In what ways does the genre of music influence shopping behaviour in retail stores?

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ATTESTATION OF AUTHORSHIP

“I hereby declare that this submission of my master’s thesis is my own work and that, to the best of my knowledge and belief, contains no material previously published or written by another person, nor material which to a substantial extent has been accepted or submitted for the award of any other degree or diploma of a university or institution of higher learning, except where due acknowledgement is made or defined in the acknowledgements.”

Signature:

Date: 24 August 2019

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I would like to thank everyone involved throughout the journey of my master's thesis. It has taken a while to complete my thesis and working on it part-time over the past two years has been rewarding yet challenging at the same time.

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ETHICAL APPROVAL

Ethical approval from the Auckland University of Technology Ethics Committee (AUTEC) was approved and granted for this application on the 17 July 2017, for the period of two years whilst completing this master's thesis. The AUTEC application number is 17/174. Further information regarding ethics approval (see Appendix A).

The key ethical consideration in this research study includes **participant observation** within a field study of experimental design. Information will be utilised only from what is publicly available within the two in-store settings / environments. Anonymity of participants is ensured (Kozinets, 2010) and no participants are recorded or interviewed.

ABSTRACT

Background music in retail settings is the subject of much academic enquiry (Garlin & Owen, 2006). Music is one form of sound that can be used to create an atmosphere that visitors will find pleasant and welcoming. Several research studies have been conducted on the atmospheric effects of music and how they affect shopper behaviour (Collins, 2003). Music, that falls under the ambience category of atmospheric effects, is “a powerful emotional stimulus and an efficient and effective means for triggering moods and shaping retail experience” (Petruzzellis, Chebat & Palumbo, 2014, p. 38).

Several empirical studies have been conducted on the immediate effects of background music. Garlin and Owen (2006) conducted a meta-analytic review of the effects of background music in retail settings. This research follows the model of Garlin and Owen (2006) and focusses on two of the five categories from the dependent variables identified by the researchers, that is, financial returns and temporal effects. The research assists in understanding how shopping behaviour such as time spent in the store, dollars spent, and the number of items purchased can be affected by the genre of music playing as background music within a retail setting.

Thus, two research questions were developed based on the research gaps identified:

RQ1 – Does the genre of music impact on shopping behaviour?

RQ2 – Does congruence between the retail environment and the genre of music impact shopping behaviour (temporal effects and financial returns)?

Quantitative research methods were chosen for this study: an experimental design with observational measures. Data collection occurred via direct observation. The research was conducted by undertaking two in-store direct, participant observations – one in a delicatessen (health / organic food) store and another in a liquor store, both in the Auckland region. Observations took place within set allocation time frames and a suitable location within each store. On one occasion, in each store, classical jazz music was played, and on another occasion, popular music was played. The frequency of product purchase during the set times was recorded, as well as the day and time of the purchase. An analysis of the two store visits followed the same procedure for each consecutive visit in order to facilitate comparisons within the findings.

During both store observations, the findings showed that when popular music was played, the sales figures (relating to the financial returns variable) were lower than when classical jazz music was played. However, no significant difference was found in terms of time spent in store and the type of products purchased. Some congruency effect was observed, in that the classical jazz music genre was associated with an increase of wine, but not beer sales.

1 CHAPTER ONE: INTRODUCTION

This chapter introduces the research, which investigates the role of different genres of music played within two different stores using in-store observation. The researcher's observational store visits occurred within manipulated environments whereby different genres of music were playing. Firstly, a background to the study is presented. Subsequently, the research objective is stated followed by a justification of the research, which is shown as plausible answers to the research questions. Next, the methodology used in this research project is briefly described. Finally, this chapter closes by presenting the organisation of the chapters and their outline.

1.1 Research Background

This section briefly outlines the background to the research. The purpose of this research and the perceived outcome/s is to investigate whether and how a genre of background music played within a retail setting or environment has an influence on the shopping behaviour of customers. Firstly, the chapter discusses the nature of retail (including the factors that retailers perceive as important in relation to customer behaviour and purchasing). Secondly, it investigates the nature of background music and draws on previous studies to determine its influence on the retail experience. This investigation leads to the hypotheses for this research.

Background music in retail settings has been the subject of academic enquiry (Garlin & Owen, 2006). This research project identifies and discusses the literature / empirical studies on the immediate effects of background music, while showing that several of the intermediate effects of background music have been ignored altogether. Some of the dependent variables examined include value returns, duration of shopping and the affective response of shoppers. The research question **'In what ways does the genre of music influence shopping behaviour in retail stores?'** is answered by investigating the effect of two music genres, classical jazz music and popular music, as background music in a retail setting. Music is powerful, emotional and motivational; therefore, retailers should investigate further relationships between store music, moods and shopping behaviour in order to increase overall sales (Bruner, 1990).

Studies conducted by Bruner (1990) and Yalch and Spangenberg (1990) laid the foundation for further studies on the topic of store music and shopping behaviour. However, there has been little research on the topic of music genre or its influence in a retail setting. Furthermore, when music genre has been discussed, it has usually been referenced alongside other atmospheric factors / effects rather than the music alone.

On the other hand, several research studies have been conducted on the atmospheric effects of music and how these affect customers, making the findings of these studies vital and useful tools for retailers (Collins, 2003). Music is a means of communication as well as recreation. The process of enjoying a musical performance when in the company of others provides a shared experience which is necessary for a sense of

social well-being and is common to all societies and cultures (Collins, 2003). The ability of music to affect our moods and our health is increasingly being recognised through the growing practice of music therapy (Morris & Munro, 2004). Music not only makes us feel good about ourselves, but it makes us feel better and when used for therapeutic, commercial or recreational purposes, it can deeply affect our feelings. It is now known exactly how this happens, but we know from our own responses that it does and that is enough to convince us of its overall value (Morris & Munro, 2004).

Atmospherics has been further divided into several categories. These include external variables such as signs, shop colour, building, surroundings of the store, etc. Internal variables include lighting, music, flooring, colour scheme and temperature. Other categories are the layout and design variables and the point-of-purchase and decoration variables (Lindquist & Sirgy, 2009). The key atmospheric effect that is useful for this research project, and which has been further analysed and discussed in more depth in the literature review, is the use of **music** in a store. A certain atmosphere or image is created in retail environments when music is used. Even when consumers are not consciously aware of it, music has been shown to influence a wide range of behavioural as well as cognitive responses in consumers (Lindquist & Sirgy, 2009).

Furthermore, research suggests that when classical music or easy listening music is played, consumers are likely to buy more items or higher-priced quality items (Yalch & Spangenberg, 1990). Bruner (1990) links music to the topic of mood affects and purchasing. As shown in the literature, the desire to study and understand human moods and to determine their role in consumer behaviour is likely to become more important in the future and music has been shown to be a powerful emotional motivator (Bruner, 1990).

Based on past findings, this research project aims to provide further evidence for the effect of genres of music on shopping behaviour.

The next section presents the research objective with a focus on the role of particular genres of music, and how / why background music is important in the retail setting.

1.2 Research Objective

A literature search provides very few examples of research into music in retail settings and the influence of music on consumer behaviour. Even though the overall use of music and its effects, such as volume and tempo, have been researched and discussed (Yalch & Spangenberg, 2000; Bruner, 1990), research into the style or genre of music is limited, especially in terms of its effects on customers' product choices, the in-store environment, buyer-seller interactions, real and perceived shopping times and overall shopping behaviour.

In their meta-analysis review of the effects of background music in retail settings, Garlin and Owen (2006) urge for more research on how background music influences the purchase and shopping behaviour of clientele. This is also the focus of a study by Turley and Milliman (2000) – 'Atmospheric effects on shopping behaviour' – where the researchers note that music is the most commonly studied general interior cue. It is

suggested that retailers need to grasp this very easy yet effective method of changing the mood of shoppers and to appreciate the long-term change in shopping behaviour that can result in positive outcomes in the retailing experience (Turley & Milliman, 2000). More research on the subject is crucial as the various atmospheric effects have an impact “on sales, the amount spent in the store/s, the gross margin, actual and perceived time in the environment, patronage, unplanned purchases, brand / store image and evaluation, rate of purchase, pace of shopping, brand choice, brand switching and satisfaction” (Turley & Milliman, 2000, p. 193).

