *An introduction to game theory* (Vol. 3). Oxford university press New York.
- Owen, G. (2013). *Game theory*. Emerald Group Publishing.
- Paavilainen, J. (2010). Critical review on video game evaluation heuristics: social games perspective. Proceedings of the International Academic Conference on the Future of Game Design and Technology,
- Pakarinen, I. (2022). *Community driven anti-harassment strategies for MMOGs*
- Palekar, S., Atapattu, M. R., Sedera, D., & Lokuge, S. (2018). Exploring spiral of silence in digital social networking spaces. International Conference on Information Systems (ICIS 2015): Exploring the Information Frontier,
- Panyametheekul, S., & Herring, S. C. (2003). Gender and turn allocation in a Thai chat room. *Journal of Computer-Mediated Communication*, 9(1), JCMC913.
- Parker, A. (2006). Lifelong learning to labour: Apprenticeship, masculinity and communities of practice. *British Educational Research Journal*, 32(5), 687-701.

- Parker, L. (2017). A Gamer's Channel's Mission: Send the Trolls Packing. <https://www.nytimes.com/2017/07/19/technology/personaltech/a-gamer-channelsmission-send-the-trolls-packing.html>
- Parks, M. R., & Roberts, L. D. (1998). Making MOOsic': The development of personal relationships on line and a comparison to their off-line counterparts. *Journal of social and personal relationships*, 15(4), 517-537.
- Parsons, T. (1949). *The structure of social action* (Vol. 491). Free press New York.
- Patil, A., Bharath, S., & Annigeri, N. (2018). Applications of game theory for cyber security system: A survey. *International Journal of Applied Engineering Research*, 13(17), 12987-12990.
- Pearce, A. M. (2017). Exploring performance of gendered identities through language in World of Warcraft. *International Journal of Human-Computer Interaction*, 33(3), 180-189.
- Pellicone, A. J., & Ahn, J. (2017). The Game of Performing Play: Understanding streaming as cultural production. Proceedings of the 2017 CHI conference on human factors in computing systems,
- Peterson, M. (2010). Massively multiplayer online role-playing games as arenas for second language learning. *Computer Assisted Language Learning*, 23(5), 429-439.
- Peterson, M. (2012). Learner interaction in a massively multiplayer online role playing game (MMORPG): A sociocultural discourse analysis. *ReCALL*, 24(3), 361-380.
- Peurala, L. (2020). Verbal abuse in online multiplayer gaming: a survey of its prevalence and effects on the playing experience.
- Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychological journal*, 20(1), 7-14.
- Polacsek, M., Boardman, G., & McCann, T. (2018). Understanding, choosing and applying grounded theory: part 2. *Nurse Researcher*, 26(3).
- Prince, M. (1906). *The dissociation of a personality: A biographical study in abnormal psychology*. Longmans, Green, and Company.
- Pulos, A. (2013). Confronting heteronormativity in online games: A critical discourse analysis of LGBTQ sexuality in World of Warcraft. *Games and culture*, 8(2), 77-97.
- Putnam, F. W. (1991). Dissociative phenomena.
- Ratan, R. A., Chung, J. E., Shen, C., Williams, D., & Poole, M. S. (2010). Schmoozing and smiting: Trust, social institutions, and communication patterns in an MMOG. *Journal of Computer-Mediated Communication*, 16(1), 93-114.
- Rawls, A. W. (2019). Introduction to Garfinkel's 'Notes on Language Games': Language events as cultural events in 'systems of interaction'. In (Vol. 22, pp. 133-147): SAGE Publications Sage UK: London, England.
- Reynolds, R., & de Zwart, M. (2011). The duty to "play": Ethics, EULAS and MMOs. *International Journal of Internet Research Ethics*, 3, 48.
- Rice, R. (2006). *MMO evolution*. Lulu. com.
- Ross, C. A. (1996). History, phenomenology, and epidemiology of dissociation. In *Handbook of dissociation: Theoretical, empirical, and clinical perspectives* (pp. 3-24). Springer.
- Rottman, G. (2017). *FUBAR: Soldier Slang of World War II*. Chartwell Books.
- Rottman, G. L. (2011). *FUBAR F*** ed Up Beyond All Recognition: Soldier Slang of World War II*. Bloomsbury Publishing.
- Rowell Huesmann, L. (1988). An information processing model for the development of aggression. *Aggressive behavior*, 14(1), 13-24.

