# A Multidimensional Explanation of Time Spent Listening to Audiobooks 

Pedro Fernandes de Sales Vieira<br>Master's Degree in Management Dissertation

Supervisor:
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#### Abstract

This exploratory study focuses on investigating the factors that may be predictors for average weekly audiobook listening time. From a holistic perspective, the conceptual model suggests relationships between several types of factors, namely factors relating to the nature of the audiobook (popularity and novelty), the audiobook distributors (ease of use of audiobook platforms), and factors intrinsic to the individual, such as their audiobook genre preference and their reading habits as well as their intention to continue listening to audiobooks. Although subscription on audiobook platforms is growing, research into audiobook consumption and purchase patterns is scarce.

A questionnaire with 110 responses from individuals who listen to audiobooks on a regular basis. The conceptual model was estimated using SmartPLS software. Multicollinearity problems were identified among some of the predictors leading to the estimation of simplified models from the conceptual model, in which some of them were omitted, and it was confirmed that the intention to continue listening to audiobooks and the ease of use of the platform influences audiobook listening time. Future research should diversify the respondents' profile demographically and geographically and consider the influence of factors inherent to the subscription on audiobooks selling platforms, such as their frequency, for example.

Research into the consumption patterns of this product are still scarce, although the audiobook is a result of the evolution of the digitalization of the functionalities of devices such as smartphones, which respond to the desires of a multitasking lifestyle.


Keywords: Audiobooks, Ease of use of online platform, Listening time, Continuous use intention, Popularity

JEL classification: O14 - Industrialization, Manufacturing and Service Industries, Choice of Technology; L86 - Information and Internet Services, Computer Software

## Resumo

Este estudo exploratório foca-se na investigação dos fatores que possam ser preditores para o tempo médio semanal da audição de audiobooks. Numa perspectiva holística, o modelo conceptual sugere relações entre vários tipos de factores, nomeadamente fatores relativos à natureza do audiobook (popularidade e novidade), aos distribuidores dos audiobooks (facilidade de uso das plataformas de audiobooks) e fatores intrínsecos ao indivíduo, como a sua preferência de gênero de audiobook e os seus hábitos de leitura bem como a sua intenção de continuar a ouvir audiobooks. Apesar de ser crescente a subscrição nas plataformas de audiobooks, é escassa a investigação aos padrões de consumo e de compra de audiobooks.

Um questionário com 110 respostas de indivíduos que ouvem audiobooks com regularidade. A estimação do modelo conceptual foi feita com recurso ao software SmartPLS. Foram identificados problemas de multicolinearidade entre alguns dos preditores que conduziram à estimação de modelos simplificados a partir do modelo conceptual, em que foram omitidos alguns deles e confirmou-se que a intenção de continuar a ouvir audiobooks e a facilidade do uso da plataforma influencia o tempo de escuta de audiobooks. Investigações futuras devem diversificar o perfil dos respondentes demograficamente e geograficamente e considerar a influência de factores inerentes à subscrição nas plataformas de venda dos audiobooks, como a sua frequência, por exemplo.

A pesquisa nos padrões de consumo deste produto são ainda escassos, embora o audiobook resulte da evolução da digitalização das funcionalidades de aparelhos como smartphones, que respondem aos desejos de um estilo de vida multitasking.

Keywords: Audiobooks, Facilidade de uso da plataforma de venda online, Tempo de escuta, Intenção de continuação de uso, Popularidade

JEL classification: O14 - Industrialização, Indústrias de Manufatura e Serviços, Escolha de tecnologia; L86 - Serviços de Informação e Internet, Software de Computador

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## I. Introduction

The theme of this thesis is to study the determinants that explain the time spent listening to audiobooks. The listening as reading of books seems to be growing in recent years.

Ever since audiobooks reached mainstream appeal due to the rise of streaming services, there have been several attempts trying to ascertain what influences consumers to spend more in terms of acquisition and time spent listening to audiobooks (Engström \& Müller, 2019; Hanner \& O’Connor, 2019; and, Pedersen \& Have, 2012). This is, however, not a onedimensional task, since the possible variables that could explain time spent listening to audiobooks is spanned through various causes such as the inherent qualities of the audiobook, the personality and uniqueness of the consumer as well as the strategies employed by the companies. Taking a multidimensional approach to consumer value and behavior provides a solution for the simplicity of the conclusions brought about by one-dimensionality (SánchezFernández et al., 2009 and Keller, 2003). This study aims at bridging these perspectives together into the audiobook sphere, which has not been conceptualized up to now.

Individual preferences for specific book genres can be a contribution towards higher times spent reading those books (Fulmer et al, 2015), but little or no research has been made towards this relation of causality. The two main broader categories of genres are fiction and non-fiction; and both of them operate on different motivational frames (Alexander \& Jarman, 2018) and are influenced by the person's personality, mainly their gender (Hopper, 2005, and Topping, 2015).

To further delve into what makes people spend higher times and sometimes an inordinate amount of time repeating the same thing, it is important to consider the role of habits which are a multifaceted concept that represents the repeated execution of the same behavior (Wood \& Rünger, 2016). The more extreme manifestations of habits can represent themselves as addictions that can guide persons' behavior (Gillan et al., 2016). This overreliance on habits can manifest itself into audiobooks and therefore serve as a catalyst for higher times engaged in them.

Important features that lead toward higher quality perceptions of products/services are the popularity (Jeong \& Kwon, 2012), and novelty books in general and audiobooks in particular. Therefore, when products/services are seen as higher value and quality, they lead towards higher rates of continuous use intention (Jun et al, 2018).

If the goal is to understand what might drive higher times hearing/listening audiobooks from a business perspective, it is important to consider both the ease of use of the platform/service (Davis, 1989) that provides the audiobooks.

This dissertation plans to present a holistic understanding of how the genre preferences, habitual listening, the product's popularity and novelty and service ease of use can ultimately contribute to augment consumers' time engaged in hearing audiobooks. With the purpose of assembling the relationships between these variables and presenting a comprehensive framework that explains the goal of listening in the audiobook market, the main goal of this research is to answer the following questions:

- How important is habitual listening to audiobooks in increasing the overall time spent listening to audiobooks?
- How much does the preference for a specific audiobook genre influence the impact of habitual listening to audiobooks in the continuous use intention of audiobooks?
- Does the novelty and popularity of the audiobook have a direct impact on the continuous use intention of audiobooks?
- How does the ease-of-use of the audiobook provider's platform contribute to continuous use intention of audiobooks?
- Does the continuous use intention of audiobooks translate into actual time spent listening?

Taking into account these research questions, the objectives of this research are six-fold:

- To evaluate if consumer's habitual listening to audiobooks is a direct predictor of continuous use intention of audiobooks
- To analyze if the audiobook genre moderates the aforementioned relationship.
- To determine if an audiobook's popularity is a predictor factor for continuous use intention of audiobooks
- To determine if an audiobook's novelty is a predictor factor for continuous use intention of audiobooks
- To ascertain if the ease of use of the platform used for listening to audiobooks is a predictor continuous use intention of audiobooks
- To determine if continuous use intention of audiobooks translates into actual time spent listening to audiobooks as a mediator of all the previous variables

This study will contribute to the body of knowledge of habitual listening to audiobooks, the role of genre preference, the importance of product popularity and novelty in dictating consumer behavior and ease of use of the platform for the audiobook market. This investigation will attempt to supplement the marketing strategies used by audiobook companies by building on the existing literature on consumer behavior and tailoring their strategies to maximize the consumer's time spent listening to their products.

This project is divided in eight chapters, each one related to the previous and to the next one to give a fully holistic and structured understanding. The chapters will be as follows:

Chapter I - Introduction: Overview of the study subject, its context and importance in addition to the main goal as well as the research questions and structure of the research

Chapter II - Literature Review: The Literature review chapter will be focused on identifying the actual state-of-art of the main components of this research and will be divided in two parts, namely, the first one will review habitual behavior, reading and genre preferences, product popularity and novelty and the second one will review the ease of use of audiobook services.

Chapter III - Hypotheses and conceptual model: The purpose of this chapter is to identify the hypotheses and, from the identified relationships between variables, to present the theoretical model.

Chapter IV -Methodology: The structure of the questionnaire and the data collection method and criteria will be presented in this chapter.

Chapter V - Data analysis and Results: In this chapter, the questionnaire results will be analyzed in scope and depth, by means of a Partial Least Squares regression model which allow to estimate the conceptual model and to validate the research hypotheses.

Chapter VI - Discussion of the main results: Results and implications of the previous analysis will be discussed in this chapter.

Chapter VII - Conclusions: In the last chapter, all the previous chapters will serve to deliver a final suggestion to the business/industry managers and to the academia. Furthermore, the limitations with the research will be presented along with possible improvements for future research.

## II. Literature Review

The literature review will be divided in two parts, according to the inherent differences in the nature of the topics. The first part will focus on several important concepts pertaining to audiobooks themselves as well as the individual hearing them. To start with, a brief introduction will be made about how an audiobook is conceptualized and how they differ from the traditional printed book. Next, the focus will be on the individual, both on how his/her habits and addictions can shape the audiobook listening behavior towards a particular audiobook. Finally, a review will be made on the popularity and novelty of an audiobook as they can influence the behaviors of a listener.

The second part of this literature review will look at subscription-based audiobook services and how its ease of use contributes to the adoption of continuous use of services and will reflect in more time spent listening to audiobooks.

### 2.1. Audiobooks, Genres, Reading Habits, Popularity, and Novelty

### 2.1.1. The Audiobook Market

A market research study by the Grand View Research (2022) showed that the audiobook market is undergoing rapid growth and expansion: in 2020, the U.S audiobook market was valued at 1.4 billion dollars and that number rose to 1.8 billion dollars in 2021. One of the main factors that led to higher market growth was the COVID-19 pandemic which, due to lockdowns, made individuals search for new entertainment methods while staying at home. As of 2022, the estimated size of the global audiobooks market is 5.36 billion USD and the forecast for this decade is an annual growth rate of $26.4 \%$ until 2030, the global market is expected to reach 35 billion dollars in 2030.