This research project fills a gap in the literature by providing more information on the effects of music genre in a retail setting. Within this research the genre of music is limited to classical jazz music and popular music and how these two genres influence the purchasing behaviour of shoppers. There has been no previous study found on how the genre of music operates in a store environment apart from a ‘wine store’ study by Areni and Kim (1993).

The objective of the research is to examine **the overall effect of classical jazz versus popular music genres used as background music in a retail store and to evaluate their influence on shopping behaviour.** The research hypotheses that will also be tested for this research project are as follows:

1. **H1:** Sales (dollars spent) – Congruency between the store environment and the type of music (classical jazz music genre versus popular music genre) can positively influence the amount of dollars spent in the store;

2. **H2:** Time spent within the store – Congruency between the store environment and the type of music (classical jazz music genre versus popular music genre) can positively influence the time spent in the store by shopper/s;

3. **H3:** Number of items purchased / type of product purchased – Congruency between the store environment and the type of music (classical jazz music genre versus popular music genre) can positively influence the type of product purchased – convenience products are purchased more often when popular music is played versus the purchase of high-end products when classical jazz music is played.

This research assists in understanding how shopping behaviour, such as time spent in the store, dollars spent, number of items purchased and types of products purchased, can be affected particularly within a retail setting.

In the next section further information on the research questions is provided.

1.3 Research Questions

Even though there have been studies on the effects of background music in retail environments or settings (e.g. Campbell and Doman (2011), Lindquist and Sirgy (2009) and Powell (2016)), these studies do not indicate how background music can create customer satisfaction and increase store traffic, higher sales margins etc. Yalch and Spangenberg (1990) maintain that there is still minimal evidence supporting the topic of background music within a retail setting as well as the complex relationship between retail shopping and various atmospheric factors.

In their study, Ogruk, Anderson and Nacass (2018) analysed atmospheric factors as ambience cues. The researchers found that when ambience factors were measured (including the key focal areas of lighting, aroma, and music), they were able to analyse customers' experiences. Measuring these cues allowed them to find any gaps as well as test a number of key elements such as the emotional states of customers and customers' perception of each of these ambience cues. They further reviewed the existing gap between customers' expectations, as well as the impact of this gap on the total customer experience (Ogruk et al., 2018).

Their findings further showed the trigger points on a consumer's emotional state when these ambience variables were to blend together, which then leads to a "positive emotional state in customers, leading to an enjoyable, memorable store visit, more time and money spent in the store and more purchasing of products" (Ogruk et al., 2018, p. 115). Therefore, if more studies are carried out on music and other atmospheric effects in stores, it could assist marketers in enhancing the retail shopping experience and developing their understanding of consumer behaviour.

Researchers who have examined the benefits of using background music in stores believe there is a need for further investigation as the use of music has shown key benefits to store environments. It is further suggested that if retailers choose to use background music within stores, then marketers need to decide when music should be used and whether music should suit the occasion or if familiar, well-known music is a better choice. Retailers can then use this information (Bruner, 1990) to achieve positive results.

Based on some of the research gaps and findings identified previously, two research questions will be investigated:

RQ1 – Does the genre of music impact on shopping behaviour?

RQ2 – Does congruence between the retail environment and the genre of music impact shopping behaviour (temporal effects and financial returns)?

Most stores usually select music that appeals to their customers and employees but should also consider the importance of supporting desirable shopping behaviour and determining how music can affect these behaviours (Yalch & Spangenberg, 1990). Past research has focused on the relationship between store

music, moods and shopping behaviour. The literature review chapter includes studies already outlined that shows music can affect consumers' moods and their moods can alter or change their shopping behaviour. Yalch and Spangenberg (1990) show that playing classical music or easy listening music can persuade customers to buy more items or higher-priced, quality items and for this reason, soothing music is a practical choice. Bruner (1990) encourages further research on the topic of mood affects and purchasing behaviour in the understanding that the topic of human moods and their role in consumer behaviour is likely to become more important in the future, with music being shown to be a powerful emotional motivator.

The methodology of the research is briefly outlined in the next section.

1.4 Methodology

The methodology chosen for this study was an experimental design with observational measures.

An experiment is a procedure carried out to support, refute or validate a hypothesis (Druckman, Greene, Kuklinski & Lupia, 2011). For this research project, experimental design was used based on the research conducted by Bruner (1990).

The research was conducted within two stores utilising direct, observations in a suitable location within the stores, as agreed to prior with the retailers. The location also had to be suitable for the observation to take place and the stores needed to provide background music so that its impact on shoppers and their purchasing decisions could be determined. Two in-store locations were identified so that if one store was not willing to participate or no useful data could be gathered for analysis in order to answer the research question, then an additional in-store location could be used as a backup plan.

The stores chosen to test the two genres of music were a liquor and wine store and a health / natural organic food store (delicatessen). Both were based in Auckland, and both sold specialised products sourced locally and internationally.

Data collection occurred via direct observation. Data collection could therefore be classified as a field experiment as it occurred within an actual store location, with real-time shoppers involved. First, preliminary analysis was conducted based on the researcher's notes made during the observations, on photographs taken at the various store observation points, on comments made by the store owner, workers and participants, and on the data analysis collation reports. Second, data were calculated via descriptive statistics including counts and means. Also, a parametric test of differences between counts using a z calculation was used for each of the hypotheses.

During the set allocated time, each customer was observed as they entered the store and again in the allocated store space where the purchase of product/s took place. The frequency of product purchase during the set time was recorded, along with the day and time of the purchase. The final dates and times of the in-

store observations were confirmed with the store owners and managers, who also agreed to provide final sales costs at the set time/s that the observation study took place within their store.

Finally, data collected during the two store visits were recorded and analysed separately in order to enable comparisons to be made between the two store observation days when a different genre of music was played. Additionally, analysis of the two store visits followed the same procedure for each consecutive visit in order to facilitate comparisons within the findings.

The comparison of the genre of music was selected within a controlled condition that also occurred within a manipulated environment in order to test different genres of music playing within a store. Thus, further identifying if a genre of music can or cannot influence shopping behaviour in a retail setting (which is the main objective of the research question identified). Furthermore, investigating the effect of two musical genres (classical jazz music genre versus popular music genre) as background music in a retail setting was utilised in a controlled setting. The stores also granted permission to use the researchers chosen music, other than their own music during the observations days/times that they would play on a day-to-day basis, and to note that a non-music condition was not trialled within this study.

A detailed description of the research methodology is provided in Chapter 3.

1.5 Thesis Organisation and Outline

The thesis is divided into five chapters. The thesis commences with an overall introduction, discussing what the research topic covers and the theme of the topic. Chapter 2 then reviews the relevant literature on the topics of ‘genre of music’, ‘atmospheric affects’ and ‘shopping, retailing behaviour and influences’ including the motivations behind these. At the conclusion of the chapter, research hypotheses are developed based on the research gap. In Chapter 3, the study’s methodology and data collection techniques are identified, along with the data analysis methods used to analyse the data in both observation studies. Chapter 4 discusses the data collection findings.

The thesis concludes with Chapter 5, which focuses on the interpretation of the results, leading to the final discussion. Based on the discussion, theoretical and managerial implications, limitations and directions for future research are identified.

2 CHAPTER TWO: LITERATURE REVIEW

In order to investigate whether this specific research topic will be valuable and whether the findings will assist in future research or analysis, it is important to know the background of musical effects, musical genre, retail settings, consumer behaviour, and what has already been researched and tested within this industry and field. This chapter analyses several studies on these topics which provide valuable insight into these areas of study and how they relate to the topic of this research.

An overall analysis of the various articles published on the topic of music in retail settings shows there have been a limited number of studies in this research area, particularly in relation to the influence of music on consumer behaviour. Of those studies, the focus has been on concepts such as the effects of music on customer choices, either through product choice, in-store environment, buyer-seller interactions, or real and perceived shopping times, and overall shopping behaviour within various shopping environments. Therefore, even though the effects of music, such as volume and tempo, have been researched and discussed by authors including Yalch and Spangenberg (2000) and Bruner (1990), a literature search on the style or genre of music used in a retail setting produces few studies.

Table 1 provides a summary of study findings on the influence of music in a retail setting and the different factors of the dependant variables. These studies may be helpful in determining how music genre and the differences between genres can influence purchasing behaviour and consumer choice. The chapter ends with a summary of the reviewed literature and identification of research gaps.

