



**Cape Peninsula
University of Technology**

The impact of over-the-top Television services on pay-television subscription services in South Africa

by

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Signed

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ABSTRACT

Globally, developments and innovations in television technology, including the launch and growth of over-the-top television services (OTT TV), have affected traditional pay-TV operators' ability to grow a subscriber base and retain existing customers. In South Africa, the Independent Communications Authority of South Africa (ICASA) commissioned an inquiry into the state of competition in the pay-TV sector to understand consumer behaviour concerning television broadcasting and video-on-demand services. Its preliminary findings revealed that the impact of OTT TV on pay-TV services was minimal, owing to the unavailability of affordable and quality broadband data. However, South African pay-TV operators such as MultiChoice, who owns DStv, argued that the survey commissioned by ICASA was invalid, as its survey questions did not address a direct assessment of the market definition. Moreover, it ignored the impact the OTT TV services have on pay-TV services, which include cord-cutting, cord-shaving and a growing number of cord-nevers.

Therefore, in the absence of a comprehensive assessment and credible evidence, this research study's main objective was to ascertain the impact that OTT TV services have on traditional pay-TV services in South Africa. A quantitative research method was adopted using a non-probability sampling technique for data collection. A total of 391 responses were collected utilising an online survey questionnaire and analysed using descriptive statistics on IBM® SPSS® version 26.

The main findings of the study showed that OTT TV services are a complementary service to pay-TV services as opposed to a substitute. The results suggest changes to TV consumption, in that more TV consumers are binge watching and streaming content online. Furthermore, the smart TV is the preferred device for TV consumption, and more than five hours a day are spent online consuming TV content, especially by male respondents. Low-income earners are using free/paid mobile applications to consume TV content, and the sharing of OTT TV logon credentials with family and friends is prevalent across all demographic groups. For those who have neither OTT TV nor pay-TV services, free-to-air services are the preferred platform for TV consumption. Renting out sports rights to OTT TV competitors would contribute to pay-TV operators' revenue. Contributions to research funding in this field would benefit all the affected stakeholders. ICASA should put measures in place to regulate the sector. This study benefits all stakeholders in digital media and business strategy, as well as marketing students.

Keywords: Over-the-top television (OTT TV), Pay-TV, cord-cutting, cord-shaving, cord-nevers

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DEDICATION

To my mother, Nomaltaly Florence Flepu

For having grown up as an orphan without an opportunity to go to school but ensuring as a single mother that all your children will have a better life. For always telling me that I must be a “master of something”. Enkosi, Jali, Nomlomo, Ngqawa, Sholowane. God bless you and perfects all that concerns you, in Jesus’ name.

TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS.....	iv
DEDICATION	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	x
LIST OF TABLES	xi
GLOSSARY.....	xii
CHAPTER ONE.....	1
1.1 Introduction and background.....	1
1.2 Statement of the research problem.....	1
1.3 Rationale for and significance of the study	3
1.4 Main research objective	3
1.4.1 Sub-research objectives	3
1.5 Main research question.....	4
1.5.1 Sub-research questions	4
1.6 Research paradigm, methods, and methodologies.....	4
1.6.1 Research paradigm.....	5
1.6.2 Research method/approach.....	5
1.6.3 Research design	6
1.6.4 Demarcation/delimitation of the study.....	7
1.6.5 Research methodologies/processes	7
1.7 Ethical considerations	10
1.8 Outline of the dissertation	11
1.9 Limitations of the research	12
1.10 Conclusion	12
CHAPTER TWO	13
2.1 Introduction	13
2.2 Overview of pay-TV subscription services in South Africa.....	14
2.3 Overview of OTT TV services in South Africa.....	16
2.3.1 Netflix	17
2.3.2 Showmax	17
2.3.3 YouTube Premium	18
2.3.4 Amazon Prime	18
2.4 Objective	19
2.5 Theoretical perspective	19
2.5.1 The uses and gratifications theory	19
2.6 Changes in device adoption.....	22
2.7 Television consumer viewing behaviours.....	23
2.7.1 Changes in viewing habits	24

2.7.2	Binge watching.....	25
2.7.3	Viewing patterns among demographic populations	25
2.8	Impact of OTT TV services on pay-TV operators.....	26
2.8.1	Cord-cutting	27
2.8.2	Cord-nevers	30
2.8.3	Cord-shavers	31
2.9	Decision determinants influencing migration.....	32
2.9.1	Convenience	32
2.9.2	Advertising	33
2.9.3	Quality of content.....	33
2.9.4	Cost.....	34
2.10	Conclusion	35
CHAPTER THREE	36
3.1	Introduction	36
3.2	Research design	36
3.2.1	Exploratory research design	36
3.2.2	Explanatory research design	37
3.2.3	Descriptive research design.....	37
3.3	Research method.....	37
3.3.1	Qualitative research approach	38
3.3.2	Mixed-methods research approach	38
3.3.3	Quantitative research approach.....	38
3.4	Research sampling design process	39
3.4.1	Population	39
3.4.2	Sampling frame.....	40
3.4.3	Sampling method.....	40
3.4.4	Sample size	41
3.4.5	Data-collection instrument	41
3.4.6	Data collection	43
3.4.7	Data analysis	44
3.5	Reliability and validity of the data collection instrument.....	46
3.5.1	Reliability.....	46
3.5.2	Validity	47
3.6	Ethical considerations	47
3.7	Conclusion	48
CHAPTER FOUR	49
4.1	Introduction	49
4.2	Section 1 – Demographic characteristics of respondents	51
4.2.1	Gender profiles of respondents.....	51
4.2.2	Age profiles of respondents	52
4.2.3	Occupation profiles of respondents	53

4.2.4	Household income profile of respondents.....	54
4.2.5	Provincial area of residence profile of respondents	55
4.2.6	Summary of demographic characteristics of the population	56
4.3	Section 2 – Consumer viewing habits – Pay-TV subscription services.....	56
4.3.1	Pay-TV subscription fee.....	57
4.3.2	Respondents who have upgraded pay-TV subscription	58
4.3.3	Cord-cutters	61
4.3.4	Cord-shavers	66
4.3.5	Cord-stacking.....	70
4.3.6	Reliability.....	72
4.3.7	Summary of Section 2 – Consumer viewing – Pay-TV subscription services..	73
4.4	Section 3 – Consumer viewing behaviours – OTT TV subscription services.....	73
4.4.1	Cord-nevers	73
4.4.2	Favoured OTT TV services by cord-nevers	75
4.4.3	Reasons influencing cord-nevers to favour OTT TV over Pay-TV subscription services 76	
4.4.4	Reliability.....	78
4.4.5	Summary of Section 3 – Consumer viewing habits – OTT TV subscription services 78	
4.5	Section 4 – Factors affecting television viewing behaviours	79
4.5.1	Source of internet.....	79
4.5.2	Streaming and downloading	73
4.5.3	Password sharing	75
4.5.4	Hours spent consuming content online.....	77
4.5.5	Binge watching.....	78
4.5.6	Preference to stream online.....	80
4.5.7	Favourite TV programme	82
4.5.8	Summary of Section 4 – Factors affecting television viewing behaviour	83
4.6	Section 5 – Device adoption	83
4.6.1	Devices	83
4.6.2	Streaming device	85
4.6.3	Summary of Section 5 – Device adoption.....	85
4.7	Section 6 – Alternative TV consumption platforms	86
4.7.1	Social media platforms.....	86
4.7.2	Other alternative platforms for non-pay-TV and OTT TV platforms	87
4.7.3	Summary of Section 6 – Alternative TV consumption platforms.....	88
4.8	Section 7 – Decision determinants influencing migration to OTT TV services.....	88
4.8.1	Reasons for OTT TV preference over pay-TV	88
4.8.2	Customer service as a determinant	90
4.8.3	Original local content as a determinant.....	92
4.8.4	Summary of Section 7 – Decision determinants influencing migration to OTT TV services.....	93

4.9	Section 8 – General	93
4.9.1	Opinions on OTT TV versus pay-TV	93
4.9.2	Suggestions for pay-TV to compete and retain customers	95
4.10	Conclusion	96
CHAPTER FIVE		97
5.1	Introduction	97
5.2	Main findings per the study’s research objectives.....	97
5.2.1	Sub-Research Objective 1	98
5.2.2	Sub-Research Objective 2	100
5.2.3	Sub-Research Objective 3	100
5.2.4	Sub-Research Objective 4	101
5.2.5	Sub-Research Objective 5	101
5.2.6	Sub-Research Objective 6	102
5.2.7	Other findings.....	102
5.3	Limitations of the study	103
5.4	Significance of the research.....	103
5.5	Recommendations	103
5.5.1	Recommendations for pay-TV operators	104
5.5.2	Recommendations for OTT TV and pay-TV operators	104
5.5.3	Recommendations for ICASA and other regulatory bodies	105
5.5.4	Recommendations for all stakeholders listed above.....	105
5.6	Suggestions for future research	105
5.7	Conclusions.....	106
REFERENCES		108
APPENDICES		116
Appendix A: Ethical clearance certificate		116
Appendix B: Consent letter for survey participation		117
Appendix C: Survey questionnaire.....		118
Appendix D: Frequency output tables from IBM SPSS Statistics		132
Appendix E: Declaration of editing.....		141
Appendix F: Turnitin originality report		142

LIST OF FIGURES

Figure 2.1 Mobile data bundle prices from 2013 to 2018	15
Figure 2.2 Reduction of fibre data prices from 2014 to 2019	16
Figure 2.3 OTT TV standard subscription fees.....	19
Figure 2.4 The six-need states of television	21
Figure 2.5 Forecast of the adult population of cord-nevers and cord-cutters	31
Figure 4.1 Demographic profiles of respondents.....	52
Figure 4.2 Age profiles of respondents.....	53
Figure 4.3 Occupation profiles of respondents.....	54
Figure 4.4 Income profile of respondents	55
Figure 4.5 Provincial residence profile of respondents.....	55
Figure 4.6 illustration of skip logic	57
Figure 4.7 Monthly pay-TV subscription fee	58
Figure 4.8 Pay-TV subscription upgrade	59
Figure 4.9 Cord-cutters.....	62
Figure 4.10 Reasons for future cancellation considerations.....	65
Figure 4.11 Cord-shavers.....	67
Figure 4.12 Cord-stacking	70
Figure 4.13 Favoured OTT TV services for cord-stacking.....	71
Figure 4.14 Cord-nevers.....	74
Figure 4.15 Favoured OTT TV services by cord-nevers	76
Figure 4.16 Reasons influencing first-time subscribers to favour OTT TV over pay-TV	77
Figure 4.17 Source of internet access.....	80
Figure 4.18 Streaming and downloading.....	73
Figure 4.19 OTT TV password sharing	75
Figure 4.20 Hours spent online consuming television content	77
Figure 4.21 Binge watching	79
Figure 4.22 Preference to stream.....	81
Figure 4.23 Favourite TV programme	82
Figure 4.24 Adopted devices for TV consumption.....	84
Figure 4.25 Preferred streaming devices	85
Figure 4.26 Social media platforms for online TV consumption	86
Figure 4.27 Alternative TV viewing platforms for non-pay-TV and OTT TV services	88
Figure 4.28 Reasons for OTT TV preference over pay-TV	89
Figure 4.29 Customer service as the reason for migration from pay-TV to OTT TV	91
Figure 4.30 Original local content as a determinant.....	92

LIST OF TABLES

Table 1.1 Formula for population size calculation	8
Table 3.1 Questionnaire categorisation for interpretation of the findings	42
Table 3.2 Questionnaire categorisation for interpretation of the findings	45
Table 4.1 Collected responses	50
Table 4.2 Total sample size.....	50
Table 4.3 Sample size reflecting population per category	51
Table 4.4 Subscription upgrade comparison by packages.....	60
Table 4.5 Cord-cutting by age	62
Table 4.6 Cord-cutting by income levels	63
Table 4.7 Cord-cutting by province.....	63
Table 4.8 Cord-cutting by gender	64
Table 4.9 Other reasons for future cancellation considerations	65
Table 4.10 Cord-shaving by gender	67
Table 4.11 Cord-shaving by income levels.....	68
Table 4.12 Cord-shaving by age	68
Table 4.13 Cord-shaving by province.....	69
Table 4.14 Cord-stacking by subscription package.....	71
Table 4.15 Reliability analysis	72
Table 4.16 Cronbach Alpha scores of each variable.....	72
Table 4.17 Cord-nevers by age	74
Table 4.18 Cord-nevers by gender identification.....	75
Table 4.19 Cord-nevers by the province of residence.....	75
Table 4.20 Other favoured OTT TV services by the cord-nevers.....	76
Table 4.21 Other reasons influencing first-time subscribers to favour OTT TV over pay-TV ..77	77
Table 4.22 Cronbach alpha reliability scores – Section 3.....	78
Table 4.23 Cronbach alpha scores of each variable	78
Table 4.24 Internet access by subscription type	80
Table 4.25 Internet access by the province of residence	72
Table 4.26 Summarised findings revealing streaming after cord-cutting.....	74
Table 4.27 OTT TV password sharing by cord-stackers	76
Table 4.28 OTT TV password sharing by cord-nevers.....	76
Table 4.29 Online TV consumption by age	77
Table 4.30 Online TV consumption by gender	78
Table 4.31 Binge watching by age	79
Table 4.32 Binge watching via the Internet	80
Table 4.33 Streaming preference by age	81
Table 4.34 Streaming preference by gender.....	81
Table 4.35 Streaming preference by subscription type	82
Table 4.36 Adopted devices for TV consumption by age.....	84
Table 4.37 Other preferred streaming devices	85
Table 4.38 Other alternative platforms for online TV consumption	87
Table 4.39 Social media platforms for TV consumption by cord-stackers.....	87
Table 4.40 OTT TV preference over pay-TV by age	90
Table 4.41 Customer service determinant by cord-cutter comparison	91
Table 4.42 Customer service determinant by age comparison	92
Table 4.43 Original content importance by cord-cutters comparison	93
Table 4.44 Open-ended questions for opinions on pay-TV versus OTT TV.....	94
Table 4.45 Suggestions for pay-TV operators to compete with OTT TV operators and retain customers	95

GLOSSARY

Terms/Acronyms/Abbreviations	Definition/Explanation
BBBEE	Broad-Based Black Economic Empowerment
Binge watching	Refers to consumers watching over one episode of a series at once.
Cord-cutting	Abandoning pay-TV services in favour of OTT TV services.
Cord-nevers	First-time subscribers who have never subscribed to traditional pay-TV services and favours OTT TV services for the first time subscription.
Cord-shaving	The downgrading of premium pay-TV subscription services for lower packages, although not cancelling services, and complementing the current services with OTT TV services.
Cord-stacking	Combining OTT TV services with pay-TV services.
DStv	Digital satellite television
FTA	Free-to-air television.
Generation: Baby Boomers	Age groups between 56 and 76 years old (Kasasa, 2020).
Gen X	Age groups between 41 and 55 years old (Kasasa, 2020).
Generation Y/Millennials	Age groups between 26 and 40 years old (Kasasa, 2020).
Generation: Z	Age groups between 5 and 25 years old (Kasasa, 2020).
HDC	Cape Peninsula University of Technology's Higher Degrees Committee.
IBM SPSS Statistics	A software package used for interactive, or batched, statistical analysis. Long produced by SPSS Inc., it was acquired by IBM in 2009. Current versions have the brand name: IBM SPSS Statistics.
ICASA	Independent Communications Authority of South Africa.
MCSA	MultiChoice South Africa.
OTT TV	Media services that are streamed online using an internet connection (Chen, 2017)
Pay TV	Paid television services provided to a consumer for a fee (ICASA, 2019b)
POPIA	Protection of Personal Information Act, Act 4 of 2013.
PwC	PricewaterhouseCoopers
SABC	South African Broadcasting Corporation.
TV	Television.
US	United States.
USA	United States of America.

CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 Introduction and background

Several authors, including Lee et al. (2017), and Elias (2019:15), concur that global trends, including technological developments in the television broadcasting sector, have changed television consumer viewing habits. These authors contend that this has resulted in customers switching to over-the-top television (OTT TV) services entirely, wanting to watch what they want, when they want and at affordable prices or no cost. Television consumers are increasingly streaming television content online using OTT TV services that distribute online videos through the Internet or other Internet Protocol (IP)-based transmission paths (Kim et al., 2017).

There is a perception in South Africa that pay-TV operators such as DStv, StarSat and free-to-air (FTA) services such as OpenView that have been successful in providing digital content to home entertainment are facing disruptions due to the global rise of OTT TV services such as Netflix, Amazon Prime, and Showmax. One wonders what may have happened to the subscription base of pay-TV services, with OTT TV services becoming more attractive to television consumers.

This research study focuses on the impact OTT TV services have on pay-TV subscription services in South Africa.

1.2 Statement of the research problem

Global technological advancements in the television broadcasting sector have given rise to new players in the sector resulting in fierce competition among traditional pay-TV operators and OTT TV service providers. Owing to accessibility, availability, and increasingly cheap broadband data, consumer television viewing habits are changing, and thus consumers are adopting online streaming platforms as they want to watch what they want and when they want (Elias, 2019:9).

With convenience driving the process, Elias (2019:22-24) argues that OTT TV consumption is on the rise, and consumers are using other devices to view content because of price and the quality of TV content.

Noting that South Africa is not immune to global changes in the television broadcasting sector, the Group CEO of MultiChoice South Africa (MCSA) complained that OTT TV service operators have an unfair advantage as there is little or no regulation (BusinessTech, 2018). Furthermore, the same source notes that this makes it difficult to compete, and thus MCSA requested the Independent Communications Authority of South Africa (ICASA) to regulate the industry. However, the consumer survey initiated by ICASA to "understand consumer behaviour concerning television broadcasting and video-on-demand services", in its preliminary findings, disputed these complaints, noting that the impact in South Africa is small and imperceptible owing to the unavailability of affordable and quality broadband data (ICASA, 2019a:8).

In its submission in response to ICASA's preliminary findings, MCSA argues that the findings are unreliable owing to the vagueness and lack of credibility of the survey questions. MCSA further notes that the survey questions did not consider that consumers are adopting alternative devices for television consumption. Thus, consumers are either cancelling their pay-TV services or downgrading premium packages for lower packages to substitute with OTT TV services. Moreover, the study did not take into consideration that there are new subscribers who are choosing OTT TV over pay-TV subscription services for the first-time subscription (ICASA, 2019b:20-29).

In Canada, where the Canadian government tax policy aids OTT TV services, this has led to a reduction of locally owned media organisations' revenue as consumers are abandoning their pay-TV subscription services for OTT TV subscription services (Anderson, 2016:10). Elsewhere, there are suggestions that there is a relationship between the adoption of OTT TV services and the subscription base of the traditional pay-TV services (Tefertiller, 2018:393; Park & Kwon, 2019; Kearney, n.d.). That relationship is not clear in South Africa. Hence, there is a need for a broad and credible assessment of the impact that OTT TV services have on pay-TV services in South Africa.

1.3 Rationale for and significance of the study

The rise and adoption of OTT TV services have changed television consumption behaviour, and this may be threatening the traditional pay-TV operators' subscriber base and their ability to attract new subscribers. These changes impact pay-TV operators' revenue as the OTT TV services platforms require little or no infrastructure to operate, no requirements for corporate social responsibility, and may not contribute to local job creation due to the nature of the business (BusinessTech, 2018).

Drawing from the survey conducted by PricewaterhouseCoopers (PwC) on the most significant corporate tax contributors in South Africa, it may be inferred that pay-TV operators are the largest employers and corporate taxpayers, as MCSA participated in the survey study (PwC, 2008). Therefore, the loss of revenue directly affects both the economy and employment.

In the absence of a comprehensive and credible assessment of the impact that OTT TV services have on traditional pay-TV subscription services, a scientific investigation and evidence are necessary to enable regulatory bodies to make informed decisions on the real impact. Furthermore, the research study should contribute to the academic field of digital media, marketing, business strategy, and entrepreneurship.

1.4 Main research objective

This research study's main objective was to ascertain the impact that OTT TV services have on traditional pay-TV services in South Africa.

1.4.1 Sub-research objectives

- To investigate if OTT TV services are a substitute for or complementary to traditional pay-TV subscription services in South Africa.
- To ascertain the influence of OTT TV services on consumer television viewing behaviours, given the rise of OTT TV services in South Africa.
- To establish if first-time subscribers favour OTT TV services over pay-TV subscription services.
- To investigate changes in devices used to consume television content, given the launch and growth of OTT TV services.
- To determine demographic characteristics in shifting from pay-TV to OTT TV services.

- To investigate decisions that influence customers to transfer to OTT TV over pay-TV subscription services.

1.5 Main research question

What is the extent of the impact OTT TV services has on traditional pay-TV operators in South Africa?

1.5.1 Sub-research questions

- Are OTT TV services a substitute for or complementary to traditional pay-TV subscription services in South Africa?
 - If OTT TV services are a substitute, which are the preferred OTT TV platforms in South Africa?
 - If consumers are not migrating to OTT TV services, where and how are they consuming television content?
- What factors affect television viewing behaviours, given the rise of OTT TV services in South Africa?
- Do first-time subscribers favour OTT TV subscription services over pay-TV services in South Africa? If so, which OTT TV services do they favour for the first-time subscription?
- What has changed in device adoption for television content consumption, given the launch and growth of OTT TV services?
- Which demographic characteristics are more prominent in migrating to OTT TV platforms?
- What are the decision determinants that influence consumers to migrate from pay-TV subscription services to OTT TV services?

1.6 Research paradigm, methods, and methodologies

Khalidi (2017:16) defines methodology as characteristics of the research study, such as research design, data collection procedures, methods for data analysis given the research philosophical views, and its paradigms. Therefore, this part of the study outlines the research approach and procedures followed to accomplish the objectives and answer the study's research questions.

1.6.1 Research paradigm

Several authors, including Antwi and Hamza (2015:218) and Khaldi (2017:16) state that the term 'paradigm' refers to a set of beliefs, values, and methods shared by members of a research community along with ontological, epistemological and methodological philosophical views. These philosophical views enable the researcher to determine data-collection instruments, including approaches to analysing the research project results (Khaldi, 2017:16). As noted by Ma (2015:567), the two leading 'families' of the research paradigm are positivism and interpretivism. Ma states that interpretivism is concerned with how people make sense of the world through a subjective view, and it is associated with qualitative methodologies.

Therefore, given the explanation by Ma (2015:567), the epistemological and ontological position of this project is thus positivist and objective, in that the study aims to provide a credible assessment by investigating the impact OTT TV services have on pay-TV subscription in South Africa. Furthermore, the researcher aims to provide an accurate description of the phenomenon in South Africa that will assist the appropriate government bodies to make informed policy decisions. Additionally, based on the study's findings, the pay-TV operators, including OTT TV services, will be able to predict future trends and implement business strategies from a South African perspective.

Considering the nature of the study, it is thus agreed that this research study project's epistemological position is positivist, and therefore its research paradigm is positivism (Hassan & Mingers, 2018:11).

1.6.2 Research method/approach

The philosophical approaches of the research study inform the methods and procedures used to carry out a research project, and these can be qualitative, quantitative, or mixed-methods research approaches (Creswell & Creswell, 2018:39).

The qualitative research approach is more subjective, and articulated in words to explain the phenomenon; data generally is collected using interviews, ethnography, and case studies. Furthermore, exploratory studies adopt this approach. In contrast, the quantitative research approach is objective, articulated in numbers to measure the opinions of a large population, and therefore can be generalised.

In quantitative studies, data collection is through non-experimental designs such as surveys and longitudinal designs, while the mixed method comprises both research approaches (Creswell & Creswell, 2018:45-47).

The research questions and objectives of the study inform the research approach to be used to conduct the study. Accordingly, the primary objective of this study was to ascertain the impact that OTT TV services have on pay-TV services. Therefore, this research study adopted a quantitative research approach to test theories objectively by observing the relationship among variables and using data-collection instruments for data analysis (Creswell, 2003:7). Further to this, data was collected from a large population, described and generalised objectively (Rahi, 2017).

1.6.3 Research design

Research designs entail a plan of action used to carry out the research project, including addressing the research questions. Khaldi (2017:19-21) states that the design can either be experimental or non-experimental. Khaldi (2017:19) affirms that “experimental studies can either be a true experiment, a quasi-experiment, or a single case study”. Furthermore, non-experimental designs can be descriptive, comparative, correlational, secondary data, surveys, or ex post facto.

The descriptive research design addresses the what, who, when, and how of the research question and the method of data collection is usually through survey questionnaires (Neuman, 2014:38-39). The study adopted a descriptive research design to ascertain and describe the phenomenon of what has transpired globally, including investigating the impact of OTT TV services on pay-TV services in South Africa (Nassaji, 2015:129; Khaldi, 2017:19-21).

To answer the research questions and fulfil the research objectives, the study used survey questionnaires to collect data. Further to this, the phenomenon was studied objectively, described and analysed. The research study findings were interpreted and illustrated using frequency tables and graphs (Antwi & Hamza, 2015:221).

1.6.4 Demarcation/delimitation of the study

The studied population consisted of pay-TV and OTT TV subscription service subscribers across all South African provinces. The researcher would like to note that some of the subscribers may be employees of the pay-TV and OTT TV service providers as they also subscribe to these services. The impact of OTT TV regulation and strategies to be adopted by pay-TV operators to compete given the rise of OTT TV in the South African context was not addressed by the researcher, although explained briefly.

1.6.5 Research methodologies/processes

1.6.5.1 Population

People of interest to the study, including their demographics, must be identified; furthermore, it is imperative to note how participants are determined (Norris et al., 2015:471). Therefore, given the epistemological position of the research study, a large population of people who consume television content using pay-TV, OTT TV services, and have internet access was sampled (Rahi, 2017). The targeted population included people between the ages of 18 and 55+ across all South African provinces, divided into demographic profiles such as age, gender, income levels, employment status, and provincial area of residence. Segmenting the demographic profile is beneficial in determining the impact according to demographic characteristics as per the study's research objectives.

Subsequently, following a similar study conducted in Taiwan, the researcher adopted the same approach by asking participants at the beginning of the survey if they are pay-TV and OTT TV subscribers, and have internet access (Chen, 2017). If they answered 'no' to any of these questions, they were disqualified from the sampled population. Promotion of the survey link was on Facebook and Instagram, with the audience chosen as per the targeted population for the research study, and to ensure the participants resided in South Africa (Facebook, 2020). The researcher further adopted a similar approach to that of Gossmann (2018:19), by circulating a survey questionnaire link via email, WhatsApp, and LinkedIn to the targeted population within the researcher's reach.

The size of the population is not determinable owing to restrictions around disclosure of customer data by the pay-TV operators due to protection of private customer information as stipulated in the Protection of Personal Information Act, 4 of 2013 (South Africa, 2013:2). According to Statista (2016), the estimated number of pay-TV households is 6.8 million; furthermore, Statista (n.d.) estimates that there are 3.46 million video streaming users in South Africa, although the demographic profiles are unknown.

Therefore, drawing from Gossmann (2018:28) and Tengeh and Talom (2020:11), the sample size is calculated using the formula depicted in Table 1.1. The researcher opted to use a margin of error of 5%, and a confidence level of 95%. In a similar study conducted in Portugal by Elias (2019:27), although it adopted a mixed-methods approach, the sample size for the survey was 184; hence the study findings were not generalisable. Therefore, as calculated in Table 1.1, a sample of 384 was deemed sufficient for this study.

$$N = \frac{z^2 p (1-p)}{e^2}$$

Table 1.1 Formula for population size calculation

Confidence level	95%
Population proportion	0.5
Margin of error	5%
Population size	6,800,000.00
Alpha	0.03
Z-score	1.96
Sample size	384

(Source: author)

1.6.5.2 Sampling method

The researcher used a non-probability sampling technique with a convenience sampling method due to limited financial resources, and since the researcher intended to access participants within her reach (Tengeh & Mukwarami, 2017:66). Further to this, the selected sampling method was deemed suitable due to the nature of this research study and given the restrictions around customer data information. This method enabled the researcher to ascertain the extent of the impact of OTT TV services on pay-TV subscription services.

1.6.5.3 Data-collection instruments

The researcher noted that interviews would be time consuming; therefore, data was collected using an online survey questionnaire. Survey questionnaires are more structured, cost-effective, straightforward, easy to analyse, and can be used to generalise opinions of a large population. The survey questionnaire used a five-point Likert-type scale as it is convenient for participants, thus making allowance for the provision of opinions in a more straightforward and better approach. The survey questionnaire consisted of a drop-down list that measured observations and attitudes of the sampled population framed in a manner that enabled the respondents to provide their opinions accurately (Rahi, 2017). Further to this, the survey questionnaire had a predetermined number of short questions, including open-ended questions.

1.6.5.4 Data collection

The design, including administration of the online survey questionnaire, was done using Google Forms to obtain responses from the sampled population. The researcher noted limitations that could hinder participants from taking part in the study, and so the survey was distributed using social media networks, namely, LinkedIn, WhatsApp, and Twitter, and including an email link for convenience and broader reach.

1.6.5.5 Data coding and analysis

The editing and coding of the collected data in quantitative research are critical before analysis can take place to ensure effective use of statistical analysis (Hair et al., 2015:316). Therefore collected data was exported from Google Forms to Microsoft Excel, and coded by assigning a number to every response received from the survey participants before capturing into the database (Hair et al., 2015:319). Thus, data were analysed numerically, using the IBM Statistical Package for Social Sciences Statistics (IBM SPSS Statistics) for data analysis (Ma, 2015:568). The researcher elected to use IBM SPSS Statistics because of its effectiveness and user-friendliness. Descriptive data analysis was used to obtain an understanding of the study results. Descriptive statistics were useful in describing the participants' summarised responses, including interpreting displayed graphical percentages. The researcher used frequency tables and graphs to present the results (Hair et al., 2015:322).