Currently, the non-fiction audiobook segment of the market is expected to have a higher annual growth rate compared to its fiction counterpart despite this segment continuing to expect a higher revenue share of the market through 2030, with science and mystery at the forefront. The same study shows that the adult segment is and will continue to represent the largest market share until 2030, with numbers around $79 \%$ of the market share in 2021. One reason that will have driven the market growth in this segment is the growing emergence of in-car entertainment systems that allow users to easily browse various audiobooks while
driving. However, the children's segment is expected to have the fastest growth through 2030, mainly due to the greater adoption of audiobooks for educational purposes.

The key players in the audiobook industry are the companies providing subscription-based packages, such as Amazon's Audible. Apple's and Google's audiobooks. These companies present themselves as key players in the audiobook market, even though their business model does not consist of subscription-based packages, but one-time purchases.

### 2.1.2. Genre preference

Books, in general, like any other product, have their values dependent on the individual's personal content preference. Certain attributes of the book are significantly more important than others, namely the knowledge about the author, the expectations of the author's work and style of writing, the genre and theme of the book, if the book was recommended, if the consumer knows what the story is about and the positive and negative reviews of the book. Genre and author expectations according to the most prevalent ratings are the most important (Leemans \& Stokmans, 1992).

A study by Samuels (1989), based on a sample of approximately 2200 students from the $7^{\text {th }}$ through $12^{\text {th }}$ grade, analyzed what led them to read their favorite books. Several reasons can be presented for the preference for certain books, but the two main reasons that stood out were the subject/genre of the book and their 'relatability'. Albeit later research showed that the reason for preferring certain books was less influential for younger children (Kragler, 2000) since these were more influenced by peer recommendation and physical characteristics of the book.

The question turns out to be whether these specific preferences contribute to greater engagement in terms of time spent listening to audiobooks. Reading preferred texts has been shown to contribute to more reading time of that text (Fulmer et al, 2015), although the text difficulty has contributed to the increase in reading/listening time. The author showed that the more difficult the text, the more time was spent on reading it and less time was spent on ramblings. A meta-analysis examining reading motivation and its relationship to reading behavior showed that reading the preferred genre, both narrative and expository texts, was positively correlated with reading motivation (Ulrich et al, 2012).

Therefore, as reading/listening to the preferred genre leads to either greater time spent and/or engagement in reading/listening, it becomes important to understand more deeply how genres are classified and studied.

Topping (2015) studied whether the favorite and most appreciated books by children were different in terms of difficulty when contrasting with all books read by children. With a sample of 150,220 children from 967 different schools, several conclusions were drawn, namely that boys inherently prefer non-fiction to fiction, girls tend to choose more difficult books in terms of reading difficulty in contrast to their counterparts and that fiction books were generally better understood than non-fiction. Findings showed that girls overall read more books than boys and prefer reading fiction instead of non-fiction, but she notes that adolescent book choices are heavily influenced by their peers.

Non-fiction usually stands out for having an "informative component" inherent in the pleasures associated with reading non-fiction that differ from reading fiction. Alexander and Jarman (2018) studied the main pleasures in non-fiction reading by examining data from a study of a school-based reading challenge between 8 and 14 years old, although only science information books were examined. The research concluded that there are extrinsic and intrinsic motivations for reading non-fiction, but the main motivation was the acquisition of new knowledge and the aesthetics of the book, albeit the latter can be partially explained by the sample age group.

A similar study conducted by Guthrie et al. (2005) analyzed how extrinsic and intrinsic motivations changed over a 12 -week period in children who chose information books (nonfiction) and narrative books (fiction) as their favorite type of book. Examples of extrinsic motivation (e.g. "it made my teacher happy", "I wanted to get the best grade") and intrinsic motivation (e.g. "I was interested in the topic", "I got to choose to read it") were assessed and the results showed that children who chose (1) narrative books as their favorites did not significantly change the levels of intrinsic motivation in the post-test analysis, but levels of extrinsic motivation dropped substantially. In contrast, children who chose (2) information books significantly increased their levels of intrinsic motivation in the post-test, although they also showed a decrease in extrinsic motivation levels over time.

It became clear that, since the genre of the book has a direct impact on initial and continuous motivation, the genre of the book becomes important in understanding how that motivation translates into listening to audiobooks and whether it can drive the time spent the individual needs listening to them.

### 2.1.3. Listening as Reading

The modern audiobook is a relatively new phenomenon that consists of changing the traditional method of consuming books by making use of our hearing instead of sight. The medium used for the consumption of audiobooks has changed significantly since its first conception and this change has been due to substantial technological advances. Apart from the proto-media used for audiobooks in the early 20th century, the first popular medium commercialized was cassette tape and this remained the most popular choice until the mid-90s when the Walkman plus cassette combination and CDs were replaced by the first mass-market digital media player called "The Audible Player", where audiobooks can be instantly downloaded through digital libraries, one of the first steps towards the abolition of physical media. Audible.com was the first and most famous Digital Library for purchasing audiobooks that remains so due to Amazon's purchase of the company in 2008.

How should the audiobook experience be conceptualized? It is easy to regard the audiobook as a natural consequence of new media forms and the growing desire for a multitasking way of life, but to fully understand its essence, the audiobook must be compared exclusively to its counterpart, the printed book. The audiobook differs from the printed book by the inclusion of a narrator who a priori influences the listening process and the absorption of the story (Pedersen \& Have, 2012).

The higher amount of cognitive load in audiobooks due to greater sensory input splits the listener's attention and, subsequently, makes the listening experience more dependent on the external environment. A disadvantage of this dependence is seen in activities such as driving a car. Research has shown that driving while listening to audiobooks, which constitutes a common habit for audiobook listeners, is extremely dependent on the complexity of their external environment (Nowosielski et al., 2018), showing that audiobooks are extremely deleterious when driving on complex roads, but relatively harmless on simple roads.

Due to this greater allocation of mental resources brought by audiobooks, this characteristic becomes a fundamental aspect of both habitual behavior and comprehension performance (Moore \& Cahill, 2016; Gönülal, 2020) and is an important tool for the development of listening comprehension (Al-Jarf, 2021) as well as to assist individuals with reading disabilities (Esteves \& Whitten, 2011).The advantages provided by audiobooks allow a wider market expansion for foreign and intellectually challenged consumers, giving audiobooks a significant competitive advantage over their traditional print reading counterpart.

### 2.1.4. Habitual Behavior

Habits and routines have always been a major part of human psychology and consumer behavior. They are a multifaceted concept that represents the repeated execution of the same behavior (Wood \& Rünger, 2016). Wallin (2022) examined and identified five routine timespaces that are most common among young adults, namely, morning routines, commuting routines, school routines, after-school routines and bedtime routines and audiobooks served a prominent stress-relief function.

The main motivation behind habit formation and its automaticity can be seen as a path to least resistance and energetic expediency (Wood \& Neal, 2009). Habit suggestion is created primarily and unsurprisingly through repetition, although its initial purpose is conditioned by a goal which is to reinforce that behavior (Aarts \& Dijksterhuis, 2000), regardless of whether that behavior is providing the desired results or not, as is the case with maladaptive behavior phenomena (Bouton, 2004; Dunsmoor et al., 2015).

In consumer behavior literature, habits represent a major component of marketing policies and actions to enhance consumer relationships with the companies and brands, especially regarding the role of habit changes and how companies can exploit it.

One of the most important studies regarding habit change, published by Verplanken et al. (2006), analyzed two types of major interventions which provide positive results in changing habits, namely, (1) those that provide information at moments when habits are vulnerable to change (downstream) and (2) those that disrupt old environmental cues and attempts to establish new ones (upstream). The authors evince that there exists a difference in approach for weak/moderate habits versus strong habits. Weak and moderate habits can be changed through downstream interventions such as motivating self-control, forming intentions of implementing and directly attempting to change beliefs and intentions. To change strong habits through downstream interventions, a context change is necessary to change in order to render the habits vulnerable to that change. In contrast, upstream interventions for both weak/moderate and strong habits require effective macro-level policy changes, such as economic incentives, legislation/regulation and normative approaches.

When taken to the extreme, habits tend to degenerate into addictions and extremely obsessive ways of thinking. It has been a central factor in the study of compulsive behavior and recent studies show that they are due to a deficit in behavior caused by excessive dependence on habits (Gillan et al., 2016). However, the teleological component that drives addiction stems
from two distinct but correlated neurobehavioral systems, namely, the hyperactivity of the impulsive system that values immediate reinforcers and the hypoactivity in executive function that pertains to the evaluation of delayed reinforcers (Bickel et al, 2011). Addiction is, therefore, the pathological pattern of response that results from persistently high valuing a behavioral reinforce and from the excessive desire for immediate consumption of that reinforcer.

Habitual behavior ends up being a phenomenon of attention. The interest in attention applied to consumer behavior first gained significance through the concept of attention economy which was first theorized by Simon et al. (1971), by advancing that human attention is a limited resource like any other type of product or commodity and the consequence of information is the depletion of attention. Therefore, attention must be allocated efficiently to maximize its potential returns.

According to Huberman (2013b), the most effective strategies to attract and maintain attention in the context of social media are novelty and popularity. They are the two main factors involved in obtaining attention and the author extrapolated from them three main strategies, the most efficient of which depends on the rate of decrease in novelty: the first strategy consists of prioritizing novelty, the second consists of prioritize popularity and the third is to prioritize the stories that would generate the most clicks in a few minutes.

The analysis of attention and its dependence has been applied more recently to streaming services (Singh et al., 2021) that aim to determine which factors lead individuals to develop an ongoing intention to use live streaming services. From a sample of 869 people, they concluded that from all the predictor variables to explain the perceived intent to continue use (convenience, monetary, emotional, and social), the value of convenience was by far the most impactful.

### 2.1.5. Product and/or Service Popularity

Popularity is an inherent social concept that signals that an object, person, idea has a position of status among a group or community due to one or several attributes which are unanimously accepted, and therefore showing a strong power of influence.

When applied to a product or service, popularity is an important and essential component of the qualities that consumers accept (Jeong \& Kwon, 2012) as "social proof" followed by a desire to purchase that product/service, leading to a bandwagon effect that it is a phenomenon
whereby the demand for a commodity is due to the influence of certain people who also consume the same commodity.