Table 1: Classification of Effects of Music Used in a Retail Setting

Classification of Effects of Music Used in a Retail Setting		
Effect	**Description**	**Literature Article (reference)**
Arousal and activation	Improve performance, levels of music – soft or loudness, pleasant and relaxed atmosphere and enjoyable environment	Smith and Curnow, 1966
Atmospherics	Affected variables such as value, duration and affect, financial returns, temporal effects such as tempo, style/genre, volume, complexity and modality	Garlin and Owen, 2006
Buyer-seller interactions	Music-induced pleasure and arousal in buyer-seller environments	Dubé, Chebat and Morin, 1995
Cognitive neuroscience	Music fights off stress, insomnia, anxiety, depression and addictions	Mindlin, Durousseau and Cardillo, 2012
Consumer change	Where they shop, what they spend money on, trade-offs between service and price	Cohen, 2006

Consumer behaviour	Longer time spent in the store, higher in-store traffic, and increased interaction with salespeople, positive perception and recognition of store image and amplification of purchase decisions	Ogruk, Anderson and Nacass, 2018
Customer feelings / responses	Manipulation – leading to higher service, quality ratings, emotional responses and satisfaction	Morrison and Beverland, 2003
Emotional states	Express emotions vs moods – how relaxed, aroused and happy or sad	Powell, 2016
	Pleasure, arousal, dominance, mood, emotion and nostalgia	Yalch and Spangenberg, 1990
	Detrimental antecedent mood states, shopper mood states, musicscape, service and effective evaluations and influence purchase needs	Herrington and Capella, 1994
Feelings	Physical, psychological and spiritual well-being	Mindlin, Durousseau and Cardillo, 2012
Health variables	Feel good/better, mood, therapeutic, commercial, recreation purposes and affect feelings	Collins, 2003
Impulse buying	Financial returns, impulse action, service quality, variety, convenience, value lead and urges	Tendai and Crispen, 2009, Mohan, Sivakumaran and Sharma, 2013
Internal variables	Lighting, music, flooring, colour scheme, temperature etc. – in-store information processing	Lindquist and Sirgy, 2009
Musical power	Healing, to enlighten, educate, invigorate, stimulate, and inspire	Campbell and Doman, 2011
Neuroimaging technology	Influence perfections, emotions, memories, neurochemistry, and behaviour	Mindlin, Durousseau and Cardillo, 2012
PAD dimensions	Environment and surroundings effects i.e. pleasure, arousal, and dominance	Lam, 2001
Psychological	Affect buyer perception, stronger effects, power stimulus, complex chemistry of controllable elements and mood	Bruner, 1990
Positioning and image	Increase sales figures, shopping times, and familiar vs unfamiliar music	Yalch and Spangenberg, 1990
Purchasing behaviour	Sales, items purchased, time, behavioural responses, servicescape, and effectiveness	Petruzzellis, Chebat and Palumbo, 2014
Sales	Items purchased, value of sales, spend rate, and shopping vs buying brain	Pradeep, 2010

Technological advances	Creating new customer needs/wants, decision making more complex, greater opportunity to research objects, and fuelling the emergence of disposable product society	Cohen, 2006
Temporal effects	Temporal perceptions, perceived duration, pace, passage of time, and temporal and non-temporal processing	Bailey and Areni, 2006, Kellaris, Mantel, and Altsech, 1996
Understanding consumer behaviour	Attention, recall, decision-making, atmospherics and persuasion	Jansson-Boyd, 2010
Value proposition	Quality perception, added value, future behavioural intentions, loyalty, enhance store reputation, develop cognitive advantage, and unique leisure shopping	Jain and Bagdare, 2011, Triantafillidou, Siomkos and Papafilippaki, 2017

2.1 Atmospheric Effects in Retailing

Atmospherics is a tool that has been widely used in order to impact people's in-store behaviour. Using the environment in which people shop to create a certain atmosphere, which in turn also creates emotional responses, is a significant way to influence the decisions people make within a shopping environment. The aim of this section is to establish what is atmospherics in general and how the atmospheric effects of music can influence consumer behaviour as shown by the research found. This is key to determining the importance of music as a research topic and its utilisation in retail settings.

Consumer behaviour and the effect of the purchasing environment were first investigated by Kotler in 1973. Kotler, who first used the term 'atmospherics', suggested that consumers do not just buy the product itself but are instead influenced by many other elements (Kotler, 1973). Packaging, advertising, image, as well as the atmosphere of the store all play a role in consumer behaviour. For retailers, the importance of the atmosphere in their store can influence the success or failure of a business (Jansson-Boyd, 2010). Atmospherics is divided into different categories: external variables such as signs, shop colour, building, surroundings of the store etc; internal variables such as the lighting, music, flooring, colour scheme, temperature etc.; the layout and design variables; and the point-of-purchase and decoration variables (Lindquist & Sirgy, 2009).

Based on the atmospheric effects that are also linked to the human five senses, Ogruk et al. (2018) further classified atmospherics by identifying three key variables that also have the power to influence customer reactions and build an emotional connection with shoppers, which are key atmospheric effects retailers should tap into (Ogruk et al., 2018).

These three primary sets of cues are ambience, display, and customer interaction (social), known in retail environment research as atmospheric effects. Ambience variables may include aroma (strength, type), which

is a particular or distinctive smell that is used in a store (whether pleasant or unpleasant); music (tempo, type), which plays a big role in creating and enhancing the retail experience, whereby by changing the tempo or style of background music, retailers can create a visible change in atmosphere too; and lighting (dimness, brightness), where ambient lighting refers to the overall store lighting that allows customers to get a general store overview through the ambience of the lighting used. Display variables include various aesthetic and functional elements such as decorations, product display, and the layout of the store. Consumer interaction / social variables include everything that can shape a customer's perception of the service level within a retail store (Ogruk et al., 2018).

The key category that will be further analysed in this study is **ambience**. The theory of ambience states that "ambience relates to the customer's perceptions and experiences of the background conditions in the environment" (Milliman, 1986, p. 286). Ambience factors referred to in the literature may also include elements such as "lighting, sound, aroma, temperature, use of colour, sound, merchandise, and tidiness / cleanness of the environment" (Ogruk et al., 2018, p. 115). Furthermore, a number of studies have shown a link between the perceptions of customers and the various ambience variables found in the literature (Ogruk et al., 2018).

The key variable from the ambience category that will be discussed further is the use of **music** within a store / retail setting. It will be shown to be the most widely studied ambience variable in the literature on customer perceptions (Ogruk et al., 2018). Music is often used to create a certain image and atmosphere in retail environments. In certain retail store settings, Lindquist and Sirgy (2009) found that the speed of in-store traffic changes pace when classical music is played: when slower music is played, it decreases the speed of the traffic and increased sales volume. The authors also tested the effects of fast and slow-paced music in a restaurant and found that slower music results in consumers eating at a slower pace and spending more on alcoholic drinks (Lindquist & Sirgy, 2009).

Knowledge of the atmospheric effect of music on consumers is an important tool that retailers need to be aware of (Collins, 2003). The question is raised – *why is this the case?* It comes down to the fact we are all musical. We all respond to music, from early childhood to the end of our lives. Music is common to all societies and cultures and is a means of communication as well as recreation. The process of enjoying a musical performance in the company of others provides a shared experience that is necessary for our sense of social well-being. Music is therefore entirely central to our existence and is the core of our being; that is, it is one of the defining features of our humanity (Collins, 2003). *So why do we listen to music?* The ability of music to affect our moods and our health is increasingly recognised through the growing practice of music therapy. Music not only makes us feel good about ourselves – it makes us feel better. Music is therefore used for therapeutic, commercial, and recreational purposes and it can deeply affect our feelings in many touchable ways. We do not know exactly how this happens, but we know from our own responses that it does and that is enough to convince us of its overall value (Morris & Munro, 2004).

Atmospherics affect consumer behaviour: sales, due to odour, product evaluation due to lighting, patronage intentions due to store layout, price perception due to colours and lighting, and purchase intentions due to merchandise arrangement (Petruzzellis et al., 2014). A study by Petruzzellis et al. (2014) found that atmospherics impact in-store behaviour through the mediation of emotions and attitudes. They found that the production of affective responses and consequently positive outcomes, such as satisfaction, positive disconfirmation of expectations, and relaxation, occur when slow-tempo music is played compared to fast-tempo music. Moreover, the authors found that music induces pleasure, which affects store evaluation, mediated by attitudes toward the servicescape and the sales personnel (Petruzzellis et al., 2014).