1.7 Ethical considerations

Drawing from Neuman (2014:145-156), the researcher ensured the following:

- To eliminate plagiarism, the researcher acknowledged all sources cited using the Harvard method of bibliographic citation as recommended by the Cape Peninsula University of Technology. Furthermore, the researcher conducted an originality report on Turnitin with the help of her supervisor (Appendix F).
- A cover letter was attached to the survey questionnaire:
 - Seeking consent from the participants to participate in the research study.
 - Explaining the research objective.
 - Providing instructions for completion of the survey.
 - Indicating that the participants had a choice to decline to participate and could withdraw from the survey study at any time to ensure the validity of the research study.
 - Ensuring the confidentiality of participant information.
 - Protecting participant information and privacy by providing participants with the choice to remain anonymous.
- The researcher intended to collect internal data from one of the pay-TV and OTT TV service operators and therefore approached its employees to participate in the survey. Consent was sought from the organisation to protect intellectual property.
- The pay-TV and OTT TV operators are strict in respect of the disclosure of customer information due to the Protection of Personal Information Act, 4 of 2013 (POPIA); therefore, the researcher personally requested the participants and customers within her reach voluntarily to participate in the survey.
- In addition to this, ethical clearance from the Cape Peninsula University of Technology's Faculty of Business and Management Sciences Research Ethics Committee, subsequently ratified by Higher Degrees Committee (HDC), was obtained by the researcher before commencing the study.

1.8 Outline of the dissertation

The dissertation consists of five chapters, as outlined below.

Chapter 1: Background and introduction

This chapter provides a brief introduction of pay-TV and OTT TV services globally, as well as in the South African context. Furthermore, it outlines the problem statement, research objectives, and research questions. The study's rationale, including the adopted approach, is provided.

Chapter 2: Literature review

This chapter provides a review of previous studies conducted relevant to this research study.

Chapter 3: Research methodology and design

The chapter outlines the research methodology followed to accomplish the objectives and answer the study's questions. Furthermore, the adopted methods for data analysis and interpretation are detailed.

Chapter 4: Results and findings

This chapter presents the research results and interprets the findings elicited from the results. Furthermore, this chapter discusses and provides an analysis of the research data of the research investigation. The collected data is summarised using descriptive statistics and presented in simple graphs and frequency tables.

Chapter 5: Conclusions and recommendations

This chapter provides a summary overview of the study, suggests recommendations, and notes contributions to the body of knowledge. It also highlights the limitations of the study and indicates possible future research as per the study findings.

1.9 Limitations of the research

Given the limited scientific research in South Africa, as well as globally, there is a paucity of literature on this topic. As indicated in the targeted population, some of the respondents may be employees of the pay-TV and OTT TV operators; therefore, their feedback may be subjective. As highlighted in the ethical considerations section, the pay-TV service providers are strict in disclosing customer and employee information; therefore, the researcher personally approached participants within her reach.

1.10 Conclusion

This chapter outlined the research study background which informed the research topic and its direction. Furthermore, the research approach and procedures followed to accomplish the objectives and answer questions of the study were covered. The next chapter discusses and reviews the literature relevant to the research study.

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

The previous chapter covered the background to the study, research approach and procedures followed to achieve the research objectives and to answer the research question. This chapter presents a critical review of empirical and theoretical studies relevant to the research study.

The purpose of a literature review is to provide context by interpreting what is already known, based on the studies relevant to the research topic (Jesson et al., 2011:9). Furthermore, literature reviews relate the study to the existing body of knowledge by filling in the gaps, highlighting the importance of the study and serving as an aid in comparing the study findings to previous research study results. The formulated research questions of the study guided the literature collected. Moreover, the research topic, including the limited literature globally and in South Africa on the impact of OTT TV services on pay-TV subscription services, justifies the research study undertaken.

The themes in this section based on available literature are discussed under the headings below:

- Overview of pay-TV subscription services in South Africa
- Overview of OTT TV subscription services in South Africa
- Theoretical perspective: Uses and gratifications theory
- Changes in device adoption
- Television consumer viewing habits
- Impact of OTT TV services on pay-TV operators
- Decision determinants influencing migration

Traditional pay-TV operators are under immense pressure due to the rise of new market players such as Netflix, Amazon Prime Video, and YouTube Premium. The rise of these new entrants has created fierce competition with pay-TV operators and enabled TV consumers to access and view TV content using multiple platforms, devices, and services. Furthermore, access to affordable and quality broadband data is significantly changing consumer television viewing habits. The next section discusses an overview of pay-TV and OTT TV subscription services in South Africa.

2.2 Overview of pay-TV subscription services in South Africa

South Africa has an estimated population of 58.78 million, and according to the general household survey conducted by Statistics South Africa (Stats SA) in 2018, 82.2% of South African households own a TV set. Almost 90% of the population owns a mobile handset (De Villiers, 2019a; Stats SA, 2019). South Africa has free-to-air television (FTA) stations and pay-TV services. The primary FTA services are the state-owned national broadcaster, the South African Broadcasting Corporation (SABC), and the privately-owned broadcaster, eTV, including OpenView. eMedia holdings own both eTV and OpenView. OpenView launched in 2013 (eMedia Holdings, 2020).

Pay-TV refers to paid television services provided to a consumer for a fee (ICASA, 2019b:6). Home Box Office (HBO) was the first network to distribute television content via satellite in 1970 and was a significant technological advancement in the TV broadcasting sector and the beginning of cable television. Over the years, the world has seen the emergence of other pay-TV providers (Mullen, 1999:39). In South Africa, such pay-TV operators are DStv and StarSat, and the estimated number of pay-TV subscribers in South Africa is about 6.8 million (Statista, n.d.).

Pay-TV services in South Africa launched in 1986 with the launch of the M-Net company by the Naspers group, which subsequently formed MultiChoice in 1995. MultiChoice launched digital satellite television services (DStv) in 1995. DStv was the first pay-TV product launched outside of the United States of America (USA) and the African region (MultiChoice, 2020c). MultiChoice's DStv has been a dominant player in the pay-TV industry for decades up until the issue of pay-TV operators licences in 2007, leading to the birth of pay-TV operators such as StarSat and many others who subsequently failed to launch their services (ICASA, n.d.). StarSat launched in 2007 following the acquisition of TopTV (StarSat, n.d.). Kwese TV, a pay-TV services company owned by Econet Media, closed its South African pay-TV operations, and subsequently obtained a free-to-air broadcasting licence in 2019 to operate in South Africa (Paul, 2019; Ramphele, 2019).

Dramatic changes across the world, including South Africa, have seen the emergence of OTT TV service providers such as Netflix, YouTube Premium, Amazon Prime, Black, and Showmax. These OTT TV service providers disrupt the television broadcasting space, change TV content consumption and give viewers more choice (ICASA, 2019b:51-65). These developments may be painting the future of pay-TV as we know it, perhaps threatening its survival, and thus, it may not be business as usual in South Africa.

Further to this, reduction trends in data costs, as depicted in Figure 2.1 and 2.2, including the accessibility of internet through public Wi-Fi free zones, while workplaces have contributed to the growth of OTT TV. These trends have made it possible for consumers to access TV content conveniently, using any device of their choice (ICASA, 2019b:59-62). The calls and recommendations for broadband data cost reduction, including pressure from the #DataMustFall campaign, predict a further reduction of data costs in the future (Omarjee, 2019). There has already been a reduction of data costs, as MTN and Vodacom announced a data price reduction in South Africa by almost 30% following the competition council pronouncement (Mungadze, 2020).

Given these developments, it is arguable that TV viewing behaviour may be changing as we know it, and this prompts a question about the impact of these developments on South African traditional pay-TV services.

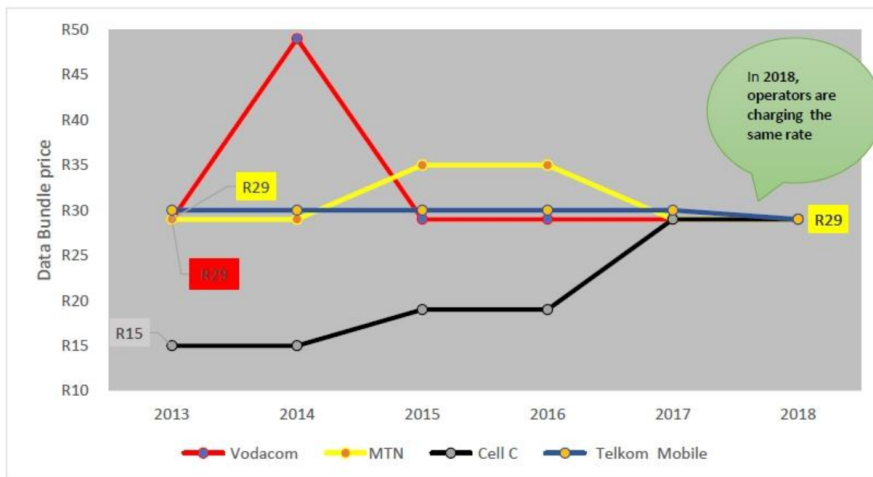


Figure 2.1 Mobile data bundle prices from 2013 to 2018 (Gilbert, 2018)

Fibre Prices – 2014 vs 2019			
Package	Speed	2014	2019
Cool Ideas Uncapped (Vumatel)	50Mbps	R3,298	R959
Cool Ideas Uncapped (Vumatel)	100Mbps	R6,599	R1,119
MTN Fibre 500GB/Uncapped	20Mbps	R2,719 (500GB)	R879 (Uncapped)
MTN Fibre 500GB/Uncapped	100Mbps	R3,729 (500GB)	R1,229 (Uncapped)
Cybersmart Lightspeed Business Uncapped	100Mbps/500Mbps	R11,999 (100Mbps)	R1,999 (500Mbps)
Vodacom Business Fibre Uncapped	10Mbps	R3,499	R1,199
Vodacom Business Fibre Uncapped	20Mbps	R5,899	R1,399
Vodacom Business Fibre Uncapped	50Mbps	R9,999	R1,799
Vodacom Business Fibre Uncapped	100Mbps	R16,999	R2,099

**Figure 2.2 Reduction of fibre data prices from 2014 to 2019
(Prior, 2019)**

2.3 Overview of OTT TV services in South Africa

OTT TV services are media television services streamed online using an internet connection (Chen, 2017:4). These services are also known as subscription video-on-demand (SVOD) or online video streaming platforms, and throughout this document, the term OTT TV will be used (Kannisto, 2019:6). Although OTT TV services proliferate, the literature on this subject is limited, as indicated in Section 2.1 of this dissertation (Kim et al., 2017:3).

Digital transformation in the broadcasting sector, including the availability of affordable internet, has given rise to multiple OTT TV services (Chen, 2017:5). These technological advancements have resulted in new market entrants, perceived as substitutes or complementary services for the traditional pay-TV service operators (Gürkaynak et al., 2019:282). Further to this, the adoption, including the availability of multiple affordable devices, has increased television content consumption through OTT TV platforms. Global OTT TV market projections are \$51.1 billion by 2020 (Kim et al., 2017:2-3). In the US alone, OTT TV service operators such as Netflix have

surpassed pay-TV operators and have more subscribers than pay-TV operators (Lee, Lee et al., 2018).

Some of the significant OTT TV services providers operating in South Africa are Netflix, Showmax, YouTube Premium, and Amazon Prime Video (ICASA, 2019b:76).

2.3.1 Netflix

Netflix is a global giant in OTT TV services and describes itself as a leading online streaming service provider with over 190 million subscribers across 190 countries globally (Netflix, 2020). In the US, Netflix is a leading OTT TV services provider, followed by Amazon Prime, with Hulu third (Lee, Nagpal et al., 2018). Netflix is estimated to have over 800 000 subscribers since it officially launched in South Africa in 2016, and it is still experiencing continual growth (ICASA, 2019b:84). According to SimilarWeb (2020), Netflix ranks in third place for streaming in South Africa.

Netflix has a wide variety of TV content in its library catalogue, which gives customers access to different programmes, and it is free from advertising. This OTT TV service allows consumers to download content offline for later viewing, which is the main attraction for TV consumers who access data at work or through public Wi-Fi hotspot zones (Van der Merwe, 2019:24). Netflix is seen as an alternative to pay-TV subscription services and is attractive to TV consumers because it caters to different age groups at affordable prices (Crawford, 2016:140).

2.3.2 Showmax

Showmax is an online video subscription service owned by the MultiChoice Group and launched in South Africa in 2015 in competition with global OTT TV services (MultiChoice, 2020a). This OTT TV platform has an estimated subscriber base of 595 000 (BusinessTech, 2019). Like other OTT TV service providers, its services are accessible on a smart TV, tablet, smartphone, and laptop. Showmax offers international content and also produces local content. In addition to this, MultiChoice provides Showmax as a value-added benefit to its DStv Premium subscribers at no cost (Showmax, 2018). Arguably, this is a good strategy for customer retention and acquisition. Therefore, Showmax has more advantages than other OTT TV subscription service providers.

Interestingly, during the national lockdown in South Africa owing to the COVID-19 pandemic, Showmax reported an increase in online streaming through its platform, depicting a change in customer viewership and increased consumption of content by consumers using OTT TV services (Eloff, 2020).

2.3.3 YouTube Premium

YouTube is a significant video application, ranked as the top website for TV movie viewing and streaming in South Africa (SimilarWeb, 2020). It launched in South Africa in 2019 and offers paid subscription services for original online movie content and music videos free from advertising (Ferreira, 2019). YouTube has a broader reach, making it the most significant OTT TV player in South Africa, as broadcasters such as eTV and the SABC use its platform for streaming services. Its subscriber base is over 20 million subscribers globally, combined with music services offerings (Fingas, 2020). However, subscriber numbers in South Africa have not been made public.

2.3.4 Amazon Prime

Amazon Prime Video is a streaming service owned by Amazon, with over 2000 TV titles in its library. It was the first to offer its customers the ability to download content offline for later viewing. This is a data cost-saving, especially in South Africa, where broadband data is still unaffordable for the majority of the population. Its platform has over 100 million subscribers and is available in more than 200 countries worldwide (Van der Merwe, 2019:26). Amazon Prime Video launched in South Africa in December 2016, and it offers online streaming video content to its subscribers for R43.00 per month. It, therefore, has the lowest subscription fee compared with other OTT TV operators in South Africa, as depicted in Figure 2.3 (TechCentral, 2016).

In June 2018, Amazon Prime subscriber numbers reached more than 95 million, and their subscriber numbers are proliferating as they are more than just an online streaming platform due to other services offered by the provider (McKinley, 2018).

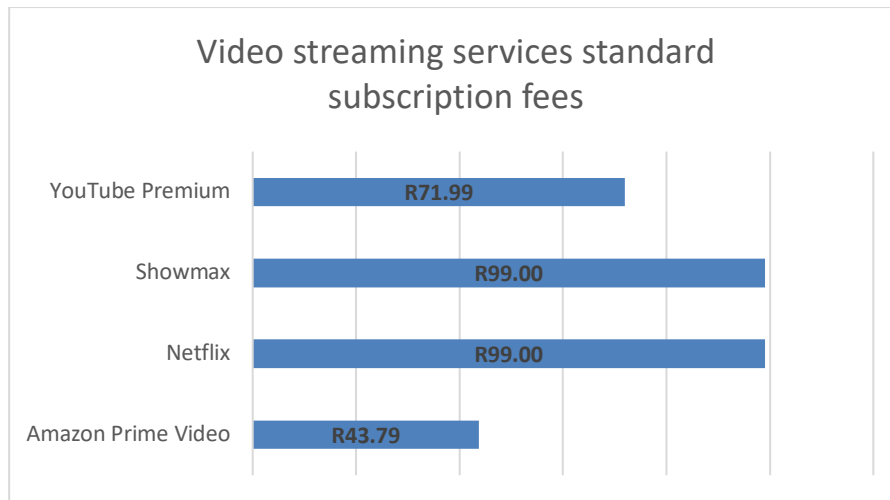


Figure 2.3 OTT TV standard subscription fees
(Source: author)

2.4 Objective

This research's study objective is to ascertain the impact that OTT TV services have on traditional pay-TV services in South Africa. Empirical studies, including theoretical perspectives relevant to the study, are reviewed to achieve the study's objectives.

2.5 Theoretical perspective

The uses and gratifications theory establishes the influences of consumers' television consumption habits. Furthermore, it aids in studying, predicting and understanding how TV consumption can evolve (Schouw, 2018:8).

2.5.1 The uses and gratifications theory

The uses and gratifications theory emerged in the late 1940s (Hossain et al., 2019). This theory "represents an attempt to explain something of how individuals use communications, among other resources in their environment, to satisfy their needs and to achieve their goals, and to do so by simply asking them" (Katz et al., 1973:510).

It is applied to measure consumers' motivation for using chosen media platforms such as newspapers, television, and smartphones (Hossain et al., 2019). It propels consumers' choice of the type of media and content consumed to satisfy social and psychological needs (Kirui, 2017:15).

The uses and gratifications theory states that people are affected differently by the same media content, based on their ideas and what they want to do with the media (Samani & Guri, 2019:207). Additionally, it implies that the consumer's choice and selection of media depend on individual personalities, values, background, race, and gender (Kirui, 2017:16; Shobiye et al., 2018:396).

The need for information, convenience utility, entertainment, and social connection interaction informs gratification sought from media consumption (Gossmann, 2018:23; Shobiye et al., 2018:400).

- **Information** – This refers to the need to obtain information online for self-education for various reasons, including entertainment. Therefore for online TV content, this refers to consumers browsing different sites to obtain information or to find a specific programme to view at a specific time based on their preference and what is convenient to their lifestyle or needs.
- **Convenience utility** – OTT TV services are a convenient media source to search for content without being bound by geographical location, unlike with pay-TV subscription services; furthermore, information is sourced at any place and on any device.
- **Entertainment** – OTT TV services can be a source of entertainment for consumers. They kill time and aid in relaxation.
- **Social interaction** – This refers to users' ability to interact with others and ease of access to online TV content. This, therefore, is an advantage, as consumers can interact with others and communicate their experiences of a specific programme in real time; for instance, when a particular programme is airing, users can have hashtags on social platforms such as Twitter to discuss the programme.

Entertainment is, therefore, a significant influence that influences consumers to adopt streaming services. Thus, the need for entertainment is a better predictor of cord-cutting than the need for information seeking and companionship. Furthermore, Nordling (2015) states that consumers' choice of media to use and choice of content to consume is based on their objective to satisfy the desired gratification, and the theory about television needs state is based on the motives behind the selection of device and watching video content as depicted in Figure 2.4.



Figure 2.4 The six-need states of television (Nordling, 2015)

- **Need to indulge** – Refers to needs to satisfy one's pleasure, that is a need to consume favourite content. Therefore, if one likes a TV series, one is prone to binge watch it using OTT TV services.
- **Need for escape** – Refers to the need to kill time and escape from everyday life by watching TV content.
- **Need for experience** – Need to experience something different and share it with friends and family.
- **Need to unwind** – After a long day, and a stressful event, consumers turn to television to relax and clear their minds.
- **Need for comfort** – Refers to everyday rituals such as consuming TV content while spending time with family and friends.
- **Need to connect** – Refers to the need to engage with society outside of the living room. For instance, consumers tend to connect with other users on social media to discuss television programmes using hashtags on Twitter, Facebook, and blogs.

“With the arrival of digital media, Ruggiero (2000) argued that three concepts closely related to Web technology would facilitate audience behaviours related to gratification seeking: interactivity, demassification, and asynchronicity” (Tefertiller, 2018:394-395).

- **Demassification** – Refers to users' ability to select programmes or content from a wide variety of menus. One can argue that pay-TV services enable consumers to access a wide variety of content, similar to OTT TV services.

- **Asynchronicity** – Refers to users' ability to control a message when it is received. Given that OTT TV services such as Netflix, Showmax and Amazon Prime have a variety of programmes in their digital library and allow users to select programmes they wish to see at a time convenient to them, this then can predict users' intentions to cut the cord with pay-TV service operators.

Chen (2017:6-7) also states that symmetrical and functional displacement measures the level of how one medium surpasses another. He further argues that symmetrical displacement quantifies the viewer's satisfaction with their achieved goals when using a selected medium. In contrast, functional displacement refers to a comparison of the amount of time that is spent by consumers on different media types. Therefore consumers may alternate between several media, and pick one over the other based on the level of satisfaction of their specific needs.

Based on the theoretical perspective, the following sections review changes in device adoption and TV viewing behaviours, given the rise of OTT TV platforms and the impact of these changes on pay-TV subscription services.

2.6 Changes in device adoption

Innovation and the emergence of smartphones, including tablets, have reshaped the production of television programmes and how people watch television. This is due to flexibility, including convenience demands from consumers who want to watch television when and where they want to, using any device of their choice. Television consumption through traditional TV sets continues to decline owing to the rapid growth of connected devices used to consume video content on multiple platforms, especially smartphones (Park, 2018:4654). An ICT survey conducted in 11 African countries revealed that devices such as desktop personal computers, laptops, smartphones, smart TVs, tablets, and mobile video games are widely available owing to their reduction in price. These devices have further accelerated the growth of OTT TV services, even on the African continent as reported in Kenya, because these devices come with pre-installed OTT TV applications (Rono & Mugeni, 2019:40).

Consumers increasingly want to watch short videos on their portable devices at any time convenient to them, including while waiting for transportation at bus stops and thus giving them control over what to consume (Chen, 2017:5-6).

Looking at social media platforms such as TikTok and Instagram, one can conclude that there is a growing trend of TV consumers who prefer to watch short videos on mobile devices. Notwithstanding this, Daniels (2017:12) states that device usage differs among age groups as follows:

- Viewers between the age groups of 18 and 24 consume television content using television sets, laptops, tablets, and smartphones, while older age groups, including 55+ age groups, exclusively consume TV content using television sets (Daniels, 2017:49; McNally & Harrington, 2017:35). Given that the millennial age group is more technologically advanced, and technology is in their DNA, this group prefers modern technology as they believe it is convenient to their lifestyle and helps them network with friends and family (Elias, 2019:12-13).
- Viewers between the ages of 25 and 54 use all devices to consume content, while the majority still enjoy using TV sets. Gen Xers are said to adapt quickly, are likely to acquire new skills, and are comfortable with smartphones, laptops, tablets, and pay-TV.

Overall, large television sets are the preferred mode to consume TV content by all age groups; notwithstanding this, younger age groups consume television content using all devices at their disposal, which predicts a wider variety of devices for future generations. Even though consumers own smartphones, most still prefer to watch TV on a bigger screen; therefore, they tend to use TV sets and laptops to consume video content (Mikos, 2016:156). In the UK, for consumers with an internet connection, smart TV is still the preferred way of consuming TV content (Ofcom, 2018:14).

The adoption of alternative devices to consume television content is, therefore, changing consumer viewing habits (ICASA, 2018:12).

2.7 Television consumer viewing behaviours

The rise of OTT TV services, including access to affordable broadband data, has changed consumers' behaviour, impacting traditional pay-TV operators' ability to attract and retain existing subscribers (Medina et al., 2015:253).

In countries like the US, consumers with broadband connection subscribe to OTT TV services, and more are migrating from pay-TV, favouring OTT platforms (Lee, Nagpal et al., 2018). In Korea, the availability of fast broadband networks, including the circulation of mobile devices, has encouraged the migration of television consumers from pay-TV to OTT TV services (Park, 2018:4660). People are increasingly streaming live content to download and watch offline, which is an advantage for OTT TV players (Kim et al., 2017:5). Even though live content is not easily accessible on illegal online platforms, and there is a risk of viruses on these websites, there is a growing trend of consumers using these platforms as they do not subscribe to OTT TV and pay-TV services (Schouw, 2018:29).

Further to this adoption of alternative devices to consume TV content, viewing behaviours have changed, with consumers using alternative platforms to consume TV content. This is especially prevalent among the younger generation who prefer to consume content using OTT TV platforms such as Netflix as opposed to watching traditional TV. According to a report by Defy Media, 65% of the youth between 13 and 24 years old consume TV content before going to school, including right through the night. The reasons for this are to satisfy the desired gratification, with the motives being to lift the mood, relieve stress, obtain information, and to put oneself to sleep (Hamedy, 2016).

Traditionally, scheduling of TV programmes is at certain times and on specific days, and one must wait for a repeat should one miss an episode of the programme. Through the years this changed, owing to video recorders which enabled consumers to record programmes. Now advancements in TV technology enable consumers to view content at their convenience, that is in any place, at any time and using any device (Christenson, 2017:9; Podara et al.,2019:69). Although online TV consumption is growing, there are still many consumers using linear for live television content such as sport, and notably, when they are with their parents (Schouw, 2018:27).

Therefore, the availability of broadband data and usage of alternative devices for TV consumption has contributed to a change in consumer viewing behaviour (Mikos, 2016:159).

2.7.1 Changes in viewing habits

Owing to changes in viewing habits, several authors, such as Baumgartner (2015) and Jenner (2016:7) concur that:

- consumers are increasingly binge-watching video content, and
- these patterns are different within demographic groups.

2.7.2 Binge watching

Access to original, fresh, quality content that is advertisement free has changed TV viewing habits, leading to the rise of the binge-watching phenomenon (Schouw, 2018:11). Binge watching refers to consumers watching more than one episode of a series at once (Jenner, 2016:7).

Consumers choose to binge watch, as it is not feasible to consume content during weekdays and office hours. Instead, they choose weekends and after hours, as this is the most time available to consume TV content. Consumers are said to binge watch to catch up on programmes, for relaxation, entertainment, escape from reality, and to improve their viewing experience. Binge watchers feel that binge watching is more interesting than waiting for a scheduled episode/programme. Furthermore, they feel more engaged with the TV characters and thus immerse themselves in the characters in the storyline (Pittman & Sheehan, 2015; Daniels, 2017:9-10). TV consumers also enjoy watching their programmes without interruptions, and this is seen as essential by millennials who want to binge watch at their leisure (Schouw, 2018:14, 42). In South Africa, DStv consumers tend to binge watch using DStv Now, a value-add application for its customers. As indicated in Section 2.3.2, during the national lockdown in South Africa, it was reported by MCSA that there was a spike in streaming services on the DStv Now and Showmax platforms.

Binge watching is indeed changing the manner TV is consumed, and TV producers are taking note as it has become essential to have a "deeper understanding of uses and gratifications of binge watching to better motivate viewers to binge watch in a way that fits with new and emerging ecommerce business models" (Pittman & Sheehan, 2015). Additionally, OTT TV platforms such as Netflix are putting all seasons of a programme online at once, and the same can be said in South Africa as Showmax reported that South Africans stream more content during holidays (TheMediaOnline, 2020). This phenomenon will continue to grow because of the convenience and flexibility it affords consumers.

2.7.3 Viewing patterns among demographic populations

Viewing habits differ among demographic populations, and the younger generations favour digital platforms where they can customise their viewing according to preference (Daniels, 2017:11).

Furthermore, Lee, Nagpal et al. (2018) state that age influences one's decision to adopt online streaming platforms. Moreover, this is more prevalent for consumers below the age of 35, while those older than 35 are less likely to adopt online streaming platforms.

Generation Z and the millennials are streaming more content online than Generation X, baby boomers, and the silent generation (Nielsen, 2016). Elias (2019:16) states that 81% of adults in the US with smartphones are spending close to two hours per day consuming TV content. Therefore the younger generations are more inclined to move away entirely from consuming TV content using traditional pay-TV services due to the rapid growth of OTT TV services and the availability of multiple devices (Daniels, 2017:11). OTT TV service providers are said to target consumers between the ages of 18 and 24, as over 50% of this group own smartphones (Dasgupta & Grover, 2019:64). Arguably, this trend contributes significantly to the global decline in traditional TV viewership, especially within the younger age groups.

The COVID-19 outbreak depicts the future of TV consumption, as Netflix reported having more than doubled subscriber numbers during the outbreak, which is more than double their projections for 2020. With consumers being at home, more and more are looking for new applications to consume TV content.

Television-viewing behaviours have significantly changed, and these trends have given rise to the cord-cutting, cord-nevers, and cord-shaving phenomena, said to have an impact on pay-TV operators (Christenson, 2017:10).

2.8 Impact of OTT TV services on pay-TV operators

Customers are increasingly cord-cutting, which means they are abandoning pay-TV services in favour of OTT TV services (Massad, 2018). There is a wave of consumers who are cord-shaving, which is downgrading their traditional premium pay-TV subscription services to standard/lower packages and combining their pay-TV services with OTT TV services (Kim et al., 2016:711). Some first-time subscribers have never subscribed to traditional pay-TV services and favour OTT TV services for the first-time subscription; these consumers are called cord-nevers (Elias, 2019:16).

The cord-cutting, cord-shaving phenomena, including the cord nevers, have resulted in revenue reduction for the pay-TV service providers, while OTT TV service providers are making remarkable market gains (Park, 2018:4651). As the world's economies are going into recession, consumers are cutting down on expenditure, and pay-TV is the initial cost to cut. In the US, pay-TV operators such as DirecTV have lost nearly two million subscribers due to subscription cancellations. Most pay-TV operators' key selling point is the live sport, and in the absence of sport due to COVID-19, most consumers are turning to game consoles, including OTT TV services (Bloomberg, 2020).

2.8.1 Cord-cutting

As fixed broadband data subscription grows, so do OTT TV services' revenues. In contrast, the pay-TV service operators are experiencing the loss of subscribers, with a decline in subscriber numbers, and are struggling to retain existing customers as more consumers are embracing OTT TV services for TV consumption (Crawford, 2016:142). This phenomenon is proliferating, and the projections are that it will reach over 40 million by the year 2021 (Park & Kwon, 2019). The accessibility to original TV content and convenience by these providers has made it easier for the consumer to access the content. Therefore, OTT TV services are direct competitors of traditional pay-TV operators, as their rise is contributing significantly to the cord-cutting phenomenon.

2.8.1.1 Cord-cutting by demographic population

From a demographic perspective, several authors report:

- The older generation, including those who are not tech-savvy, are hesitant to cut the cord with pay-TV operators because of the fear of adapting to new technologies, including difficulties in learning new technologies (McKinley, 2018).
- Millennials and Generation Z are highly likely to cut the cord as the cost of purchasing a TV set, including a setup box, is deemed a costly exercise compared with a portable laptop used for dual purposes. Young people do not have a steady income. With the continuous rise in subscription fees, these age groups tend to opt for OTT TV services convenient to their lifestyle and which they deem affordable (Elias, 2019:22). This trend will continue to grow, especially with these age groups (Tefertiller, 2018:390-391).

2.8.1.2 Reasons for cord-cutting

- Several authors, including Christenson (2017:15) and Lee, Nagpal et al. (2018) concur, as stated below:
 - Increase in subscription fees. As broadband data becomes affordable, consumers may re-evaluate the cost of a pay-TV subscription, considering the cost of broad-band data which is used for multiple purposes.
 - Ability to choose channels, including TV content of one's choice. Pay-TV subscribers, in general, want to pay for what they use; therefore, availability of this option may indeed lead to cord-cutting.
 - Convenience – the ability to consume TV content using any preferred device at any time. Consumers do not wish to be restricted to one choice of device and place to consume TV content.