The popularity of a product in influencing consumer choice was also studied by Powell et al., (2017) who concluded that, more than its inherent quality; it is due to the enormous importance that people place on the opinion of others. Popularity also influences product trust and perceived quality which can be exacerbated when time scarcity is high (Yu et al, 2015). Novelty plays an important role in popularity as it drives engagement (Carmel et al, 2012). Applying the concept of popularity to books, a study on creating a prediction model to determine the popularity of a book on the largest book rating platform, Goodreads (Suman et al, 2018) showed that the main determinants that drive book popularity were the average author rating, archival diversity (i.e., whether the book is currently categorized by the reader as "Read" or "Currently Read"), and the number of rewards the author received.

As product popularity and usage are important to affect its perceived value as well as to drive its behavioral intent (Yen \& Teng, 2015), perceived value is important to drive continued use intention (Jun et al, 2018), the research of how audiobook popularity influences continued listening use and time spent listening to audiobooks, this variable is going to be considered in this research.

### 2.1.6. Product/Service Novelty

The novelty of a product or service consists of how it is distinguished from other existing products or services in which it is in competition (Chakrabarti \& Khadilkar, 2003).

A study has shown that there is a distinction between objective product novelty and subjective consumer assessment of novelty (Sung et al, 2016), demonstrating that just using the word "NEW" in an appropriate context is sufficient to induce higher levels of initial interest and more time spent seeing the ad, although it didn't translate into taste or excitement just by virtue of signaling novelty. Nevertheless, product novelty is a predictor of product evaluation, but there is a sweet spot by which more novelty yields worst results (Luan \& Kim, 2022), this inverted U-curve of diminishing results can partially be explained by the change from "curiosity-inducing" features of a product to an outright expectancy violation when a product tries to be too novel or avant-garde.

How does the novelty of a product translate into greater use of that product? Karjaluoto et al (2019) showed that the novelty of a new product increases the perception of hedonic value
and that, in turn, it increases the commitment to having it. Furthermore, when creativity is examined cross-culturally, novelty is in and of itself significant to produce desire for a product, although this process is augmented when that same product has higher rates of appropriateness (Paletz \& Peng, 2008).

It would be important to investigate how novelty would translate into a greater commitment to listening to audiobooks and consequently translate into greater time spent listening to audiobooks.

### 2.2. Ease of Use of a platform

Audiobook subscription services allow for an easier experience and wider adoption for regular readers, occasional readers, and new readers. The reason for this stems from the ease of access through large companies such as Audible by Amazon, which allows any reader to start listening to audiobooks without much difficulty, both in the acquisition process and in the payment process, as well as in the constitution of a personal library that allow easier accessibility on a day-to-day basis.

While the importance of ease of use has been extensively studied (Davis, 1989) as well as its positive influence on consumer satisfaction (Amin et al. 2014), recent studies have shown that when it comes to private self-service technologies and services, like Audible and audiobook subscription services, hedonic motivation plays a greater role of service convenience in consumer motivation more than utilitarian motivation (Collier et al., 2014).

Another important factor related to general satisfaction with self-service technologies, Liu (2012) studied the concept of forced use in the adoption of self-service technologies by the customer. The author interviewed 290 users of self-service technology in China and concluded that forced use contributed significantly to lower trust in technology, which consequently led to much lower satisfaction with self-service technologies.

Amin et al. (2014) tried to understand how perceptions of usefulness and ease of use influence trust regarding the satisfaction that consumers had with mobile websites. The authors concluded that there is a significant positive relationship between perceptions of utility and ease of use and satisfaction with mobile sites, translating into an increase in the perceived value of their utility.

A later study by Filieri et al. (2021) also supported the hypothesis that the ease of use of the platform leads to greater customer satisfaction and that this leads to continued intention to use the platform.

Another study (Hansen et al. 2018) also tested the hypothesis that the ease of use leads to greater continued intention to use. The results showed that there is a significant positive relationship between ease of use and continued intent to use the platform. When applied to companies that supply audiobooks, the guarantee of high-quality service plays a fundamental role in the customer's perception of the brand and subsequently their level of engagement, among other factors. Audible meets this expectation due to its vast catalog of audiobooks, in addition to its accessibility and ease of use.

### 2.3. Continuous Use Intention

Continuous use intention denotes the intention of consumers to continue using a product, service or provider. The factors influencing continuous use intention depend mainly on consumer/user satisfaction, and user satisfaction in turn depends on a plethora of factors (Jin et al, 2013).

There exists, however, a difference between the intention and the actual commitment towards the product/service, which is the actualization of this intention and therefore, continuous usage (Yuan et al 2019). Continuous usage is a direct predictor factor of continuous usage intention (Yuan et al 2019; Pihlström, M. 2007), which shows that both variables go hand in hand and cannot be examined without the other. A massive study analyzed continuous usage of the popular Chinese social media app WeChat through a synonymous concept, which they termed "Stickiness" instead of commitment, by their definition, stickiness is the ability to attract and retain consumers to prolong the duration of each stay (Lien et al, 2017), they showed that stickiness also is a direct predictor factor for continuous use intention.

These mentioned studies showed that the concept of continuous usage usually precedes the continuous use intention, but how does the intention of continuous usage predict the actual action to use?

An important study which sought to understand the intention-behavior relationship in purchasing showed that purchase intentions are predictive of future purchase behavior (Morwitz et al, 2007), showing that certain product properties are universal for higher likelihood of translating intention to actual purchase.

The problem still remains: If this intention-behavior relationship also applies to continuous usage of the product/service and not just purchasing. To understand this specific relationship, we can turn to Febrianto et al (2018) who showed that intention to use is a positive predictor of actual usage, which is the amount of time someone spends interacting with the product/service and the frequency. These results were also shown to hold true in a previous study (Sambasiva et al, 2010).

## III. Theoretical Framework

### 3.1. Hypotheses Development

The aim of this project is to understand how the variables already mentioned are related to explain the listening times of audiobooks. The literature reviewed in the previous chapter showed a distinctive set of variables which impact the time spent listening to audiobooks. The time spent listening to audiobooks as a proxy of continued use is analyzed using the observable variable "How much time do you spend per week, in hours on average, listening to audiobooks?" The choice of the time frame applied to this question was set to weekly since this requires less memory recollection from the respondents and therefore less probability of both the questionnaire dropout and more accuracy of the responses.

To establish which variables are explaining time spent listening to audiobooks, the theoretical framework will be done by selecting several authors before drawing the hypotheses.

For the construct habitual listening to audiobooks, Singh et al. (2021) argue that consumer's addiction/high habitual behavior positively predicts continue use intention to listening to audiobooks.

Therefore, the first hypothesis is:
H1: The higher the levels of habitual audiobook listening, the higher the intention of continually listening to audiobooks

Taking into account the research conducted on genre preference, we can highlight the metaanalysis performed by Schiefele et al. (2012) where several studies stated that reading motivation is positively correlated with reading preference. But, the reading motivation potentially increases habitual behavior which can lead to compulsive behavior which is caused by excessive habit formation (Gillan et al., 2016).

Then, the second hypothesis is:
H2: The preferred book genre influences the relationship between the habitual listening to audiobooks and time spent listening to audiobooks

When trying to understand how audiobook popularity might explain the overall time spent listening to audiobooks, we can refer to the research conducted by Chang et al. (2015) which showed that the popularity attached to a product influences the perceived quality of that
product and the research made by Jun et al (2018) demonstrated that perceived quality is important to drive continuous use intention. Therefore, the third hypothesis is:

H3: The more popular the audiobook is, the higher the intention of continually listening to audiobooks

To understand the relationship between the novelty of a product and potential commitment and higher usage of listening to audiobooks, we highlight the research done by Karjaluoto et al. (2019) which exemplified how new product novelty drives overall satisfaction and commitment.

Two other studies also highlight the relationship between product novelty, satisfaction and commitment. The first study is done by Luan \& Kim (2022) which showed that consumer's perception of novelty matches higher product evaluation in an inverted $U$-shape, signaling that too much or two little novelty lowers positive product evaluation. The second study by Jun et al (2018) demonstrated that higher perceived quality of the service is important to drive its continuous use intention.

Taking this into account, the fourth hypothesis is:

H4: The more novel the audiobook is, the higher the intention of continually listening to audiobooks

Turning over to the variable Ease-of-use of the platform and its potential relationship with higher times reading audiobooks, we can focus on the research done by Amin et al. (2014), that showed that perceived ease of use predicted positively the consumer satisfaction, and the research by Kim and Kim (2012) which illustrated that customer satisfaction with a selfservice technology leads to higher rates of continuous use.

Therefore, the fifth hypothesis is:
H5a: The more user-friendly an audiobook provider's platform is, the higher the intention of continually listen to audiobooks

H5b: The more user-friendly an audiobook provider's platform is, the higher the time spent listening to audiobooks

For the last variable, continuous use intention must be actualized into actual time spent listening to audiobooks, we highlight the work of Febrianto et al (2018) which showed that intention to use is a positive predictor of actual usage, which is the amount of time someone
spends interacting with the product/service and the frequency. Therefore, the seventh and final hypothesis is:

H6a: Continuous use intention predicts time spent listening to audiobooks
H6b: Continuous use intention mediates the relationship between the independent variables and time spent listening to audiobooks

Taking into account the relationship between these variables, it is possible to draw the figure below as the main conceptual diagram:


Figure 1 - Conceptual model

## IV. Methodology

### 4.1. Measurement of Variables

This research made use of quantitative research methods through the application of a questionnaire to regular listeners of audiobooks in order to collect relevant data; therefore it is a convenience sample. The following tables reveal the main authors used in the questionnaire, their items, and measurements.