“Music, among other atmospheric cues, is a powerful emotional stimulus, an efficient and effective means for triggering moods and shaping retail experience” (Petruzzellis et al., 2014, p. 38). Music can positively alter moods, which in turn alter behaviours. In their study, Petruzzellis et al. (2014) found a greater emotional and behavioural response to music as opposed to a cognitive one.

Recognising the importance of music and its ability to communicate across societies and cultures means that it is vital to investigate and analyse theoretical marketing and the retailing literature and research conducted on this topic. In their meta-analysis study on the effects of background music in retail settings, Garlin and Owen (2006) focused mainly on the time spent in-store as the dependent variable. However, other studies have considered alternative variables beyond the atmospheric effects of music on the retail experience. Their theories show that the following variables must also be considered.

The dependent variables discussed by researchers include the category of ‘**affective variables**’. Lee, Henderson and Shum (2004) found that music in service settings can reduce even extreme emotions such as intense anxiety. Hosea (2004) maintains that the predictive effect of music variables on mood is useful as it is one of the easiest ways that managers can influence customer behaviour and how they feel. He asserts that the mood effects of music are an important factor in relationship building. The next important variable influenced by music is **‘financial returns**’. It has been suggested that customers’ affective and cognitive responses to experiences in-store influence the likelihood of behaviours which directly impact an organisation’s financial returns. In other words, background music can facilitate top-and bottom-line returns to businesses (Areni, 2003a).

The concepts of **‘attitude’** and **‘perception’** play a vital role. It has been suggested that music can encourage the selection of certain products by stimulating customers to recall related knowledge. Background music can therefore enhance or create customers’ attitude towards the store and/or its elements (Dubé & Morin, 2001). This further links to studies that have investigated **‘behavioural variables’** and how music influences the way in which customers associate with staff / employees and other customers in stores, as well as buying choices (Areni, 2003a). Lastly, ‘**temporal effects**’ identify clear relationships between background music and various temporal dimensions. Key elements like tempo, style / genre, volume, complexity and modality have been outlined as key musical elements that can affect consumers’ purchasing

behaviour. Further research highlights the complexity of relationships between musical elements and behavioural outcomes (Turley & Milliman, 2000).

The meta-analysis review highlights key findings that could assist future research on the subject. Some of these findings include:

- Familiarity has a positive effect on customers;
- The mere presence of music has a positive effect on customers as well as felt pleasure;
- Slower tempo, lower volume, and familiar music result in subjects staying marginally longer at a venue than when the tempo or volume are high, or the music is less familiar;
- The higher the volume and tempo and the less customers like the music, the longer their perception of time duration;
- Tempo has the greatest effect on arousal.

(**Source:** Garlin & Owen, 2006, p. 761).

Furthermore, an article by Burzynska labelled ‘Pop Music’ discusses how various sounds within a wine setting affect the purchasing behaviour of customers. They found that music played at a winery can influence customers’ behaviour in buying more glasses of wine. They further observed and experimented with the sound made by wine bottles themselves and how this could affect the mood and perception of customers (Burzynska, 2010). Furthermore, other articles and news results have focused on the topic of background music and have reported the effects on people when background music is included within, for example, news reports and TV and radio advertising, pointing out how background music can act as an emotional prompt or trigger (Ravaja & Kallinen, 2004).

Another area of interest is non-computer task completion while listening to background music in a real-world setting. In his study, Phillips (2004) found that calming music led to better participant performance when particular memory tasks were performed over no music. When background music on cognitive test performance was also performed, it led to improved performance when compared with a control condition (Phillips, 2004). When classical music was played, participants performed better on the problem-solving task than those who listened to punk music or no music at all. However, when classical music was played, those participants offered more off-task comments during the task than those listening to no music (Phillips, 2004).

Additionally, a summary provided on the statistics and news report website *Music Works* identifies a number of international research studies that have found that music can influence desired behavioural responses within areas of our everyday lives. If used correctly, music can potentially be a very powerful tool for almost every kind of organisation (*Music Works*, 2010). Interestingly, statistics from these studies show that the

tempo, volume, or pitch of music is another influential variable of direct relevance to retailers. Furthermore, *Music Works* (2010) presents a background music study conducted by the researcher Sullivan, that was carried out in a medium-sized, mid-range restaurant. Sullivan found that 20% longer meal durations occurred in the restaurant when soft music was played compared to loud music and consequently the amount of money spent increased by 7.5%. Another study found that when slow music was played, restaurant patrons stayed 20% longer in the time variable, with 51% more money was spent on drinks per head and 12% more on food per head (*Music Works*, 2010).

Music has the power to heal, to enlighten, to educate, invigorate, stimulate, and inspire (Campbell & Doman, 2011). For many, a daily session of listening to music, and perhaps singing as well, can suffice as a welcome source of joy and comfort at the beginning or close of a day. Some may wish to focus more intently on expanding the range and quality of their vocal expression as a way of growing more in touch with their own spirituality, and of communicating more effectively with others (Campbell & Doman, 2011). Just as the tone of someone's voice can tell us a person's mood, it can also relate to their feelings. In the same way, the music that we listen to gives us a sense, a barometer, of how the atmospheres of our mind and body are communicating with each other – a happy tone can make us feel good while a lower tone can be linked more to despondency (Campbell & Doman, 2011).

It has also been found that when music is played in a working environment, it impacts the performance and reactions of employees and benefits customers / clients. Playing music with a faster tempo and louder volume, as found in pop and rock music, would probably not be the most ideal music to play in a dentist's waiting room. The music played in a medical setting should endeavour to create more comfort for patients and put them first, rather than prioritising the staff and their choice of upbeat music to keep them cheerful during the working day. Indeed, pain and anxiety can be measurably decreased when patients listen to soothing, low-volume, slower-tempo music (Campbell & Doman, 2011). It is important to play the type of music most suited to a particular working environment – a type of music that encourages clients to return and which makes them as comfortable as possible (Campbell & Doman, 2011).

A hypothesis that has been advanced to resolve some of the conflicting data in the fields of 'arousal' and 'activation' is that a certain level of noise or music can improve performance, while a lower or higher level can slow it down (Smith & Curnow, 1966). Smith and Curnow (1966) found that the loudness of music, unless above hearing level, does not affect the total sales of a store. Therefore, it would be interesting to further analyse which additional effects of music manipulate the outcome of shopping behaviour as a store environment and atmosphere can affect shoppers' behaviour in several ways (Smith & Curnow, 1966).

In conclusion, we can see that music is one form of sound that can be used to create an atmosphere that visitors find pleasant and welcoming. We now know from the atmospheric effects listed earlier, that **sound**, in this case music, is a key and crucial element with strong relevance to the retail sector. In their study, Ogruk et al. (2018) classified atmospherics to include three key variables (ambience, display, and customer

interaction) that have the power to influence customer reactions and build an emotional connection with shoppers. These are key atmospheric effects retailers should tap into. Collins (2003) also believes that atmospheric effects created through the use of music can affect a customer or shopper and is thus a highly useful tool that retailers need to take account of.

Researchers further believe that it is important to pay attention to clients' responses to the sound environment during their visits to a workplace. Sound is therefore a key part of a comprehensive effort to please customers that every business must make. If the sound environment is improved in a workplace, clients and workers are both likely to generate more business (Campbell & Doman, 2011). This is supported by Petruzzellis et al. (2014) who found that music is a powerful emotional stimulus, and an efficient and effective means for triggering moods and shaping retail experience (Petruzzellis et al., 2014).

There are, therefore, key reasons why it is important for retailers to include music in their stores. It has been shown that atmospherics not only affect our emotional states, that is, emotions and moods (Powell, 2016), but also our physical, psychological, and spiritual well-being (Mindlin, Durousseau & Cardillo, 2012).

The next sub-sections in the literature review will further elaborate on these topics and analyse in more depth genres of music and key music elements and how these can further affect consumers and their shopping behaviour.

2.2 Music Elements and Genre

Taking into consideration how music can affect a customer or shopper, and how music is therefore an important tool that retailers need to be aware of (Collins, 2003), in this next section further studies are reviewed on various musical elements linked to the use of musical genres to determine their importance.