- Crawford (2016:138-139) states that cord-cutting emanates from the following factors:
 - Consumption of TV content to satisfy personal needs and lifestyle. Although this may be fulfilling to consumers, it has setbacks, such as limited content available.
 - From a cost-benefit analysis, pay-TV subscription services are perceived not to be worth the price. Moreover, considering the set-up costs, including broadband data subscription and time available to consume content, it may not be beneficial. However, it is also arguable that pay-TV offers a variety of genres and content which spans sport, reality TV, documentaries, and news channels.
 - Technology preferences based on the number of available devices at their disposal.

- The perceived advantages that OTT TV services have over pay-TV services, including frustrations with old technology and the inability to obtain features available on OTT TV services (Tefertiller, 2018:402).

- Poor customer service (Lee, Nagpal et al., 2018). How consumers perceive customer service and their experience may indeed influence cord-cutting, despite the quality of content.

During the COVID-19 pandemic in the US, 1.8 million households cancelled their pay-TV subscriptions with pay-TV operators because of unemployment, high subscription fees, and the lack of live sport. There are now as many non-pay-TV subscribers as there were pay-TV subscribers in 1988. The COVID-19 pandemic will accelerate the cord-cutting phenomenon, while OTT TV services such as Hulu and YouTube Premium continue to grow with Disney+ signing up 54.5 million customers worldwide during this pandemic (*Premium Times*, 2020).

Although the cord-cutting phenomenon is high in countries like the US, this trend is not significant in other markets, such as the Korean market. This is due to pay-TV operators combining their traditional offerings with OTT TV services as part of their retention strategy, thus giving these pay-TV operators a competitive advantage (Park, 2017:29). Furthermore, in Japan, a local TV network took over Hulu; this, therefore, can be argued as a strategy to 'kill the competitor,' retain existing and attract new customers (Park, 2017:23). In the South African market, M-CSA that owns DStv has combined its offering with Showmax and JOOX music streaming services, a value-add to its top-tier subscribers at no cost (De Villiers, 2019b).

In addition to these strategies, Park (2018:4647) states that pay-TV providers are responding to the cord-cutting phenomenon by:

- implementing a multiscreen which enables consumers to access television everywhere and anywhere;
- obtaining exclusive rights to television content;
- having online packages which do not require a setup box;
- having cloud pay-TV accessible using smart TV sets; and
- offering consumers the option to select and pay for the channels they use (Chulkov & Nizovtsev, 2015).

Although the cord-cutting phenomenon poses threats to pay-TV operators, they continue to increase subscription fees, despite growing concerns of losing subscribers. In South Africa, year after year, DStv continues to increase subscription fees despite the threat of cord-cutting (Bronkhorst, 2020). The projections are that traditional pay-TV services subscribers will decrease even further, with the OTT TV market growing significantly (Park & Kwon, 2019).

Notwithstanding this, although OTT TV services are growing exponentially, pay-TV is here to stay, as people turn to their television sets during times of crisis and watch live shows such as *American Idol* (Elias, 2019:17). There is still a 57% revenue increase for cable and satellite companies (McKinley, 2018). For instance, in the Turkish market, OTT TV services are expected to be complementary to pay-TV services due to the availability of broadband internet services, including the fact that pay-TV service operators offer OTT TV services to their customers as a value-add at no cost or at a small fee (Gürkaynak et al., 2019:299).

It is also worth noting that, despite COVID-19 and the threat of OTT TV services, MultiChoice South Africa (MCSA), that owns DStv, reported an increase of 5% in their subscriber base and 3% in revenue. Furthermore, MCSA announced a distribution partnership with Netflix and Amazon Prime (MultiChoice, 2020b). OTT TV services are, therefore, a more significant part of the consumer experience, and this strategy is a simplification of the customer experience and a game-changer, as noted globally.

2.8.2 Cord-nevers

Cord-nevers refer to first-time subscribers who have never subscribed to pay-TV services in favour of OTT TV services. The projections are that the cord-nevers will increase, reaching over 41 million in 2021, with 24% of users being from 18–34 years, and the primary reason being the burden of pay-TV services subscription fees (Park & Kwon, 2019). In the US, more than a quarter of millennials have never subscribed to pay-TV services, favouring OTT TV services for a first-time subscription (Baumgartner, 2015:1).

Cord-nevers are the biggest threat to pay-TV operators' survival compared with cord-cutters, and play a considerable role in pay-TV's declining subscriber numbers (Enli & Syvertsen, 2016:143). In the US alone, the projections are that 50% of adults under the age of 30 will not subscribe to pay-TV services by the year 2025 (Harris, 2015). As depicted in Figure 2.5, in the US, there is a growing trend of cord-nevers (eMarketer, 2018).

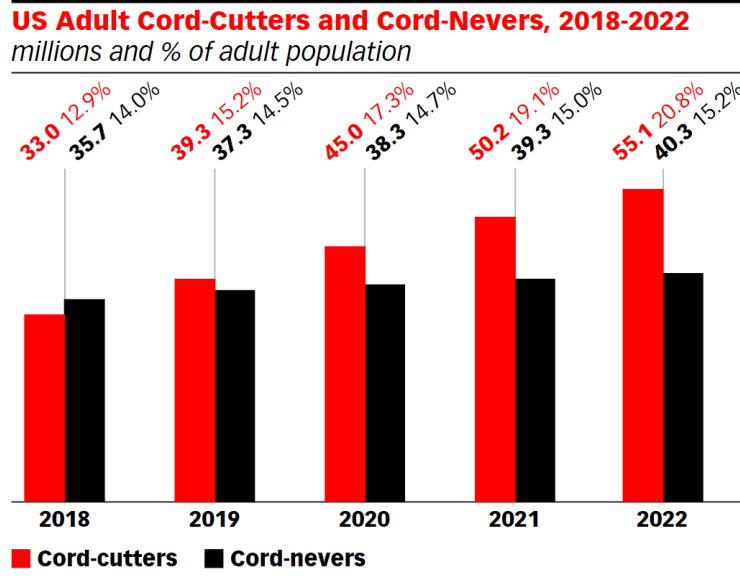


Figure 2.5 Forecast of the adult population of cord-nevers and cord-cutters (eMarketer, 2018)

Consumers between the ages of 18 years indicate that they have never subscribed to pay-TV because they can access content through OTT TV services (Christenson, 2017:12). Considering that 35.7% of the total population in South Africa comprises young people between the ages of 18 and 34, one might argue that there are rising cord-nevers in South Africa (Evans, 2018). According to Statista (2020), the unemployment rate among the youth in South Africa is currently at 52.85%, and this raises the question of whether this presents a threat of growing and potential cord-nevers based on international trends.

2.8.3 Cord-shavers

Cord-shaving refers to the downgrading of premium pay-TV subscription services for lower packages, although not cancelling services, and complementing the current services with OTT TV services. This phenomenon presents a more significant threat to pay-TV service providers owing to revenue loss, although there is no total loss of the subscriber (Tefertiller, 2018:405). Drastic changes in subscription fees influence the cord-shaving phenomenon, meaning that when prices go up, consumers are highly likely to downgrade subscription services to lower packages and complement them with cheaper OTT TV services (ICASA, 2019b:21). The risk with the cord-shavers is that once this group is dissatisfied with pay-TV services, they become cord-cutters (Elias, 2019:16).

The cord-shaving phenomenon is highly likely to increase as fibre is rolled out to more areas in South Africa, and as data prices are reduced (ICASA, 2019b:23).

In the UK, 36% of OTT TV subscribers downgraded their premium pay-TV services. A further 71% of OTT TV subscribers have combined their subscription with pay-TV subscription services owing to the inability of OTT TV services to offer elite sport, and this phenomenon is called cord-stacking (Ofcom, 2018:16-18).

2.9 Decision determinants influencing migration

The growing number of alternatives for the consumption of TV content is giving consumers more choice, and therefore consumers are not stuck with services they do not want to subscribe to and pay for. Convenience and low-cost subscriptions are the main reasons why consumers abandon traditional pay-TV services for OTT TV services (Elias, 2019:21). Other reasons for migration are access to fresh, quality content, customer service, and advertisement-free OTT TV.

2.9.1 Convenience

OTT TV services allow consumers to watch their TV shows in their own time, using any device, anywhere they choose, without any fixed schedule as opposed to traditional pay-TV operators, where one would have to sit in front of a TV set for a specific time to consume content (Kannisto, 2019:27). Convenience refers to the following attributes:

- The ability to watch TV content according to users' preferences, whether indoors or outdoors, including using any preferred device; thus, OTT TV users do not mind paying additional costs because of the flexibility these services provide (Dasgupta & Grover, 2019:67; Rono & Mugeni, 2019:37).
- The ability to pause and replay programmes is essential, as is binge watching, as this provides consumers with control over their viewing and is deemed attractive (Daniels, 2017:58; Elias, 2019:23).
- In countries like the US, consumers spend an average of 60 hours a week using multiple devices to consume content; therefore, this affords users the ability to stream TV content using different devices (Elias, 2019:22-23).

Although the study was different from the current research study, it is worth noting the assertion by Tengeh and Talom (2020:8) that convenience is a driving factor in the adoption of digital services, as consumers and entrepreneurs alike can transact from the comfort of their homes using any device of their choice. Therefore, the same can be said about the adoption of OTT TV services, as they enable the consumption of TV content with any device, at any time and anywhere. Considering the DStv Now application, it is arguable that pay-TV service operators are moving to the right direction to satisfy customer needs and compete with OTT TV services.

2.9.2 Advertising

Television consumers are moving to OTT TV platforms because of fewer commercials and greater flexibility, as customers' pace of living is fast, and time they spend watching television is fragmented (Chen, 2017:4). Schouw (2018:28) asserts that consumers find commercials annoying and irritating, prompting migration. This thus poses a more significant threat, as one of pay-TV operators' revenue streams is through airtime sales.

2.9.3 Quality of content

Regardless of how convenient it is to use the OTT TV platform, if the quality of the content is not good enough and not diverse enough, consumers will be discouraged from using it (Li, 2015:31; Daniels, 2017:58). Therefore, content is king and an attraction in the choice of platform. Consumers want to pay for the best international and local content consolidated in one place (Dasgupta & Grover, 2019:67). Drawing from the work conducted by Chen (2017:3) in the Taiwan market, the findings revealed that Taiwanese expressed their dissatisfaction with Taiwanese TV programmes for their deteriorating quality, giving rise to the local pay-TV provider's concern about consumers' migration to OTT TV platforms due to demands for new quality programmes. This trend is similar in countries such as the UK, as the access to quality content is the critical reason consumers subscribe to OTT TV services (Ofcom, 2018:15). Furthermore, statistics reveal that local content available in the language understood by citizens is one of the drivers for the choice of TV services platforms (Rono & Mugeni, 2019:39).

Interestingly, Schouw (2018:34) notes that when consumers find it challenging to choose what content to watch using OTT TV services, they end up losing interest because of the time it takes to find content to watch. Furthermore, according to a survey conducted by SurveyMonkey®, consumers are not concerned with fresh content as they tend to watch older TV programmes that are not available on pay-TV platforms (Elias, 2019:24).

To respond to these trends, OTT TV service operators such as Netflix produce far more quality TV content, drawing from insights from TV consumers regarding their preferences and choices using available technology.

2.9.4 Cost

In the US, the cost is the leading factor influencing consumers to migrate to OTT TV services (Lee, Nagpal et al., 2018). High subscription fees are the top complaints cited by dissatisfied consumers. The price of buying a setup box and TV set, including the inability to select or subscribe to specific channels at affordable prices, is deemed unattractive by the millennial and Generation Z age groups and presents a more significant threat to cut-the-cord with pay-TV service providers. As young people do not have a steady income, and with subscription fees consistently rising, they tend to opt for the OTT TV services convenient to their pockets (Elias, 2019:22). Further to this, the cost of purchasing a decoder and installation fees, and making calls or visiting the service centres for registration is cumbersome. In their study on the adoption of mobile money, Tengeh and Talom (2020:7) revealed that ease of access influences one's adoption of digital services.

In their study findings, Dasgupta and Grover (2019:68) state that only 28% of the participants paid a subscription fee or had a premium subscription on their OTT TV subscription services. Instead, users consume the free or limited content offered by OTT TV platforms. Owing to the customisation of OTT TV platforms, consumers pay for what they want to view with no additional costs, unlike the pay-TV platforms that offer thousands of channels at a higher price.

While subscription fees are a concern for consumers, pay-TV operators are also concerned with the rising costs of the content they pay to distribute programmes to the consumers, as they also buy the rights to distribute these programmes. The cost of distribution rights is more of a concern for small pay-TV operators, as more prominent pay-TV operators have more bargaining power to negotiate owing to the number of subscribers on their books (Christenson, 2017:4-5). The same can be said of South Africa, considering that DStv is the largest pay-TV operator and has more negotiating power than pay-TV operators such as StarSat owing to subscriber numbers, although subscription costs increase occur year after year.

2.10 Conclusion

Given all these trends and changes, the landscape in the broadcasting sector is changing rapidly. As revealed in the literature, as access to affordable and quality broadband data becomes available, consumer viewing behaviours change. These changes differ among generational age groups. More TV consumers are adopting different devices to consume TV content. The cost of a subscription fee is the main reason for cord-cutting because of the perceived value of OTT TV services and expensive pay-TV services costs. The cord-shaving phenomenon and rising cord-nevers present a more significant threat to pay-TV operators' business sustainability. Convenience, quality of content, and fewer TV commercials have also been established as decision determinants influencing consumers to migrate from pay-TV to OTT TV services.

Arguably, the emergence of OTT TV services will change the pay-TV services sector significantly. However, the OTT TV services subscriber base may eventually decrease as consumers realise that lower subscription fees mean restricted content. Moreover, pay-TV service providers may remain dominant players; thus, these new platforms will not replace the existing platforms; instead, they will benefit some market segments. Lastly, the lack of regulation gives OTT TV service providers a more significant advantage, and thus they can offer services more cheaply, which impacts traditional pay-TV operators' ability to compete and their business sustainability.

This chapter provided a comprehensive review of available literature relevant to this research study. The next chapter outlines the research methodologies adopted to carry out the research study.

CHAPTER THREE RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter reviewed empirical studies and theoretical perspectives relevant to this study. This chapter discusses the research methodologies adopted to carry out the study to achieve the research objectives. The paradigm of this study was positivist, as detailed in Chapter 1. The research study utilised a quantitative research method with a descriptive research design. The research methodologies, such as population, sampling method, data collection instruments, and justification for the selected methodologies, are discussed in detail in this chapter. The chapter concludes by outlining the procedures followed to code and analyse the collected data. IBM SPSS Statistics was used to analyse collected data.

This research's study main objective is to ascertain the impact that OTT TV services have on traditional pay-TV services in South Africa.

3.2 Research design

This section entails the procedures undertaken to achieve the study objectives; furthermore, it includes the methods used for data collection and analysis (Creswell & Creswell, 2018:37). A descriptive research design was deemed suited to this study, based on its philosophical assumptions, research questions, and objectives (Saunders et al., 2009:136-137). The research design consists of three approaches, namely, exploratory, descriptive, and explanatory (Saunders et al., 2009:139-140).

3.2.1 Exploratory research design

An exploratory research design is adopted when there is limited or no information on what is happening to pursue new understanding, ask relevant questions about the phenomenon, and make an assessment. It usually adopts a qualitative research approach and is conducted by reviewing existing literature, conducting interviews with experts in the field of interest, and holding focus-group interviews to obtain new insights. This design is flexible and adaptable to change of direction, based on new insights gained. Therefore, this design is not conducive to this study, as the phenomenon exists with studies conducted elsewhere. Furthermore, it not aligned with the objectives and questions that this study intends to answer.

3.2.2 Explanatory research design

This design establishes a causal relationship between variables to study the problem to explain the correlation among variables.

3.2.3 Descriptive research design

A descriptive research design gives a detailed characterisation of the relevant groups, events, and phenomena studied. This research study is concerned with whom, what, when, and where, and therefore based on its objectives and questions stipulated in Chapter 1, a descriptive research design is conducive to the study (Cooper & Schindler, 2013:127). Furthermore, the researcher has a good understanding of the phenomenon and seeks scientific data to ascertain the impact of OTT TV services on pay-TV subscription in South Africa.

The researcher used quantitative data to allow a statistical examination of the relationships (Clow & James, 2014:28-29). The research study adopted a survey strategy to answer the research questions and achieve its research objectives to ensure reliable data collection from an ample population in a cost-effective manner (Saunders et al., 2009:144).

Malhotra (2010:108) states that descriptive research design using strategies such as surveys entails cross-sectional and longitudinal research designs. The time horizon of longitudinal research is a diary perspective, and its strength includes the capacity to monitor change and development over time (Saunders et al., 2009:154). In contrast, a cross-sectional research design involves a collection of information from any given sampled population only once, and can either be single or multiple cross-sectional designs (Malhotra, 2010:108).

Therefore, this study adopted a descriptive research design, using a single cross-sectional design, as data is collected from the targeted population's respondents only once (Malhotra, 2010:108; Cooper & Schindler, 2013:128).

3.3 Research method

The research approach consists of “plans and procedures for the research study that span the phases from widespread assumptions, including specific methods to be followed to collect data, analyze collected data, and its interpretation thereof. The nature of the phenomenon studied, including the philosophical assumptions, informs the selection of the research approach”

(Creswell & Creswell, 2018:314). According to Creswell and Creswell (2018:38), there are three approaches to research: the qualitative, quantitative, and mixed-methods approaches.

3.3.1 Qualitative research approach

The qualitative research approach focuses on how and why, that is, the process of and reasons why things happen the way they do (Cooper & Schindler, 2013:144). Its emphasis is on words instead of numbers when collecting data during analysis. Its ontological position is mostly constructionism, while its epistemological position is interpretivism, and it is associated with the inductive approach (Bryman & Bell, 2011:27). In addition to this, data collection in qualitative research can be interactive or non-interactive (Khaldi, 2017:21).

The qualitative research approach typically adopts an exploratory research design. Its significant advantage is that it is unstructured, and costs are lower (Clow & James, 2014:41). However, this approach is too subjective and prone to human error, there are biases in data collection and analysis, and the ability to generalise is limited for larger populations (Cooper & Schindler, 2013:144; Clow & James, 2014:42). For this research study, and considering its objectives, the qualitative research approach is not appropriate.

3.3.2 Mixed-methods research approach

When both quantitative and qualitative research approaches are used, this is called a mixed-method, and it is useful if it provides the researcher with better opportunities to answer the research questions (Saunders et al., 2009:153).

3.3.3 Quantitative research approach

According to Khaldi (2017:19), a quantitative research approach "is a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analysed using statistical procedures". Quantitative research in business research usually measures consumer behaviour, opinions, or attitudes, and answers how often, when, and who related research questions. The dominant methodology used in the quantitative research approach is the survey questionnaire (Cooper & Schindler, 2013:146-147).

The quantitative research approach is beneficial when the sample size is large, with structured questions. Moreover, it is analysed objectively and statistically. However, it is expensive, and

generally, its time frame is longer. This approach usually employs a descriptive and causal research design (Clow & James, 2014:42-43).

A quantitative research approach is most suited to this research study as the main objective was to ascertain the impact of OTT TV services on pay-TV services in South Africa. The study described and made predictions on future trends based on the research study findings, including global trends based on reviewed literature. In addition to this, a structured online survey questionnaire was distributed to a large group of participants, and collected data was analysed using statistical measurements.

3.4 Research sampling design process

The sampling design process includes steps that are interrelated and relevant to all aspects of the research project: defining the target population, determining the sample frame, selecting the sampling technique, determining the sample size, and executing the sampling process (Malhotra, 2010:372). This section outlines the sampling strategy followed in conducting the research study to answer the research questions and achieve the research objectives.

3.4.1 Population

When conducting a social survey, the researcher needs to consider the population suited to and appropriate for the research study. The population refers to the "universe of units from which the sample is to be selected" (Bryman & Bell, 2011:176). The study targeted people who consume television content using OTT TV services and pay-TV services in South Africa between the ages of 18 and 55+, with internet access (Cooper & Schindler, 2013:339).

As indicated in Chapter 1, the size of the population cannot be determined owing to restrictions around disclosure of customer data from the pay-TV operators and also considering the protection of private customer information as stipulated in POPIA (South Africa, 2013:2). However, according to Statista (n.d.), it is estimated that there are 6.8 million pay-TV households, and 3.46 million video streaming users in South Africa, although the demographic profile is unknown.

3.4.2 Sampling frame

A sampling frame refers to the elements of a population from the selected sample. The sampling frame could not be established for the targeted population because of confidentiality and restrictions on access to the subscriber database from the pay-TV and OTT TV service providers (Clow & James, 2014:227-229). Therefore, the researcher used the sample size formula, as indicated in Table 1.1, based on the estimated number of pay-TV subscribers in South Africa, and using the non-probability sampling method. Further to this, using the similar approach by Chen (2017:11), the researcher asked the participants at the beginning of the survey if they were pay-TV and OTT TV subscribers with internet access in order to qualify them to participate in the study.

3.4.3 Sampling method

Sampling entails choosing a sub-group of people from a defined population to make a statistical generalisation about the defined population. It is advantageous because it saves time, and is much more manageable owing to the number of people involved (Saunders et al., 2009:210, 212). According to Clow and James (2014:229), "sampling methods are divided into probability and non-probability sampling methods".

3.4.3.1 Probability sampling method

This technique refers to when groups in the targeted population are known, and there is a probability to be selected to participate in the survey (Saunders et al., 2009:213). The types of probability sampling methods are simply random, stratified random, cluster sampling, systematic sampling, and multistage sampling. The probability sampling method's strength is that it eliminates bias, although it is costly regarding time and energy (Taherdoost, 2016:20).

3.4.3.2 Non-probability sampling method

Non-probability sampling consists of the quota, snowball, convenience, and purposive sampling method (Taherdoost, 2016:22). This study employed a non-probability sampling technique, as the chance of someone chosen to take part in the study is not known, nor can it be determined (Clow & James, 2014:230). The advantage of a non-probability sampling method is that the researcher can still generalise the population, although not on numerical grounds.

3.4.3.2.1 Convenience sampling method

Convenience sampling methods are prevalent and widely used in business and management studies (Bryman & Bell, 2011:191). The advantage of the convenience sample is that the researcher can use family and friends as part of the sample as opposed to targeting unknown individuals.

Therefore, the study adopted a convenience sampling method owing to the accessibility of the participants within the researcher's reach and because of limited financial resources (Bryman & Bell, 2011:191; Taherdoost, 2016:22).

3.4.4 Sample size

The number of people in a population participating in the study to ensure the proper size of the population is known as the sample size (Malhotra, 2010:374). The correct sample size does not guarantee that the study findings will reflect the defined population accurately, although it increases probability (Clow & James, 2014:230). Following the approach used by Gossmann (2018:28) and Tengeh and Talom (2020:11), a sample size of 384 was required in this study, as detailed in Chapter 1.

3.4.5 Data-collection instrument

Data can be collected by observing consumer behaviour or conducting a survey, and conducting experiments that combine the survey and observation method (Sarstedt & Mooi, 2019:58). The observation method refers to watching people doing what they do, analysing, and interpreting their behaviour (Saunders et al., 2009:288). In contrast, surveys capture the respondents' opinions, preferences, and motivations and can be conducted online through personal interviews and telephonically. Furthermore, in marketing and socio-economic research, surveys are a common form of data collection (Wegner, 2012:15).

The data was collected utilising self-administered online surveys because they are cheaper, faster, and data is more likely to be accurate, and the anonymity of respondents is assured. Therefore participants are highly likely, to be honest in their responses (Wegner, 2012:16).

3.4.5.1 Survey questionnaire design

The questionnaire included closed and open-ended questions. The open-ended questions sought unprompted responses to enable respondents to answer the questions in their own words, while the closed questions had a set of answers listed in the questionnaire from which participants had to choose (Brace, 2008:46-47).

The questionnaire consisted of 12 sections, as reflected in Appendix C, accompanied by a cover letter introducing the research study and soliciting informed consent (Appendix B). Simultaneously, the second section was for population qualification to screen the respondents' eligibility to participate in the study to ensure that only valid respondents participated in the study as per the targeted population (Brace, 2008:35-38). The following sections included questions relating to the objectives of the research study, as depicted in Table 3.1. Section 2 to 11 consisted of closed questions and used a five-point Likert scale. The adaptation of the study's questions is from questionnaires administered in other similar studies. Furthermore, the study questions were modified as guided by the survey questionnaire guide and reviewed literature. The questionnaire consisted of 32 questions.

Table 3.1 Questionnaire categorisation for interpretation of the findings

Section	Description of the section
Section 1	Introduction to the study and consent form.
Section 2	Population qualification questions.
Section 3	Television consumer viewing behaviours.
Section 4	Television consumer viewing behaviours – Pay-TV & OTT TV subscription services.
Section 5	Television consumer viewing behaviours – OTT TV – first-time subscribers.
Section 6	Television consumer viewing behaviours – Internet access.
Section 7	Factors affect television viewing behaviours in South Africa.
Section 8	Device adoption.
Section 9	Alternative TV consumption platforms.
Section 10	Decision determinants influencing migration from pay-TV to OTT TV services.
Section 11	Biographical information.
Section 12	General.

(Source: author)

3.4.5.2 Pilot testing

Pilot testing reveals survey design errors, while pretesting allows the researcher to establish how the questionnaire performs in a live environment. It also allows the researcher to identify any problems that participants may encounter and to refine the data-collection instrument before administering the questionnaire (Cooper & Schindler, 2013:199). To pretest the survey questionnaire, experts in the research field (supervisor and statistician) examined the questionnaire, following which some of the questions were discarded and refined (Saunders et al., 2009:394).

After questions had been revised and refined, a small pilot study with 15 individuals comparable with the targeted population took place; however, the individuals selected for the pilot were not invited to complete the actual survey (Bryman & Bell, 2011:190, 262-263). The purpose of the pilot was to:

- determine the performance of the collection instrument in a live environment;
- identify if the respondents tended to answer questions identically;
- establish those questions not well understood; and
- identify the flow of the questions.

The test results indicated that some of the questions did not make sense, and the flow was bland. Therefore, the researcher amended the questionnaire and deleted some of the questions. Once the researcher was happy with the flow of questions, and the survey questionnaire's performance and had received approval from the supervisor, the administration of the questionnaire in a live environment took place.

3.4.6 Data collection

The survey questionnaire was administered from 22 April 2020 and closed on 6 June 2020. The survey link was shared within the researcher's network using WhatsApp, Twitter, and LinkedIn for convenience, broader reach and the popularity of these social media networks by the targeted population (Oji et al., 2017:4). Further to this, the promotion of the survey link was on Facebook, targeting the studied population. The researcher took care to set the demographic characteristics and interest criteria on Facebook to ensure the respondents were residing in South Africa and were members of the targeted population.

Although the sample size required for this study was 384, drawing from a similar approach by Gossmann (2018:38), the researcher hoped to attract at least 500 respondents to participate in the study to have a full split between the demographic characteristics of the defined population, especially provincial areas of residence. This was to ascertain provinces within South Africa possibly migrating from pay-TV to OTT TV services. Owing to financial constraints, as the study was self-funded, the goal of at least 500 responses was not accomplished. A total number of 391 valid questionnaires were collected, and therefore, the researcher was happy to proceed as the requisite sample was obtained for data analysis and to generalise.

3.4.7 Data analysis

Before data can be analysed and interpreted, preparation needs to occur, which includes data cleaning, editing, coding, and conversion from raw form to a suitable format for analysis (Cooper & Schindler, 2013:376). Therefore, the survey questionnaire raw data was exported from Google Forms into Microsoft Excel for cleaning, to detect errors and omissions, and make corrections where possible. Responses to Section 2 of the questionnaire under Question 1, which was answered as 'none of the above', were removed from the sample (Cooper & Schindler, 2013:376). Following the data editing and cleaning, coding involved assigning a number to each response on the questionnaire (Cooper & Schindler, 2013:381; Clow & James, 2014:365).

Upon completion of data coding of the collected data, it was captured on IBM SPSS Statistics for analysis as this program specialises in quantitative data analysis (Saunders et al., 2009:425; Sarstedt & Mooi, 2019:123). The study used descriptive analysis to describe and compare variables, using a numeric format based on the research study's objectives and questions (Saunders et al., 2009:444). The collected data was presented in simple graphs and frequency tables to interpret the findings. The researcher formulated the table categories as per the research questions to analyse the questionnaire, as depicted in Table 3.2.

Table 3.2 Questionnaire categorisation for interpretation of the findings

Main Research Question	What is the extent of the impact OTT TV services have on traditional pay-TV operators in South Africa?		
Sub-research questions	Category	Question number	Source
Sub-RQ 1	Are OTT TV services a substitute for or complementary service to traditional pay-TV subscription services in South Africa?	2–12	Questionnaire
<i>Sub-RQ 1.1</i>	<i>If OTT TV services are a substitute, which are the preferred OTT TV platforms in South Africa?</i>	9-11	
<i>Sub-RQ 1.2</i>	<i>If consumers are not migrating to OTT TV services, where and how are they consuming television content?</i>	22-23	
Sub-RQ2	What factors affect television viewing behaviours, given the rise of OTT TV services in South Africa?	28, 30, 13–19	Questionnaire
Sub-RQ3	Do first-time subscribers favour OTT TV subscription services over pay-TV services in South Africa? If so, which OTT TV services do they favour for the first-time subscription?	10 & 11	Questionnaire
Sub-RQ4	What has changed in device adoption for television content consumption, given the launch and growth of OTT TV services?	20–21	Questionnaire
Sub-RQ5	Which demographic characteristics are more prominent in migrating to OTT TV platforms?	27–31	Questionnaire
Sub-RQ6	What are the decision determinants that influence consumers to migrate from pay-TV subscription services to OTT TV services?	24–26	Questionnaire
General	General	32–33	Questionnaire

(Own source)

3.5 Reliability and validity of the data collection instrument

Validity and reliability in research address issues relating to error and measurement of the research instrument (Clow & James, 2014:267). Furthermore, reliability and validity refer to an understanding of questions by the respondents as intended by the researcher and the researcher's understanding of the answers provided by the respondent as intended by the respondent (Saunders et al., 2009:371-372). To ensure the reliability and validity of the questions, these must take place:

- There must be clarity regarding the required data, and the questionnaire must be designed accordingly.
- The questions must be understood by the respondent as intended by the researcher.
- The respondent must answer the questions.
- The answers to the questions must be interpreted by the researcher as intended by the respondent.