Table 1. The contributions of the main authors for the questionnaire items

| Constructs | Authors | Items |
| :---: | :---: | :---: |
| Habitual Listening to Audiobooks | Singh et al (2021) | 7 |
| Genre Preference | Rain, M. \& Mar, R.A. (2014) | 5 |
| Audiobook Novelty | Chang, J. et al (2014) | 4 |
| Audiobook Popularity | Chang et al. (2015) | 3 |
| Ease-of-Use of the Platform | Lund, A. (2001) | 6 |
| Continuous Intention to Listening to Audiobooks | Pang, S. Et al (2020) | 4 |

Table 2. Identification of the variable Habitual audiobook listening

| Habitual listening | Classification | Measure |
| :--- | :--- | :--- |
| How do these next statements reflect your belief about your habits towards audiobooks? |  |  |
|  |  |  |
| I find myself listening to Audiobooks for longer than I planned | Ordinal Scale: |  |
| to |  | 1- Strongly Disagree |
| I am bothered when people interrupt me while I am listening to | 2- Disagree |  |
| an Audiobook | 3- Somewhat Disagree |  |
| I would rather spend time listening to an Audiobook than do | Ordinal | 4- Neither Agree nor Disagree |
| things around the house. | Variables | 5- Somewhat Agree |
| Much of my leisure/free time I spend listening to Audiobooks |  | 6- Agree |
| I sacrifice other activities to listen to audiobooks. | 7- Strongly Agree |  |
| I push through to finish an audiobook even if I lost interest in it. | 9- Don't Know/Don't want to |  |
| I have a big backlog of audiobooks I intend to hear or purchase. |  |  |
|  |  |  |
|  |  |  |

Table 3. Identification of the variable Genre preference

| Potential moderator 1: Genre preference | Classification | Measure |
| :--- | :--- | :--- |
| How do these next statements reflect your preference for specific audiobook genres? |  |  |
| I prefer fiction (novels, stories, etc.) over non-fiction | Ordinal Scale: |  |
| (biographies, theoretical learning, etc.) audiobooks |  | 1-Strongly Disagree |
| I prefer listening to stories over theoretical learning. | 2- Disagree |  |
| I find it easier listening to fiction (novels, stories, etc.) | Ordinal | 3- Somewhat Disagree |
| audiobooks than nonfiction (biographies, theoretical learning, | 4- Neither Agree nor Disagree |  |
| etc.) audiobooks. |  | 5-Somewhat Agree |
| I prefer audiobooks that discuss real world issues. | 6- Agree |  |
| I like audiobooks that discuss topics of a more | 7- Strongly Agree |  |
| informative/scientific nature | 9- Don't Know/Don't want to |  |

Table 4. Identification of the variable Novelty
Novelty Classification Measure

How do these next statements reflect your opinion about the novelty of an audiobook?

|  | Ordinal Scale: |
| :--- | :--- |
|  | 1- Strongly Disagree |
| I prefer audiobooks that have "out of the ordinary" stories | 2- Disagree |
| I prefer audiobooks that talk about something not commonly | Ordinal |
| found. | 3- Somewhat Disagree |
| I prefer audiobooks that incorporate new ideas/concepts. | Variables |
|  |  |
|  | 4- Neither Agree nor Disagree |
|  | 5- Somewhat Agree |
|  | 6- Agree |
|  | 7- Strongly Agree |
|  | 9- Don't Know/Don't want to |
| answer |  |

Table 5. Identification of variable Popularity

| Popularity | Classification | Measure |
| :---: | :---: | :---: |
| How do these next statements reflect your opinion about the novelty of an audiobook? |  |  |

I think audiobooks with more people sharing, and responding positively, are more worthy of my time.
I am more likely to hear an audiobook if I see more people sharing
I think audiobooks with more people sharing, and responding positively, are more likely to be enjoyable / better

Ordinal Scale:
1- Strongly Disagree
2- Disagree
3- Somewhat Disagree
Ordinal 4- Neither Agree nor Disagree
Variables 5-Somewhat Agree
6- Agree
7- Strongly Agree
9- Don't Know/Don't want to answer

Table 6. Identification of the variable Ease of use of a platform

| Ease of use of a platform | Classification |
| :--- | :--- |

Table 7. Identification of the variable Continue use intention

| Continue use | Classification | Measure |
| :---: | :---: | :---: |

Potential Mediator: Continue use intention
How do these next statements reflect your opinion about your intention in listening to audiobooks in the future?

|  | Ordinal Scale: |
| :--- | :--- |
| I will continue hearing Audiobooks in the future | 1- Strongly Disagree |
| I will maintain my listening frequency in the future | 2- Disagree |
| I will make an effort to keep listening to Audiobooks in the | Ordinal |
| future | 3- Somewhat Disagree |
| I will recommend Audiobooks I like to other people in the | 4- Neither Agree nor Disagree |
| future | 5- Somewhat Agree |
|  | 6- Agree |
|  | 7- Strongly Agree |
|  | 9- Don't Know/Don't want to |
|  | answer |

The dependent variable, time spent listening to audiobooks, is measured in hours per week.
Several items were eliminated from the questionnaire because they were very similar to others and also there was the goal to reduce the dimension of the questionnaire.

### 4.2. Questionnaire Pretest and Data Collection

Before submitting the questionnaire to the public, a pretest performed by ten individuals was conducted to ascertain if the questionnaire was easy to read/comprehend as well as extract the respondents' general feedback as well as possible improvements to better comprehension and lower possible fatigue, the feedback was synthesized as follows:

- The questionnaire was long.

The sample was collected through the submission of the questionnaire mainly between two sources, the first was through immediate word-of-mouth spreading and the second was through the literature board on the websites Reddit and 4Chan, in which it was explicitly filtered only audiobook listeners through the question "How much time do you spend weekly in hours on average hearing audiobooks?", in which the answers that resulted in less than 1 hour responses were invalidated.

### 4.3. Socio-demographic characterization of the sample

The sample consisted of 110 participants ( 2 participants were removed due to listening to 0 hours of audiobooks), in which at the beginning of the questionnaire was asked several questions regarding their socio-demographic background, as the following figure illustrates:


Figure 2 - Participants' profile
A total of 24 different nationalities answered the survey with Portugal (30.6\%) and the United States of America (29.6\%) leading the largest bulk of respondents. Countries like France (7.6\%), the United Kingdom (5.6\%) and Germany also took a role in the geographical background of the respondents, with the remaining respondents spanning over several countries.

The respondents were mostly male ( $89.1 \%$ ) with only a total of 12 female respondents (10.9\%). From the total sample, $65.5 \%$ were aged between the ranges of $18-24$ years old, consisting therefore to generation Z; $30.09 \%$ were aged between $25-40$ years old (Millennials), $1.8 \%$ were aged between $41-56$ years old (generation X ) and $1.8 \%$ were aged between $57-75$ years old (Baby Boomers). None of the respondents was older than 75 years old.

The educational background of the respondents consisted mainly of bachelors (62.7\%), followed by having a degree of Master's (20.9\%), high school and secondary education ( $15.5 \%$ ) and 1 respondent had a $\mathrm{PhD}(0.9 \%)$.

Finally, the professional occupation of the respondents was mainly students (48.2\%), followed by employed workers ( $41.8 \%$ ); both self-employed workers and unemployed individuals consisted of $4.5 \%$ each and lastly 1 respondent replied with "Other" ( $0.9 \%$ ).

### 4.4. Reliability analysis

In order to know the consistency among the items of each construct, the coefficients of Cronbach's Alpha were computed.

Table 8. The Cronbach's alpha coefficients

| Constructs | Items | Cronbach's alpha coefficients |
| :---: | :---: | :---: |
| Genre preference: |  |  |
| Fiction type | Genre01 |  |
|  | Genre02 | 0.882 |
|  | Genre03 |  |
| Non-fiction | Genre04 | 0.815 |
|  | Genre05 | 0.815 |
| Habitual listening | ADDICTION01 |  |
|  | ADDICTION02 |  |
|  | ADDICTION03 |  |
|  | ADDICTION04 | 0.923 |
|  | ADDICTION05 |  |
|  | ADDICTION06 |  |
|  | ADDICTION07 |  |
| Novelty | NOVELTY01 |  |
|  | NOVELTY02 | 0.872 |
|  | NOVELTY03 |  |
| Popularity | POPULARITY01 |  |
|  | POPULARITY02 | 0.926 |
|  | POPULARITY03 |  |
| Ease of use of the platform | PLATFORM01 | 0.935 |
|  | PLATFORM02 |  |
|  | PLATFORM03 |  |
|  | PLATFORM04 |  |
|  | PLATFORM05 |  |
|  | PLATFORM06 |  |
| Continue use | CONTINUE USE INTENTION01 | 0.917 |
|  | CONTINUE USE INTENTION02 |  |
|  | CONTINUE USE INTENTION03 |  |
|  | CONTINUE USE INTENTION04 |  |

The items' coefficients are reliable with each one for each construct.

### 4.5. Constructs' validity

In order to have an idea about the one-dimensionality of the constructs Habitual listening, Ease of use of the platform and Continue use intention constructs, it was followed by an exploratory factor analysis in principal components. The results are the following:

### 4.5.1 The construct Habitual listening

As said before, an exploratory factor analysis was performed which shows that the data is adequate to this multidimensional procedure $\left(K M O=0.920 ; \chi_{(21)}^{2}=481.134 ; \operatorname{Sig}<\right.$ $0.001)$, meaning that data is correlated in the sample $(K M O=0.920)$ and is correlated in the population with the rejection of the null hypothesis of the Bartlett's test of sphericity (Sig $<$ 0.001 ). Just one component is extracted that explains $68.61 \%$ of the total cumulative variance. The communalities are greater than 0.570 .

Table 9. Extraction of one component for Habitual listening

|  | Component |
| :--- | ---: |
|  | 1 |
| I push through to finish an audiobook even if I lost interest in it. | .882 |
| I sacrifice other activities to hear audiobooks. | .858 |
| Much of my leisure/free time I spend listening to Audiobooks | .850 |
| I find myself listening to Audiobooks for longer than I planned to | .845 |
| I would rather spend time listening to an Audiobook than do things around the house | .812 |
| I have a big backlog of audiobooks I intend to hear or purchase. | .788 |
| I am bothered when people interrupt me while I am listening to an Audiobook | .758 |

### 4.5.2 The construct Ease of use of the platform

The same procedure was performed for the construct Ease of use of the platform and similar results were obtained $\left(K M O=0.913 ; \chi_{(15)}^{2}=480.694 ; \operatorname{Sig}<0.001\right)$. The communalities are above 0.68 . Only one component was extracted which explains $75.63 \%$ of the total cumulative variance.