Music as an atmospheric variable has been found to influence various in-store shopping attitudes and behaviours, including moods and unplanned purchases. Time spent in the environment and perceived waiting time have also been demonstrated to influence shopper purchases and investment behaviours (Eroglu, Machleit & Chebat, 2005).

When background music is played in retail environments, key external elements and evaluations, such as the desire to interact with salespeople, the perceived versus the actual time spent by shoppers shopping, as well as the pace of in-store traffic flow and dollar sales, have been found to be affected. Consumer research has shown that music can influence hedonic consumption and consumer aesthetics, mood, nostalgia, attitude formation, and classical conditioning (Eroglu et al., 2005).

"Music is indeed an international language, understood in some way by nearly everyone" (Kerr & Das, 2014, p. 49). Rosenfeld (1985) notes that music can move people to tears or to dance, to fight or to love. It can inspire our most exalted religious feelings and ease our anxious and lonely moments. Most importantly, music is created by people to not only affect others but to also communicate with people (Rosenfeld, 1985).

Research on music and mood states have shown the effect of music on individuals. “People consistently react to the pitch and tempo of music” (Rosenfeld, 1985, p. 5). “Pitch affects pleasantness ratings, while tempo affects activation ratings” (Rosenfeld, 1985, p. 25). When certain songs or instrumentals are played, people tend to make distinct, free associations with what they are hearing. “An association can be an experience that was happy, sad, or some other emotion” (Kerr & Das, 2014, p. 54). As individuals, we can experience a mixture of psychological and physiological reactions when listening or responding to music. These reactions reflect the cultivation of personal experiences, training, associations, and expectations (Kerr & Das, 2014).

Bruner (1990) believes that marketers do not fully understand that music in a retail setting is an efficient yet effective means of triggering moods as well as a useful tool to communicate nonverbally. For these reasons it should be used as a control measure by marketers. Bruner (1990) concludes that whilst music can affect consumer behaviour and mood, it is likely to have a greater effect when consumers have high affective and/or low cognitive involvement with the allocated product (Bruner, 1990). Several further studies have examined music in the in-store context to see the effect of music on consumer behaviour. For example, the use of music in supermarkets was designed to make shopping enjoyable and to distract attention from the total cost of the day’s shopping trip (Smith & Curnow, 1966). When music is carefully selected, it proves to be a highly successful tool by which to create a relaxed and yet pleasant shopping atmosphere for customers. Smith and Curnow (1966) found that a certain degree of noise improves performance, while a lower or higher degree delays performance (Smith & Curnow, 1966).

In another study by Yalch and Spangenberg (1990), the authors examined the effect of music on shopper behaviour and found that “shoppers respond psychologically and behaviourally to environmental factors such as music even though few shoppers consciously note the presence of music” (Yalch & Spangenberg, 1990, p. 55). The authors suggest that perception of time spent could be deceptive when listening to music that is liked versus music that is not liked. Research has shown that shoppers tend to shop faster if fast music is playing, and conversely, to shop slower if slow music is playing (Yalch & Spangenberg, 1990).

A study by North, Hargreaves and McKendrick (1997) found that the effect of in-store music on purchasing and product choice in wine stores can not only affect sales but also shoppers’ retailing experiences. Their study looked at specific pieces of music and how they may activate superordinate knowledge structures. They found that in-store music can influence product choice and is linked to knowledge structure and information processing. For example, when stereotypical French music is played, it can activate superordinate knowledge structures concerning France and its cultural context. It is sensible, therefore, to pair French music with a display of French wines. Similarly, stereotypical German music can activate German related knowledge and should be paired with the display of German wines. Their findings showed that French wine outsold German wine when French music was played, whereas German wine outsold French wine when German music was played (North et al., 1997).

Another study in a wine store by Areni and Kim (1993) investigated the influence of background music on shopping behaviour to determine whether classical music versus Top-Forty music affects consumer choice. Their findings showed that shoppers are influenced to spend more money when classical music is played rather than Top-Forty popular, with an increase in the purchase of more select and expensive wines. The authors note that music is more persuasive when it 'fits' the persuasion context in order to produce the desired outcomes, suggesting that consumers associate wine consumption with prestige and sophistication when classical music is playing, rather than Top-Forty music that suggests a less refined environment. They further suggest that retailers should use their findings to their advantage and pay attention to the symbolic meaning underlying each purchase experience. If customers are seeking sophistication, as in the wine store example, in-store cues should be considered to facilitate that experience (Areni & Kim, 1993).

Furthermore, background music has been linked to communicating to shoppers the price and quality of the merchandise within a particular store. Previous research has demonstrated that the type of music played not only influences sales figures, but also a store's positioning and image (Yalch & Spangenberg, 1990). In their study, Yalch and Spangenberg (1990) compared easy-listening music, such as classical music, to Top-Forty popular music. Their study showed that playing slower, easy listening music leads to higher sales within a store as it is linked to shoppers' pace of movement within the store. They therefore suggest that if any retailer wishes to convey high prestige and a high-quality image, they should consider classical or easy listening music rather than faster or Top-Forty music. In addition, past research has demonstrated that higher priced merchandise is sold when classical music is played in the background of a store (Areni & Kim, 1993).

Carefully selected music has proved highly successful when utilised to create a pleasant and relaxed atmosphere in-store (Smith & Curnow, 1966). Stores are increasingly aware of the need to create a more enjoyable environment, which can perhaps distract customers' attention from the total cost of the goods in their shopping trolleys. Smith and Curnow (1996) advance a hypothesis that resolves some of the conflicting data in the fields of 'arousal' and 'activation'. They believe that a certain degree of noise or music may improve performance, whilst a too low or too high level of noise or music can slow it down.

A store environment and atmosphere can affect shoppers' behaviour in several ways. Lam (2001) discusses the links between human beings' emotions and their environment and surroundings with reference to the dimensions of pleasure, arousal, and dominance (otherwise known as the PAD paradigm). Many studies that have been conducted on the emotional response to in-store environments provide evidence that shoppers' emotional states and moods can be represented by PAD dimensions (Lam, 2001). The environmental psychology of retailing, as summarised by Yalch and Spangenberg (2000), refers to the PAD framework and explores how the physical store environment might affect not only in-store employees and customers, but also shopping behaviour through emotional states and moods. Yalch and Spangenberg (2000) analysed the emotional state or response of shoppers and found that all three emotional states (pleasure, arousal, and dominance) are affected by music interaction. In their study, they further found that within fixed time conditions, shoppers who listen to unfamiliar music have an increased sense of pleasure and dominance, but

not arousal. When tested over time, they found that retail managers believe shoppers tend to buy more when shopping for longer periods and listening to familiar music, as this music enhances arousal, but not pleasure and dominance. Overall, they found that product evaluations are positive when related to pleasure, but negative when related to arousal (Yalch & Spangenberg, 2000).

Furthermore, Yalch and Spangenberg (2000) maintain that if retailers aim to create a familiar environment for their shoppers, they will not necessarily achieve the 'intended' effect. The authors believe that although shoppers shop longer when listening to familiar music, customers shop even longer when listening to unfamiliar music. For example, they believe that fast music should be arousing and this could be achieved by using louder music, causing individuals to move more quickly through their environment (in the store) causing faster shopping experiences (Yalch & Spangenberg, 1993).

Donovan and Rossiter (1982) also tested the effects of arousal and pleasure on shopping behaviour using the PAD model (see Figure 1). The results revealed positive correlations between pleasure and favourable shopping behaviours such as purchasing and spending more time in the store. Unsurprisingly, shoppers also reported that they spent more time in the store if their arousal level was high. Therefore, in their experimental findings the negative correlations between arousing music (fast or loud) and observed shopping times were contradicted (Yalch & Spangenberg, 1993).

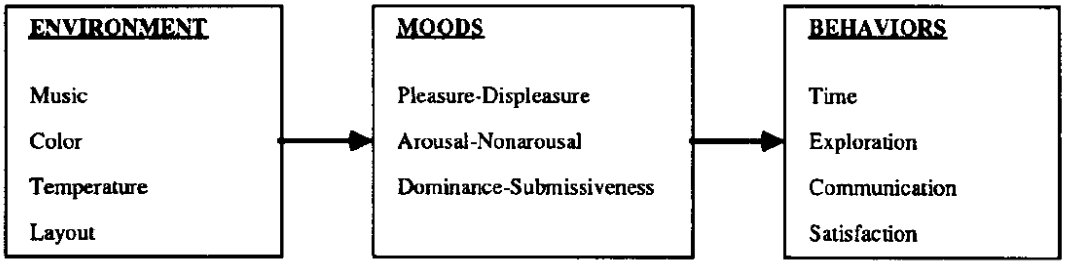

Figure 1: The role of moods in mediating atmospheric effects on shopping behaviour

(**Source:** Yalch & Spangenberg, 1993).