3.5.1 Reliability

Reliability refers to the degree to which the data-collection instrument would produce consistent results time and again if it were to be replicated by another researcher at a different time (Malhotra, 2010:318; Clow & James, 2014:267). If the selected data-collection instrument produces the same results, it is deemed to be reliable; therefore, the survey questionnaire must be reliable to be valid (Saunders et al., 2009:373; Clow & James, 2014:267).

Saunders et al. (2009:373-374) state that reliability in survey questionnaires is evaluated through test re-test, internal consistency, and alternative form. Test re-test refers to administering the survey questionnaire twice to respondents; however, this is difficult to achieve as respondents may not want to answer the same questionnaire more than once. Internal consistency refers to comparing the answers with each question in the survey questionnaire with other questions to measure the answers' reliability throughout all the questions from the questionnaire. Alternative form involves comparing the answers with alternative forms of the same questions.

Therefore, to ensure reliability, the survey questionnaire was piloted to 15 participants to test if the questions sounded right, were understood by the respondents in simple terms without any complicated jargon and elicited the respondents' interest. Based on the feedback received, some of the questions were removed and paraphrased.

Furthermore, to get the respondents' attention, the biographical questions were moved to the end of the questionnaire (Brace, 2008:175). The researcher also used IBM SPSS Statistics to test reliability on identified variables.

3.5.2 Validity

Validity comprises internal and external validity, where internal validity refers to "the extent to which a particular treatment in an experiment produces the sole effect on the dependent variable". External validity is "the degree to which the study's findings can be generalised and representable of the targeted population" (Clow & James, 2014:197-198). Several authors concur that the evaluation of a questionnaire's validity is through content and construct validity, and is criterion-related (Saunders et al., 2009:373; Malhotra, 2010:320).

- Criterion-related validity involves the ability to use questions to forecast future trends.
- Content validity, also known as face validity, refers to the extent to which the data-collection tool gives adequate attention to the investigated questions.
- Construct validity indicates the level that the researcher calculates what it claims to calculate.

The researcher ensured content and construct validity by using two experts in the research field (supervisor and statistician) to scrutinise and assess the questionnaire, including establishing if the questions were necessary and made sense and checking for inconsistencies by piloting to 15 participants. The pilot of the survey questionnaire further tested if the respondents were able to answer the questions asked by the researcher (Brace, 2008:176).

3.6 Ethical considerations

The researcher adhered to and complied with the Cape Peninsula University of Technology's ethical guidelines by obtaining ethical clearance before data collection commenced. This is depicted in Appendix A. Furthermore; a consent letter indicated that participation in the study was voluntary, as illustrated in Appendix B. The participant's right to privacy was respected, and respondents' email addresses, including names, were not collected, thus assuring participation was anonymous.

3.7 Conclusion

This chapter addressed the methodology and research design used to conduct the research project in detail. The study adopted a quantitative research approach using a descriptive research design with a cross-sectional research design strategy. Further to this, the study adopted a non-probability convenience sampling technique, and participants with pay-TV and OTT TV subscriptions, including internet access, were the selected target population. The study used Google Forms to administer the survey, and the distribution of the survey link was through social media networks and emails from 25 April to 6 June 2020.

This chapter covered the research methodologies adopted to carry out the study to achieve the research objectives. The next chapter presents and discusses the findings of the study's results.

CHAPTER FOUR

DATA PRESENTATION, DISCUSSION, AND ANALYSIS OF FINDINGS

4.1 Introduction

In the previous chapter, I discussed the research methods employed to conduct the research project. This chapter presents, analyses and discusses the findings of the study. Descriptive statistics in the form of frequency tables illustrate the study findings as reflected in Appendix D, and graphs are provided to answer research questions, draw conclusions and provide recommendations in the next chapter. Promotion of the survey was on Facebook, Instagram, LinkedIn, and through the researcher's network.

At the beginning of the survey, participants were asked if they had a pay-TV and OTT TV subscription, including internet access. If they answered 'none of the above', they were disqualified from participating in the survey. A total of 399 responses were collected, and 8 of the participants were disqualified as they were not part of the targeted population based on the responses as reflected in Table 4.1. Table 4.2 reflects the sample size used for analysis after the cleaning of data, including disqualified respondents as per the criteria selected. Therefore, the total sample size was 391, which was sufficiently large to generalise.

The population consisted of 219 pay-TV subscribers (highlighted in yellow), 138 OTT TV subscribers with FTA services (highlighted in green), and 34 consumers who use free or paid applications to consume TV content online, as reflected in Table 4.3.

Skip logic was applied to the survey to ensure the respondents only see questions that apply to them based on how they answered the current questions. The purpose of this was to ensure that the respondents do not answer the questions randomly, for a high completion rate and relevance of the questions (Survey Monkey, 2020). The coding of these questions reflects as non-applicable (n/a). Unanswered questions are highlighted in the presentation of the results by highlighting the percentage, with possible reasons for non-response. Further to this, where the total of an unanswered question was more than 10%, the question was omitted from the study (Dong & Peng, 2013; Lange, 2014). The collected quantitative data were analysed using descriptive analysis on IBM SPSS Statistics.

Table 4.1 Collected responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I have both pay-TV and OTT TV subscription	93	23.3	23.3	23.3
	Internet (ADSL, fibre, Wi-Fi (at home, work or through Wi-Fi hotspot zones, mobile data)	71	17.8	17.8	41.1
	OTT TV subscription (Netflix, Showmax, Amazon Prime, etc.)	72	18	18	61.2
	Satellite/pay-TV subscription (DStv, StarSat, etc.)	155	38.8	38.8	100
	None of the above	8	2	2	43.1
	Total	399	100	100	

Source: survey data (2020)

Table 4.2 Total sample size

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I have both pay-TV and OTT TV Subscription	93	23.8	23.8	23.8
	Internet (ADSL, fibre, Wi-Fi (at home, work or through Wi-Fi hotspot zones, mobile data)	71	18.2	18.2	42.0
	OTT TV subscription (Netflix, Showmax, Amazon Prime, etc.)	72	18.4	18.4	60.4
	Satellite/pay-TV subscription (DStv, StarSat, etc.)	155	39.6	39.6	100
	None of the above				
	Total	391	100	100	

Source: survey data (2020)

Table 4.3 Sample size reflecting population per category

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	DStv	216	55.2	55.2
	StarSat	3	.8	56.0
	I have free-to-air (FTA – SABC, eTV, OVHD, etc.) & OTT TV services	43	11.0	67.0
	I only have OTT TV services (Netflix, Showmax, etc.)	95	24.3	91.3
	I use free/paid mobile apps to consume TV content.	34	8.7	100.0
	Total	391	100.0	100.0

Source: survey data (2020)

4.2 Section 1 – Demographic characteristics of respondents

As indicated in Chapter 3, to catch the participants' attention, the demographic characteristics were moved to page 11 of the survey questionnaire. However, for data analysis, following the presentation of the sample size, the studied population's demographic characteristics are presented first. This section consisted of five questions on the demographic characteristics of the sampled population, such as gender identification, age, occupation, income levels, and provincial area of residence. All questions in this section were mandatory except for income level. During the pilot study, it was established that this might be a sensitive question that many respondents might find uncomfortable to answer, although confidentiality and anonymity were guaranteed.

4.2.1 Gender profiles of respondents

Figure 4.1 depicts the gender profile of the sampled population. Of the 391 respondents, 65.5% identified as male, followed by female at 31.2%. The rest of the population represented identified as non-binary at 1.0%, gender fluid at 0.5%, while 1.8% preferred not to state their gender profiles. The gender profiles were significantly different from a similar study conducted by Elias (2019:29), where the majority of the respondents were female at 60.3% and male at 39.7%. Furthermore, the gender profile findings were consistent with a report from Stats SA, which states that the gender identifying as males consume more TV content than females or any other gender profile (BusinessTech, 2013).

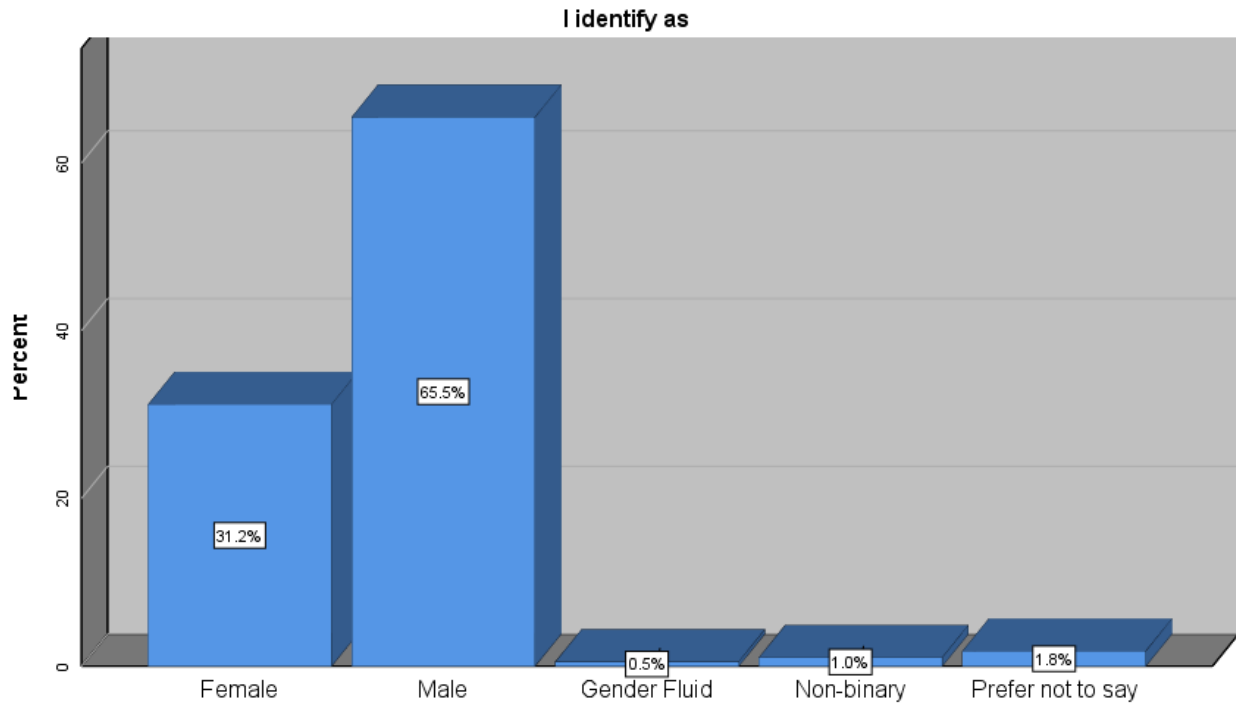


Figure 4.1 Demographic profiles of respondents
Source: survey data (2020)

4.2.2 Age profiles of respondents

Figure 4.2 depicts the age profile of the respondents. The question was asked to establish the relationship between age groups' preferences and behaviours based on the objectives of the study. The largest age groups were between the ages of 35 and 45 years at 36.3%, followed by 46 and 54 years at 20.2%. Of the studied population, 13.0% was between the ages of 18 and 24 years, while 13.3% of the respondents were aged between 55+. The generational age group of the respondents was slightly different from the study conducted by Elias (2019:29) in Portugal, where the majority of the population were equally millennials and Generation Z. In contrast, this study was dominated by millennials/Generation Y and Gen Xers. The age group profile of the respondents is attributed to the fact that these are the people responsible for the payment of subscription fees.

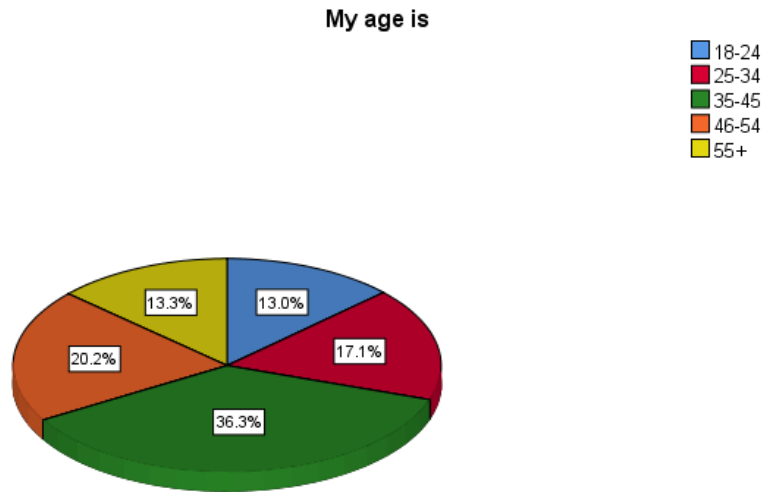


Figure 4.2 Age profiles of respondents
Source: survey data (2020)

4.2.3 Occupation profiles of respondents

Figure 4.3 depicts the occupation profiles of the respondents. The question was asked to determine the occupation of those who have cut the cord with pay-TV services and establish if employment status influenced the cancellation of pay-TV services for OTT TV services. Of the 391 respondents, 1.0% ($n=4$) did not respond to the question. Of the 387 respondents, most were employed full time at 63.4%, which could indicate that these respondents are responsible for paying the subscription fees. A further 15.1% of the population indicated that they were self-employed, and the smallest group of the population represented comprised students at 5.1%.

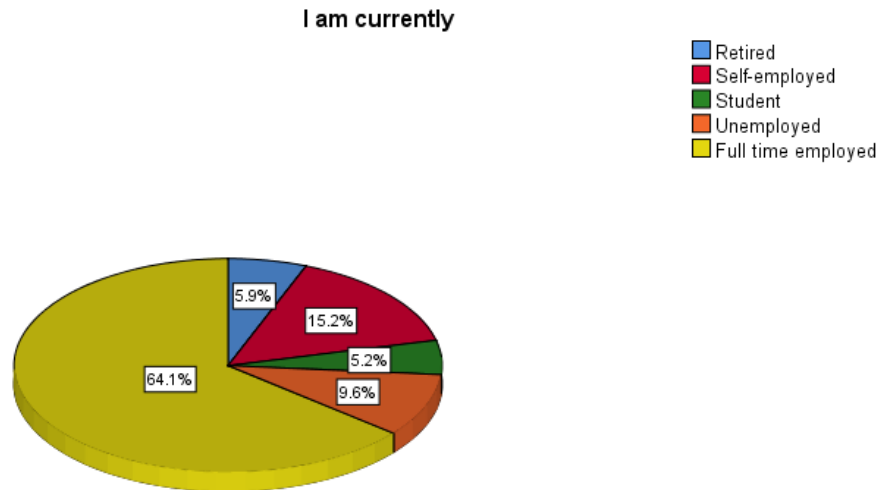


Figure 4.3 Occupation profiles of respondents
Source: survey data (2020)

4.2.4 Household income profile of respondents

Figure 4.4 illustrates the respondents' monthly household income, including any additional work but excluding government grants. The question was asked to establish if income levels influenced the decision to cut-the-cord, cord-shave, and to determine each income level's preference for OTT TV over pay-TV. Of the 391 respondents, 7.4% ($n=29$) skipped the question, and this may be due to the sensitivity of the question. The rate of participants that skipped the question was less than 10%; therefore, the collected data was sufficient to generalise based on income levels.

Of the 362 respondents, the majority were from the lowest income groups, earning less than R10,000.00 at 28.5%, with the highest income group earning R 33,000.00+ at 24.0%. These results reflect income distribution levels in South Africa, as stated by Stats SA (2020).

My household income per month, including any additional jobs, but excluding government grants is

- Less than R10,000.00
- R10,000.00 - R17,000.00
- R18,000.00 - R22,000.00
- R23,000.00 - R32,000.00
- R33,000.00+

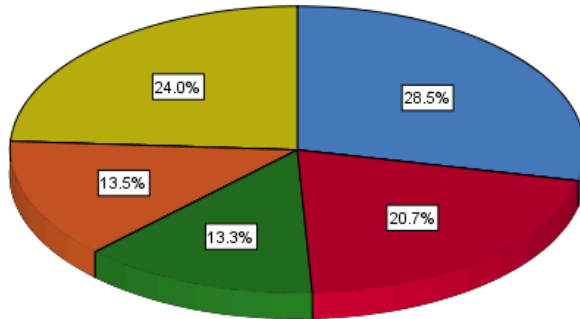


Figure 4.4 Income profile of respondents
Source: survey data (2020)

4.2.5 Provincial area of residence profile of respondents

The question was asked to ascertain which provinces were most prevalent in cutting the cord, as this would form the basis of recommendations for strategies to be implemented at regional levels and to understand where the impact is enormous. Of the 391 respondents, the study revealed that 41.7% resided in the Western Cape, followed by Gauteng at 22.0%. The fewest respondents were from Limpopo and the Northern Cape, at 2.3% respectively, as depicted in Figure 4.5.

My province of residence

- Eastern Cape
- Free State
- Gauteng
- Kwa-Zulu Natal
- Limpopo
- Mpumalanga
- North West
- Northern Cape
- Western Cape

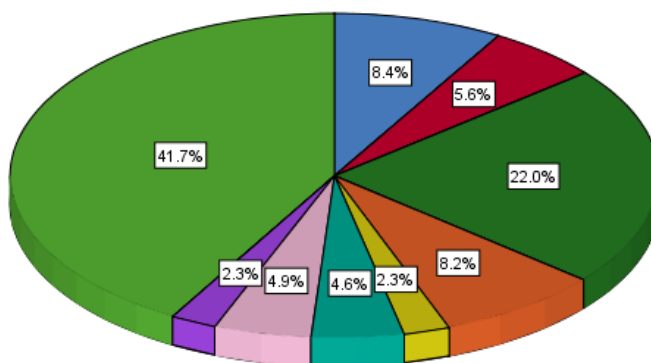


Figure 4.5 Provincial residence profile of respondents
Source: survey data (2020)

4.2.6 Summary of demographic characteristics of the population

- Of the 391 participants, the study revealed that 56.0% were pay-TV subscribers, and of the 219 respondents, 99% had a DStv subscription, and 1% had a StarSat subscription. Furthermore, the study revealed that 24.3% of the studied population had only an OTT TV subscription.
- 63% of the respondents were from the prime working group (25–54 years old); therefore, this suggests that these are the decision-makers in terms of subscription choices in households (Index Mundi, 2019).
- The majority of respondents were full time and self-employed at 68.5%, which is interpreted as those paying subscription fees.
- The income levels reflect total household income levels, which may include the partner's income, where the home is headed by more than one person with an income. The household income contributes to household expenses, including monthly or annual subscription fees of pay-TV and OTT TV services.
- All provinces were represented in the study and reflected the population size of each province as the most significant provinces are the Gauteng, KwaZulu-Natal, Western Cape, and Eastern Cape provinces, with the Northern Cape having the smallest population at 2.2% of the South African population (Stats SA, 2019).

4.3 Section 2 – Consumer viewing habits – Pay-TV subscription services

This section entails information about the impact OTT TV has on pay-TV subscription, which relates to cord-cutting, cord-shaving, and cord-stacking. Furthermore, it seeks to present the findings of Sub-Research Question 1, to investigate if OTT TV services are a substitute for or complementary service for pay-TV subscription services. Furthermore, after having answered questions applicable to the respondents as per applied skip logic, all respondents proceeded to section/page 6 to 12 of the questionnaire as illustrated in figure 4.6. Therefore, the questions that did not apply to the respondents were coded as 'n/a'.

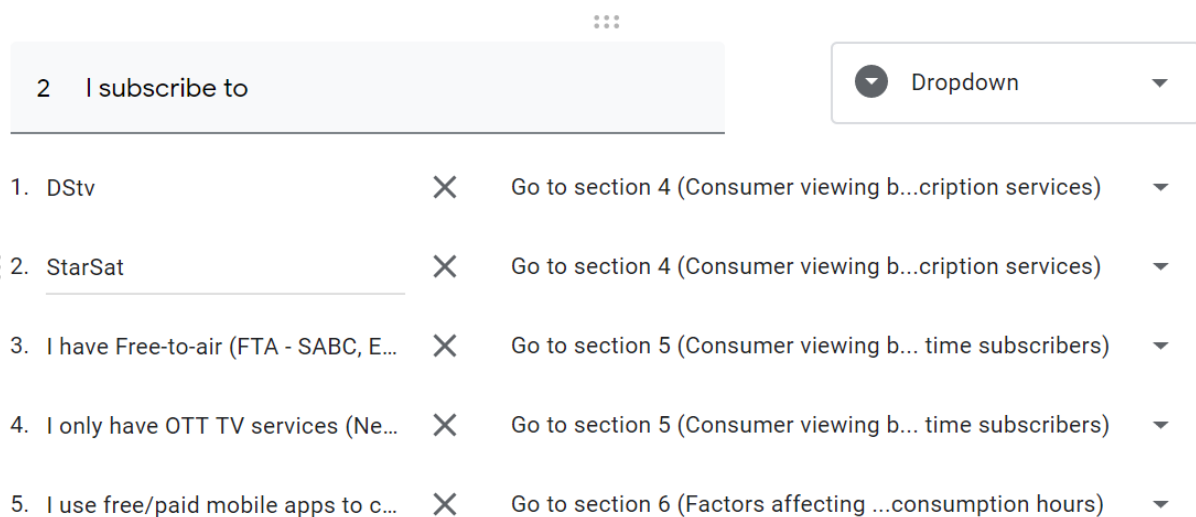


Figure 4.6 illustration of skip logic
Source: survey data (2020)

4.3.1 Pay-TV subscription fee

As demonstrated in Table 4.3, 56.0% ($n=219$) of the sampled population indicated that they subscribed to pay-TV services, with 55.2% subscribing to DStv and 0.8% to StarSat. These findings depict the dominance of DStv in the South African market.

As illustrated in Figure 4.7, of the 219 respondents who have a pay-TV subscription, 32.0% have a premium subscription, paying more than R500.00 per month, and 6.1% have lower pay-TV subscription packages, paying less than R400.00 per month. This question was asked to compare subscribers who have upgraded their subscription packages and to establish the relationship between cord-cutting and cord-shaving across subscription fees/packages. This question was important as it reveals the loss of subscription revenue; for instance, if the majority of the cord-cutters were premium subscribers, this would translate to a significant impact on revenue.

My monthly pay-TV subscription fee is

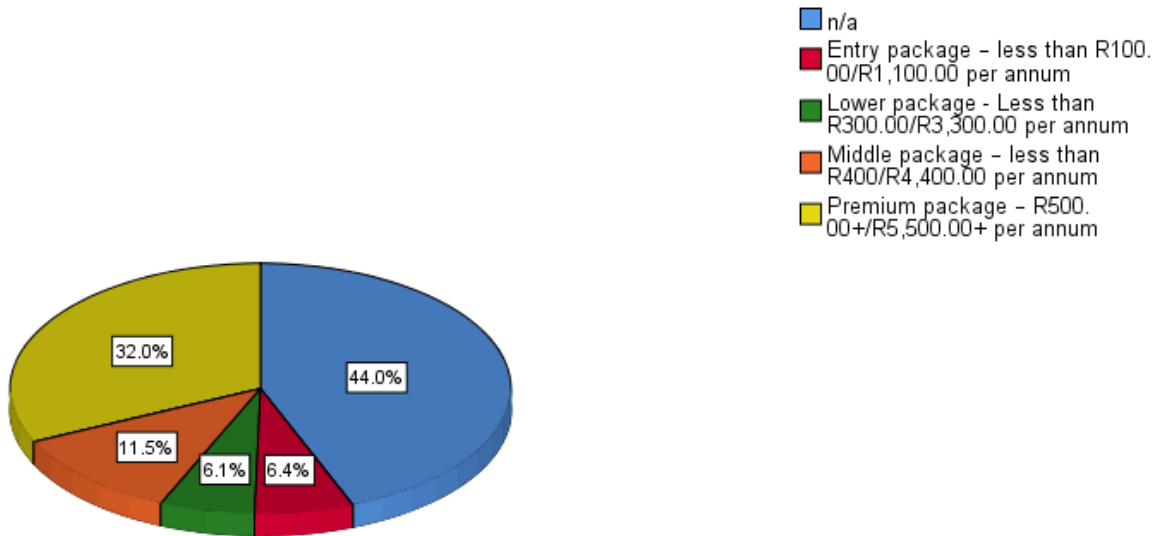


Figure 4.7 Monthly pay-TV subscription fee
Source: survey data (2020)

4.3.2 Respondents who have upgraded pay-TV subscription

Respondents were asked if they had upgraded their pay-TV subscription in the last six months. This was to ascertain if the pay-TV subscribers had downgraded their packages to lower packages or upgraded from lower packages to premium packages. Of the 219 respondents who indicated that they had a pay-TV subscription, 1.3% ($n=5$) did not answer the question. Of the remaining 214 respondents, as illustrated in Figure 4.8, the summarised findings revealed that 37.0% ($n=143$) of the respondents disagreed or strongly disagreed that they had not upgraded their pay-TV subscription in the last six months, while only 11.1% ($n=43$) agreed or strongly agreed that they had upgraded their pay-TV subscription services in the last six months.

Table 4.4 depicts a comparison of subscribers who have upgraded their subscription packages. Of the 43 who had upgraded their subscription, the study revealed that the majority were premium subscribers ($n=21$).

I have upgraded my Pay-TV subscription services in the last six months

- n/a
- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

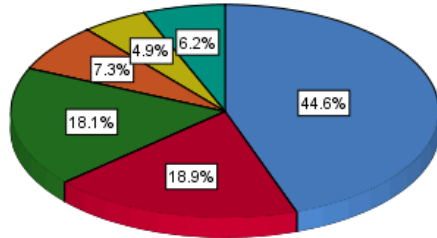


Figure 4.8 Pay-TV subscription upgrade
Source: survey data (2020)

Table 4.4 Subscription upgrade comparison by packages

		My monthly pay-TV subscription fee is					Total
		Entry package – less than R 100.00/R1,100.0 0 per annum	Lower package - Less than R 300.00/R3,300.00 per annum	Middle package – less than R 400/R4,400.00 per annum	Premium package – R 500.00+/R5,500.0 0+ per annum		
I have upgraded my Pay-TV subscription services in the last six months	n/a	172	0	0	0	0	172
	Strongly disagree	0	7	5	15	46	73
	Disagree	0	9	5	17	39	70
	Neutral	0	2	3	8	15	28
	Strongly agree	0	2	4	3	10	19
	Agree	0	4	7	2	11	24
Total		172	24	24	45	121	386

Source: survey data (2020)

4.3.3 Cord-cutters

This question was asked to ascertain the cord-cutting phenomenon: consumers who are cancelling their pay-TV subscriptions in favour of OTT TV services. Of the 219 respondents who indicated they were pay-TV subscribers, the summarised findings illustrated in Figure 4.9 reveal that 42.2% ($n=163$) of the respondents disagreed or strongly disagreed not to have cancelled their pay-TV subscription. In contrast, only 5.5% ($n=21$) agreed that they had cut the cord with their pay-TV service provider. This is in line with the claims by ICASA (2019a:8), as reviewed in the literature that the cord-cutting phenomenon is small in South Africa owing to the unavailability of affordable and quality broadband data. Further to this, the findings reveal that OTT TV services are not a substitute for pay-TV services, and this concurs with Cell C's assertion that OTT TV services are not a direct threat to pay-TV operators, although this may change in the future as many do not have internet access (ICASA, 2019a:41, 82).

Of the 219 respondents, 1.3% ($n=5$) did not answer the question.

Table 4.5 illustrates that of the 5.5% ($n=21$) who indicated they had cut the cord with pay-TV services, the majority ($n=7$) of the cord-cutters were between the ages of 35 and 45. These findings concur with the assertion by Elias (2019:22) that the ages between 35 and 45 represent a higher risk to the abandonment of pay-TV services in favour of OTT TV services. Only one respondent between the ages of 18 and 24 indicated having cancelled his or her pay-TV subscription in favour of OTT TV subscription. Furthermore, most of the respondents ($n=10$) earn between R10,000.00 and R17,000.00 per month, as illustrated in Table 4.6. Of the high-income earners of the studied population, only two either agreed or strongly agreed with having cut the cord with their pay-TV service provider in favour of OTT TV services.

The Western Cape province had more cord-cutters than the rest of the provinces, as illustrated in Table 4.7. As illustrated in Table 4.8, mostly males indicated having cut the cord with their pay-TV service provider in favour of OTT TV services.