- Royse, P., Lee, J., Undrahbuyan, B., Hopson, M., & Consalvo, M. (2007). Women and games: Technologies of the gendered self. *new media & society*, 9(4), 555-576.
- Saarinen, T. (2017a). Toxic behavior in online games. *University of Oulun. Finlandia*.
- Saarinen, T. (2017b). *Toxic behavior in online games* T. Saarinen].
- Salmon, T., & Serra, D. (2013). Does social judgment diminish rule breaking?
- Sbaraini, A., Carter, S. M., Evans, R. W., & Blinkhorn, A. (2011). How to do a grounded theory study: a worked example of a study of dental practices. *BMC medical research methodology*, 11, 1-10.
- Schmitter, P. C. (2009). The nature and future of comparative politics. *European Political Science Review*, 1(1), 33-61.
- Scholz, T. (2011). New broadcasting in IPTV—the case of the starcraft broadcasting scene. World Media Economics & Management Conference. Thessaloniki,
- Schott, G. R., & Horrell, K. R. (2000). Girl gamers and their relationship with the gaming culture. *Convergence*, 6(4), 36-53.
- Schreiber, R. (2001). The “How to” of grounded theory: Avoiding the pitfalls. In, RS Schreiber & PN Stern (Eds.), *Using grounded theory in nursing* (pp. 55–84). In: New York, NY: Springer Publishing Company.
- Seale, C. (1999). The quality of qualitative research. *The Quality of Qualitative Research*, 1-224.
- Searle, J. R. (1995). *The construction of social reality*. Simon and Schuster.
- Sebastian, K. (2019). Distinguishing between the strains grounded theory: Classical, interpretive and constructivist. *Journal for Social Thought*, 3(1).
- Seidel, S., & Urquhart, C. (2013). On emergence and forcing in information systems grounded theory studies: The case of Strauss and Corbin. *Journal of Information Technology*, 28(3), 237-260.
- Shaw, A. (2010). What is video game culture? Cultural studies and game studies. *Games and culture*, 5(4), 403-424.
- Shaw, A. (2012). Do you identify as a gamer? Gender, race, sexuality, and gamer identity. *new media & society*, 14(1), 28-44.
- Shen, C., Sun, Q., Kim, T., Wolff, G., Ratan, R., & Williams, D. (2020). Viral vitriol: Predictors and contagion of online toxicity in World of Tanks. *Computers in Human Behavior*, 108, 106343.
- Sherif, M. (1966). In common predicament: Social psychology of intergroup conflict and cooperation. (*No Title*).
- Showkat, N., & Parveen, H. (2017). In-depth Interview. In.
- Shubik, M. (1982). *Game theory in the social sciences: concepts and solutions*.
- Simpson, J. M., Knottnerus, J. D., & Stern, M. J. (2018). Virtual rituals: Community, emotion, and ritual in massive multiplayer online role-playing games—A quantitative test and extension of structural ritualization theory. *Socius*, 4, 2378023118779839.
- Singh, S., Gupta, P., Jasial, S. S., & Mahajan, A. (2023). Correlates of compulsive use of social media and academic performance decrement: A stress-strain-outcome approach. *J. Content Community Commun*, 17, 131-146.
- Skinner, B. F. (1985). Cognitive science and behaviourism. *British Journal of psychology*, 76(3), 291-301.
- Smith, B., & Searle, J. (2003). The construction of social reality: An exchange. *American Journal of Economics and Sociology*, 285-309.
- Snodgrass, J. G., Lacy, M. G., Dengah II, H. F., Eisenhauer, S., Batchelder, G., & Cookson, R. J. (2014). A vacation from your mind: Problematic online gaming is a stress response. *Computers in Human Behavior*, 38, 248-260.