Table 10. Extraction of one component for Ease of use of the platform

|  | Component |
| :--- | ---: |
|  | 1 |
| It is user friendly. | .895 |
| It is easy to use. | .893 |
| I learned to use it quickly. | .886 |
| I can use it successfully every time. | .869 |
| Both occasional and regular users would like it. | .844 |
| It requires the fewest steps possible to accomplish what I want to do with it. | .830 |

### 4.5.3 The construct Continue use intention

The construct Continue use intention consisting of four items is studied as a unidimensional construct, as expected. The adequacy measures show that the data is adequate to this multidimensional procedure $\left(K M O=0.845 ; \chi_{(6)}^{2}=308.251 ; \operatorname{Sig}<0.001\right)$ and just one component was extracted that explains $80.245 \%$ of the total cumulative variance. The communalities are greater than 0.70 .

Table 11. Extraction of one component for Continue use intention

|  | Component |  |
| :--- | ---: | :---: |
|  | 1 |  |
| I will make an effort to keep listening to Audiobooks in the future | .927 |  |
| I will continue listening to Audiobooks in the future | .908 |  |
| I will recommend Audiobooks I like to other people in the future | .906 |  |
| I will maintain my listening frequency in the future | .839 |  |

### 4.6. Estimations

There is a mediating effect when there is a significant relationship between an independent variable $\left(X_{1}\right)$ and another independent variable which is a mediator $\left(X_{2}\right)$ and a dependent variable $(Y)$. The following figure shows this relationship.


In terms of mathematical annotation, the corresponding equations are written as

$$
\begin{gathered}
Y_{1 i}=\beta_{01}+\beta X_{1 i}+\varepsilon_{1 i} \\
Y_{2 i}=\beta_{02}+c^{\prime} X_{1 i}+b M_{2 i}+\varepsilon_{2 i} \\
X_{2 i}=\beta_{03}+a X_{1 i}+\varepsilon_{3 i}
\end{gathered}
$$

where the total effect $\left(\beta=c^{\prime}+a b\right)$ is decomposed into the direct effect $\left(c^{\prime}\right)$ and indirect effect ( $a b$ ).

The mediation can be complete (or full) mediation or partial mediation. Full mediation occurs when the independent variable no longer affects the dependent variable after the mediator has been controlled. Partial mediation is the case in which the relationship between the independent variable to the dependent variable is reduced in absolute size but is still different from zero when the mediator is introduced in the estimation.

There is a moderating effect if the moderating variable $\left(X_{2}\right)$ exerts a significant effect on the relationship between an independent variable $\left(X_{1}\right)$ and the dependent variable $Y$.

where $X_{1}$ is the independent variable; $X_{2}$ is the moderator, and $Y$ is the dependent variable. The corresponding equation is

$$
Y_{i}=\beta_{0}+\beta_{1} X_{1 i}+\beta_{2} X_{2 i}+\beta_{3} X_{1 i} X_{2 i}+\varepsilon_{i}
$$

where $X_{1 i} X_{2 i}$ is the interaction term and $\varepsilon_{i}$ is the error term.
The combinations of these models are visualized in the next figure.


Figure 3-The combined model in terms of diagram to be estimated

- The indirect effect of $X$ on $Y$ through the mediator is equal to $a_{i} b_{i}$.
- The direct effect of $X$ on $Y$ is equal to $c_{1}^{\prime}$.
- The interaction effect of $X *$ Moderator is equal to $c_{3}^{\prime}$.

To estimate the detailed empirical model, the Partial Least Squares Structural Equation Modeling (PLS-SEM) bootstrapping technique is used to estimate the Process model from the software SmartPLS, version 4 (Ringle et al., 2015). The PLS is a good approach to be applied when the sample size is small and applications have little available theory (Hwang et al., 2010). PLS-SEM relies on a nonparametric bootstrap procedure, since it does not assume that the data is normally distributed, (Davison \& Hinkley, 1997) to test if the estimated path coefficients are significant (Hair et al., 2017). The PLS-SEM algorithm uses a maximum number of iterations equal to 3000 and the stop criterion is set at $10^{-7}$; to make a decision
about the significance of the estimates, 5000 samples are generated. It is assumed that the level of significance is equal to 0.10 .

### 4.6.1. Estimated Models

The detailed empirical model shown in Figure 1 is going to be estimated.
Before going through the interpretation of the estimated model, the assumption that the model does not suffer from multicollinearity needs to be validated from the coefficient Variance Inflation Factor (VIF). VIF values greater than 5 indicate a potential problem of multicollinearity and values greater than 10 indicate a multicollinearity problem (Sheather, 2009). Therefore, this assumption is not validated (Table 9).

Table 12 - The collinearity diagnostics for Model 1

|  | VIF |
| :--- | ---: |
| Continue use | 1.339 |
| Ease of use | 87.105 |
| Fiction | 60.529 |
| Habitual listening | 162.655 |
| NFiction | 73.741 |
| Novelty | 77.098 |
| Popularity | 52.267 |
| Fiction x Habitual listening | 61.595 |
| Fiction x Novelty | 63.131 |
| Fiction x Popularity | 93.429 |
| Fiction x Ease of use | 43.698 |
| NFiction x Habitual listening | 57.971 |
| NFiction x Novelty | 47.384 |
| NFiction x Popularity | 89.456 |

To deal with the multicollinearity problem, one possible way is to omit one or more variables from the model that can be the reason for such violation. The next estimated models, derived from Model 1, are simplified models that can minimize this problem.

MODEL 2
MODEL 2a
The variables Continue use intention and Habitual listening are closely related and cannot be together in the same model; thus, one of them should be omitted from the model's specification.

If the omitted variable is Habitual listening, the diagram to be estimated is visualized in the next figure).


Figure 4-Model 2a to be estimated
The problem with multicollinearity persists. But the problem of multicollinearity associated to the variable Continue use intention is solved $\left(V I F_{\text {Continue use }}=1.215\right)$.

Table 13. The collinearity diagnostics for Model $2 a$

|  | VIF |
| :--- | ---: |
| Continue use | 1.215 |
| Ease of use | 81.724 |
| Fiction | 78.541 |
| NFiction | 76.868 |
| Novelty | 62.245 |
| Popularity | 73.242 |
| Fiction x Novelty | 52.943 |
| Fiction x Popularity | 61.061 |
| Fiction x Ease of use | 87.340 |
| NFiction x Novelty | 47.478 |
| NFiction x Popularity | 43.276 |
| NFiction x Ease of use | 85.612 |

Thus, there are other variables that are still closed related, and Model 2a is not going to be estimated.

MODEL 2b
Omitting the variable Continue use intention, in this version there is not the mediator variable.


Figure 5-Model 2b to be estimated
The problem of multicollinearity continues to be present.
Table 14. Collinearity diagnostics for Model $2 b$

|  | VIF |
| :--- | :--- |
| Ease of use | 80.423 |
| Fiction | 77.751 |
| NFiction | 76.649 |
| Novelty | 60.517 |
| Popularity | 73.184 |
| Fiction x Popularity | 60.534 |
| Fiction x Novelty | 51.495 |
| Fiction x Ease of use | 85.716 |
| NFiction x Novelty | 46.413 |
| NFiction x Popularity | 43.167 |
| NFiction x Ease of use | 84.526 |

## MODEL 3

It is possible that this problem can still occur due to the variables Fiction and Non-Fiction.
Thus, there is still a model that can be tested if one representative item for each of these constructs in terms of dummies would replace the constructs. These items were recoded into three categories, where label 1 means disagree, label 2 means neither agree nor disagree, and label 3 means agree. Then, the dummies were computed (Figure 6).

MODEL 3a


Figure 6 - Model 3a to be estimated

With Habitual listening and with the replacement of Fiction type and Non-Fiction type by the dummies for each representative item, but recoded, where the reference category is for both cases the category 1 (those who disagree), the multicollinearity problem was not solved.

Table 15. Collinearity diagnostics for Model 3a

|  | VIF |
| :--- | ---: |
| D_Genre01R_2 | 81.438 |
| D_Genre01R_3 | 103.136 |
| D_NFiction5R_2 | 59.852 |
| D_NFiction5R_3 | 77.081 |
| Ease of use | 22.947 |
| Habitual listening | 14.965 |
| Novelty | 14.709 |
| Popularity | 17.525 |
| D_Genre01R_2 x Habitual listening | 25.642 |
| D_Genre01R_2 x Novelty | 24.643 |
| D_Genre01R_2 x Popularity | 18.598 |
| D_Genre01R_2 x Ease of use | 44.447 |
| D_Genre01R_3 x Habitual listening | 27.915 |
| D_Genre01R_3 x Novelty | 26.365 |
| D_Genre01R_3 $\times$ Popularity | 33.557 |
| D_Genre01R_3 x Ease of use | 56.136 |

MODEL 3b
Substituting the variable Habitual listening by Continue use intention, the results for the collinearity diagnostics show that the multicollinearity problem remains.


Figure 7 - Model 3b to be estimated

The multicollinearity problem can be seen from Table 16.
Table 16. Collinearity diagnostics for Model $3 b$

|  | VIF |
| :--- | :--- |
| Continue use | 16.958 |
| D_Fiction1R_2 | 76.448 |
| D_Fiction1R_3 | 81.321 |
| D_NFiction5R_2 | 48.798 |
| D_NFiction5R_3 | 71.561 |
| Ease of use | 22.156 |
| Novelty | 15.297 |
| Popularity | 16.742 |
| D_Fiction1R_2 $\times$ Continue use | 27.632 |
| D_Fiction1R_2 $\times$ Novelty | 27.332 |
| D_Fiction1R_2 $\times$ Popularity | 14.522 |
| D_Fiction1R_2 $\times$ Ease of use | 38.567 |
| D_Fiction1R_3 $\times$ Continue use | 46.318 |
| D_Fiction1R_3 $\times$ Novelty | 26.861 |
| D_Fiction1R_3 $\times$ Popularity | 31.855 |
| D_Fiction1R_3 $\times$ Ease of use | 58.475 |
| D_NFiction5R_2 $\times$ Continue use | 28.838 |
| D_NFiction5R_2 $\times$ Novelty | 19.010 |
| D_NFiction5R_2 $\times$ Popularity | 23.202 |
| D_NFiction5R_2 $\times$ Ease of use | 33.504 |
| D_NFiction5R_3 $\times$ Continue use | 44.157 |
| D_NFiction5R_3 $\times$ Novelty | 28.124 |
| D_NFiction5R_3 $\times$ Popularity | 26.306 |
| D_NFiction5R_3 $\times$ Ease of use | 55.604 |

MODEL 4
Another possible way to specify a very simple model to mimic the reality is to eliminate the Genre preferences from the model specification. The model in both versions, depending on whether habitual listening or continue to use intention is omitted from the model's specification are going to be estimated.