Furthermore, based on their findings and the use of the PAD model (see Figure 1), Donovan and Rossiter (1982) maintain that in order to differentiate a retail store from competing stores, music is one of several environmental or atmospheric factors available to make this happen. As an attractive atmospheric variable, music can also be relatively inexpensive to provide because it can be changed easily and can have predictable appeal value to individuals based on their age and lifestyle (Yalch & Spangenberg, 1993).

When individuals are shopping alone or simply browsing, they are less likely to be influenced by background music playing compared to shoppers who are in a store to purchase a specific item or may be shopping with other persons. Lindquist and Sirgy (2009) believe that when music is arousing, this in turn may also energise shoppers, which may cause shoppers to finish their shopping experience quickly. However, other shoppers

may find arousing music stimulating and decide to explore the store further, resulting in them spending more time in the store, which is an overall positive outcome (Lindquist & Sirgy, 2009). Further, what constitutes pleasant music varies across shoppers. A desire to assess this variation has motivated some researchers to investigate this topic further (Yalch & Spangenberg, 1993).

On the other hand, Yalch and Spangenberg (2000) found a complex relationship between music and shopping times. It is likely that shoppers will remember familiar music better than unfamiliar music and will notice the start and finish of familiar songs more so than unfamiliar ones. When listening to familiar music, shoppers are therefore less likely to remember their actions and this could distract them from their current shopping endeavours (Yalch & Spangenberg, 1993).

Finally, a study by Dubé, Chebat and Morin (1995) links background music to consumers' desire to affiliate in buyer-seller interactions. The authors tested the effect of music-induced pleasure and arousal in buyer-seller environments such as bank services and manipulated the environment using classical music. Music is a powerful stimulus that affects mood and a complex chemistry of controllable elements (Dubé et al., 1995). Dubé et al. (1995) suggest that peaks of pleasure can be located at two extremes of arousal, that is, in very relaxing or very exciting situations, and in a shopping situation, this affects consumers' overall behaviour. They also believe that retailers can use their findings as a stepping stone to provide insight into how to design various environments that optimise the effectiveness of buyer-seller interactions (Dubé et al., 1995).

To conclude, a review of the literature conduced on the link between the genre of music within wine stores and customer purchasing behaviour shows it is important to consider that the number of items examined, handled, or purchased, the time spent in-store, and the decision to test merchandise can be affected due to background music (Bruner, 1990). However, the genre of background music is likely to have stronger effects on the perceptions and preferences of shoppers, although the genre of music has different effects on different people across customer audiences (Bruner, 1990). The genre of music may be more important in terms of buyers' perceptions regarding appropriate behaviour or of merchandise quality (Bruner, 1990).

2.2.1 Comparison of Music Genres: Popular versus Classical Jazz

With some of the key elements already discussed around the atmospheric effects of music on purchasing behaviour, it is important to understand why certain genres of music are popular in retail settings as background music because of their effect on people. This section provides a comparison of two musical genres used as background music.

It is important to recognise that music can be divided into various key areas such as genre. A theoretical definition of music genre refers to "the categorical and typological construct that identifies musical sounds as belonging to a category (genre) that can be distinguished from other categories of music" (Middleton, 1990, p. 3). The two key genres that most musical categories are divided into are '**classical music**' and '**popular music**'.

Popular music has many features, including being a form of music that is an expression of youth culture, whereby life's excitements and agonies are distilled into a song and unforgettable tune that capture moments in time (Shuker, 2017). Popular music includes all music that is non-classical and non-jazz music, all of which have happily developed alongside mainstream ballads and show songs. Popular music often uses simple tunes and lyrics yet is capable of emotional and technical complexity. For that reason, popular music is perhaps the most difficult aspect of music to define, while continuing to be a major force in our society (Morris & Munro, 2004). On the other hand, nobody has yet discovered an adequate definition of classical music as the term is understood today. It is well known in the music industry as 'serious' music, and it is viewed in society today as being condescending to other forms of music, such as jazz or folk music, suggesting that it is to be taken seriously (Collins, 2003).

Classical music is probably one of the oldest genres of music. Classical music has been referred to as music that was written in the Classical era – during the 18th and 19th centuries. Calling a piece of music classical is sometimes done as a means of commonly distinguishing it from popular music (Henley & Jackson, 2012). One of the major tests of whether a tune is or is not classical music has traditionally been whether it has a sense of performance about it, and that it is still being performed many years after its composition. The argument is, however, that "today's popular music has lasted just as long, with songs from the 1950's still being played and listened to today on the radio, well over half a century since their original release" (Henley & Jackson, 2012, p. 8).

Popular music, as opposed to classical music, is commonly in the form of a song with accompaniment, strategically designed for easy listening. It is evident in many cultures and is a major communication tool (Morris & Munro, 2004). One of the most prominent differences between classical music and pop music is the different level of importance placed on the composer and the performer. In pop music the performer is all, but in classical music the composer is the star of the show (Henley & Jackson, 2012). Jazz music, on the other hand, is considered difficult to define, in part because it contains many subgenres with improvisation as one of its essential elements (Gioia, 2016). The roots of jazz music comes from:

> the centrality of improvisation which is attributed to the influence of earlier forms of music such as blues, a form of folk music which arose in part from the work songs and field hollers of African American slaves on plantations. These work songs were commonly structured around a repetitive call-and-response pattern, but early blues was also improvisational. (Gioia, 2016, p. 205)

Classical music performance is:

> evaluated more by its fidelity to the musical score, with less attention given to interpretation, ornamentation and accompaniment. The classical performer's goal is to play the composition as it was written. Jazz is often characterised by the product of interaction and collaboration, placing less value on the contribution of the composer, if there is one, and more on the performer. (Giddins, 1998, p. 70)

The jazz performer “interprets a tune in individual ways, never playing the same composition twice” (Giddins, 1998, p. 89). Classical jazz is a combination of both and “depending on the performer's mood, experience, and interaction with band members or audience members, the performer may change melodies, harmonies and time signatures” (Giddins, 1998, p. 89). It has been proven that:

> listening to jazz music has potential benefits for health as varied as the genre itself. The innovative riffs, cool tones and complex rhythms can bring natural relief for mind and body as well as influence the type of brain waves produced – which can be stimulating or relaxing. It also physically changes the body by lowering the heart and respiratory rate. (Top Master's in Healthcare Administration, 2019, para.1–3)

Since stress is the root of many health problems, the relaxing effect of jazz music can have an incredible healing influence (Top Master's in Healthcare Administration, 2019).

It is important to consider the value of music and its various effects as listed above. ‘Standardisation’ and the concept of ‘pseudo-individualisation’ are musicology theories utilised to describe music and music’s effect on listeners (Garlin & Owen, 2006). The key:

> difference between a popular song and a standard or serious song, is that the melody and the lyrics of a popular song are constructed within a definite pattern or structural form, whereas a poem or lyric of a standard song has no structural limits and the music is free to interpret the meaning and feeling of the words without following a set pattern or form. (Middleton, 1990, p. 34)

In conclusion, we can now determine from the literature presented that music is indeed an international language, understood in some way by nearly everyone (Kerr & Das, 2014). This then leads to the use of background music in retail organisations. Background music affects various shopping behaviours, such as the pace of in-store traffic flow and dollar sales, volume, drinking time, perceived and actual time spent shopping, and the desire to interact with salespeople (Eroglu et al., 2005). In the consumer-research domain, music is shown to influence ‘hedonic’ consumption and consumer aesthetics, mood, nostalgia, attitude formation, and classical conditioning.

2.3 Effects of Music on Consumer Behaviour

Now that we have a better understanding of the different types of music and what effect they can have on people; the next section will focus on the research undertaken by Garlin and Owen (2006). After reviewing studies in background music research (see Table 2), the authors identified dependent variables with a concentration on five categories shown by the independent variables.

A full outline of the researchers’ overall findings after reviewing studies in background music research can be seen in Table 2. The next sub-sections will further explore these identified variables and effects.