- Snodgrass, J. G., Lacy, M. G., Francois Dengah, H., Fagan, J., & Most, D. E. (2011). Magical flight and monstrous stress: Technologies of absorption and mental wellness in Azeroth. *Culture, Medicine, and Psychiatry*, 35, 26-62.
- Spitzer, C., Barnow, S., Freyberger, H. J., & Grabe, H. J. (2006). Recent developments in the theory of dissociation. *World psychiatry*, 5(2), 82.
- Stark, C. A. (2019). Gaslighting, misogyny, and psychological oppression. *The monist*, 102(2), 221-235.
- steamcommunity. (2023). *Star Wars Galaxies*. Retrieved 29 August from <https://steamcommunity.com/sharedfiles/filedetails/?id=43948523>
- Stevenson, R. (2018). What the soldier said: Silence,(bad) language and the Great War. *Anglo Saxonica*, 3(16), 51-73.
- Stolz, J. (2023a). Social Games. Outline of a Metatheory for the Social Sciences.
- Stolz, J. (2023b). The theory of social games: outline of a general theory for the social sciences. *Humanities and Social Sciences Communications*, 10(1), 1-12.
- Storytelling. (2015, 09 March 2024). Social Game Theory for LARPerS. <https://storytelling.co.za/game-theory-for-larpers/>
- Strauss, A., & Corbin, J. (1990a). *Basics of qualitative research*. Sage publications.
- Strauss, A., & Corbin, J. (1990b). Basics of qualitative research: grounded theory procedures and techniques. In: London: Sage.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research techniques.
- Suddaby, R. (2006). From the editors: What grounded theory is not. In (Vol. 49, pp. 633-642): Academy of Management Briarcliff Manor, NY 10510.
- Suler, J. (2004). The online disinhibition effect. *CyberPsychology & behavior*, 7(3), 321-326.
- Swedberg, R. (2001). Sociology and game theory: Contemporary and historical perspectives. *Theory and Society*, 30(3), 301-335.
- Takano, M., & Tsunoda, T. (2019). Self-disclosure of bullying experiences and social support in avatar communication: analysis of verbal and nonverbal communications. Proceedings of the International AAAI Conference on Web and Social Media,
- Tan, P. (2011). Hate speech in game communities. *Updates: The Gambit Blog*, 10.
- Tang, T. Y., Man, C. Y., Hang, C. P., Cheuk, L. S., Kwong, C. W., Chi, Y. C., Fai, H. K., & Kam, S. (2008). A study of interaction patterns and awareness design elements in a massively multiplayer online game. *International journal of computer games technology*, 2008.
- Tansey, O. (2009). Process tracing and elite interviewing: a case for non-probability sampling. In *Methoden der vergleichenden Politik-und Sozialwissenschaft* (pp. 481-496). Springer.
- Taylor, C. (2017). Strategies and Behaviors of Cyber Deviance and Internet Trolling.
- Taylor, D. G. (1982). Pluralistic ignorance and the spiral of silence: A formal analysis. *Public opinion quarterly*, 46(3), 311-335.
- Taylor, T. L. (2009). *Play between worlds: Exploring online game culture*. MIT press.
- Teng, C.-I., & Chen, W.-W. (2014). Team participation and online gamer loyalty. *Electronic Commerce Research and Applications*, 13(1), 24-31.
- Teng, L., Liu, D., & Luo, J. (2022). Explicating user negative behavior toward social media: an exploratory examination based on stressor–strain–outcome model. *Cognition, Technology & Work*, 24(1), 183-194.
- Terrion, J. L., & Ashforth, B. E. (2002). From 'I' to 'we': The role of putdown humor and identity in the development of a temporary group. *Human relations*, 55(1), 55-88.
- Thornberg, R. (2012). Informed grounded theory. *Scandinavian journal of educational research*, 56(3), 243-259.