MODEL 4a
Choosing to omit Continue use intention, the model to be estimated is shown in the next figure.


Figure 8 - Model 4a to be estimated

The VIF's estimations now show that the model doesn't suffer from the multicollinearity problem and the estimated coefficients as well as the determination coefficients are going to be analyzed.

Table 17. Collinearity diagnostics for Model 4a

|  | VIF |
| :--- | :---: |
| Ease of use | 1.010 |
| Habitual listening | 1.017 |
| Novelty | 1.072 |
| Popularity | 1.053 |

The estimated coefficients can be viewed in the next table.

Table 18. The estimated coefficients for Model 4 a

|  | Coefficients | P values | $R^{2}$ | Adjusted $R^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Ease of use | 0.104 | 0.022 | 0.06 | 0.028 |
| Habitual listening | 0.109 | 0.071 |  |  |
| Novelty | 0.030 | 0.556 |  |  |
| Popularity | -0.035 | 0.533 |  |  |

For a level of significance equal to 0.10 , only Ease of use of a platform and Habitual listening can significantly explain variations in the dependent variable. But the quality of the adjustment is poor. That is, only $2.8 \%$ of the variations in Time spent listening to audiobooks are explained by the estimated model, after adjusting for the number of predictors and the sample size.

MODEL 4b
Choosing to omit Habitual listening, the estimated model in Figure 9 is the following:


Figure 9 - Model 4b to be estimated
The estimated model doesn't suffer from the multicollinearity problem (Table 19).
Table 19. Collinearity diagnostics for Model $4 b$

|  | VIF |
| :--- | ---: |
| Continue use | 1.050 |
| Ease of use | 1.036 |
| Novelty | 1.077 |
| Popularity | 1.048 |

The estimated coefficients and the coefficients for the quality criteria are viewed in the next table.

Table 20. The estimated coefficients for Model 4b

|  | Coefficients | $\mathbf{P}$ <br> values | $R^{2}$ | Adjuste <br> $\mathbf{d}$ <br> $R^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Continue use | 0.133 | 0.002 | 0.07 | 0.041 |
| Ease of use | 0.086 | 0.048 |  |  |
| Novelty | -0.001 | 0.988 |  |  |
| Popularity | -0.025 | 0.660 |  |  |

For a unit increase in Continue use intention, it is expected, on average, that Time spent listening to audiobooks will increase 0.133 , if the effect of the other independent variables remain constant.

Ease of use of a platform and Continue use intention significantly explain variations in the dependent variable. The quality of the adjustment improved compared with the obtained in the previous version, but it is still poor. Only $4.1 \%$ of the variations in Time spent listening to audiobooks are explained by the estimated model, after adjusting for the number of predictors and the sample size. This is the model that is chosen to validate the hypotheses in Chapter III.

As a summary, it can be said that Model 4 is chosen to validate the hypotheses. Thus, Continue use intention (or Habitual listening) and Ease of use of a platform significantly explain Time spent listening to audiobooks.

### 4.6.2 Considerations

In the presence of multicollinearity, the task to design the complexity of explaining audiobook listening, was an impossible task and a very simple model was specified. The other theoretical way to solve the multicollinearity problem, increasing the sample dimension, is an impossible task.

### 4.7. Validation of the hypotheses

From the results presented previously, the hypotheses developed previously are going to be validated (Table 21) from the estimations of Model 4b.

Other models will not be considered for this validation.

Table 21. Hypotheses Validation

| Hypotheses | Model 4b |
| :--- | :---: |
| H1: The higher the levels of habitual audiobook listening, the <br> higher the intention of continually listening to audiobooks | Not Validated |
| H2: The preferred book genre influences the relationship <br> between the habitual listening to audiobooks and time spent <br> listening to audiobooks. | Not Validated |
| H3: The more popular the audiobook is, the higher the intention <br> of continually listening to audiobooks | Not Validated |
| H4: The more novel the audiobook is, the higher the intention of <br> continually listening to audiobooks | Not Validated |
| H5a: The more user-friendly an audiobook provider's platform <br> is, the higher the intention of continually listen to audiobooks | Not Validated |
| H5b: The more user-friendly an audiobook provider's platform <br> is, the higher the time spent listening to audiobooks | Validated |
| H6a: Continuous use intention predicts time spent listening to <br> audiobooks | Validated |
| H6b: Continuous use intention mediates the relationship <br> between the independent variables and the time spent listening <br> to audiobooks | Not validated |

## V. Conclusion

### 5.1. Results and discussion

In this study, the aim was to answer the research question about how all the aforementioned variables may give a holistic and multidimensional approach in explaining the time spent listening to audiobooks.

Unfortunately, the multicollinearity problem did not allow to estimate the empirical model shown in Figure 1.

Models 4 a and 4 b , on the other hand, were able to resolve the multicollinearity problem, but at the expense of the removal of several variables. Nonetheless, model 4 b was able to produce better results than model 4 a (Adjusted $\mathrm{R}^{2}=0.041$ ) and establish that continuous use intention and ease of use of the platform are direct predictors of time spent listening to audiobooks. In light of these results, it becomes necessary to comprehend why most models failed to be applied to this investigation and replicate the work of previous authors in different areas. One reason for this might be due to the high number of options in the Likert-type scale, which albeit it has the tendency to reduce central tendency bias, it can provide marginally worse distribution of data. Another potential factor that may have led to this result is the inclusion of many independent variables for such a small sample.

The sample in the research of Singh et al (2021) had a balanced Male/Female ratio which could have been a possible differentiating factor in comparison to this research, since males consisted of $89.1 \%$ of the total respondents, as well as a significantly larger sample of 869 respondents. Furthermore, the questionnaire included only individuals from India, in contrast with this research that had a respondent profile with several nationalities. Some of the same principles also apply to Rain and Mar (2014), which had a larger sample of 232 respondents as well as a majority of female respondents. The same Female majority and single country analysis can be seen with Chang et al. (2015).

Chang, J. et al (2014) also had a higher sample of 215 respondents, but the main target of their Novelty construct was "New Product Performance", which although better performance shares similarity with continuous use, this semantic difference might skew possible results when trying to explain intention of continuous use.

Finally, in the research of Pang, S. et al (2020), they had a significantly higher sample size, but had a majority male respondent profile and surprisingly it was one of the studies in which our hypothesis was confirmed.

### 5.2. Limitations

The first limitation is due to the low sample size of only 110 participants which lowers the capacity to understand the existent variability of the population and could contribute to higher levels of bias

Most of the respondents being Male and the higher number of respondents with bachelor degrees may have increased this problem. Another possible criticism of this research is that the variable monthly income is absent; however, if this variable was included in the questionnaire, the results would not match reality since young respondents, that are the majority in this sample ( $65.5 \%$ ), rely on the purchasing power of their parents and not in their personal income. Another potential limitation can be related to the respondents over 40 years old who are not sufficiently represented in this sample (3.6\%) which can lead to loss of information that can be important.

The biggest limitation is the incapacity to replicate the models presented by the authors because of a different scope of this thesis. This research had a more explorative nature, due to the inclusion of various variables from several study areas.

Finally, it is also important to mention that the variables habitual listening and continuous use, despite having very different theoretical foundations, still have a high level of multicollinearity. In future studies, the following question should be taken into account:

Was there any problem that the respondents faced while answering the questionnaire due to the meanings of the variables Continue use intention and Habitual listening?

### 5.3. Recommendations for future research

In light of the limitations mentioned above, future research should include a higher sample size as an attempt to get a more balanced Male/Female ratio. Another possible area for future research would also be to investigate older age groups with different and well-balanced geographical countries with a more diverse nationalities profile. Also, it may be possible that new lifestyles and the growing desire for multitasking might provide insight in the consumption pattern of audiobook listeners.

Future research should also attempt to investigate these same variables in terms of their items and scales; mainly divide the model's specification into three different areas: Related to the platform (ease-of-use), nature of the audiobook (audiobook novelty, audiobook popularity) and in regards to the individual (habitual listening and audiobook genre preference). Albeit in the latter case of habitual listening, it is suggested that it should be investigated in other areas of psychology such as personality and social aspects, instead of a more behaviorist approach as was done in this research. Adjoined to this line of reasoning, a shorter questionnaire may benefit the research by leading to more accurate responses.

Another possible area of research is to substitute the variable "Time Spent Listening to Audiobooks" with a possible proxy variable such as "Number of Audiobooks read during X period" (for example, last six months) and ascertain if it yields better results.

It is also important to emphasize other possible ways to collect the respondent data. Instead of using literature forums, other media sources such as Facebook, Instagram and other social media apps might tap into an audience with a different background and opinion.

### 5.4. Recommendations for the industry

Due to the results of this research, little can be recommended for the Audiobook industry, since more research is needed to make a more cohesive and backed theory behind time spent listening to Audiobooks. But it is important nonetheless to accentuate that future strategies to drive consumers to spend more time listening should focus around developing (1) the concept of continue intention to keep listening, when the outcome is time spent listening to Audiobooks and (2) being the use of a platform a significant predictor of time spent listening to audiobooks, it is important that the platform providers continue to design their platforms in order to maximize the ease of their user experience.