I have cancelled my pay-TV subscription services in favour of OTT TV subscription

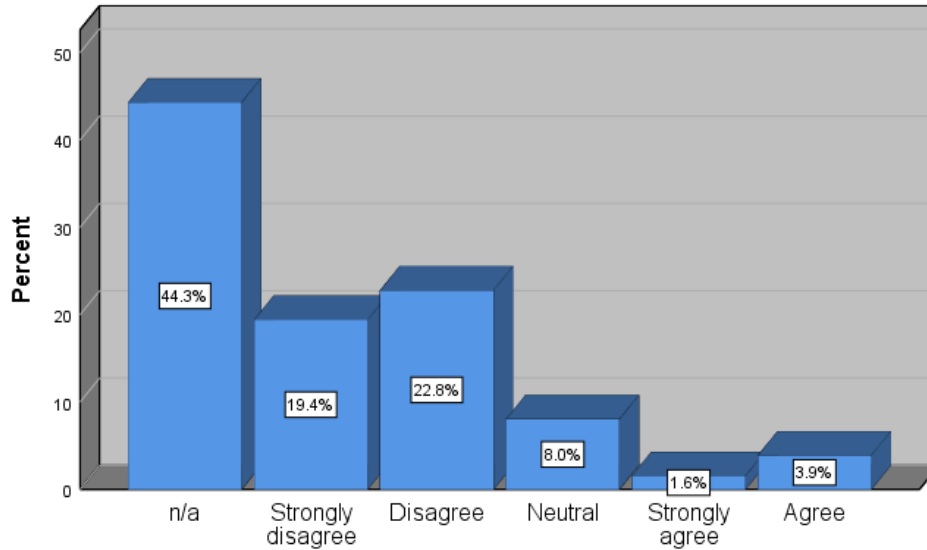


Figure 4.9 Cord-cutters
Source: survey data (2020)

Table 4.5 Cord-cutting by age

I have cancelled my pay-TV subscription services in favour of OTT TV subscription

		n/a	Strongly disagree	Disagree	Neutral	Strongly agree	Agree	Total
My age is	18–24	35	7	6	1	0	1	50
	25–34	28	14	16	4	2	3	67
	35–45	59	26	34	14	1	6	140
	46–54	32	15	19	8	1	4	79
	55+	17	13	13	4	2	1	50
Total		171	75	88	31	6	15	386

Source: survey data (2020)

Table 4.6 Cord-cutting by income levels

I have cancelled my pay-TV subscription services in favour of OTT TV subscription.

		n/a	Strongly disagree	Disagree	Neutral	Strongly agree	Agree	Total
My household income per month, including any additional jobs, but excluding government grants is	Less than R10,000.00	51	12	20	11	2	5	101
	R10,000.00 - R17,000.00	33	13	13	6	3	7	75
	R18,000.00 - R22,000.00	23	10	12	2	0	1	48
	R23,000.00 - R32,000.00	18	11	11	8	0	0	48
	R33,000.00+	31	25	24	3	1	1	85
Total		156	71	80	30	6	14	357

Source: survey data (2020)

Table 4.7 Cord-cutting by province

I have cancelled my pay-TV subscription services in favour of OTT TV subscription.

		n/a	Strongly disagree	Disagree	Neutral	Strongly agree	Agree	Total
My province of residence	Eastern Cape	14	7	8	2	0	1	32
	Free State	12	5	1	2	1	0	21
	Gauteng	47	15	16	7	1	0	86
	KwaZulu-Natal	16	6	3	3	0	4	32
	Limpopo	3	5	0	0	1	0	9
	Mpumalanga	7	3	3	1	1	1	16
	North West	8	7	1	2	0	0	18
	Northern Cape	5	0	3	0	0	1	9
	Western Cape	59	27	53	14	2	8	163
	Total		171	75	88	31	6	15

Source: survey data (2020)

Table 4.8 Cord-cutting by gender

		I identify as					Total
		Female	Male	Gender fluid	Non-binary	Prefer not to say	
I have cancelled my pay-TV subscription services in favour of OTT TV subscription	n/a	37	124	0	4	6	171
	Strongly disagree	36	36	2	0	1	75
	Disagree	32	56	0	0	0	88
	Neutral	11	20	0	0	0	31
	Strongly agree	0	6	0	0	0	6
	Agree	6	9	0	0	0	15
Total		122	251	2	4	7	386

Source: survey data (2020)

4.3.3.1 Reason for future cancellation consideration

Summarised findings in Figure 4.10 illustrate the reasons that could prompt pay-TV subscribers to cancel their current subscription. The study revealed that the top reasons that could prompt the respondents to cancel their pay-TV subscription would be choosing own channels at 17.1% ($n=67$) and if OTT TV services had live sport at 13.8% ($n=54$). These findings slightly differ from those of Lee, Nagpal et al. (2018) as reviewed in the literature, who indicated that the majority of those who plan to cut the cord with their pay-TV services is because of the high subscription fees.

Interestingly, 9.5% ($n=37$) indicated that nothing would make them cancel their pay-TV subscription, and an increase in price subscription was the least of the reasons to consider for cancellation of pay-TV subscription at 10.0% ($n=39$).

A follow up open-ended question was asked to ascertain other reasons that would prompt pay-TV subscribers to cancel their pay-TV subscription as illustrated in Table 4.9. Therefore the availability of reliable, fast broadband data and poor TV content would prompt cancellation of pay-TV subscription fees in favour of OTT TV services.

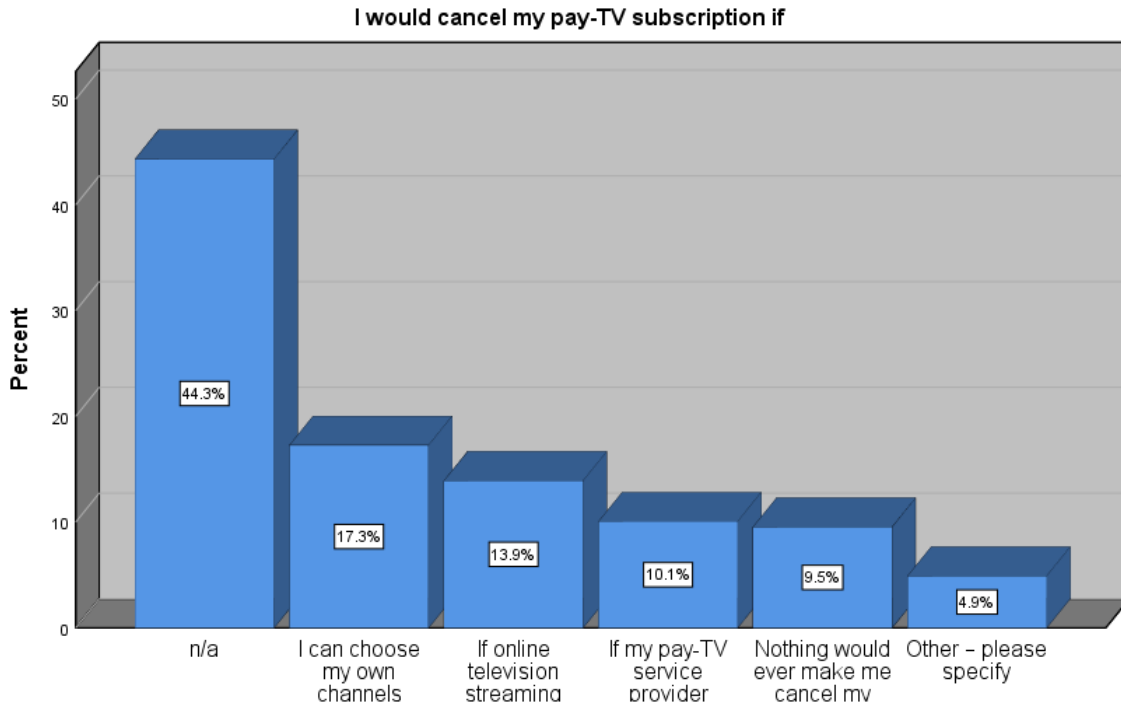


Figure 4.10 Reasons for future cancellation considerations
Source: survey data (2020)

Table 4.9 Other reasons for future cancellation considerations

- "Should the area I stay in have a stable and established internet infrastructure, there is a strong possibility of cancelling the pay-tv subscription."
- "If for some reason, I would lose my job."
- "If another competitor with strong content comes along and if subscription would be more than R1000."
- "If they cancel or stop my favourite TV programmes."
- "We get poor content."
- "Should the area I stay in have a stable and established internet infrastructure, there is a strong possibility of cancelling the pay-tv subscription."

Source: survey data (2020)

4.3.4 Cord-shavers

The question was asked to ascertain the cord-shaving phenomenon as per the literature reviewed, which refers to downgrading premium services for lower packages and complementing them with OTT TV services. Figure 4.11 illustrates the summarised findings of the respondents who have downgraded their current pay-TV subscription in favour of OTT TV. 35.1% ($n=136$) of the respondents either disagreed or strongly disagreed that they have not downgraded their pay-TV premium subscription services in favour of OTT TV services. Only 13.0% ($n=49$) of the population either strongly agreed or agreed with having downgraded their premium pay-TV subscription in favour of OTT TV services. Of the 219 respondents, 1.0% did not answer the question.

Therefore, the cord-shaving phenomenon in South Africa is lower than in countries like the UK, where according to Ofcom (2018:16-18), 36% of pay-TV subscribers downgraded their premium services and complemented them with OTT TV. Given these findings, it is agreed that the reason for the low cord-shaving phenomenon is due to the unavailability of affordable and fast broadband data. Moreover, as data becomes more accessible and affordable, there could be an increase in the cord-shaving phenomenon as predicted by ICASA (2019b:23).

From the perspective of the demographic characteristics, the male gender predominantly combined their pay-TV services compared with other gender groups, as illustrated in Table 4.10. A significant number ($n=36$) of high income-earners earning R33,000.00+ were more prevalent in downgrading their pay-TV for OTT TV services, followed by those earning between R10,000.00 and R 17,000.00 ($n=19$); this is illustrated in Table 4.11. Arguably, the high-income earners have access to broadband data, hence are more likely to downgrade premium pay-TV packages and complement them with an OTT TV subscription.

Most of the cord-shavers were between the ages of 35 and 45 years ($n=40$), followed by ages of 25-34 and 35-46. The illustration of the summarised findings reflects in Table 4.12. The Western Cape province had the most cord-shavers ($n=36$) followed by Gauteng ($n=20$).

I have downgraded my premium pay-TV subscription for a lower-priced package in favour of OTT TV services

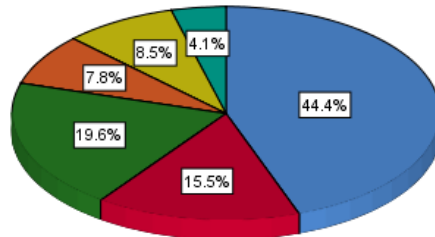


Figure 4.11 Cord-shavers
Source: survey data (2020)

Table 4.10 Cord-shaving by gender

		I identify as					Total
		Female	Male	Gender fluid	Non-binary	Prefer not to say	
I have	n/a	37	125	0	4	6	172
downgraded my	Strongly disagree	20	39	0	0	1	60
premium pay-TV	Disagree	34	42	0	0	0	76
subscription for a	Neutral	14	16	0	0	0	30
lower-priced	Strongly agree	14	17	2	0	0	33
package in favour	Agree	2	14	0	0	0	16
of OTT TV							
services							
Total		121	253	2	4	7	387

Source: survey data (2020)

Table 4.11 Cord-shaving by income levels

My household income per month, including any additional jobs, but excluding government grants is

		Less than R10,000.00	R10,000.00 – R17,000.00	R18,000.00 – R22,000.00	R23,000.00 – R32,000.00	R33,000.00 +	Total
I have	n/a	51	33	23	18	32	157
combined my pay-TV with OTT TV subscription	Strongly disagree	13	6	5	5	6	35
	Disagree	17	11	8	14	8	58
	Neutral	8	4	1	1	5	19
	Strongly agree	5	5	6	7	17	40
	Agree	6	14	5	3	19	47
Total		100	73	48	48	87	356

Source: survey data (2020)

Table 4.12 Cord-shaving by age

My age is

		18–24	25–34	35–45	46–54	55+	Total
I have	n/a	36	28	59	32	17	172
combined my pay-TV with OTT TV subscription	Strongly disagree	4	5	13	6	8	36
	Disagree	1	12	18	18	11	60
	Neutral	3	4	9	5	3	24
	Strongly agree	5	6	17	10	3	41
	Agree	2	11	23	7	8	51
Total		51	66	139	78	50	384

Source: survey data (2020)

Table 4.13 Cord-shaving by province

		My province of residence									Total
		Eastern Cape	Free State	Gauteng	Kwa Zulu- Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	
I have	n/a	14	12	47	16	3	8	8	5	59	172
combined	Strongly disagree	3	1	6	4	1	1	2	1	17	36
with OTT TV subscription	Disagree	6	0	11	1	1	2	1	1	37	60
	Neutral	1	2	2	2	1	3	1	0	12	24
	Strongly agree	3	4	10	5	3	2	4	1	9	41
	Agree	3	2	10	4	0	1	3	1	27	51
Total		30	21	86	32	9	17	19	9	161	384

Source: survey data (2020)

4.3.5 Cord-stacking

Figure 4.12 illustrates a summary of the findings in respect of the population who have combined their pay-TV subscription services with OTT TV services. Surprisingly, 25.0% ($n=96$) of the respondents either disagreed or strongly disagreed in that they had not combined their pay-TV subscription services with OTT TV. Only 24.0% ($n=92$) agreed or strongly agreed to had combined their pay-TV subscription services with OTT TV services. These findings were different from the study conducted in the UK by Ofcom (2018:16-18), where it was reported that 71% of OTT TV subscribers are combining their pay-TV subscription due to the unavailability of sport on OTT TV services. These results further support MultiChoice's arguments in that some, and not all consumers, will combine their pay-TV with OTT TV services (ICASA, 2019b:256). Further to this, Table 4.14 illustrates that in comparison, respondents with a premium pay-TV subscription ($n=61$) are combining their subscription with OTT TV services, while ($n=6$) of the respondents with lower packages indicated the same.

Showmax emerged as the favoured OTT TV services for cord-stacking at 18.7%, as illustrated in Figure 4.13; this could be attributed to its being a value-added service for DStv Premium subscribers. Notably, the study revealed that Netflix is also a favoured OTT TV subscription at 17.1%, while a low 0.6% of the respondents indicated favouring Amazon Prime Video, and 1.8% ($n=7$) did not answer the question. Of the 9.6% of respondents who indicated favouring other OTT TV services, YouTube, followed by DStv Now, emerged as the most favoured streaming platform.

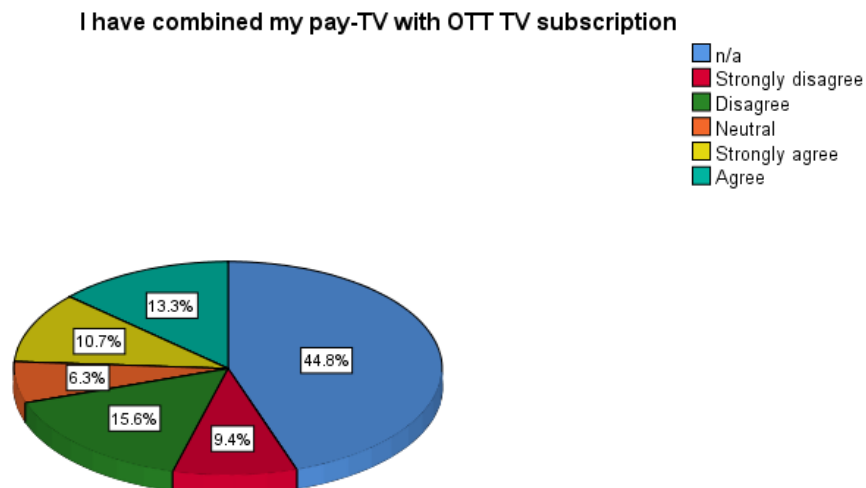


Figure 4.12 Cord-stacking
Source: survey data (2020)

Table 4.14 Cord-stacking by subscription package

		I have combined my pay-TV with OTT TV subscription						Total
		n/a	Strongly disagree	Disagree	Neutral	Strongly agree	Agree	
My monthly	n/a	172	0	0	0	0	0	172
pay-TV	Entry package – less	0	3	8	1	6	4	22
subscription	than R							
fee is	100.00/R1,100.00 per							
	annum							
	Lower package – Less	0	6	8	3	4	2	23
	than R							
	300.00/R3,300.00 per							
	annum							
	Middle package – less	0	6	15	8	6	9	44
	than R400/R4,400.00							
	per annum							
	Premium package – R	0	21	29	12	25	36	123
	500.00+/R5,500.00+							
	per annum							
Total		172	36	60	24	41	51	384

Source: survey data (2020)

Which OTT TV services have you combined your pay-TV subscription with?

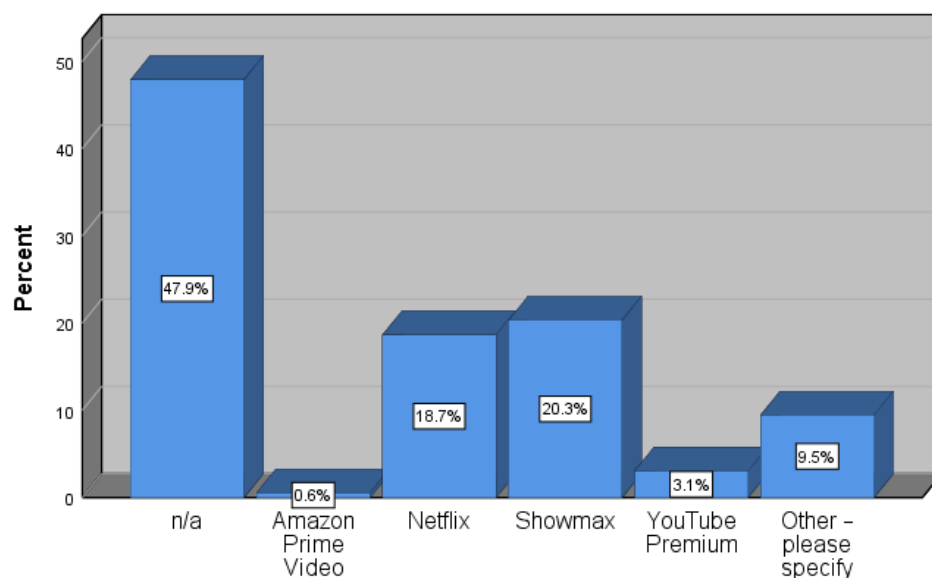


Figure 4.13 Favoured OTT TV services for cord-stacking (Survey data,2020)

4.3.6 Reliability

Cronbach's alpha was used to test the internal consistency and reliability of the responses based on the feedback received from the respondents in the survey questionnaire to establish if respondents understood the questions asked and if they responded truthfully. The researcher identified six variables from Section 2 to conduct the testing. Table 4.15 illustrates that the Cronbach coefficient score was above the recommended score of 0.65 to 0.8 or higher; thus, these results suggest the reliability of the measurement as satisfactory (Goforth, 2015). The six identified variables Cronbach alpha scores are illustrated in Table 4.16.

Table 4.15 Reliability analysis

Cronbach's alpha	Cronbach's alpha based on standardised items	N of Items
.922	.926	6

Source: survey data (2020)

Table 4.16 Cronbach Alpha scores of each variable

	Scale Mean if item deleted	Scale Variance if item deleted	Corrected Item – Total correlation	Squared multiple correlation	Cronbach's alpha if item deleted
I have upgraded my Pay-TV subscription services in the last six months.	6.85	48.698	.767	.622	.910
I have cancelled my pay-TV subscription services in favour of OTT TV subscription	7.00	50.656	.802	.698	.908
I have downgraded my premium pay-TV subscription for a lower-priced package in favour of OTT TV services	6.80	48.264	.779	.679	.908
I have combined my pay-TV with OTT TV subscription	6.39	43.798	.774	.638	.912
Which OTT TV services have you combined your pay-TV subscription with?	6.51	45.689	.812	.708	.903
I would cancel my pay-TV subscription if	6.73	47.727	.776	.642	.908

Source: survey data (2020)

4.3.7 Summary of Section 2 – Consumer viewing – Pay-TV subscription services

- The majority of the respondents did not cancel their pay-TV subscription.
- The demographics of those who cancelled their pay-TV subscription were between the ages of 35 and 45 years, earning between R10,000.00 and R17,000.00 per month. High-income groups did not cancel their subscription services.
- The ability to choose their channels and availability of live sport on OTT TV platforms would prompt respondents to cancel their pay-TV subscription.
- The majority of the respondents did not downgrade their pay-TV subscription in favour of OTT TV services, and neither did they combine their pay-TV subscription with OTT TV services. For the remaining respondents confirmed to be cord-stackers, findings revealed that Showmax was the preferred OTT TV service provider for cord-stacking.

4.4 Section 3 – Consumer viewing behaviours – OTT TV subscription services

As indicated in Table 4.3, of the 391 respondents, 35.0% ($n=138$) indicated that they subscribed to OTT TV and FTA. Of the 138 respondents, 68.8% ($n=95$) were OTT TV service subscribers, and 31.1% ($n=43$) had a combination of OTT TV subscription and FTA services. Therefore, this section entails information about the impact OTT TV has on pay-TV subscription in terms of the cord-nevers phenomenon. Furthermore, it seeks to present the findings of Sub-Research Question 1 and 3, which sought to investigate if OTT TV services are a substitute for pay-TV subscription services and if first-time subscribers favour OTT TV services for the first-time subscription over pay-TV.

4.4.1 Cord-nevers

This question was asked to determine if first-time subscribers favour OTT TV services over pay-TV subscription services. Interestingly, summarised findings illustrated in Figure 4.14 revealed that 18.1% ($n=70$) of the studied population either disagreed or strongly disagreed with choosing OTT TV services for the first-time subscription, while 11.1% ($n=43$) strongly agreed or agreed to have chosen OTT TV services for the first-time subscription instead of a pay-TV subscription. These findings dispute MultiChoice's arguments which state that there is a significant increase in the number of consumers who see no need to subscribe to pay-TV services and therefore choose OTT TV services for the first-time subscription (ICASA, 2019b:49-50).

As illustrated in Table 4.17, from the perspective of the demographic characteristics, the majority ($n=18$) of the cord-nevers were between the ages of 18 and 24. These findings are consistent with Christenson (2017:16) and Harris (2015), who stated that the majority of the cord-nevers are within these age groups.

From the gender perspective, the majority ($n=26$) of the cord-nevers were male, as illustrated in Table 4.18. Most first-time subscribers who prefer OTT TV over pay-TV are significantly high in Gauteng ($n=16$), followed by the Western Cape ($n=13$), as illustrated in Table 4.19.

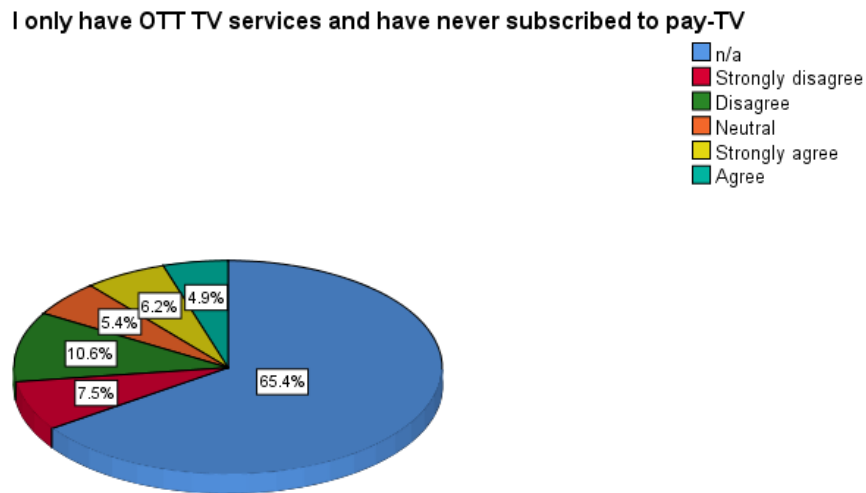


Figure 4.14 Cord-nevers
Source: survey data (2020)

Table 4.17 Cord-nevers by age

I only have OTT TV services and have never subscribed to pay-TV.

		n/a	Strongly disagree	Disagree	Neutral	Strongly agree	Agree	Total
My age is	18–24	25	2	5	0	17	1	50
	25–34	48	6	5	2	1	5	67
	35–45	88	12	20	9	3	9	141
	46–54	52	5	7	8	2	4	78
	55+	40	4	4	2	1	0	51

Source: survey data (2020)

Table 4.18 Cord-nevers by gender identification

		I identify as					Total
		Female	Male	Gender Fluid	Non-binary	Prefer not to say	
I only have OTT TV services and have never subscribed to pay-TV	n/a	90	158	2	0	3	253
	Strongly disagree	5	23	0	1	0	29
	Disagree	10	29	0	1	1	41
	Neutral	2	17	0	0	2	21
	Strongly agree	8	14	0	2	0	24
	Agree	6	12	0	0	1	19
Total		121	253	2	4	7	387

Source: survey data (2020)

Table 4.19 Cord-nevers by the province of residence

		I only have OTT TV services and have never subscribed to pay-TV						Total
		n/a	Strongly disagree	Disagree	Neutral	Strongly agree	Agree	
My province of residence	Eastern Cape	20	2	3	2	2	3	32
	Free State	14	2	3	2	0	1	22
	Gauteng	50	7	7	6	13	3	86
	KwaZulu-Natal	19	1	5	3	1	2	31
	Limpopo	7	1	0	0	1	0	9
	Mpumalanga	11	3	4	0	0	0	18
	North West	13	2	0	2	1	1	19
	Northern Cape	6	1	0	0	1	1	9
	Western Cape	113	10	19	6	5	8	161
Total		253	29	41	21	24	19	387

Source: survey data (2020)

4.4.2 Favoured OTT TV services by cord-nevers

This question was asked to answer Sub-Research Question 3, which further sought to investigate favoured OTT TV services by first-time subscribers. Of the cord-nevers, 20.5% prefer Netflix, as illustrated in the summarised findings in Figure 4.15. Amazon Prime Video was the least preferred OTT TV service provider by cord-nevers at 1.6%. Of the 138 respondents, 5.1% did not answer the question.

From the 4.6% who indicated they favoured other OTT TV services, an open-ended question was asked to probe other favoured OTT TV services.

The summarised findings are illustrated in Table 4.20 in no order. Interestingly, a significant number of respondents also indicated that they use all the OTT TV services listed in the questionnaire (Amazon Prime Video, Netflix, Showmax, and YouTube Premium).

If you have never subscribed to pay-TV and only subscribe to OTT TV services, which services do you subscribe to?

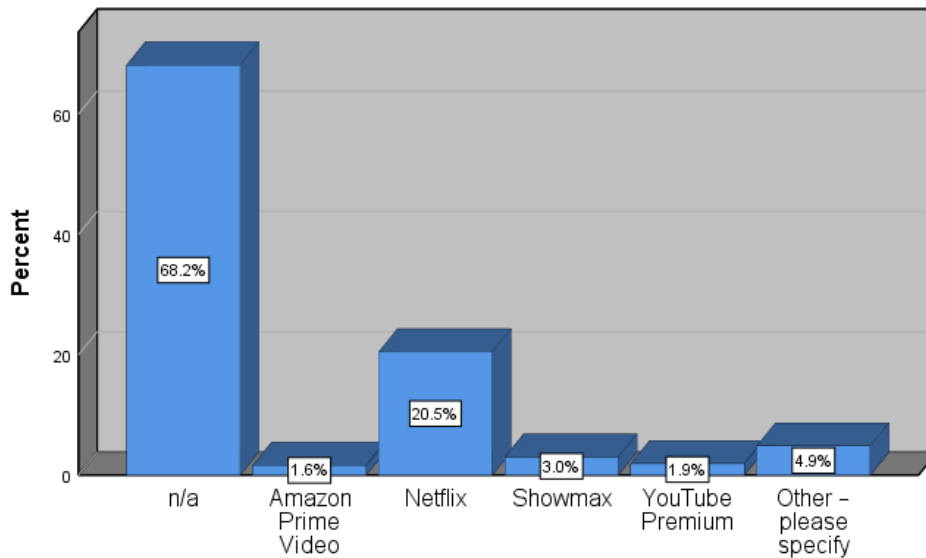


Figure 4.15 Favoured OTT TV services by cord-nevers
Source: survey data (2020)

Table 4.20 Other favoured OTT TV services by the cord-nevers

- Hulu
- Sling TV
- Expat Vision UK
- "I am using all of the services, as mentioned above."

Source: survey data (2020)

4.4.3 Reasons influencing cord-nevers to favour OTT TV over Pay-TV subscription services

This question was asked to determine what influences first-time subscribers to favour OTT TV over pay-TV subscription services. Summarised findings in Figure 4.16 reveal that although 13.2% of the respondents indicated that they had pay-TV previously, but had cancelled due to price, the main reason influencing first-timers to favour OTT TV over pay-TV subscription is the price of subscription fees at 7.8%. These findings are consistent with the findings of Daniels (2017:95), where the high cost of subscription fees was the reason the cord-nevers chose OTT TV services for the first-time subscription over pay-TV subscription. This study further revealed that 6.2% of the first-time subscribers opted for OTT TV services due to the availability of a variety of content provided by OTT TV service providers.

5.4% ($n=21$) did not answer this question. Other reasons influencing first-time subscribers to favour OTT TV over pay-TV are listed in Table 4.21 and include price, customer service, content, and the nature of the respondents' jobs, which involve travelling.

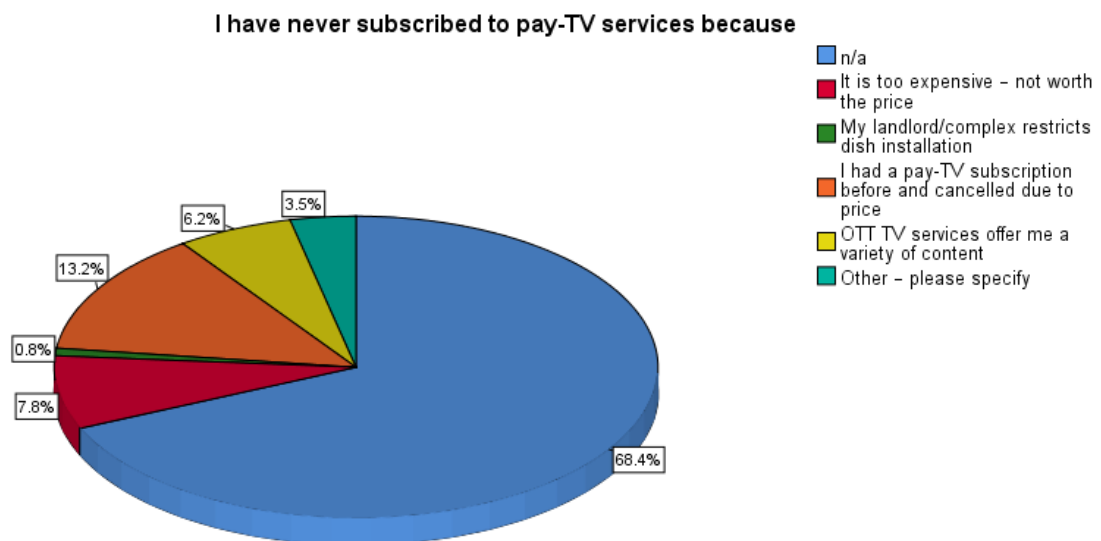


Figure 4.16 Reasons influencing first-time subscribers to favour OTT TV over pay-TV
Source: survey data (2020)

Table 4.21 Other reasons influencing first-time subscribers to favour OTT TV over pay-TV

- "Considering the price of data and subscription, I am still paying less. Also, I can use my laptop and data for multiple purposes compared to DStv, which needs a TV, decoder, etc."
- "DSTV plays the same movies and shows over and over again."
- "I move around a lot as a freelancer sometimes."
- "I never thought about subscribing to any pay-TV in the past."
- "Bad call service, unprofessional."

Source: survey data (2020)

4.4.4 Reliability

Table 4.22 illustrates the Cronbach coefficient score, which is above the recommended score; thus, these results suggest the reliability of the measurement. The three identified variables Cronbach alpha scores are illustrated in Table 4.23.