- Thorne, S. L. (2008). Transcultural communication in open Internet environments and massively multiplayer online games. *Mediating discourse online*, 305327.
- Thorne, S. L. (2010). The 'Intercultural Turn' and Language Learning in the. *Telecollaboration 2.0: Language, literacies and intercultural learning in the 21st century*, 1, 139.
- Thorne, S. L., Fischer, I., & Lu, X. (2012). The semiotic ecology and linguistic complexity of an online game world. *ReCALL*, 24(3), 279-301.
- Timothy, D. J. (2012). Archival research. In *Handbook of research methods in tourism*. Edward Elgar Publishing.
- Timothy, J. (2000). Why we curse: A neuro-psycho-social theory of speech. *Amsterdam: John*.
- Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of advanced nursing*, 48(4), 388-396.
- Tosca, S. (2003). The quest problem in computer games. In *Proceedings of TIDSE 2003*. ACM Digital Library (BFI Level 2).
- Treadway, B. D. (2010). *Online Gaming and Spam* University of Georgia].
- Trujillo, M., Gruppi, M., Buntain, C., & Horne, B. D. (2020). What is bitchute? characterizing the. *Proceedings of the 31st ACM conference on hypertext and social media*,
- Turcan, G., Coşkun, E., Özşahin, M., & Rovshenov, A. (2002). Intersection of Strategic Management and Management Information Systems Disciplines: Analysis of Theories. *European Proceedings of Social and Behavioural Sciences*.
- Turkle, S. (1995). *Life on the screen: identity in the age of the Internet* Simon & Schuster. New York.
- Turley, L. W., & Milliman, R. E. (2000). Atmospheric effects on shopping behavior: a review of the experimental evidence. *Journal of business research*, 49(2), 193-211.
- Tyler, T. R. (2006). Restorative justice and procedural justice: Dealing with rule breaking. *Journal of social issues*, 62(2), 307-326.
- Um, M.-Y., & Harrison, D. F. (1998). Role stressors, burnout, mediators, and job satisfaction: A stress-strain-outcome model and an empirical test. *Social Work Research*, 22(2), 100-115.
- Urquhart, C. (2007). The evolving nature of grounded theory method: The case of the information systems discipline. *The Sage handbook of grounded theory*, 339-359.
- Urquhart, C., & Fernández, W. (2013). Using grounded theory method in information systems: The researcher as blank slate and other myths. *Journal of Information Technology*, 28, 224-236.
- Urquhart, C., Lehmann, H., & Myers, M. D. (2010). Putting the 'theory' back into grounded theory: guidelines for grounded theory studies in information systems. *Information Systems Journal*, 20(4), 357-381.
- v. Neumann, J. (1928). Zur theorie der gesellschaftsspiele. *Mathematische annalen*, 100(1), 295-320.
- Vaast, E., & Walsham, G. (2013). Grounded theorizing for electronically mediated social contexts. *European journal of information systems*, 22, 9-25.
- Van den Berg, A. (1998). Is sociological theory too grand for social mechanisms. *Social mechanisms: An analytical approach to social theory*, 204-237.
- Van der Hart, O., & Horst, R. (1989). The dissociation theory of Pierre Janet. *Journal of traumatic stress*, 2(4), 397-412.
- Van der Kolk, B. A., & Van der Hart, O. (1989). Pierre Janet and the breakdown of adaptation in psychological trauma. *American Journal of Psychiatry*, 146(12), 1530-1540.
- Vaughan, M. W. (1997). Marketing strategies for online entertainment: a snapshot of computer game networks.

- Vdovichenko, S. (2015). Leet Speak in Modern Gamer Slang. *Вопросы современной лингвистики и методики обучения иностранным языкам в школе и в вузе*(1), 79-84.
- Velez, J. A., Mahood, C., Ewoldsen, D. R., & Moyer-Gusé, E. (2014). Ingroup versus outgroup conflict in the context of violent video game play: The effect of cooperation on increased helping and decreased aggression. *Communication Research*, 41(5), 607-626.
- Vermeulen, L., Abeele, M. V., & Van Bauwel, S. (2016). A gendered identity debate in digital game culture. *Press Start*, 3(1), 1-16.
- Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing Digital Transformation*, 13-66.
- Vygotsky, L. (1978). *Mind in society: Interaction between learning and development. Readings on the development of children*. NY: WH Freeman and Company. Retrieved from: <http://www.psy.cmu.edu/~sieglervygotsky78.pdf>.
- Wagstaff, C. R., Martin, L. J., & Thelwell, R. C. (2017). Subgroups and cliques in sport: A longitudinal case study of a rugby union team. *Psychology of Sport and Exercise*, 30, 164-172.
- Wahab, E., Ajiboye, O., Ogbeyemi, G., & Isaiah, S. (2023). Introduction to Sociological theory. In.
- Walker, D., & Myrick, F. (2006). Grounded theory: An exploration of process and procedure. *Qualitative Health Research*, 16(4), 547-559.
- Walsh, I., Holton, J. A., Bailyn, L., Fernandez, W., Levina, N., & Glaser, B. (2015). What grounded theory is... a critically reflective conversation among scholars. *Organizational Research Methods*, 18(4), 581-599.
- Walsham, G. (1995). Interpretive case studies in IS research: nature and method. *European journal of information systems*, 4(2), 74-81.
- Wang, A. (2017). Using Second Life in an English course: How does the technology affect participation? *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 7(1), 66-85.
- Watson, J. B. (1913). Psychology as the behaviorist views it. *Psychological review*, 20(2), 158.
- Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS quarterly*, xiii-xxiii.
- Weimann, P. (2012). An organizational framework for the use of web-based tools in "Virtual" project teams.
- White, A. (2017). Inclusive Masculinities in Contemporary Football: Men in the Beautiful Game. *Sociology of Sport Journal*, 34(4), 364-366.
- Wiesche, M., Jurisch, M. C., Yetton, P. W., & Krcmar, H. (2017). Grounded theory methodology in information systems research. *MIS quarterly*, 41(3), 685-A689.
- Williams, D., Caplan, S., & Xiong, L. (2007). Can you hear me now? The impact of voice in an online gaming community. *Human Communication Research*, 33(4), 427-449.
- Williams, D., Consalvo, M., Caplan, S., & Yee, N. (2009). Looking for gender: Gender roles and behaviors among online gamers. *Journal of communication*, 59(4), 700-725.
- Williams, D., Ducheneaut, N., Xiong, L., Zhang, Y., Yee, N., & Nickell, E. (2006). From tree house to barracks: The social life of guilds in World of Warcraft. *Games and culture*, 1(4), 338-361.
- Williams, D., Kennedy, T. L., & Moore, R. J. (2011). Behind the avatar: The patterns, practices, and functions of role playing in MMOs. *Games and culture*, 6(2), 171-200.