Dependent variables studied in background music research*

Variable category	% Studies (n=150)**	Variations or descriptors
Affective	41%	Mood, arousal, pleasure, emotion, nostalgia
Financial returns	25%	Value of sales, repeat purchase, items purchased, rate of spend, quantity purchased, gross margin
Attitudinal/ perceptual	24%	Liking, brand loyalty, product evaluation, quality perceptions, experience satisfaction, perception of visual stimuli, service quality perceptions, price sensitivity, expectations, intentions, social identification, status perceptions
Temporal effects	20%	Duration perceived/actual, service time, unplanned time, time to serve customers, time to decision-make, time to consume, duration of music listening
Behavioral	10%	Patronage frequency, store choice, behavior speed, affiliation, items examined/handled, in-store traffic flow, impulse behavior., recommend service, number of customers leaving before served.

*Where studies examine multiple dependent variables they are included in more than one category.
**Reference list available on request from the authors.

Table 2: Table showing dependent variables studied in background music research

(**Source:** Garlin & Owen, 2006).

The findings of Garlin and Owen (2006) showed that **affective variables** / responses can be examined within three dimensions: arousal, pleasure, and dominance with a strong link to mood, emotion, and nostalgia. Their analysis showed that increased pleasure is associated with higher evaluation of a service or venue and increased arousal with a greater tendency to affiliate with other customers or staff; however, dominance was found to be of little predictive value (Garlin & Owen, 2006).

Next, Garlin and Owen (2006) found that **value returns** is a very important factor when considering the effects of background music on sales / purchases, intention to purchase, intention to return, and intention to recommend the service / product. In their study, Garlin and Owen (2006) reviewed the effects of background music, including tempo, volume, complexity, genre, liking / familiarity, and absence / presence of music. An interesting point is that after examining a range of genres, ‘genre’ and the differences in genre effects were listed in the absence / presence analysis as significant. The authors concluded that genre has a medium positive outcome but that regardless of the type of music, its presence has a small positive effect on customers that is also robust (Garlin & Owen, 2006).

Further, Garlin and Owen (2006) examined **duration behaviour** as part of temporal effects based on the actual time spent in a location or on an activity. After analysing studies that focused on the effects of music on duration and pace in a retail environment, they found that when some form of background music is present, customers stay longer as opposed to when no music is present. When the volume of the music is low rather than high, is slower in tempo rather than faster, and is lower in complexity as well as liked, customers also stay longer (Garlin & Owen, 2006). Genre on the other hand, was excluded from the studies they examined, and no hypothesis was established as to how genre can affect duration (Garlin & Owen, 2006).

2.3.1 Affective / Psychological Effects

The first sub-section addresses some of the deeper affective and phycological effects that music has on us, linked to the various emotional states of arousal, pleasure, and dominance with a strong link to mood, emotion, and nostalgia. It further investigates background music and how our emotions can be linked to it.

Music, particularly singing, is an important feature of all human societies, and evidence shows that it has been so for many thousands of years (Powell, 2016). Dating back to pre-historic times, music has had a positive effect on human survival, and this must be one of the main reasons why it exists. Indeed, people perform music to show how healthy and skilful they are, in order to attract sexual partners (Powell, 2016). There is also plenty of evidence that music bonds groups of people together across a wide range of situations, from celebrations to grief, and bonded groups are more likely to survive because they cooperate better when things go wrong. Revolutions thrive on songs because they help to draw the revolutionaries into a single group. The same effect can be seen with crowds of sports fans. Although the words of these group-bonding songs often have some emotional content, it is not always the case (Powell, 2016). Whether its groups of people attending a sports game, or fans of a musical artist, or even members of a religious group, public and mutual singing binds people together and encourages them to help one another if things start going badly (Powell, 2016).

While music without lyrics cannot easily tell a story, it can express and evoke emotions. Compared to mood, emotions are relatively brief and intense. If an emotional response is music-related, it will be synchronised with the music – that is, the music will trigger an emotion (Powell, 2016).

Music and emotion are linked in two ways (Powell, 2016). In some cases, we may not connect with the music, but instead we simply recognise which emotion the composer intends us to feel when listening to a particular piece. In other cases, we may become emotionally involved with the music. The question can be further asked, *does music generate emotions?* Everyone agrees that music creates emotional responses, but is that proof that it is true? In his study, Powell (2016) requested a number of composers to create several different types of music, ranging from happy and excited to angry and dull, in order to identify the different types of emotions aroused in listeners. It has since been confirmed that a wide range of listeners generally agree on whether a piece of music is intended to be happy or sad and whether it is supposed to be relaxing or arousing.

Firstly, emotion relates to an intense, internal feeling that can also incorporate mood. “Emotion is a feeling that comprises physiological, behavioural and cognitive reactions to internal and external events” (Jansson-Boyd, 2010, p. 69). It tends to be purposeful in that it represents something, such as when a consumer is especially pleased with the effectiveness of a product. It is more difficult to clearly distinguish mood from emotion. “Generally, moods are more pervasive, longer lasting and less intense than emotions. To date, it appears that a high number of consumer researchers that have investigated affect have chosen to focus on mood” (Jansson-Boyd, 2010, p. 70).

Powell (2016) discusses four of the basic emotional states that are the easiest for humans to spot and project. It is usually possible to tell how relaxed or aroused and how happy or sad people are by their body language – or on the phone, by their tone of voice, even if they are speaking in a language you have never heard before. At the same time, a certain piece of music can make one person feel happy / playful where another person may feel or hear the same piece of music and feel happy / proud (Powell, 2016). In Powell's (2016) study, over 700 people were asked to share their most recent emotional experience. Everyone claimed to have experienced emotions while listening to music and about 80% of respondents said their most recent emotional response to music had been pleasurable – with the five most common emotions being happiness, melancholy, contentment, nostalgia, and arousal. The findings of this study therefore showed that music can indeed create emotions. The results also showed that when music is calm or happy, people become calmer and happier, but when the music portrays a negative emotion like anger, people merely recognise that it is anger. Powell (2016) believes that we do not become angry ourselves when listening to angry music, unless, for example, the music is played in a movie, in which case the visual imagery and the music can work together to create a heightened emotional response, both positively and negatively (Powell, 2016).

Listening to joyful dance music increases the blood oxygen levels of various emotion-linked areas of the brain (Powell, 2016). The opposite happens when unpleasant, dissonant music is played; that is, the subject's blood oxygen levels drop where they had been high and subsequently rise in the amygdala. Apart from proving that music does generate real emotions, Powell's (2016) study indicates that music can be used to manipulate the amygdala in cases where it is not functioning properly. Therefore, the brain responds to music in a similar way to how it responds to other emotional stimuli.

In general, the emotional content of music can be identified very quickly and sometimes in a second or so. Music that is produced specifically as background music for shopping or eating is deliberately designed to be non-distracting and utterly unmemorable – so it that it creates a type of aural wallpaper, allowing a person to focus on the pros and cons when deciding on which item or product to buy (Powell, 2016). Therefore, the result of listening to background music is generally a diluted version of the emotional response to listening to music that has been chosen. Background music can lead to a minor reduction in boredom when doing something tedious, or slightly raise the level of mood. Furthermore, it is believed that small changes such as these should not be dismissed as trivial. The accumulation of little positive pushes has been shown to enrich life by improving how one performs both socially and intellectually (Powell, 2016).

Also, the effects of the emotional factors of pleasure and arousal have been found to be additional to cognitive factors such as variety and quality of merchandise, price and value for money (Morris & Munro, 2004). Shoppers mood states at a point of purchase and the offset of detrimental antecedent mood states can influence shoppers when background music is played (Herrington & Capella, 1994). Morris and Munro (2004) believe that music is a key element that can alter moods and mood changes also alter behaviours. "Music serves as a strong stimulus that elicits psychological responses among shoppers. It helps motivate

the subconscious and can create a lasting impression on existing and potential customers" (Morrison & Beverland, 2003, p. 77). In order to make the shopping experience more satisfying and to develop a store environment that is more favourable, the creation of a pleasurable frame of mind can be achieved when soothing music is used as it can help to set the mood (Jain & Bagdare, 2011).

Research has highlighted the effective use of music as a means of manipulating consumers' feelings. According to Hul, Dubé and Chebat (1997), music can "improve the evaluation of the in-store environment, which has positive spin-offs for how consumers approach that environment. Music can also reduce negative emotions associated with wait time and lead to more positive evaluations of the store's service" (Hul et al., 1997, p. 87). It has been suggested that marketers should consider the ease with which music can appeal directly to emotions and its use as a critical tool, given the strong relationship evident between emotional responses and satisfaction (Morrison & Beverland, 2003).