Table 4.22 Cronbach alpha reliability scores – Section 3

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.907	.909	3

Source: survey data (2020)

Table 4.23 Cronbach alpha scores of each variable

	Scale Mean if Deleted	Scale Variance if Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
I only have OTT TV services and have never subscribed to pay-TV.	1.60	6.895	.829	.689	.858
If you have never subscribed to pay-TV and only subscribe to OTT TV services, which services do you subscribe to?	1.71	8.083	.818	.671	.870
I have never subscribed to pay-TV services because	1.63	7.341	.808	.653	.873

Source: survey data (2020)

4.4.5 Summary of Section 3 – Consumer viewing habits – OTT TV subscription services

- Of the 138 respondents who indicated they use OTT TV services combined with FTA, 68.8% had OTT TV subscriptions.
- 18.1% of the respondents were not first-time OTT TV subscribers, and those who were first-time OTT TV subscribers were between the ages of 18 and 24 years. A significant reason for choosing OTT TV over pay-TV for a first-time subscription is the price and availability of a variety of content.
- Gauteng had the highest population of cord-nevers, followed by the Western Cape province.

- Netflix emerged as the preferred OTT TV subscription service by the cord-nevers.

4.5 Section 4 – Factors affecting television viewing behaviours

On the questionnaire, the factors affecting television viewing behaviours were split into two sections in order not to discourage or overwhelm respondents with many questions. This section measures the population's habits in terms of streaming, time spent online to consume TV content, internet access, binge watching, preference to stream, and favoured TV programmes. This section presents the findings of Sub-Research Question 2, which sought to ascertain factors affecting television viewing behaviours in South Africa.

4.5.1 Source of internet

The question was asked to determine internet penetration across the demographic characteristics and subscription preference. OTT TV platforms also require access to the Internet. Figure 4.17 reveals that 73.8% of the respondents access the Internet at home using Wi-Fi, followed by mobile data at 19.7%, and 0.8% of the respondents indicated that they access the Internet using Wi-Fi at school or university. Universities and schools were closed owing to the COVID-19 lockdown; this could have affected the percentage of respondents accessing the Internet at these institutions.

Summarised findings in Table 4.24 indicate that most DStv subscribers access the Internet using Wi-Fi at home ($n=148$), including mobile data ($n=51$). Of the 391 respondents, 0.3% did not answer the question. Further to this, consumers who only subscribe to OTT TV services access the Internet using Wi-Fi at home. The summarised findings illustrated in Table 4.25 further revealed that most of the respondents in the Western Cape ($n=110$) have Wi-Fi at home, followed by Gauteng ($n=73$).

I access the internet via

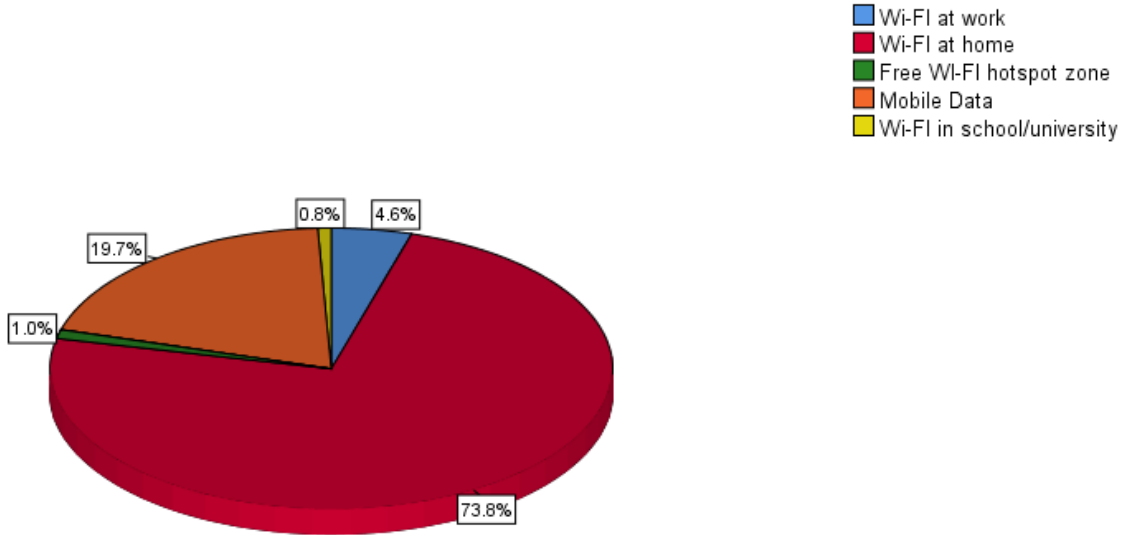


Figure 4.17 Source of internet access
Source: survey data (2020)

Table 4.24 Internet access by subscription type

I access the Internet via		I subscribe to					Total
		DStv	StarSat	I have free-to-air (FTA) – SABC, eTV, OVHD, etc.) & OTT TV services	I only have OTT TV services (Netflix, Showmax, etc.)	I use free/paid mobile apps to consume TV content	
Wi-Fi at work	12	1	1	2	2	18	
Wi-Fi at home	148	2	28	82	28	288	
Free Wi-Fi hotspot zone	4	0	0	0	0	4	
Mobile data	51	0	13	11	2	77	
Wi-Fi at school/university	0	0	1	0	2	3	
Total	215	3	43	95	34	390	

Source: survey data (2020)

Table 4.25 Internet access by the province of residence

		My province of residence									Total
		Eastern Cape	Free State	Gauteng	KwaZulu- Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	
I access the internet via	Wi-Fi at work	1	2	5	2	2	0	0	0	6	18
	Wi-Fi at home	25	15	73	25	5	15	15	5	110	288
	Free Wi-Fi hotspot zone	0	0	0	0	0	1	0	0	3	4
	Mobile data	6	5	8	5	1	2	4	4	42	77
	Wi-Fi at school/university	0	0	0	0	1	0	0	0	2	3
Total		32	22	86	32	9	18	19	9	163	390

Source: survey data (2020)

4.5.2 Streaming and downloading

The question was asked to determine if consumers are downloading more content to stream, especially those who confirmed having cancelled their pay-TV services in favour of OTT TV services. Summarised findings in Figure 4.18 reveal that 28.6% of respondents are now downloading and streaming more content than they did when they had a pay-TV subscription, while 13.4% only started downloading now that they do not have a pay-TV subscription. Of the 391 respondents, 4.3% did not answer the question. Furthermore, summarised findings in Table 4.26 indicate that those who cancelled their pay-TV subscription are streaming more content online now than they did when they had a pay-TV subscription. These results depict a trend in the streaming of TV content online.

Regarding downloading or streaming television content, this statement applies to me

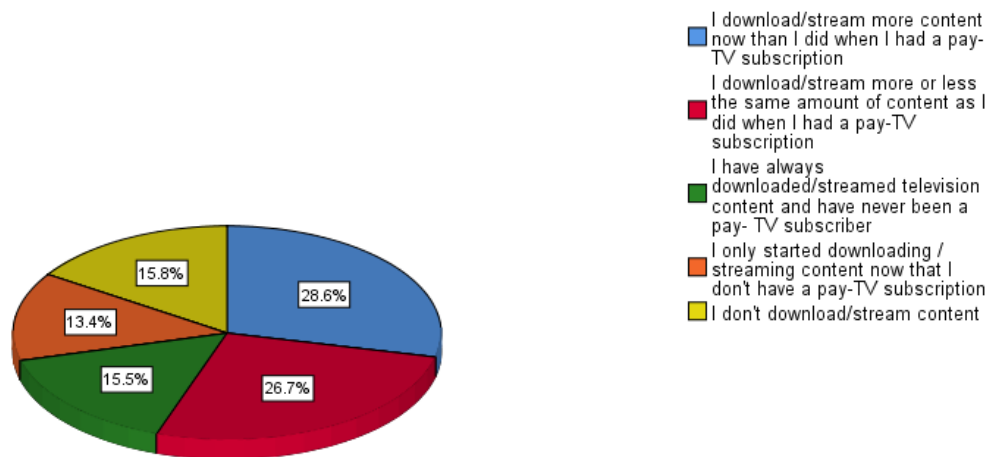


Figure 4.18 Streaming and downloading
Source: survey data (2020)

Table 4.26 Summarised findings revealing streaming after cord-cutting

Regarding downloading or streaming television content, this statement applies to me

		I download/stream more or less the same amount of content as I did when I had a pay-TV subscription.	I download/stream more or less the same amount of content as I did when I had a pay-TV subscription.	I have always downloaded/streamed television content and have never been a pay-TV subscriber.	I only started downloading/streaming content now that I don't have a pay-TV subscription.	I don't download/stream content.	Total
I have cancelled my pay-TV subscription services in favour of OTT TV subscription	n/a	56	26	42	35	7	166
	Strongly disagree	16	32	0	4	19	71
	Disagree	15	30	9	5	23	82
	Neutral	11	9	4	3	4	31
	Strongly agree	2	2	0	1	1	6
Agree	4	1	3	2	4	14	
Total		104	100	58	50	58	370

Source: survey data (2020)

4.5.3 Password sharing

This question was asked to establish if there is a behaviour of password sharing. The sharing of OTT TV services' passwords has an impact on subscription revenue for both pay-TV and OTT TV service providers as it translates to fewer subscribers. This has an impact on the distribution price of content and revenue from subscription fees. As illustrated in Figure 4.19, 45.1% ($n=166$) of the respondents either agreed, strongly agreed that they are sharing their OTT TV passwords with friends and family to consume TV content. Of the 391 respondents, 5.9% did not answer the question.

The findings reveal that those combining their pay-TV subscription with OTT TV services, mostly share their Showmax passwords with friends and family, as illustrated in Table 4.27. The cord-nevers, on the other hand, mostly share their Netflix passwords, as illustrated in Table 4.28.

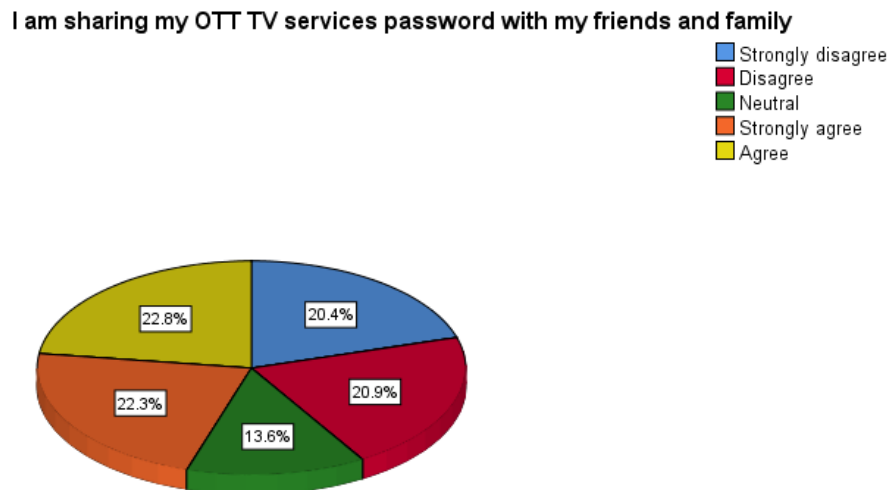


Figure 4.19 OTT TV password sharing
Source: survey data (2020)

Table 4.27 OTT TV password sharing by cord-stackers

		I share my OTT TV services password with my friends and family					Total
		Strongly disagree	Disagree	Neutral	Strongly agree	Agree	
Which OTT TV services have you combined your pay-TV subscription with?	n/a	35	29	25	45	32	
	Amazon Prime Video	0	1	0	0	1	2
	Netflix	12	11	9	12	23	67
	Showmax	15	12	6	21	17	71
	YouTube Premium	1	3	3	1	3	11
	Other – please specify	9	13	4	3	3	32
Total		72	69	47	82	79	349

Source: survey data (2020)

Table 4.28 OTT TV password sharing by cord-nevers

		I share my OTT TV services password with my friends and family					Total
		Strongly disagree	Disagree	Neutral	Strongly agree	Agree	
If you have never subscribed to pay-TV and only subscribe to OTT TV services, which services do you subscribe to?	n/a	48	53	32	48	54	
	Amazon Prime Video	0	0	1	3	2	6
	Netflix	19	12	8	19	17	75
	Showmax	2	2	2	1	2	9
	YouTube Premium	3	3	0	1	0	7
	Other – please specify	1	2	4	7	3	17
Total		73	72	47	79	78	349

Source: survey data (2020)

4.5.4 Hours spent consuming content online

Illustrated findings in Figure 4.20 depict time spent consuming content online. From the studied population, 3.3% ($n=13$) of the respondents did not answer the question. Of the respondents, 23.8% indicated that they spend more than five hours a day online consuming TV content, and this is in accordance with the literature reviewed where Elias (2019:22-23) noted that Americans are spending more than 60 hours a week online to consume TV content. A further 20.9% of the respondents indicated spending three hours online consuming TV content. Interestingly, 18.5% of the respondents indicated that they spend less than one hour and four hours, respectively. Summarised findings in Table 4.29 and Table 4.30 reveal that respondents between the ages of 35 and 45, including the males, spend over five hours a day online consuming TV content.

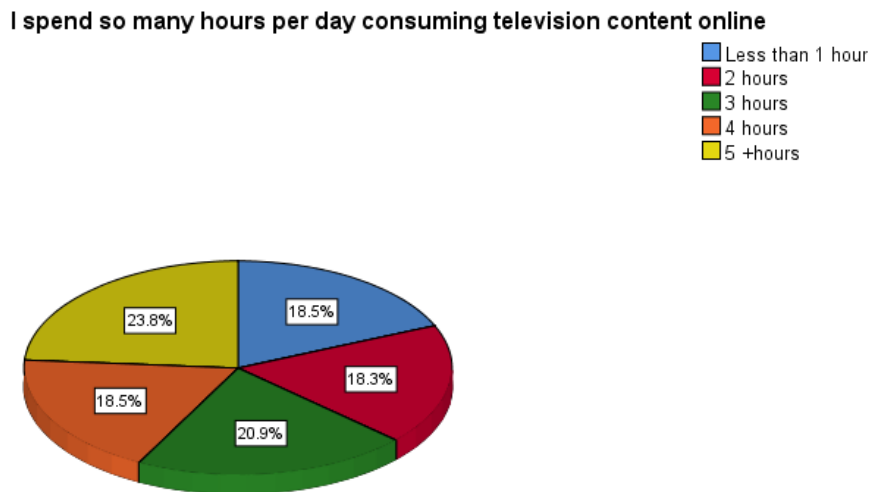


Figure 4.20 Hours spent online consuming television content
Source: survey data (2020)

Table 4.29 Online TV consumption by age

		My age is					Total
		18–24	25–34	35–45	46–54	55+	
I spend so many hours per day consuming television content online	Less than 1 hour	3	12	31	15	9	70
	2 hours	11	13	21	14	10	69
	3 hours	10	13	29	18	9	79
	4 hours	7	12	17	19	15	70
	5+ hours	17	16	40	12	5	90
Total		48	66	138	78	48	378

Source: survey data (2020)

Table 4.30 Online TV consumption by gender

		I identify as					Total
		Female	Male	Gender fluid	Non-binary	Prefer not to say	
I spend so many hours per day consuming television content online	Less than 1 hour	25	44	0	0	1	70
	2 hours	23	44	1	1	0	69
	3 hours	29	47	0	1	2	79
	4 hours	13	56	0	1	0	70
	5 + hours	24	62	0	1	3	90
Total		114	253	1	4	6	378

Source: survey data (2020)

4.5.5 Binge watching

The question was asked to establish the magnitude of binge watching in South Africa, which is to ascertain the percentage of the population that watches over one episode of a series at once instead of consuming scheduled content on linear TV. Of the respondents, 62.20% ($n=237$) either strongly agreed or agreed with binge watching, as illustrated in Figure 4.21. These findings corroborate those of Nielsen (2016) and Schouw (2018:36), who concur that a significant number of TV consumers binge watch. Further to this, these findings are consistent with consumers' need to satisfy the desired gratification to escape, unwind and indulge in their favourite TV content after a long, stressful day to relax and clear their minds as the majority of the respondents were from the prime working group (Pittman & Sheehan, 2015).

Of the 391 respondents, 2.1% did not answer the question.

Table 4.31 illustrates that the binge-watching phenomenon is prevalent across all the age groups participating in the study. Most of the respondents whose source of internet is Wi-Fi at home ($n=180$) were the highest binge watchers, followed by those who use mobile data ($n=45$), as demonstrated in Table 4.32. Therefore, the availability of broadband data influences TV consumption using OTT TV services, including binge watching.

I binge watch, (that is watching different episodes of a program at one go)

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

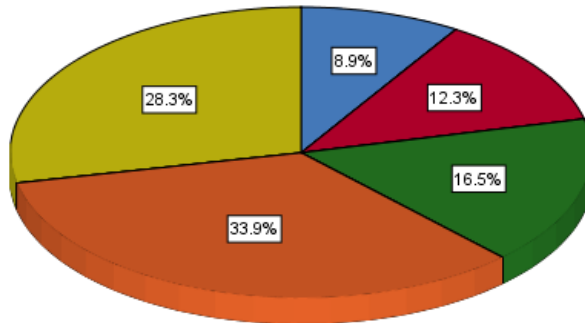


Figure 4.21 Binge watching
Source: survey data (2020)

Table 4.31 Binge watching by age

		My age is					Total
		18–24	25–34	35–45	46–54	55+	
I binge watch (that is, watching different episodes of a programme at one go)	Strongly disagree	4	3	11	10	6	34
	Disagree	1	6	16	14	10	47
	Neutral	3	10	26	12	12	63
	Strongly agree	37	20	44	23	5	129
	Agree	5	25	42	20	16	108
Total		50	64	139	79	49	381

Source: survey data (2020)

Table 4.32 Binge watching via the Internet

		I access the Internet via					Total
		Wi-Fi at work	Wi-Fi at home	Free Wi-Fi hotspot zone	Mobile data	Wi-Fi at school/university	
I binge watch (that is, watching different episodes of a programme at one go)	Strongly disagree	2	23	0	9	0	34
	Disagree	2	30	2	13	0	47
	Neutral	3	50	0	9	1	63
	Strongly agree	8	95	0	24	2	129
	Agree	1	85	1	21	0	108
Total		16	283	3	76	3	381

Source: survey data (2020)

4.5.6 Preference to stream online

The question was asked to establish if the respondents preferred to stream TV content instead of using linear TV. Summarised findings in Figure 4.22 reveal that 60.1% respondents ($n=231$) either agreed strongly or agreed that they prefer to stream TV content online. A low 7.3% ($n=28$) strongly disagreed, while 11.7% ($n=45$) disagreed. Of the 391 respondents, 1.5% did not answer the question. Most respondents who only have OTT TV services strongly agreed ($n=43$) that they prefer to stream online, followed by DStv subscribers ($n=39$), as illustrated in Table 4.33.

From the perspective of the demographic characteristics, the age groups between 18 and 24 years ($n=34$) strongly agreed that they prefer to stream, followed by ages between 35 and 45 years ($n=32$), while only $n=7$ of the age group of 55+ indicated streaming preference over linear TV as demonstrated in Table 4.34. In addition to this, a significant number of respondents who identified as male indicated a preference to stream instead of using linear television ($n=77$), as illustrated in Table 4.35. Therefore, millennials prefer to stream content online, depicting the future of TV consumption in South Africa, considering that the majority of the population is within this age demarcation.

I prefer to stream content online

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

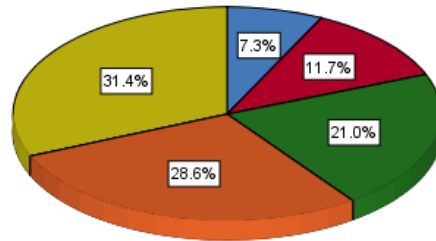


Figure 4.22 Preference to stream
Source: survey data (2020)

Table 4.33 Streaming preference by age

		My age is					Total
		18–24	25–34	35–45	46–54	55+	
I prefer to stream content online.	Strongly disagree	4	8	4	6	6	28
	Disagree	2	8	21	5	9	45
	Neutral	6	20	27	17	11	81
	Strongly agree	34	16	32	21	7	110
	Agree	4	15	56	30	16	121
Total		50	67	140	79	49	385

Source: survey data (2020)

Table 4.34 Streaming preference by gender

		I identify as					Total
		Female	Male	Gender fluid	Non-binary	Prefer not to say	
I prefer to stream content online.	Strongly disagree	13	15	0	0	0	28
	Disagree	12	31	0	0	2	45
	Neutral	35	44	0	0	2	81
	Strongly agree	29	77	1	2	1	110
	Agree	30	87	0	2	2	121
Total		119	254	1	4	7	385

Source: survey data (2020)

Table 4.35 Streaming preference by subscription type

		I subscribe to					Total
		DStv	StarSat	I have free-to-air (FTA – SABC, eTV, OVHD, etc.) & OTT TV services	I only have OTT TV services (Netflix, Showmax, etc.)	I use free/paid mobile apps to consume TV content	
I prefer to stream content online.	Strongly disagree	24	0	2	2	0	28
	Disagree	37	0	4	4	0	45
	Neutral	58	2	7	4	10	81
	Strongly agree	39	0	12	43	16	110
	Agree	52	1	18	42	8	121
Total		210	3	43	95	34	385

Source: survey data (2020)

4.5.7 Favourite TV programme

This question was asked to establish the preference of local content versus international content. Although most of the respondents indicated favouring 'other TV programmes', local TV programmes were the most favoured programmes with *Gomora – Ivili liya jika* at 13.7%, followed by *Still Breathing* at 7.7% as illustrated in Figure 4.23. Of the 391 respondents, 3.1% did not answer the question.

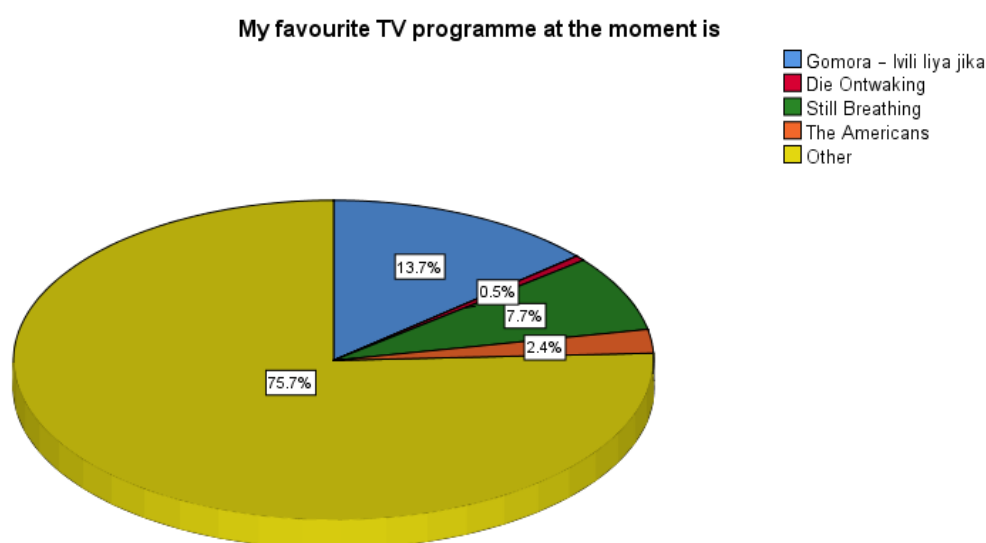


Figure 4.23 Favourite TV programme

Source: survey data (2020)

4.5.8 Summary of Section 4 – Factors affecting television viewing behaviour

- The majority of the respondents' source of internet is through Wi-Fi at home.
- Of the respondents, 28.6% download more content now than they did when they had a pay-TV subscription.
- The sharing of OTT TV passwords with family and friends is prevalent among respondents, especially for Showmax subscribers.
- Of the respondents, 23.8% spend more than five hours online consuming TV content, especially those aged between 35 and 45 years and who identify as male.
- The majority of the respondents across all age groups are binge watching, especially those with Wi-Fi at home.
- Streaming online is preferred to linear TV by most respondents, especially those aged between 18 and 24 years and who identify as male.
- *Gomora – ivili liyijika* is the most popular TV programme at present.

The findings in this section corroborate Elias (2019:22-23), who state that consumers are spending more time online consuming, streaming and downloading TV content.

4.6 Section 5 – Device adoption

This section presents the findings of Sub-Research Question 4, which sought to ascertain changes in device adoption for TV consumption due to the rapid growth of connected devices such as smartphones, smart TVs, and streaming devices. Two questions on the adoption of devices and streaming devices were asked.

4.6.1 Devices

The smart TV is the preferred device for 43.8% of the studied population. This is contrary to the findings of ICASA (2019a:39) that 95% of the population use a mobile phone, and 82% prefer a TV set for TV consumption. Furthermore, this finding is consistent with Mikos (2016:156), who revealed that a TV is the preferred mode of TV consumption because consumers still prefer a larger screen for viewing. Of the respondents, 26.0% indicated that they use a smartphone to consume TV content, while a low 4.0% favour a tablet for TV consumption, as illustrated in Figure 4.24. Of the 391 respondents, 3.6% did not answer the question.

From the demographic perspective, as illustrated in Table 4.36, the study revealed that the smart TV is the most favoured device of respondents between the ages of 35 and 45 years ($n=72$), followed by those between 46 and 54 years ($n=49$) and 55+ ($n=31$).

The laptop is the preferred device for TV consumption for those between 35 and 45 years ($n=25$), 18 and 24 years ($n=15$) and 25 and 34 years ($n=14$). The tablet is preferred by those aged 55+ and from 35 to 45 years. The smartphone is the most preferred device for ages 34 to 45 years ($n=35$), followed by 18 to 24 years ($n=24$) and ages between 25 and 34 years ($n=23$).

Lastly, although not significant, the desktop was preferred by ages between 46 and 54 years ($n=5$). These findings corroborate other studies indicating that age groups between 18 and 24 years prefer smart TVs, laptops, tablets, and smartphones, while those aged 55+ prefer smart TVs (Daniels, 2017:49; McNally & Harrington, 2017:35).

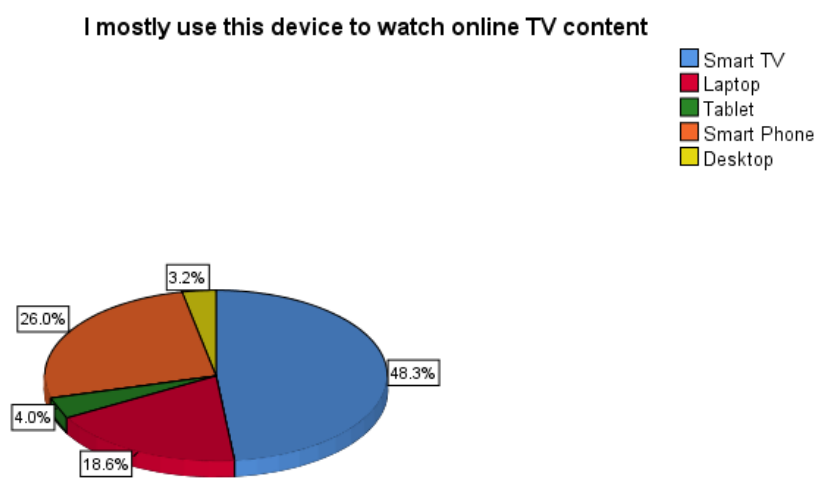


Figure 4.24 Adopted devices for TV consumption
Source: survey data (2020)

Table 4.36 Adopted devices for TV consumption by age

		My age is					Total
		18–24	25–34	35–45	46–54	55+	
I mostly use this device to watch online TV content	Smart TV	8	22	72	49	31	182
	Laptop	15	14	25	8	8	70
	Tablet	1	3	4	3	4	15
	Smart Phone	24	23	35	13	3	98
	Desktop	1	2	2	5	2	12
Total		49	64	138	78	48	377

Source: survey data (2020)

4.6.2 Streaming device

Of the respondents, 67.4% indicated that they use other streaming devices, as indicated in the open-ended questions shown in Table 4.37. Further to this, the Apple TV emerged as the most favoured device, as indicated by 11.2% of the respondents, followed by Xiaomi Mi Box S at 11.0%, as illustrated in Figure 4.25. Of the 391 respondents, 11.3% did not answer the question. These results were, therefore, not generalisable as more than 10% of the respondents did not answer the question.

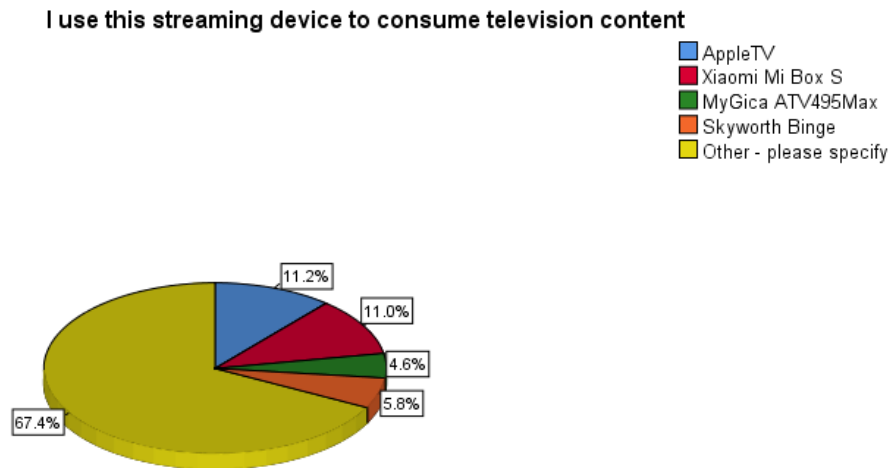


Figure 4.25 Preferred streaming devices
Source: survey data (2020)

Table 4.37 Other preferred streaming devices

- Amazon Fire TV
- Android TV box
- PS4
- Roku
- Google Chromecast

Source: survey data (2020)

4.6.3 Summary of Section 5 – Device adoption

- Smart TV is the most preferred TV consumption device by 48.3% of the respondents between the ages of 35 and 45 years.
- The Apple TV streaming device emerged as the preferred device for streaming, followed by Xiaomi Mi Box X.