## References

Amin, M., Rezaei, S., \& Abolghasemi, M. (2014). User satisfaction with mobile websites: the impact of perceived usefulness (PU), perceived ease of use (PEOU) and trust. Nankai Business Review International, 5(3), 258-274. https://doi.org/10.1108/NBRI-01-20140005

Aarts, H., \& Dijksterhuis, A. (2000). Habits as knowledge structures: Automaticity in goaldirected behavior. Journal of Personality and Social Psychology, 78(1), 53-63. https://doi.org/10.1037/0022-3514.78.1.53

Alexander, J., \& Jarman, R. (2018).The pleasures of reading non-fiction.
Al-Jarf, R. (2021). Mobile audiobooks, listening comprehension and EFL college students. International Journal of Research -GRANTHAALAYAH, 9(4), 410-423. https://doi.org/10.29121/granthaalayah.v9.i4.2021.3868

Bickel, W. K., Jarmolowicz, D. P., Mueller, E. T., \& Gatchalian, K. M. (2011). The behavioral economics and neuroeconomics of reinforcer pathologies: Implications for etiology and treatment of addiction. Current Psychiatry Reports, 13(5), 406-415. https://doi.org/10.1007/s11920-011-0215-1

Biswas, A., Grewal, D., Verma, S., Banerjee, S., \&Nordfält, J. (2017).Reframing the Discount with a Comparison to the Sale Price: Does It Make the Discount More Attractive? ABHIJIT GUHA.

Bouton, M. E. (2004).Context and behavioral processes in extinction.In Learning and Memory (Vol. 11, Issue 5, pp. 485-494).https://doi.org/10.1101/lm. 78804

Carmel, D., Roitman, H., \& Yom-Tov, E. (2012).On the relationship between novelty and popularity of user-generated content. ACM Transactions on Intelligent Systems and Technology, 3(4).https://doi.org/10.1145/2337542.2337554

Chakrabarti, A., \& Khadilkar, P. (2003). A measure for assessing product novelty.
Chang, J.-J., Hung, K.-P., \& Lin, M.-J.J. (2014).Knowledge creation and new product performance: the role of creativity.

Collier, J. E., Sherrell, D. L., Babakus, E., \&Horky, A. B. (2014). Understanding the differences of public and private self-service technology. Journal of Services Marketing, 28(1), 60-70. https://doi.org/10.1108/JSM-04-2012-0071

Davis, F. D. (1989). Perceived Usefulness.
Davison, A. C., \& Hinkley, D. V. (1997). Bootstrap methods and their application (No. 1). Cambridge university press.

Dunsmoor, J. E., Niv, Y., Daw, N., \& Phelps, E. A. (2015).Rethinking Extinction. In Neuron (Vol. 88, Issue 1, pp. 47-63).Cell Press.https://doi.org/10.1016/j.neuron.2015.09.028

Engström, C., \&Müller, N. J. (2019).Consumer adoption of audiobook streaming services.www.liu.se

Esteves, K. J., \& Whitten, E. (2011).Assisted Reading with Digital Audiobooks for Students with Reading Disabilities Reading Disabilities. http://scholarworks.wmich.edu/reading

Febrianto, G., Hidayatullah, S., \&Ardianto, Y. T. (2018).The Effect of Intention to Usage to Actual Usage E-Purchasing Application. Article in International Journal of Scientific and Engineering Research, 9.http://www.ijser.org

Filieri, R., Acikgoz, F., Ndou, V., \& Dwivedi, Y. (2021). Is TripAdvisor still relevant? The influence of review credibility, review usefulness, and ease of use on consumers' continuance intention. International Journal of Contemporary Hospitality Management, 33(1), 199-223. https://doi.org/10.1108/IJCHM-05-2020-0402

Fulmer, S. M., D’Mello, S. K., Strain, A., \& Graesser, A. C. (2015). Interest-based text preference moderates the effect of text difficulty on engagement and learning. Contemporary Educational Psychology, 41, 98-110. https://doi.org/10.1016/j.cedpsych.2014.12.005

Gillan, C. M., Robbins, T. W., Sahakian, B. J., van den Heuvel, O. A., \& van Wingen, G. (2016).The role of habit in compulsivity. European Neuropsychopharmacology, 26(5), 828-840. https://doi.org/10.1016/j.euroneuro.2015.12.033

GÖNÜLAL, T. (2020). Improving Listening Skills with Extensive Listening Using Podcasts and Vodcasts. International Journal of Contemporary Educational Research. https://doi.org/10.33200/ijcer.685196

Grand View Research, Inc.. (2022). Audiobooks Market Size, Share \& Trends Analysis Report By Genre, By Preferred Device (Smartphones, Laptops \& Tablets, Personal Digital Assistants), By Distribution Channel, By Target Audience, By Region, And Segment Forecasts, 2022-2030. https://www.grandviewresearch.com/industry-analysis/audiobooks-market

Guthrie, J. T., Hoa, L. W., Wigfield, A., Tonks, S. M., \& Perencevich, K. C. (2005). From spark to fire: Can situational reading interest lead to long-term reading motivation? Reading Research and Instruction, 45(2), 91-117. https://doi.org/10.1080/19388070609558444

Hair, J. F., Matthews, L. M., Matthews, R. L., \& Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use "PLS-SEM or CB-SEM: updated guidelines on which method to use." In Organizational Research Methods, MIS Quarterly, and International Journal (Vol. 1, Issue 2).

Hair, J. F., Ringle, C. M., \& Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139-152. https://doi.org/10.2753/MTP1069$\underline{6679190202}$

Hanner, H., \& O'Connor, A. (2019). Audiobooks speak for themselves a quantitative study of consumer behaviour related to audiobooks in Sweden.

Hansen, J. M., Saridakis, G., \& Benson, V. (2018).Risk, trust, and the interaction of perceived ease of use and behavioral control in predicting consumers' use of social media for transactions. Computers in Human Behavior, 80, 197-206. https://doi.org/10.1016/j.chb.2017.11.010

Herbert Simon, S. A., Karl Deutsch, D. W., \& Shubik, M. (1971). Designing organizations for an information-rich world. The Johns Hopkins Press.

Hopper, R. (2005). What are teenagers reading? Adolescent fiction reading habits and reading choices.

Huberman, B. A. (2013). Social Computing and the Attention Economy. Journal of Statistical Physics, 151(1-2), 329-339. https://doi.org/10.1007/s10955-012-0596-5

Hwang, H., Malhotra, N. K., Kim, Y., Tomiuk, M. A., \& Hong, S. (2010). A comparative study on parameter recovery of three approaches to structural equation modeling. Journal of Marketing Research, 47 (Aug), 699-712.

Jeong, H. J., \& Kwon, K. N. (2012). The Effectiveness of Two Online Persuasion Claims: Limited Product Availability and Product Popularity. Journal of Promotion Management, 18(1), 83-99. https://doi.org/10.1080/10496491.2012.646221

Jin, B. S., Yoon, S. H., \& Ji, Y. G. (2013).Development of a Continuous Usage Model for the Adoption and Continuous Usage of a Smartphone. International Journal of HumanComputer Interaction, 29(9), 563-581. https://doi.org/10.1080/10447318.2012.729997

Jun, J., Cho, I., \& Park, H. (2018). Factors influencing continued use of mobile easy payment service: an empirical investigation. Total Quality Management and Business Excellence, 29(9-10), 1043-1057. https://doi.org/10.1080/14783363.2018.1486550

Karjaluoto, H., Shaikh, A. A., Saarijärvi, H., \& Saraniemi, S. (2019). How perceived value drives the use of mobile financial services apps. International Journal of Information Management, 47, 252-261. https://doi.org/10.1016/j.ijinfomgt.2018.08.014

Keller, K. L. (2003). Brand Synthesis: The Multidimensionality of Brand Knowledge. In JOURNAL OF CONSUMER RESEARCH (Vol. 29).

Kim, Y.-J., \& Kim, B.-Y. (2020). The Purchase Motivations and Continuous Use Intention of Online Subscription Services. International Journal of Management (IJM), 11(11), 196207. https://doi.org/10.34218/IJM.11.11.2020.020

Kotler P. Keller K. L. \& Chernev A. (2022). Marketing management (Sixteenth edition. Global).Pearson Education Limited.

Kragler, S. (2000).Choosing books for reading: An analysis of three types of readers. Journal of Research in Childhood Education, 14(2), 133-141. https://doi.org/10.1080/02568540009594758

Leemans, H., \& Stokmans, M. J. W. (1992). A descriptive model of the decision making process of buyers of books. Journal of Cultural Economics.

Lien, C. H., Cao, Y., \& Zhou, X. (2017).Service quality, satisfaction, stickiness, and usage intentions: An exploratory evaluation in the context of WeChat services. Computers in Human Behavior, 68, 403-410. https://doi.org/10.1016/j.chb.2016.11.061

Luan, Y., \& Kim, Y. J. (2022). An integrative model of new product evaluation: A systematic investigation of perceived novelty and product evaluation in the movie industry. PLoS ONE, 17(3 March). https://doi.org/10.1371/journal.pone. 0265193

Lund, A. (2001). Measuring Usability with the USE
Questionnaire.https://www.researchgate.net/publication/230786746
Maity, S. K., Kumar, A., Choudhary, V., Mukherjee, A., \& Mullick, A. (2018). Understanding book popularity on goodreads. Proceedings of the International ACM SIGGROUP Conference on Supporting Group Work, 117121.https://doi.org/10.1145/3148330.3154512

Moore, J., \& Cahill, M. (2016).Audiobooks: Legitimate "Reading" Material for Adolescents? 19. www.ala.org/aasl/slr

Morwitz, V. G., Steckel, J. H., \& Gupta, A. (2007). When do purchase intentions predict sales? International Journal of Forecasting, 23(3), 347-364.
https://doi.org/10.1016/j.ijforecast.2007.05.015
Nowosielski, R. J., Trick, L. M., \& Toxopeus, R. (2018). Good distractions: Testing the effects of listening to an audiobook on driving performance in simple and complex road environments. Accident Analysis and Prevention, 111, 202-209.
https://doi.org/10.1016/j.aap.2017.11.033
Paletz, S. B. F., \& Peng, K. (2008). Implicit theories of creativity across cultures: Novelty and appropriateness in two product domains. Journal of Cross-Cultural Psychology, 39(3), 286-302. https://doi.org/10.1177/0022022108315112

Pang, S., Bao, P., Hao, W., Kim, J., \& Gu, W. (2020). Knowledge sharing platforms: An empirical study of the factors affecting continued use intention. Sustainability (Switzerland), 12(6).https://doi.org/10.3390/su12062341

Pedersen, B. S., \&Have, I. (2012). Conceptualizing the audiobook experience. Sound Effects.
Pihlström, M. (2007). Committed to content provider or mobile channel? Determinants of continuous mobile multimedia service use. In Jitta journal of information technology theory and application Mobile Multimedia Service Use (Vol. 9, Issue 1).