- Williams, D., Yee, N., & Caplan, S. E. (2008). Who plays, how much, and why? Debunking the stereotypical gamer profile. *Journal of Computer-Mediated Communication*, 13(4), 993-1018.
- Willig, C. (2013). *EBOOK: introducing qualitative research in psychology*. McGraw-hill education (UK).
- Wilson, R. J. (2011). 'Tommifying'the Western Front, 1914–1918. *Journal of Historical Geography*, 37(3), 338-347.
- Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. P. (2013). Using grounded theory as a method for rigorously reviewing literature. *European journal of information systems*, 22(1), 45-55.
- Wrona, T., & Gunnesch, M. (2016). The one who sees more is more right: how theory enhances the 'repertoire to interpret'in qualitative case study research. *Journal of Business Economics*, 86, 723-749.
- Xiao, B. S., & Wong, Y. M. (2013). Cyber-bullying among university students: An empirical investigation from the social cognitive perspective. *International Journal of Business and Information*, 8(1), 34.
- Yee, N. (2006). The demographics, motivations, and derived experiences of users of massively multi-user online graphical environments. *Presence: Teleoperators and virtual environments*, 15(3), 309-329.
- Yee, N., Bailenson, J. N., Urbanek, M., Chang, F., & Merget, D. (2007). The unbearable likeness of being digital: The persistence of nonverbal social norms in online virtual environments. *CyberPsychology & behavior*, 10(1), 115-121.
- Zähres, F. (2017). "pentakill inc."-A Case Study of Shortening Processes in Ludolects. In *Communication forms and communicative practices. New perspectives on communication forms, affordances and what users make of them* (Vol. 15).
- Zhang, F., & Kaufman, D. (2016). Older adults' social interactions in massively multiplayer online role-playing games (MMORPGs). *Games and culture*, 11(1-2), 150-169.
- Zhang, S., Zhao, L., Lu, Y., & Yang, J. (2016). Do you get tired of socializing? An empirical explanation of discontinuous usage behaviour in social network services. *Information & Management*, 53(7), 904-914.
- Zheng, H., & Ling, R. (2021). Drivers of social media fatigue: A systematic review. *Telematics and Informatics*, 64, 101696.

APPENDICES

APPENDIX A: ETHICS APPROVAL LETTER



Faculty of Engineering, Built Environment and Information Technology

Fakulteit Ingenieurswese, Bouw-omgewing en
Inligtingstechnologie / Lefapha la Boetsenere,
Tikologo ya Kago le Thakholotši ya Tshedimošo

16 November 2022

Reference number: EBIT/220/2022

Ms KC Namane
Department: Informatics
University of Pretoria
Pretoria
0083

Dear Ms KC Namane,

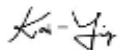
FACULTY COMMITTEE FOR RESEARCH ETHICS AND INTEGRITY

Your recent application to the EBIT Research Ethics Committee refers.

Approval is granted for the application with reference number that appears above.

1. This means that the research project entitled "Understanding the use of pejorative language in Massively Multiplayer Online Games (MMOGs)" has been approved as submitted. It is important to note what approval implies. This is expanded on in the points that follow.
2. This approval does not imply that the researcher, student or lecturer is relieved of any accountability in terms of the Code of Ethics for Scholarly Activities of the University of Pretoria, or the Policy and Procedures for Responsible Research of the University of Pretoria. These documents are available on the website of the EBIT Research Ethics Committee.
3. If action is taken beyond the approved application, approval is withdrawn automatically.
4. According to the regulations, any relevant problem arising from the study or research methodology as well as any amendments or changes, must be brought to the attention of the EBIT Research Ethics Office.
5. The Committee must be notified on completion of the project.