4.7 Section 6 – Alternative TV consumption platforms

This section presents findings of Sub-Research Question 7, which sought to investigate if consumers are not migrating to OTT TV services, where and how they are consuming TV content. Furthermore, this section sought to ascertain alternative means of TV content consumption for those not migrating, substituting, or combining their pay-TV subscription with OTT TV services.

4.7.1 Social media platforms

Summarised findings in Figure 4.26 reveal that none of the respondents uses Twitter for TV consumption. The study revealed that a large majority (63.8%) use YouTube for online content consumption as an alternative to OTT TV services and pay-TV. These results indicate the dominance of YouTube and its position as the most extensive application for music and video consumption in South Africa (SimilarWeb, 2020).

The least used social media platform for online TV consumption is Instagram at 1.3%. Of the 391 respondents, 3.8% did not answer this question. For the 24.2% of the respondents who indicated using other platforms to consume online content, an open-ended question was asked to establish the preferred platforms; these are illustrated in Table 4.38. Furthermore, summarised findings in Table 4.39 revealed that the majority ($n=54$) of those not combining their pay-TV services use YouTube as opposed to OTT TV platforms.

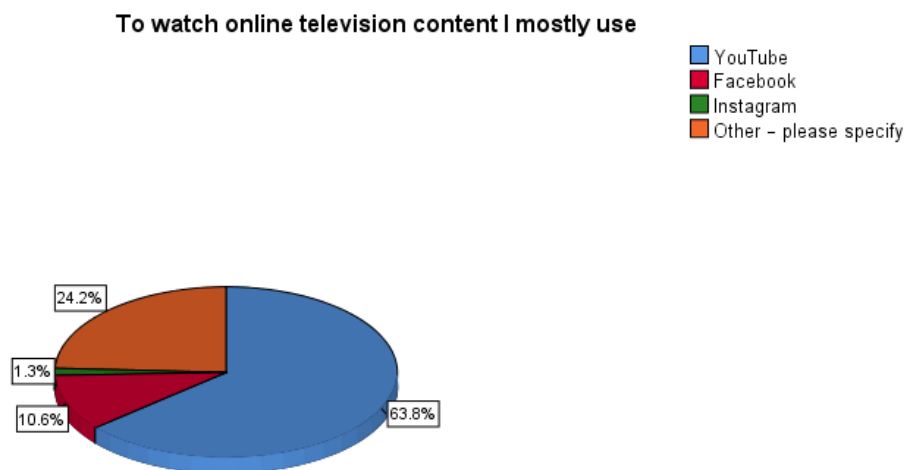


Figure 4.26 Social media platforms for online TV consumption
Source: survey data (2020)

Table 4.38 Other alternative platforms for online TV consumption

Live TV apps
 BeeTV
 Mass online
 Streaming websites

Source: survey data (2020)

Table 4.39 Social media platforms for TV consumption by cord-stackers

I have combined my pay-TV with OTT TV subscription.

		n/a	Strongly disagree	Disagree	Neutral	Strongly agree	Agree	Total
To watch online television content, I mostly use	YouTube	100	18	34	16	30	37	235
	Facebook	16	6	9	4	4	1	40
	Instagram	3	0	0	0	2	0	5
	Other – please specify	51	7	11	4	5	13	91
Total		170	31	54	24	41	51	371

Source: survey data (2020)

4.7.2 Other alternative platforms for non-pay-TV and OTT TV platforms

This question was asked to ascertain how those who no longer have a pay-TV and OTT TV subscription are currently consuming television content. Findings in Figure 4.27 indicate that 36.7% of the respondents use FTA services to consume TV content, while 21.1% use social media applications. Further to this, 17.4% of the respondents indicated that they use family members' OTT TV logon credentials to consume TV content, while 13.8% use illegal streaming platforms to consume content. This is consistent with the findings of Schouw (2018:29), who indicated that consumers illegally stream content that is not available on their OTT or pay-TV services.

If you no longer have Pay-TV subscription services, and do not have OTT TV services, how are you watching TV now?

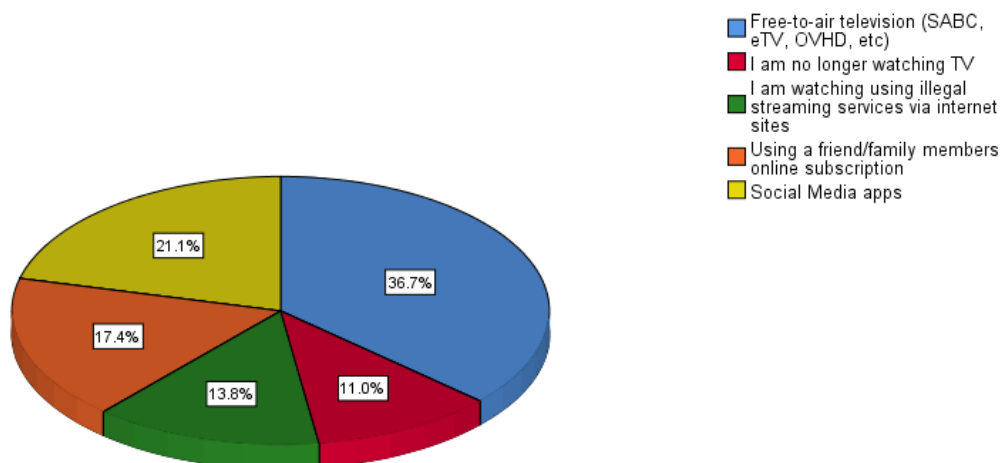


Figure 4.27 Alternative TV viewing platforms for non-pay-TV and OTT TV services
Source: survey data (2020)

4.7.3 Summary of Section 6 – Alternative TV consumption platforms

- Of the respondents, 63.8% prefer YouTube as an alternative to OTT TV services for online TV consumption.
- FTA is the most widely used method of TV viewing by non-pay-TV and OTT TV subscribers.

4.8 Section 7 – Decision determinants influencing migration to OTT TV services

This section presents the findings of Sub-Research Question 8, which sought to ascertain decision determinants that influence consumers to migrate from pay-TV subscription services to OTT TV services. Furthermore, the questions sought to ascertain if price, content, convenience, ease of use, and advertisements are determinants to migrate from pay-TV to OTT TV services.

4.8.1 Reasons for OTT TV preference over pay-TV

Summarised findings in Figure 4.28 indicate that for 45.6% of the respondents, convenience is the main reason for migrating from pay-TV to OTT TV. These findings concur with the literature reviewed as indicated by Chen (2017:20) and Rono and Mugeni (2019:42), who notes that consumers use products out of convenience and as enabled by OTT TV operators. A further 24.9% of the respondents indicated price as the determinant for choosing OTT TV services over a pay-TV subscription service.

Of the 391 respondents, 10.7% did not answer the question. The researcher felt that these findings were critical, and the reason for the non-response could be that these questions were towards the end of the questionnaire, when the respondents may have been tired of completing the questionnaire as it took approximately 10 minutes.

From the perspective of demographics, Table 4.40 indicates the following:

- Age groups between 18 and 24 years and 55+ agreed that the top three reasons for migration were convenience, fresh quality content, and price.
- For the age groups between 25 and 34 years, convenience, price, and ease of finding new programmes were the primary reasons for migration.
- The 35–45-year-olds, as well as the 46–54-year-olds, agreed that convenience, price, and lack of advertising were the top three reasons for migration.

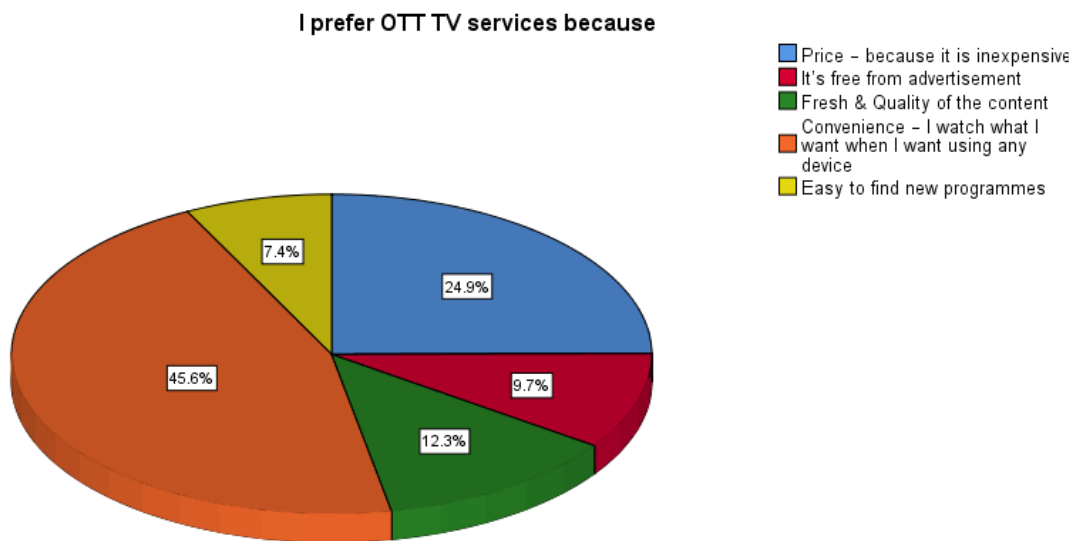


Figure 4.28 Reasons for OTT TV preference over pay-TV
Source: survey data (2020)

Table 4.40 OTT TV preference over pay-TV by age

		My age is					Total
		18–24	25–34	35–45	46–54	55+	
I prefer OTT TV services because	Price – because it is inexpensive	7	12	35	21	12	87
	It's free from advertisements	3	7	14	7	3	34
	Fresh & quality of the content	13	8	13	5	4	43
	Convenience – I watch what I want when I want, using any device	20	22	58	38	21	159
	Easy to find new programmes	2	9	10	3	2	26
Total		45	58	130	74	42	349

Source: survey data (2020)

4.8.2 Customer service as a determinant

The question was asked to determine if the level of customer service received influenced migration from pay-TV to OTT TV. Surprisingly, Lee, Nagpal et al. (2018) stated that poor customer service influences the decision to abandon pay-TV services for OTT TV services, and the current study revealed that 36.0% ($n=129$) of the respondents were undecided whether customer service influenced migration from pay-TV to OTT TV services, as illustrated in Figure 4.29. However, the remaining 34.4% ($n=123$) either agreed or strongly agreed, that customer service would influence their decision to migrate from pay-TV to OTT TV. Of the 391 respondents, 8.4% ($n=33$) did not answer the question. Findings shown in Table 4.41 indicate that of those who cancelled pay-TV in favour of OTT TV, customer service was the primary reason for cancellation.

Summarised findings in Table 4.42 indicate that respondents between the ages of 35 and 45 years ($n=53$) indicated that customer service would influence them to migrate from pay-TV to OTT TV services. Similarly, in the age group of 46 to 54 years, ($n=34$) indicated that customer service would influence their migration.

Customer service experience influences my decision to migrate from pay-TV to OTT TV platforms

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

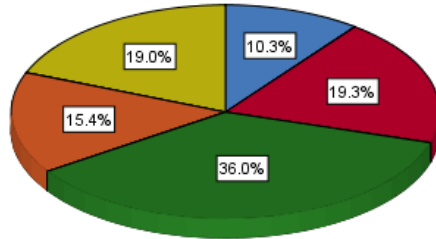


Figure 4.29 Customer service as the reason for migration from pay-TV to OTT TV
Source: survey data (2020)

Table 4.41 Customer service determinant by cord-cutter comparison

I have cancelled my pay-TV subscription services in favour of OTT TV subscription.

		n/a	Strongly disagree	Disagree	Neutral	Strongly agree	Agree	Total
Customer service experience influences my decision to migrate from pay-TV to OTT TV platforms	Strongly disagree	14	16	6	0	0	1	37
	Disagree	26	10	26	3	1	2	68
	Neutral	65	23	19	21	0	1	129
	Strongly agree	28	9	11	3	3	1	55
	Agree	30	10	14	3	2	8	67
Total		163	68	76	30	6	13	356

Source: survey data (2020)

Table 4.42 Customer service determinant by age comparison

		My age is					Total
		18–24	25–34	35–45	46–54	55+	
Customer service experience influences my decision to migrate from pay-TV to OTT TV platforms	Strongly disagree	8	7	11	7	4	37
	Disagree	11	15	22	9	12	69
	Neutral	18	23	48	24	16	129
	Strongly agree	5	4	21	17	8	55
	Agree	3	14	32	17	2	68
Total		45	63	134	74	42	358

Source: survey data (2020)

4.8.3 Original local content as a determinant

This question was asked to determine if original local content, more especially in the language understood by citizens, was one of the drivers influencing the adoption of OTT TV services. Rono and Mugeni (2019:39) argue that content in the language understood influences the adoption of OTT TV platforms. Summarised findings in Figure 4.30 reveal that 44.9% ($n=169$) of the respondents either agreed or strongly agreed that original local content was essential to them, while 27.9% ($n=105$) were undecided. Of the 391 respondents, 3.6% ($n=14$) did not answer the question.

Furthermore, summarised findings in Table 4.43 illustrate that for those who cancelled their pay-TV subscription in favour of OTT TV ($n=9$), original local content was important.

Original local content is important to me

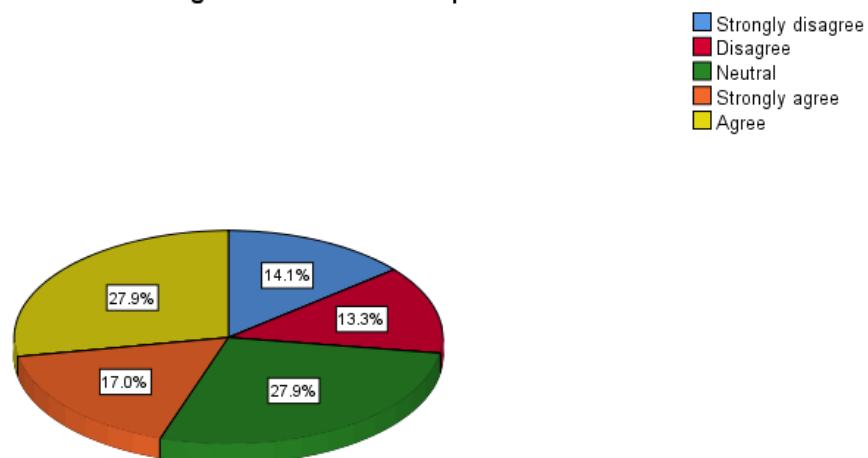


Figure 4.30 Original local content as a determinant
Source: survey data (2020)

Table 4.43 Original content importance by cord-cutters comparison

		I have cancelled my pay-TV subscription services in favour of OTT TV subscription.						
		n/a	Strongly disagree	Disagree	Neutral	Strongly agree	Agree	Total
Original local content is important to me.	Strongly disagree	27	11	5	4	2	2	51
	Disagree	29	5	8	4	2	2	50
	Neutral	52	18	18	14	0	2	104
	Strongly agree	17	22	18	5	0	1	63
	Agree	42	16	35	4	2	6	105
Total		167	72	84	31	6	13	373

Source: survey data (2020)

4.8.4 Summary of Section 7 – Decision determinants influencing migration to OTT TV services

- The study revealed that convenience and price are significant reasons for migrating from pay-TV to OTT TV services.
- The majority of respondents were unsure of customer service as an influence to migrate to OTT TV services, while 34.4% indicated they would migrate because of customer service. Customer service was important for the studied population between the ages of 35 and 45 years.
- Of the respondents, 44.9% indicated that access to original local content influenced the decision to migrate from pay-TV to OTT TV services.

4.9 Section 8 – General

This section presents the findings of the open-ended questions posed to the respondents regarding their opinions on pay-TV versus OTT TV subscription. The respondents were further asked to provide suggestions on what they thought pay-TV operators could do to compete with OTT TV operators and retain existing customers. The top ten comments were selected from each question, based on common themes.

4.9.1 Opinions on OTT TV versus pay-TV

One hundred and seventy-eight open-ended answers were obtained from the questionnaire, and the researcher selected the top ten answers based on the common themes. Table 4.44 illustrates opinions provided by the respondents on the state of OTT TV versus pay-TV in South Africa.

Table 4.44 Open-ended questions for opinions on pay-TV versus OTT TV

Is there anything that you would like to contribute to this study (your opinions on pay-TV vs OTT TV)?	
•	In a world with so much online content, mostly free, people cannot find the time to stay loyal to one subscription. So if a subscription is not cutting it for them, they will tend to cancel that subscription for something better, more comfortable, and cheaper. Pay-TV has to become dynamic in delivering its services to clients to match the changing times. I do not watch much TV because I think it is expensive, and half of the time I spend at work anyway, so I took out the cheapest package so that I can watch the Home channel on weekends or after work. I mostly watch content on YouTube and Instagram because there is a wide variety of content, and I can choose to follow the kind I like.
•	Pay-TV must come up with more fresh content.
•	I prefer my pay-TV service. I can watch it when I have time.
•	Pay-TV in SA has a plus ten-year life span, if not more. There is still much work do to strengthen the internet spectrum before we can write it off. OTT is still mainly consumed by people in affluent residential areas and not all but at most 50%. OTT lacks a lot in terms of local content.
•	Pay-TV offers a simplified viewing experience without having to go through hundreds of titles before deciding what content to consume.
•	Affordability and the perception of value for money is a huge factor. Most live sport is still not available on OTT TV yet.
•	Because of technology's fast internet, fibre and Wi-Fi, and also platforms where I have the freedom to watch what I want at any given time, has caused people to switch. I was not happy with the DStv payment system, especially when one decided to reactivate one's account. If it comes to fibre, I pay less to watch an unlimited number of films, and payment is month to month. Fibre is reasonably affordable, and I have access to Wi-Fi with all my electronic devices.
•	Pay-TV is a better option as you can move between bouquets based on your budget, whereas OTT does not have that option. Customer service is zero to none on OTT, for their existing subscribers.
•	I have not had exposure to OTT TV, and therefore fear that it will be expensive to use, as I do not have uncapped Wi-Fi at home.
•	Now that I get more out of my data subscription with my cellphone provider, I consume more content online. However, there are programmes that I would like on DStv, which are not available on my Netflix. If DStv can have a cheaper option with engaging content than what Showmax is offering, I would subscribe.

Source: survey data (2020)

5.11.1.1 Summary of respondent's opinions

- The majority of the respondents agree that convenience is the driving force when choosing between OTT TV and pay-TV subscription services.
- Owing to the availability of content on social media applications such as YouTube, the respondents note that TV is consumed using these alternatives.
- OTT TV is perceived to be the product of the rich in affluent areas owing to expensive broadband data. Further to this, those with broadband fibre prefer OTT TV services as they get more out of their data subscription.
- Ease of use and the ability to switch subscription packages with pay-TV service providers are perceived as advantages.

- Lastly, the unavailability of sport on OTT TV services discourages consumers from migrating from pay-TV to OTT TV subscription services.

4.9.2 Suggestions for pay-TV to compete and retain customers

The number of responses to this question was 233, and the researcher chose ten answers based on the common themes. Table 4.45 presents suggestions provided by the respondents on what pay-TV operators can do to compete and retain existing customers.

Table 4.45 Suggestions for pay-TV operators to compete with OTT TV operators and retain customers

What do you think pay-TV service providers can do to retain customers and compete with OTT TV platforms?
<ul style="list-style-type: none"> • Exclusive content to premium subscribers.
<ul style="list-style-type: none"> • Give the customers the freedom to compile their packages by choosing shows of their liking, compared to offering fixed packages. People tend to keep their subscriptions if they are getting what they want from a package.
<ul style="list-style-type: none"> • If pay-TV providers can combine their services with an internet subscription available to their customers @ no extra cost, that might help to retain customers.
<ul style="list-style-type: none"> • The government should subsidise some packages on pay-TV for lower-income households.
<ul style="list-style-type: none"> • Partner with the likes of YouTube and have stand-alone online streaming services.
<ul style="list-style-type: none"> • Pay-TV already has a great benefit, and that is existing customers, so the best way to keep them is to provide new content and let the older stuff go to a dedicated channel, especially for someone who wants to watch an old movie; new content will have to attract new customers. I know the red tape binds pay-TV to show specific stuff over and over again, and yes it is not old if you have not seen it yet, but amongst that there is a lot that has seen it, and the repeats are the leading cause why clients just do not bother with pay-TV anymore. If data rates can fall or one can get a great deal with a data contract, that will be the downfall of pay-TV, even though it is far down the road, it is possible. Pay-TV is losing great clients because of content not fresh enough, and if new content is available, it is not in the cheaper price range.
<ul style="list-style-type: none"> • Local production is a good idea and so also local reality TV. DStv decoder should become a streaming device that is user friendly so that there is no need for any other streaming device in my home. Fight for better legislation that protects South African pay-TV better and tax or make it difficult for overseas companies to just do business here without investing in the people of South Africa.
<ul style="list-style-type: none"> • Repackage their service to include Netflix as they have done with Showmax but at a lesser price and upgrade their decoders to be flexible or customise them to connect to Wi-Fi to stream OTT.
<ul style="list-style-type: none"> • They must cater to new markets; our youth want things online and cheap.
<ul style="list-style-type: none"> • To be honest, taking into account the prices of reliable internet around R800 a month, it is still cheaper to pay for pay-TV ... Reality is as their customer base increases, they will have to find ways to increase; their income to upgrade their infrastructure to keep their services cheaper. Look at YouTube; you cannot even watch some videos without ads in the middle. Alternatively, you must pay to join the premium package to get rid of the ads; the same will happen soon with streaming services. If pay-TV goes down to streaming, where will ads move to? Is it logical?

Source: survey data (2020)

5.11.3.1 Summary of respondents' suggestions

- The majority of the respondents suggested that pay-TV operators should consider enabling consumers to package their channels according to their interests and pay for selected channels accordingly.
- Bundling of broadband data services with pay-TV subscription services would play a significant role in customer retention, especially if discounts are offered to pay-TV subscribers.
- There should be partnerships with other OTT TV service providers to give pay-TV subscribers special discounts. Further to this, it was suggested by the majority of the respondents that a stand-alone streaming device should be considered by pay-TV operators to enable consumers to switch seamlessly from pay-TV subscription to OTT TV.
- Legislation of OTT TV service providers is suggested to protect South African pay-TV operators' sustainability.

4.10 Conclusion

The research study's findings were presented, discussed, and analysed according to the structure of the online survey questionnaire from the 391 respondents who participated. The main objective of this research investigation was to ascertain the impact that OTT TV services have on traditional pay-TV services in South Africa.

The next chapter draws conclusions from the study's findings, and recommendations are provided.

CHAPTER FIVE CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The previous chapter presented and discussed the findings of the research study's results. This chapter concludes with a final discussion of the findings correlated with the study's research objectives. Conclusions drawn from the findings are provided, and recommendations are made based on the conclusions of the study. The chapter ends with suggestions for future research.

5.2 Main findings per the study's research objectives

As revealed in the literature, there is a relationship between the adoption of OTT TV services and the subscription base of traditional TV services; however, this is not clear in South Africa owing to a lack of credible evidence. A scientific investigation of the impact OTT TV services have on pay-TV subscription services in South Africa thus was conducted to enable regulatory bodies to make informed decisions on the real impact for governance, including policy formulation.

This section discusses the study's findings by linking them to the literature reviewed and according to the study's research objectives. The study's main objective was to ascertain the impact that OTT TV services have on traditional pay-TV services in South Africa. Sub-research objectives were developed and broken down into six sub-objectives to achieve the study's primary objective.

5.2.1 Sub-Research Objective 1

To investigate if OTT TV services are a substitute for or complementary to traditional pay-TV services in South Africa.

Globally, consumers are increasingly cord-cutting, cord-shaving, and cord-stacking, and there is an increase of rising first-time subscribers who favour OTT TV subscription over pay-TV (Kim et al., 2016:711; Elias, 2019:16). The sections below summarise Sub-Research Objective 1 findings:

5.2.1.1 Cord-cutting phenomenon

- Contrary to what is happening globally, as noted in the literature reviewed, the research revealed that the majority of the studied population did not cancel their pay-TV subscription in favour of OTT TV services. This finding is also supported by one of the respondents, who, in the open-ended questions, noted that "pay-TV has a +-10 year-life span if not more, as there is still much work to be done to strengthen the internet spectrum".
- The cord-cutting phenomenon is low, owing to pay-TV operators such as DStv that combine their subscription offering with OTT TV services such as Showmax as a value-add service for premium subscribers, which corroborates the findings by Park (2017:29).
- The majority of cord-cutters are between the ages of 35 and 45.
- A majority of the respondents indicated that they would cancel their subscription services if they could choose their channels.
- The majority of cord-cutters were low-income groups, indicating affordability as the reason for choosing OTT TV services over pay-TV subscription.
- New findings were that respondents indicated they would cut the cord if pay-TV operators cancelled or stopped favourite TV content.

5.2.1.2 Cord-nevers

- The study's findings revealed that most of the respondents did not choose OTT TV services for the first-time subscription over pay-TV.
- Although the phenomenon is low, cord-nevers are between the ages of 18 and 24. The reason for choosing OTT TV services for a first-time subscription is due to the cost of subscription fees.

- It is considered cheaper to have OTT TV, considering that the combined cost of data and OTT TV subscriptions is still lower than a pay-TV subscription. Furthermore, data can be used for other purposes, and more than one person can use the OTT TV services with a smartphone as opposed to having to buy another setup box and incur installation costs for additional viewing, including access fees.
- Work that entails extensive travel influences the decision to choose OTT TV over pay-TV for first-time subscription.

Although OTT TV is on the upside globally, in South Africa it is still at the penetration level; thus, pay-TV continues to rise, although this may change in a few years as data costs continue to decrease.

5.2.1.3 Cord-shaving

- The cord-shaving phenomenon in South Africa is small and lower than in countries like the UK and US, where pay-TV subscribers have downgraded their premium services and complemented them with OTT TV.
- The high-earning income groups downgraded their premium pay-TV packages for lower packages and complemented them with OTT TV services.

5.2.1.4 Cord-stacking

- Most respondents do not combine their pay-TV subscription with OTT TV subscription services.
- However, a large number of DStv premium subscribers combined their pay-TV service with OTT TV services. The reason for this is that Showmax is a value-added service for DStv subscribers. Accordingly, Showmax emerged as the favoured OTT TV subscription for cord-stacking.

5.2.2 Sub-Research Objective 2

To ascertain the influence of OTT TV services on consumer television viewing behaviours, given the rise of OTT TV services in South Africa.

- The studied population access the Internet using Wi-Fi at home.
- The majority of the studied population residing in the Gauteng and Western Cape provinces, including those with a pay-TV subscription, access the Internet using Wi-Fi at home.
- Therefore, the influence on television viewing behaviours, as revealed in the study is as follows:
 - A significant number of consumers are increasingly streaming and downloading more content online and spending over five hours per day online consuming TV content.
 - Streaming of TV content online was more prevalent in those who had cancelled their pay-TV subscriptions.
 - Of the respondents, 62.20% binge watch, and this is prevalent across all age groups.

5.2.3 Sub-Research Objective 3

To establish if first-time subscribers favour OTT TV services over pay-TV subscription services.

The findings of this objective have been highlighted in Sub-Research Objective 1; however, additional findings emerged:

- Although most first-time subscribers do not favour OTT TV services over pay-TV, the millennial generation age group preferred OTT TV over pay-TV for first-time subscription.
- The study findings revealed that price was a dominant reason for choosing OTT TV over pay-TV subscription by first-time subscribers.

- As previously indicated in Sub-Research Objective 1's findings from the open-ended questions, one of the reasons for first-time subscribers choosing OTT TV over pay-TV is because of the nature of their job which involves extensive travelling, and therefore there is no need for a pay-TV subscription that requires a fixed installation and TV set. This reason is an indicator of future television subscriptions; as people move around, they may not necessarily require a setup box and dish installation to consume TV content. This, therefore, may further impact hotels and holiday accommodation establishments as guests may not require a TV during their stay. Therefore, it prompts a change in business strategy for these establishments.
- First-time subscribers in Gauteng and the Western Cape, and those who identify as male, prefer OTT TV for first-time subscription. Provincial preference is associated with the rollout and availability of broadband data in these provinces.

5.2.4 Sub-Research Objective 4

To investigate changes in devices used to consume television content, given the launch and growth of OTT TV services.

- The smart TV is the most dominant device for TV consumption, while the laptop is the most preferred device for online TV consumption by age groups between 35 and 55+.

5.2.5 Sub-Research Objective 5

To determine demographic characteristics in shifting from pay-TV to OTT TV services.

- Respondents between the age groups of 35 and 45 years from the Western Cape, more especially those who identified as male, are shifting from pay-TV to OTT TV services, and those with a pay-TV subscription are combining their subscription with OTT TV services.
- The age groups between 18 and 24 years prefer OTT TV for a first-time subscription over pay-TV.

- Among the income levels, the significant findings are:
 - Income earners between R10,000.00 and R17,000.00 cancelled their pay-TV subscription in favour of OTT TV services.
 - In contrast, high-income earners earning R33,000.00+ downgraded their current pay-TV subscription, complementing it with OTT TV services.
 - Low-income earners earning less than R10,000.00 are using free/paid mobile applications to consume TV content.

5.2.6 Sub-Research Objective 6

To investigate decisions that influence customers to transfer to OTT TV over pay-TV subscription services.

- Convenience, that is, the ability to watch TV content at any time using any device, is the primary reason for migrating from pay-TV to OTT TV for 45.6% of the studied population, followed by the price of subscription fees.
- Quality of content, advertisements, and ease of finding new programmes were not essential decisions that influence migration from pay-TV services to OTT TV services.
- Most of the respondents were undecided if the level of customer service received from their pay-TV operator would influence their decision to migrate to OTT TV services. However, 34.4% indicated that poor customer service would influence migration. It was interesting to note from the open-ended questions that customer service is perceived as non-existent from OTT TV service providers. Therefore, customer service is a competitive advantage for pay-TV operators.
- Original local content influences migration from pay-TV to OTT TV services; this further corroborated the findings in respect of those who cancelled pay-TV services in favour of OTT TV services, as presented in the study results.

5.2.7 Other findings

- The majority of the cord-shavers prefer Netflix, followed by Showmax.
- Netflix is the preferred OTT TV service of the cord-nevers.
- Other popular OTT TV services based on the open-ended questions are Hulu, Sling TV, and YouTube.
- YouTube is the most preferred service for online streaming as an alternative to OTT TV subscription services, as indicated by 63.8% of the studied population.
- FTA is the most preferred platform to watch TV for those who no longer have pay-TV and do not subscribe to OTT TV services.