Powell, D., Yu, J., DeWolf, M., \& Holyoak, K. J. (2017). The Love of Large Numbers: A Popularity Bias in Consumer Choice. Psychological Science, 28(10), 1432-1442. https://doi.org/10.1177/0956797617711291

Rain, M., \& Mar, R. (2014). Measuring reading behavior: Examining the predictive validity of print-exposure checklists. Empirical Studies of the Arts, 32(1), 93-108. https://doi.org/10.2190/EM.32.1f

Ringle, C. M., da Silva, D., \&Bido, D. D. S. (2014).Modelagem de Equações Estruturais com Utilização do Smartpls. Revista Brasileira de Marketing, 13(2), 56-73. https://doi.org/10.5585/remark.v13i2.2717

Sambasivan, M., Wemyss, G. P., \& Rose, R. C. (2010).User acceptance of a G2B system: A case of electronic procurement system in Malaysia. Internet Research, 20(2), 169-187. https://doi.org/10.1108/10662241011032236

Samuels, B. G. (1989). Young Adults' Choices: Why Do Students "Really like" Particular Books? In Source: Journal of Reading (Vol. 32, Issue 8).

Sánchez-Fernández, R., ÁngelesIniesta-Bonillo, M., \& B Holbrook, M. (2009). The conceptualization and measurement of consumer value in services.

Schiefele, U., Schaffner, E., Möller, J., Wigfield, A., Nolen, S., \& Baker, L. (2012).Dimensions of reading motivation and their relation to reading behavior and competence. In Reading Research Quarterly (Vol. 47, Issue 4, pp. 427463).https://doi.org/10.1002/RRQ. 030

Simon J. Sheather (2009). A modern approach to regression with R. Springer -Verlag New York Inc.

Singh, S., Singh, N., Kalinić, Z., \& Liébana-Cabanillas, F. J. (2021). Assessing determinants influencing continued use of live streaming services: An extended perceived value theory of streaming addiction. Expert Systems with Applications, 168.https://doi.org/10.1016/j.eswa.2020.114241

Sung, B., Hartley, N., Vanman, E., \& Phau, I. (2016). How can the word "NEW" evoke consumers' experiences of novelty and interest? Journal of Retailing and Consumer Services, 31, 166-173. https://doi.org/10.1016/j.jretconser.2016.02.010

Tattersall Wallin, E. (2022). Audiobook routines: identifying everyday reading by listening practices amongst young adults. Journal of Documentation, 78(7), 266-281. https://doi.org/10.1108/JD-06-2021-0116

Topping, K. J. (2015).Fiction and Non-Fiction Reading and Comprehension in Preferred Books. Reading Psychology, 36(4), 350387.https://doi.org/10.1080/02702711.2013.865692

Verplanken, B., Wood, W., Cohen, J., Lind, A., Lynch, J., Quinn, J., \& Rodriguez, D. (2006). Interventions to Break and Create Consumer Habits.25(1), 1547-7207.

Wood, W., \& Neal, D. T. (2009). The habitual consumer. Journal of Consumer Psychology, 19(4), 579-592. https://doi.org/10.1016/j.jcps.2009.08.003

Wood, W., \& Rünger, D. (2016). Psychology of habit. Annual Review of Psychology, 67, 289-314. https://doi.org/10.1146/annurev-psych-122414-033417

Yen, C. H., \& Teng, H. Y. (2015). Celebrity Involvement, Perceived Value, and Behavioral Intentions in Popular Media-Induced Tourism. Journal of Hospitality and Tourism Research, 39(2), 225-244. https://doi.org/10.1177/1096348012471382

Yuan, Y., Lai, F., \& Chu, Z. (2019). Continuous usage intention of Internet banking: a commitment-trust model. Information Systems and E-Business Management, 17(1), 125. https://doi.org/10.1007/s10257-018-0372-4

## APPENDIX

## Questionnaire

## Part 1- General Information

1. What is your gender? *

Male
Female
Don't want to say
2. What is your age *

$$
\begin{aligned}
& \text { 18-24 (Gen Z) } \\
& 25-40 \text { (Millennial) } \\
& 41-56 \text { (Gen X) } \\
& 57-75 \text { (Baby Boomer) } \\
& 76+\text { (Silent Gen) }
\end{aligned}
$$

3. What is your education level? *

Basic (Until 4th grade)
Secondary Education (Until 12th grade)
Bachelor's degree
Master's Degree
PhD
4. What is your professional occupation? *

Employee
Self-Employed
Student
Unemployed
Retired
Other
5. Which country did you grow up? *

## Part 2- Time spent weekly listening to audiobooks

1. How much time do you spend weekly in hours, on average, hearing audiobooks? (Write only the number, e.g. 10) (minimum 1 hour) *

## Part 3- Audiobook Genre

How do these next statements reflect your preference for specific audiobook genres?

1. I prefer fiction (novels, stories, etc.) over non-fiction (biographies, theoretical learning, etc.) audiobooks *

Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer
2. I prefer listening to stories over audiobooks about theoretical learning *

Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer
3. I find it easier listening to fiction (novels, stories, etc.) audiobooks than nonfiction (biographies, theoretical learning, etc.) audiobooks.*

Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer
4. I prefer audiobooks that discuss real world issues. *

Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer
5. I like audiobooks that discuss topics of a more informative/scientific nature *

Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer

## Part 4- Audiobook Novelty

How do these next statements reflect your opinion about the novelty of an audiobook?

1. I prefer audiobooks that have "out of the ordinary" stories *

Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer
2. I prefer audiobooks that talk about something not commonly found. *

Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer

I prefer audiobooks that incorporate new ideas/concepts. *
Strongly Disagree

Disagree<br>Somewhat Disagree<br>Neither Agree nor Disagree<br>Somewhat Agree<br>Agree<br>Strongly Agree<br>Don't Know/Don't want to answer

## Part 5- Audiobook Popularity

How do these next statements reflect your opinion about the popularity of an audiobook?

I think audiobooks with more people sharing, and responding positively, are more worthy of my time *

Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer

I am more likely to hear an audiobook if I see more people sharing *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer
I think audiobooks with more people sharing, and responding positively, are more likely to be enjoyable / better *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Don't Know/Don't want to answer

## Part 6- Habitual Heavy Listening

How do these next statements reflect your dependency towards audiobooks?

> I find myself listening to Audiobooks for longer than I planned to *
> $\quad$ Strongly Disagree
> Disagree
> Somewhat Disagree
> Neither Agree nor Disagree
> Somewhat Agree
> Agree
> Strongly Agree

I am bothered when people interrupt me while I am listening to an Audiobook *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree

Strongly Agree
I would rather spend time listening to an Audiobook than do things around the house. * Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Much of my leisure/free time I spend listening to Audiobooks *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
I sacrifice other activities to hear audiobooks. *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
I push through to finish an audiobook even if I lost interest in it. *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
I have a big backlog of audiobooks I intend to hear or purchase. *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Part 7- Ease-of-Use of the Platform
How do these next statements reflect your opinion about platform you currently use to listen/buyaudiobooks?
It is easy to use. *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
It is user friendly. *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
It requires the fewest steps possible to accomplish what I want to do with it. *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
Both occasional and regular users would like it.
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
I can use it successfully every time. *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
I learned to use it quickly.
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree

## Part 8- Continuous Listening Intention

 the future?I will continue listening to Audiobooks in the future *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree
I will maintain my listening frequency in the future *
Strongly Disagree
Disagree
Somewhat Disagree
Neither Agree nor Disagree
Somewhat Agree
Agree
Strongly Agree

How do these next statements reflect your opinion about your intention in listening to audiobooks in

```
I will make an effort to keep listening to Audiobooks in the future *
    Strongly Disagree
    Disagree
    Somewhat Disagree
    Neither Agree nor Disagree
    Somewhat Agree
    Agree
    Strongly Agree
I will recommend Audiobooks I like to other people in the future *
    Strongly Disagree
    Disagree
    Somewhat Disagree
    Neither Agree nor Disagree
    Somewhat Agree
    Agree
    Strongly Agree
```


## MODEL 1

|  | Original sample (0) | P values |
| :--- | ---: | ---: |
| Continue use -> Time Spent Listening | 0.799 | 0.013 |
| Ease of use -> Continue use | 0.158 | 0.201 |
| Ease of use -> Time Spent Listening | 0.058 | 0.984 |
| Fiction -> Time Spent Listening | -4.648 | 0.309 |
| Habitual listening -> Continue use | 0.179 | 0.074 |
| Habitual listening -> Time Spent Listening | -5.968 | 0.091 |
| NFiction -> Time Spent Listening | -3.248 | 0.451 |
| Novelty -> Continue use | 0.154 | 0.147 |
| Novelty -> Time Spent Listening | -2.533 | 0.400 |
| Popularity -> Continue use | -0.035 | 0.707 |
| Popularity -> Time Spent Listening | 1.887 | 0.573 |


| Fiction x Habitual listening -> Time Spent Listening | 0.810 | 0.090 |
| :--- | ---: | ---: |
| Fiction x Novelty -> Time Spent Listening | 0.390 | 0.321 |
| Fiction x Popularity -> Time Spent Listening | -0.165 | 0.710 |
| Fiction x Ease of use -> Time Spent Listening | 0.042 | 0.918 |
| NFiction x Habitual listening -> Time Spent Listening | 0.790 | 0.069 |
| NFiction x Novelty -> Time Spent Listening | 0.232 | 0.532 |
| NFiction x Popularity -> Time Spent Listening | -0.316 | 0.463 |
| NFiction x Ease of use -> Time Spent Listening | 0.070 | 0.837 |