The Committee wishes you every success with the research project.



Prof K.-Y. Chan

Chair: Faculty Committee for Research Ethics and Integrity
FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

APPENDIX B: INFORMED CONSENT



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
Denkiers • Leading Minds • Diligopolo Ho Dihalefi

Consent to Participate in a Research Study

Researcher: Kedibone Charlotte Namane (20673681)

Institution: University of Pretoria

Study No: EBIT/220/2022

Ethics committee contacts details: Secretariat (EBIT Ethics Office): Mrs Marié van Niekerk (012 4204244; Ebit-Ethics@up.ac.za) / FHS Etics Office: Tel: 012 356 3084 or 012 356 3085, fhsethics@up.ac.za

Topic: Understanding the use of pejorative language in Massively Multi-player Online Games

Dear Participant

This consent form gives details about the study at hand; it is important that you carefully read it and then decide if you want to take part in the study.

PURPOSE

The purpose of this study is to gain an understanding of the main concerns regarding the use of pejorative language in Massively Multiplayer Online Games (MMOG). The study is under the supervision of Dr M Hattingh, Prof M Matthee and Prof E Muller. This is a study about language use in MMOGs; MMOGs are a gaming genre where multiple players can play together and against each other in the same virtual world finishing quests/levels in an attempt to make player's character stronger. The researcher wants to understand what the main concerns (most important things) are with regards to language use in MMOGs.

PROCEDURE

- I, the researcher, will observe you playing games.
- I will then arrange a meeting with you at your convenience to conduct a one-on-one interview.
- The interview will be a conversation guided by your responses.
- I will request permission from you to digitally (voice) record the interview and the session when I observe you playing games so that I am able to refer to it when I analyse the data.
- Your identity will remain confidential.
- You will be granted the option of obtaining a copy of consent.
- The duration of the interview will be approximately one (1) hour.

POSSIBLE RISKS AND BENEFITS

If you feel uncomfortable at any point during the study, you are free to let me know, and we can break or continue at a later stage. You are also free to withdraw from the study at any time, there will be no consequences for this. When withdrawing from the study, you should let the research team

know that you wish to withdraw. You may provide the research team with the reason(s) for leaving the study, but this is not mandatory. You may also choose not to answer any questions if you feel uncomfortable.

There is no compensation for participating in the study.

CONFIDENTIALITY

The researcher will take every possible effort to ensure that all participants' responses are kept confidential. All identifying information will be excluded when the results are presented and published. All participants will be referred to as "Participant" in order to maintain confidentiality.

I will also ensure that any information provided by each participant is handled in the strictest confidence, and that this information will not be used to reflect negatively on any participant.

Sincerely,

Kedibone Namane Dr Marie Hattingh

Signature

Researcher \ PhD Student

Faculty of Engineering, Built-Environment and
Information Technology

University of Pretoria
kncharlotte31@gmail.com

Signature

Research Supervisor
Faculty of Engineering, Built-
Environment and Information
Technology

University of Pretoria
Email: marie.hattingh@up.ac.za

CONSENT

I hereby consent that I have read and I understand the contents of this document. I therefore agree to participate in the study, and I am doing so at my own freewill.

Signature of participant

DATE

APPENDIX C: INTERVIEW QUESTIONS

Please respond truthfully (with a **YES** or **NO**) to the questions below.

Question	Yes/No
1. Are you over the age of 18?	
2. Do you play online games?	

Semi structured follow up questions.

Part A: Background Information

1. Can you tell me more about yourself?
This is an open question to make the participant more comfortable.
2. Which games do you usually play?
3. How often do you play online games?
4. How long have you been playing?
5. What role(s) do you usually take in online games?

Part B: Language use in MMOGs

1. What are your linguistic habits during gameplay?
 - a. How do you communicate with other players who are not in your team? (Chat, audio, etc)
 - b. How do you communicate with your team members?
2. How would you describe typical gaming language?
3. How does your typical gaming language differ from your daily language?
 - a. Do you use more direct/forceful/pejorative language?
 - b. Please describe how the team member interaction language can be characterised.
4. If previously indicated that pejorative language was used: - What are your views regarding the use of pejorative language during game play?
 - a. Is pejorative language or swearwords often used by players?
 - b. If so, when and how is it used?
 - c. Why do you think this is so?
5. How do you account for the strong presence of pejorative language and swearwords in particular when communicating with other players?

6. Does it bother you that there is pejorative language during game play or is it normal?
(Please elaborate)