- A large number of respondents indicated using family and friends' online subscription passwords to consume online content. This is a significant revenue threat to pay-TV and OTT TV service operators alike.

5.3 Limitations of the study

Access to customer data from pay-TV and OTT TV service operators would have benefited the study, as the subscribers would have been sampled as part of the study and segmented accordingly. To mitigate this, the researcher approached people within her reach, including promoting the survey on Facebook, based on the characteristics and interests of the targeted population according to their financial resources. Therefore, a credible assessment in alignment with reviewed literature is provided. Moreover, significant contributions have been made to the body of knowledge, as highlighted in the findings.

Furthermore, the paucity of literature on the topic posed a challenge, especially in the South African context. Therefore, more research studies on OTT TV services and pay-TV in South Africa should be conducted to contribute to the body of knowledge. Companies operating in this space would benefit from funding research in this field as it would influence government policies, contribute to the body of knowledge, and assist in developing strategies for companies in the digital media space.

5.4 Significance of the research

The researcher intended to conduct a scientific investigation and provide evidence of the impact of OTT TV services on pay-TV services in South Africa in the absence of a comprehensive and credible assessment. This was done to assist regulatory bodies such as ICASA to make informed decisions on policy, governance and regulatory matters. Therefore, the study benefits all stakeholders in digital media, as well as business strategy, governance, marketing, and entrepreneurship students.

5.5 Recommendations

Although the study's findings revealed no impact on pay-TV due to the rise of OTT TV services, it is worth acknowledging that as affordable, fast broadband data become available very shortly, pay-TV service providers will feel the impact. Therefore, the researcher recommends the following:

5.5.1 Recommendations for pay-TV operators

- Pay-TV operators should not remain stagnant/complacent; continuous innovations focusing on the drivers motivating consumers to migrate from pay-TV to OTT TV services are critical.
- Pay-TV operators should consider implementing an option for those who prefer to consume content online to subscribe without the need to purchase a setup box and pay for installation. Such options would lead to a reduction in subscription fees, benefiting consumers in terms of cost and pay-TV operators in terms of customer acquisition and retention.
- Showmax recently announced it would be launching ShowmaxPro in other countries on the African continent to include live sport on their OTT TV platform. This strategy would benefit South African consumers and assist pay-TV operators in their endeavours for customer retention.
- Pay-TV operators would benefit from renting sports rights to their OTT TV competitors, which would contribute to their revenue. OTT TV should not only be seen as a competitor affecting pay-TV's operators' sustainability, but also as an opportunity to expand the content offering and other business revenue streams.
- Although the majority of first-time subscribers do not favour OTT TV services over pay-TV services in South Africa, pay-TV service providers should take note of first-time subscribers who prefer to stream online, and therefore should implement strategies to attract this group of consumers in order to compete with OTT TV service providers.

5.5.2 Recommendations for OTT TV and pay-TV operators

- It is worth noting that although streaming online is exciting at present, this is not sustainable, as OTT TV service operators will run out of content owing to the binge-watching phenomenon. Therefore, both OTT TV and pay-TV service operators would benefit from funding content development and devising innovative ways of keeping subscribers entertained, as failure to do so would lead to an increase in illegal streaming and use of family and friends' passwords for viewing, thus affecting revenue streams for all parties.
- Furthermore, both OTT TV and pay-TV operators would benefit from partnering with universities to conduct more research in this field by providing bursaries and research grants. This would enhance the development of new technologies, content development, and business turnaround strategies.

- Pay-TV services would benefit from partnering with internet service providers as part of their bundled services. The advantage would be to lock the customer in with a pay-TV subscription on the standalone streaming platform through own in-house OTT TV services.
- Pay-TV and OTT TV service providers would benefit from collaborating with universities to undertake research studies on the adoption of innovations in digital television media. This would lead to implementable proactive strategies for business sustainability, including product development, based on customer behaviour.
- Pay-TV and OTT TV providers would do well in not neglecting consumers over the age of 55+ by developing strategies based on the consumer behaviour of these age groups for customer retention and acquisition, as the current 35-year-olds will be 55 in a few years.

5.5.3 Recommendations for ICASA and other regulatory bodies

Regulatory bodies such as ICASA should pay careful attention to OTT TV service providers' contribution to the country's economy through employment, tax, and Broad-Based Black Economic Empowerment (BBBEE) measures. Therefore, considerations to regulate the industry to ensure international players' contributions to the country's economy would benefit fair competition and job security.

5.5.4 Recommendations for all stakeholders listed above

Owing to limited literature in this field, it would be beneficial to all parties interested in this field to partner with universities for more research funding and opportunities on factors affecting consumer behaviour, specifically in the digital television media, with the rise of online streaming services.

5.6 Suggestions for future research

- This study focused on investigating the extent of the impact OTT TV has on pay-TV services. Although the impact is small at present, future research using actual customer data from both OTT TV and pay-TV service providers should be conducted. Further to this, a mixed-method approach would provide an in-depth understanding of what influences consumers to migrate from pay-TV to OTT TV, including television viewing behaviours.
- Future studies could focus on strategies that pay-TV operators could implement to compete and turn around their businesses to remain competitive.

- Without further studies on the hidden impact of Pay-TV operators on matters such as contribution to tax, BBBEE, employment, and corporate social responsibility, it would be impossible for regulatory bodies to implement policies to regulate the industry.
- Future research investigating the regulation of the OTT TV service sector by the relevant regulatory bodies would be beneficial.

5.7 Conclusions

The rationale for the study was to conduct a scientific investigation and provide evidence of the impact of OTT TV on pay-TV services in South Africa in the absence of a comprehensive and credible assessment. This study's objective was to ascertain the impact that OTT TV services have on traditional pay-TV services in South Africa. Sub-objectives were developed and broken down into six sub-objectives to achieve the main objective. Following the objectives, research questions were formulated, which directed the research approach and process. A quantitative research approach was adopted, and data was collected using an online survey questionnaire. The collected data were analysed using IBM SPSS Statistics.

In conclusion:

- Although there is a growing trend of consumers migrating from pay-TV services to OTT TV services, migration has little or no impact on pay-TV services. OTT TV services are a complementary service to pay-TV services instead of a substitute, and both services have their unique advantages.
- Pay-TV still dominates OTT TV, and this is mainly due to sporting rights, live content, breaking news, and availability of fast, affordable broadband data.
- South African pay-TV services have the advantage of telling South African stories through local TV content which gives them an added advantage, and pay-TV is still viewed favourably in South Africa.
- As affordable, fast broadband data becomes available, as well as cheaper devices such as smart TVs, smartphones, and streaming devices, viewing behaviour will continue to change. The respondents confirmed that they binge watch, spending more time online consuming content, and adopting different devices to consume content, including streaming. These findings corroborate consumers' need to escape, unwind and indulge in their favourite TV content after a long, stressful day, and to relax and clear their minds, as most of the respondents were from the prime working group.
- The findings further reveal that most of the population consume TV content online, predicting the future of online TV consumption in South Africa.

- The availability of Wi-Fi in considering preference to subscribe to OTT TV over pay-TV for first-time subscribers depicts a future trend of cord-nevers, especially in the Gauteng and Western Cape provinces, the provincial economic hubs in South Africa. This poses a more significant threat to pay-TV operators.
- Although it is expected that OTT TV will grow, pay-TV will continue to grow as streaming will run out of content.
- The nature of work, including economic trends, will impact the subscription type adopted by consumers, based on their needs and financial capabilities.

Finally, the study's objectives are achieved as a credible, unbiased, comprehensive assessment, and evidence is provided.

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APPENDICES

Appendix A: Ethical clearance certificate



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Symphony Road Bellville 7535


Office of the Chairperson Research Ethics Committee	Faculty: BUSINESS AND MANAGEMENT SCIENCES
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The Faculty's Research Ethics Committee (FREC) on 18 February 2020, ethics Approval was granted to Nokuphiwa Udoakpan (204446147) for a research activity for M Tech: Business Administration at Cape Peninsula University of Technology.

Title of dissertation/thesis/project:	The impact of OTT TV services on pay-TV subscription services in South Africa Lead Supervisor (s): Prof R Tengeh
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Comments:

Decision: Approved

 Signed: Chairperson: Research Ethics Committee	18 February 2020 Date
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Clearance Certificate No | 2020FOBREC743

Appendix B: Consent letter for survey participation

The impact of over-the-top television (OTT TV) Services on pay-TV subscription services in South Africa

Dear Participant

The primary objective of the research is to ascertain the impact that OTT TV services have on traditional pay-TV services in South Africa.

The survey is part of a research project towards the completion of the MTech: Business Administration degree which will be submitted to the Cape Peninsula University of Technology.

Your agreement to participate in the questionnaire is voluntary and you are hereby assured that all information will be treated confidentially. Should you wish to withdraw for any reason at any time during the study, you are welcome to do so without any objection to your decision. All findings will be dealt with anonymously. You are also allowed to omit any questions you don't feel comfortable answering. Instructions are provided on each page of the questionnaire and should take between 5 and 10 minutes to complete. Please be advised that the survey questions do not pose any real risk of distress or discomfort, either physically or psychologically to yourself.

You are invited to contact the researchers should you have any questions about the research before or during the study on the contact details below.

Your cooperation which is crucial to the study and its success will be appreciated. Thank you for your cooperation.

Yours faithfully
Nokuphiwa Udoakpan (Researcher)
204446147@mycput.ac.za
072-568-1572

Principal Supervisor
Professor Robertson K. Tengeh
021-460-3450
*** Required**

Population Qualification questions

Appendix C: Survey questionnaire

1. 1. I have *

Mark only one oval.

- Satellite/ pay-TV subscription (DStv, StarSat, etc)
- OTT TV subscription (Netflix, Showmax, Amazon Prime, etc)
- Internet (ADSL, Fibre, WIFI (at home, work or through WIFI hotspot zones, mobile data)

- I have both pay-TV and OTT TV subscription
- None of the above

Subscription services

2. 2 I subscribe to

Mark only one oval.

- DStv *Skip to question 3*
- StarSat *Skip to question 3*
- I have Free-to-air (FTA - SABC, ETV, OVHD, etc) & OTT TV services
Skip to question 12
- I only have OTT TV services (Netflix, Showmax, etc) *Skip to question 12*
- I use free/paid mobile apps to consume TV content *Skip to question 17*

Consumer viewing behaviors - Pay-TV subscription services

3. 3. My monthly pay-TV subscription fee is

Mark only one oval.

- Entry package – less than R 100.00/R1,100.00 per annum
- Lower package - Less than R 300.00/R3,300.00 per annum
- Middle package – less than R 400/R4,400.00 per annum
- Premium package – R 500.00+/R5,500.00+ per annum
- I've never had pay-TV – only have OTT TV services

4. 4. I have upgraded my Pay-TV subscription services in the last six months

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

5. 5. I have cancelled my pay-TV subscription services in favour of OTT TV subscription

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

6. 6. I would cancel my pay-TV subscription if

Mark only one oval.

- I can choose my own channels
- If online television streaming platforms could have live sport
- If my pay-TV service provider increase the subscription fees
- Nothing would ever make me cancel my pay-TV subscription
- Other – please specify

7. 6.1 If you have answered other on 6, can you please specify

8. 7. I have downgraded my premium pay-TV subscription for a lower-priced package in favour of OTT TV services

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

9. 8. I have combined my pay-TV with OTT TV subscription

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

10. 9. Which OTT TV services have you combined your pay-TV subscription with?

Mark only one oval.

- Amazon Prime Video *Skip to question 17*
- Netflix *Skip to question 17*
- Showmax *Skip to question 17*
- YouTube Premium *Skip to question 17*
- Other – please specify *Skip to question 17*

11. 9.1 If you have answered other on question 9, can you please specify

Consumer viewing behaviors - OTT TV - first time subscribers

12. 10. I only have OTT TV services and have never subscribed to pay-TV

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

13. 11. If you have never subscribed to pay-TV and only subscribe to OTT TV services, which services do you subscribe to?

Mark only one oval.

- Amazon Prime Video
- Netflix
- Showmax
- YouTube Premium
- Other – please specify

14. 11.1 If you selected 'other' on question 11, please specify

15. 12. I have never subscribed to pay-TV services because

Mark only one oval.

- It is too expensive – not worth the price
- My landlord/complex restricts dish installation
- I had a pay-TV subscription before and cancelled due to price
- OTT TV services offer me a variety of content
- Other – please specify

16. 12.1 If you have answered other on question 12, can you please specify

Factors affecting television viewing behaviours behaviours - Streaming, Internet
Access and consumption hours

17. 13. I access internet via

Mark only one oval.

- WIFI at work
- WIFI at home
- Free WIFI hotspot zone
- Mobile Data
- WIFI in school/university

18. 14. Regarding downloading or streaming television content, this statement applies to me

Mark only one oval.

- I download/stream more content now than I did when I had a pay-TV subscription
- I download/stream more or less the same amount of content as I did when I had a pay-TV subscription
- I have always downloaded/streamed television content and have never been a pay-TV subscriber
- I only started downloading / streaming content now that I don't have a pay-TV subscription
- I don't download/stream content

19. 15. I am sharing my OTT TV services password with my friends and family

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

20. 16. I spend so many hours per day consuming television content online

Mark only one oval.

- Less than 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5 +hours

Factors affect television viewing behaviours in South Africa (Binge-watching, streaming & TV program)

21. 17. I binge-watch, (that is watching different episodes of a program at one go)

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

22. 18. I prefer to stream content online

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

23. 19. My favourite TV program at the moment is

Mark only one oval.

- Gomora – Ivili liya jika
- Die Ontwaking
- Still Breathing
- The Americans
- Other

Device adoption

24. 20. I mostly use this device to watch online TV content

Mark only one oval.

- Smart TV
- Laptop
- Tablet
- Smart Phone
- Desktop

25. 21. I use this streaming device to consume television content

Mark only one oval.

- AppleTV
- Xiaomi Mi Box S
- MyGica ATV495Max
- Skyworth Binge
- Other - please specify

26. 21.1 If you have answered other on question 21, can you please specify

Alternative TV consumption platforms

27. 22. To watch online television content I mostly use

Mark only one oval.

- YouTube
- Facebook
- Instagram
- Twitter
- Other – please specify

28. 22.1 If you have answered other on question 22, can you please specify

29. 23. If you no longer have Pay-TV subscription services, and do not have OTT TV services, how are you watching TV now?

Mark only one oval.

- Free-to-air television (SABC, ETV, OVHD, etc)
- I am no longer watching TV
- I am watching using illegal streaming services via internet sites
- Using a friend/family members online subscription
- Social Media apps

Decision determinants influencing migration from pay-TV to OTT TV services?

30. 24. I prefer OTT TV services because

Mark only one oval.

- Price – because it is inexpensive
- It's free from advertisement
- Fresh & Quality of the content
- Convenience – I watch what I want when I want using any device
- Easy to find new programs

31. 25. Customer service experience influences my decision to migrate from pay-TV to OTT TV platforms

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

32. 26. Original local content is important to me

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Strongly agree
- Agree

Biographical information

33. 27. I identify as *

Mark only one oval.

- Female
- Male
- Gender Fluid
- Non-binary
- Prefer not to say

34. 28. My age is *

Mark only one oval.

- 18-24
- 25-34
- 35-45
- 46-54
- 55+

35. 29. I am currently

Mark only one oval.

- Retired
- Self-employed
- Student
- Unemployed
- Full time employed

36. 30. My household income per month, including any additional jobs, but excluding government grants is

Mark only one oval.

- Less than R 10,000.00
 R 10,000.00 - R17,000.00
 R18,000.00 - R 22,000.00
 R 23,000.00 - R 32,000.00
 R 33,000.00+

37. 31. My province of residence *

Mark only one oval.

- Eastern Cape
 Free State
 Gauteng
 KwaZulu Natal
 Limpopo
 Mpumalanga
 North West
 Northern Cape
 Western Cape

GENERAL

38. 32. Is there anything that you would like to contribute to this study (your opinions on pay-TV vs OTT TV)?

39. 33. What do you think pay-TV service providers can do to retain customers and compete with OTT TV platforms?

This content is neither created nor endorsed by Google.

Google Forms

Appendix D: Frequency output tables from IBM SPSS Statistics

		I have			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	Satellite/ pay-TV subscription (DStv, StarSat, etc)	155	39.6	39.6	39.6
	OTT TV subscription (Netflix, Showmax, Amazon Prime, etc)	72	18.4	18.4	58.1
	Internet (ADSL, Fibre, WI-FI (at home, work or through WI-FI hotspot zones, mobile data)	71	18.2	18.2	76.2
	I have both pay-TV and OTT TV subscription	93	23.8	23.8	100.0
	None of the above				
Total		391	100.0	100.0	

		I subscribe to			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	DStv	216	55.2	55.2	55.2
	StarSat	3	.8	.8	56.0
	I have Free-to-air (FTA - SABC, ETV, OVHD, etc) & OTT TV services	43	11.0	11.0	67.0
	I only have OTT TV services (Netflix, Showmax, etc)	95	24.3	24.3	91.3
	I use free/paid mobile apps to consume TV content	34	8.7	8.7	100.0
	Total	391	100.0	100.0	

		My monthly pay-TV subscription fee is			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	n/a	172	44.0	44.0	44.0
	Entry package – less than R 100.00/R1,100.00 per annum	25	6.4	6.4	50.4
	Lower package - Less than R 300.00/R3,300.00 per annum	24	6.1	6.1	56.5
	Middle package – less than R 400/R4,400.00 per annum	45	11.5	11.5	68.0
	Premium package – R 500.00+/R5,500.00+ per annum	125	32.0	32.0	100.0
Total		391	100.0	100.0	

I have upgraded my Pay-TV subscription services in the last six months

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n/a	172	44.0	44.6	44.6
	Strongly disagree	73	18.7	18.9	63.5
	Disagree	70	17.9	18.1	81.6
	Neutral	28	7.2	7.3	88.9
	Strongly agree	19	4.9	4.9	93.8
	Agree	24	6.1	6.2	100.0
	Total	386	98.7	100.0	
Missing	System	5	1.3		
	Total	391	100.0		

I have cancelled my pay-TV subscription services in favour of OTT TV subscription

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n/a	171	43.7	44.3	44.3
	Strongly disagree	75	19.2	19.4	63.7
	Disagree	88	22.5	22.8	86.5
	Neutral	31	7.9	8.0	94.6
	Strongly agree	6	1.5	1.6	96.1
	Agree	15	3.8	3.9	100.0
	Total	386	98.7	100.0	
Missing	System	5	1.3		
	Total	391	100.0		

I would cancel my pay-TV subscription if

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n/a	172	44.0	44.3	44.3
	I can choose my own channels	67	17.1	17.3	61.6
	If online television streaming platforms could have live sport	54	13.8	13.9	75.5
	If my pay-TV service provider increase the subscription fees	39	10.0	10.1	85.6
	Nothing would ever make me cancel my pay-TV subscription	37	9.5	9.5	95.1
	Other – please specify	19	4.9	4.9	100.0
	Total	388	99.2	100.0	
Missing	System	3	.8		
	Total	391	100.0		

I have downgraded my premium pay-TV subscription for a lower-priced package in favour of OTT TV services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n/a	172	44.0	44.4	44.4
	Strongly disagree	60	15.3	15.5	59.9
	Disagree	76	19.4	19.6	79.6
	Neutral	30	7.7	7.8	87.3
	Strongly agree	33	8.4	8.5	95.9
	Agree	16	4.1	4.1	100.0

	Total	387	99.0	100.0	
Missing	System	4	1.0		
	Total	391	100.0		

I have combined my pay-TV with OTT TV subscription

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n/a	172	44.0	44.8	44.8
	Strongly disagree	36	9.2	9.4	54.2
	Disagree	60	15.3	15.6	69.8
	Neutral	24	6.1	6.3	76.0
	Strongly agree	41	10.5	10.7	86.7
	Agree	51	13.0	13.3	100.0
	Total	384	98.2	100.0	
Missing	System	7	1.8		
	Total	391	100.0		

Which OTT TV services have you combined your pay-TV subscription with?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n/a	172	44.0	47.9	47.9
	Amazon Prime Video	2	.5	.6	48.5
	Netflix	67	17.1	18.7	67.1
	Showmax	73	18.7	20.3	87.5
	YouTube Premium	11	2.8	3.1	90.5
	Other – please specify	34	8.7	9.5	100.0
	Total	359	91.8	100.0	
Missing	System	32	8.2		
	Total	391	100.0		

I only have OTT TV services and have never subscribed to pay-TV

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n/a	253	64.7	65.4	65.4
	Strongly disagree	29	7.4	7.5	72.9
	Disagree	41	10.5	10.6	83.5
	Neutral	21	5.4	5.4	88.9
	Strongly agree	24	6.1	6.2	95.1
	Agree	19	4.9	4.9	100.0
	Total	387	99.0	100.0	
Missing	System	4	1.0		
	Total	391	100.0		

If you have never subscribed to pay-TV and only subscribe to OTT TV services, which services do you subscribe to?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n/a	253	64.7	68.2	68.2
	Amazon Prime Video	6	1.5	1.6	69.8
	Netflix	76	19.4	20.5	90.3
	Showmax	11	2.8	3.0	93.3
	YouTube Premium	7	1.8	1.9	95.1
	Other – please specify	18	4.6	4.9	100.0
	Total	371	94.9	100.0	

Missing	System	20	5.1		
	Total	391	100.0		

I have never subscribed to pay-TV services because

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n/a	253	64.7	68.4	68.4
	It is too expensive – not worth the price	29	7.4	7.8	76.2
	My landlord/complex restricts dish installation	3	.8	.8	77.0
	I had a pay-TV subscription before and cancelled due to price	49	12.5	13.2	90.3
	OTT TV services offer me a variety of content	23	5.9	6.2	96.5
	Other – please specify	13	3.3	3.5	100.0
	Total	370	94.6	100.0	
Missing	System	21	5.4		
	Total	391	100.0		

I access internet via

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	WI-FI at work	18	4.6	4.6	4.6
	WI-FI at home	288	73.7	73.8	78.5
	Free WI-FI hotspot zone	4	1.0	1.0	79.5
	Mobile Data	77	19.7	19.7	99.2
	WI-FI in school/university	3	.8	.8	100.0
	Total	390	99.7	100.0	
Missing	System	1	.3		
	Total	391	100.0		

Regarding downloading or streaming television content, this statement applies to me

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I download/stream more content now than I did when I had a pay-TV subscription	107	27.4	28.6	28.6
	I download/stream more or less the same amount of content as I did when I had a pay-TV subscription	100	25.6	26.7	55.3
	I have always downloaded/streamed television content and have never been a pay-TV subscriber	58	14.8	15.5	70.9
	I only started downloading / streaming content now that I don't have a pay-TV subscription	50	12.8	13.4	84.2
	I don't download/stream content	59	15.1	15.8	100.0
	Total	374	95.7	100.0	

Missing	System	17	4.3		
	Total	391	100.0		

I am sharing my OTT TV services password with my friends and family

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	75	19.2	20.4	20.4
	Disagree	77	19.7	20.9	41.3
	Neutral	50	12.8	13.6	54.9
	Strongly agree	82	21.0	22.3	77.2
	Agree	84	21.5	22.8	100.0
	Total	368	94.1	100.0	
Missing	System	23	5.9		
	Total	391	100.0		

I spend so many hours per day consuming television content online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 hour	70	17.9	18.5	18.5
	2 hours	69	17.6	18.3	36.8
	3 hours	79	20.2	20.9	57.7
	4 hours	70	17.9	18.5	76.2
	5 +hours	90	23.0	23.8	100.0
	Total	378	96.7	100.0	
Missing	System	13	3.3		
	Total	391	100.0		

I binge watch, (that is watching different episodes of a programme at one go)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	34	8.7	8.9	8.9
	Disagree	47	12.0	12.3	21.3
	Neutral	63	16.1	16.5	37.8
	Strongly agree	129	33.0	33.9	71.7
	Agree	108	27.6	28.3	100.0
	Total	381	97.4	100.0	
Missing	System	10	2.6		
	Total	391	100.0		

I prefer to stream content online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	28	7.2	7.3	7.3
	Disagree	45	11.5	11.7	19.0
	Neutral	81	20.7	21.0	40.0
	Strongly agree	110	28.1	28.6	68.6
	Agree	121	30.9	31.4	100.0
	Total	385	98.5	100.0	
Missing	System	6	1.5		
	Total	391	100.0		

My favourite TV programme at the moment is

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Gomora – Ivili liya jika	52	13.3	13.7	13.7
	Die Ontwaking	2	.5	.5	14.2
	Still Breathing	29	7.4	7.7	21.9
	The Americans	9	2.3	2.4	24.3
	Other	287	73.4	75.7	100.0
	Total	379	96.9	100.0	
Missing	System	12	3.1		
	Total	391	100.0		

I mostly use this device to watch online TV content

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Smart TV	182	46.5	48.3	48.3
	Laptop	70	17.9	18.6	66.8
	Tablet	15	3.8	4.0	70.8
	Smart Phone	98	25.1	26.0	96.8
	Desktop	12	3.1	3.2	100.0
	Total	377	96.4	100.0	
Missing	System	14	3.6		
	Total	391	100.0		

I use this streaming device to consume television content

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	AppleTV	39	10.0	11.2	11.2
	Xiaomi Mi Box S	38	9.7	11.0	22.2
	MyGica ATV495Max	16	4.1	4.6	26.8
	Skyworth Binge	20	5.1	5.8	32.6
	Other - please specify	234	59.8	67.4	100.0
	Total	347	88.7	100.0	
Missing	System	44	11.3		
	Total	391	100.0		

To watch online television content I mostly use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YouTube	240	61.4	63.8	63.8
	Facebook	40	10.2	10.6	74.5
	Instagram	5	1.3	1.3	75.8
	Other – please specify	91	23.3	24.2	100.0
	Total	376	96.2	100.0	
Missing	System	15	3.8		
	Total	391	100.0		

If you no longer have Pay-TV subscription services, and do not have OTT TV services, how are you watching TV now?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Free-to-air television (SABC, ETV, OVHD, etc)	80	20.5	36.7	36.7
	I am no longer watching TV	24	6.1	11.0	47.7
	I am watching using illegal streaming services via internet sites	30	7.7	13.8	61.5
	Using a friend/family members online subscription	38	9.7	17.4	78.9
	Social Media apps	46	11.8	21.1	100.0
	Total	218	55.8	100.0	
Missing	System	173	44.2		
	Total	391	100.0		

I prefer OTT TV services because

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Price – because it is inexpensive	87	22.3	24.9	24.9
	It's free from advertisement	34	8.7	9.7	34.7
	Fresh & Quality of the content	43	11.0	12.3	47.0
	Convenience – I watch what I want when I want using any device	159	40.7	45.6	92.6
	Easy to find new programs	26	6.6	7.4	100.0
	Total	349	89.3	100.0	
Missing	System	42	10.7		
	Total	391	100.0		

Customer service experience influences my decision to migrate from pay-TV to OTT TV platforms

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	37	9.5	10.3	10.3
	Disagree	69	17.6	19.3	29.6
	Neutral	129	33.0	36.0	65.6
	Strongly agree	55	14.1	15.4	81.0
	Agree	68	17.4	19.0	100.0
	Total	358	91.6	100.0	
Missing	System	33	8.4		
	Total	391	100.0		

Original local content is important to me

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	53	13.6	14.1	14.1
	Disagree	50	12.8	13.3	27.3
	Neutral	105	26.9	27.9	55.2
	Strongly agree	64	16.4	17.0	72.1

	Agree	105	26.9	27.9	100.0
	Total	377	96.4	100.0	
Missing	System	14	3.6		
	Total	391	100.0		

I identify as

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	122	31.2	31.2	31.2
	Male	256	65.5	65.5	96.7
	Gender Fluid	2	.5	.5	97.2
	Non-binary	4	1.0	1.0	98.2
	Prefer not to say	7	1.8	1.8	100.0
	Total	391	100.0	100.0	

My age is

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	51	13.0	13.0	13.0
	25-34	67	17.1	17.1	30.2
	35-45	142	36.3	36.3	66.5
	46-54	79	20.2	20.2	86.7
	55+	52	13.3	13.3	100.0
	Total	391	100.0	100.0	

I am currently

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Retired	23	5.9	5.9	5.9
	Self-employed	59	15.1	15.2	21.2
	Student	20	5.1	5.2	26.4
	Unemployed	37	9.5	9.6	35.9
	Full time employed	248	63.4	64.1	100.0
	Total	387	99.0	100.0	
Missing	System	4	1.0		
	Total	391	100.0		

My household income per month, including any additional jobs, but excluding government grants is

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than R10,000.00	103	26.3	28.5	28.5
	R10,000.00 - R17,000.00	75	19.2	20.7	49.2
	R18,000.00 - R22,000.00	48	12.3	13.3	62.4
	R23,000.00 - R32,000.00	49	12.5	13.5	76.0
	R33,000.00+	87	22.3	24.0	100.0
	Total	362	92.6	100.0	
Missing	System	29	7.4		
	Total	391	100.0		

My province of residence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Eastern Cape	33	8.4	8.4	8.4
	Free State	22	5.6	5.6	14.1
	Gauteng	86	22.0	22.0	36.1
	KwaZulu-Natal	32	8.2	8.2	44.2
	Limpopo	9	2.3	2.3	46.5
	Mpumalanga	18	4.6	4.6	51.2
	North West	19	4.9	4.9	56.0
	Northern Cape	9	2.3	2.3	58.3
	Western Cape	163	41.7	41.7	100.0
	Total	391	100.0	100.0	

Appendix E: Declaration of editing

ELIZABETH S VAN ASWEGEN
BA (Bibl), BA Hons (English language & literature), MA (English), DLitt (English), FSAILIS

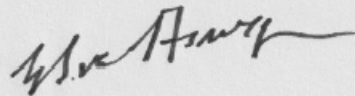
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DECLARATION OF EDITING

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The MTech: Business Administration dissertation by candidate **Nokuphiwa Udoakpan** titled 'The impact of over-the-top Television services on pay-television subscription services in South Africa' has been edited, all references have been checked for correctness and conformance with the CPUT Harvard bibliographic style guide, and all in-text citations have been checked against the references. The candidate has been advised to make the recommended changes.



Dr ES van Aswegen
15 August 2020

Appendix F: Turnitin originality report

Turnitin Originality Report

The impact of Over-The-Top Television services on pay-television ...
Udoakpan

by Nokupiwa



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