Pradeep (2010), on the other hand, undertook research in the neuro field and provided insights into how the human brain works. His study showed that the human brain is emotional at its very core. Therefore, merchandisers must make the experience of shopping an emotionally engaging, self-satisfying one if they seek repeat visits (Pradeep, 2010).

Pradeep (2010) goes into further detail about the five senses and how they are linked to the buying brain. The sense that will be briefly discussed in relation to his research is that of **sound**. Hearing gives us information that is vital for survival, for instance, by alerting us of any approaching sounds. However, our sense of sound is more than perfunctory. Hearing also allows us to generate memories that can be either nostalgic or deep and may be associated with moments that are highly emotional. Therefore, when we attend various events, such as graduations, weddings, and funerals, we use music to mark our traditional passages. This can also be seen with exhausted patients who respond to music and the dying who relax when music is played. When we sing, physical responses occur such as the widening of our pupils and a rise in endorphins; moreover, it has been scientifically validated that healing occurs when singing (Pradeep, 2010).

A study by Pradeep (2010) that involved Neurological Iconic Signature (NIS) critically examined whether a product that makes a sound and the background 'noise' experienced in a shopping environment are part of NIS. The sounds that accompany peak experience are critical to its enjoyment, and to its retention in memory. Therefore, the body has key sensory receptors all over it. It is suggested that if marketers consider the sensory capabilities of a product or experience, they are selling to the 'buying brain'. If the experience is meant to be tactile, then the product should be infused with fun, allowing the fingers to touch and explore it. If the experience is sensory, then it could include music to capture memories or change moods. What we hear is specialised and tuned to what interests us. The 'buying brain' will easily ignore distracting noises (Pradeep, 2010). Pradeep (2010), also aims to educate retailers and advertisers on how the buying brain functions, that is, the all-important transition from being a 'shopping brain' to becoming a 'buying brain.' This new

understanding of the ‘primal brain’ in the modern world creates huge challenges and opportunities that have not been considered in human history before (Pradeep, 2010).

Studies confirm that music affects every part of the brain and has the potential to exert a powerful influence over its control systems (Mindlin et al., 2012). Music can therefore influence our perceptions, emotions, memories, neurochemistry, and ultimately behaviours, because these control systems regulate much of our goal-directed actions and our thought processes. When viewed in the long term, it’s believed that music can begin to change how the higher brain systems operate which then allows new ways of thinking and an increased ability for people to adapt to stress. In this way, music becomes a key tool used as a support mechanism in all that people do (Mindlin et al., 2012).

Mindlin et al. (2012) believe that it is not necessary to use harmful drugs as music can trigger various mental states that are all within positive measures. These states can range from being highly vigilant to feeling relaxed with an all-encompassing calmness. Through their research in neuropsychiatry, neurophysiology, and cognitive neuroscience, Mindlin et al. (2012) investigated psychology, brain research, clinical medicine, and human performance improvement in relation to music. They believe that choosing a music playlist can change a person’s life; that is, the power of music can help people stay mentally sharp and focused, increase performance, and fight off stress, insomnia, anxiety, depression, and even addictions (Mindlin et al., 2012).

Emotions have been proven to affect our ability to store, retrieve, and encode information, which is linked to the impact of emotions on people’s cognitive processes. The process that consumers follow when relating product information is linked to emotions, which play a key function in areas such as selective attention and recall (Jansson-Boyd, 2010). Emotions are therefore linked to people’s focus on certain factors over others. In their study, Jansson-Boyd (2010) manipulated the feelings and emotions of participants in various moods by linking facts that ranged from happy to sad. Results showed that sad participants remembered a higher number of sad facts, while happy participants remembered a higher number of happy facts. These findings showed that mood plays a key part in what makes people engage in ‘selective learning’ and that people can become more biased depending on what they pay attention to, which can be based on the type of mood they are in (Jansson-Boyd, 2010). Their research provides evidence that “emotions can play a part in how much attention people pay to certain types of product information, as long as the information provided can be linked to similar emotions and/or attraction to the evaluator’s mood” (Jansson-Boyd, 2010, p. 75).

It appears that consumers delve into their feelings to determine their ‘reaction to the stimuli’ that they are exposed to when confronted with a large selection of product or service choices (Jansson-Boyd, 2010). Jansson-Boyd (2010) suggest that cognitive judgements are outside individuality and are preceded by emotions as suggested in their findings. It is believed that consumers may not be aware that emotions play a key role in their decision making and that they could be making decisions based on the ‘how-do-I-feel-about-it’ heuristic. By using an experimental approach, it has been shown that consumers decision making as well

as their feelings related to their decisions are linked to their moods, which help to inform their decision making (Schwarz & Clore, 1983).

Music can also instantly shift one's mood (DeNora, 2000) and help in developing or changing one's mood. Individual tunes can influence a person's feelings and what he / she thinks about and how he / she behaves (Mindlin et al., 2012). For example, a person might choose to play something up-beat when feeling down, or something slow when feeling anxious – with the original mood changed in a second. It is important to become more sensitive to the effects of music and how it can change the mood of not only people, but even an environment and perhaps that of consumer behaviour (Mindlin et al., 2012). Marketers can use this knowledge to tap into music's strong, instant mood-altering capability, giving them control over feelings, even at a moment's notice.

2.3.2 Financial Returns

Next, financial returns, which can include variables such as value of sales, repeat purchase, items purchased, rate of spend, quantity purchased, and/or gross margin, are briefly discussed. The evidence from research conducted by Garlin and Owen (2006) clearly suggests that an organisation's financial returns can be directly impacted by customers' affective and cognitive responses to their in-store experiences, which influence the likelihood of behaviours.

According to Cohen (2006), trends in consumer purchasing behaviour have also changed in the past few years. Due to the speed at which today's world is moving, consumers are seeing the introduction of new products and enhanced features at a rapid rate, and their lifestyles have become increasingly multifaceted yet multidimensional at the same time. There are many added choices in the marketplace and new needs to fill, meaning that customers have more complex and wider purchasing decisions to make than ever before (Cohen, 2006). This means that stores must think carefully about the value of sales as well as the effects on profit-margins that link to repeat purchases.

We have seen that approach behaviour and satisfaction with shopping experiences have positive outcomes when arousal induced by music and aroma results in increased levels of pleasure (Morrison & Beverland, 2003). The study by Mohan, Sivakumaran and Sharma (2013) found that the perceptions of store employees may influence customers' attitudes towards merchandise and service quality, which reflects the influence of a number of elements on consumer behaviour. Similarly, convenience, quality, variety, and value lead to positive attitudes towards private labels and store brands (Mohan et al., 2013).

Mohan et al. (2013) found that the store environment may also influence the number of items purchased, store liking, time and money spent, perceived quality of the merchandise, patronage, sales, product evaluation, satisfaction, and store choice. The authors also found that the store environment drives impulse buying through positive affect and urge, and that 'personality variables' influence impulse buying through

positive affect and urge. They did not find support for the relationship between negative affect and urge (Mohan et al., 2013). Music and other elements lead to higher store environment perception, which leads to urge that then leads to impulse buying (Mohan et al., 2013).

According to Tendai and Crispen (2009, p. 104), music is capable of “evoking complex affective and behavioural responses in consumers and music may impact on both how long consumers spend in a shop and on how much they buy”. In their first study observation, the researchers found that when slow music is played in a retail environment, shoppers spent more time and money. In their second observation, they found that customers take more their time to eat their meals when slow music is played, compared to those who are in an environment where fast-music is played (Tendai & Crispen, 2009).

Another study by North, Hargreaves and McKendrick (2000) examined the effects of music on customers' perceptions of the atmosphere in a city centre bank and a city centre bar, respectively. The researchers investigated two possible functions of music in these commercial environments. The first function was the effect on the perceived characteristics of the place in which it was played. The second function was the effect of music on purchase intentions (North et al., 2000). Kotler (1973), who introduced the concept of store atmospherics, examined the effort to design buying environments that produce specific emotional effects in buyers and thus enhance their purchase probability. Their findings suggest that positive practical benefits can be achieved if a more detailed understanding of in-store music is achieved, since in-store music may mediate the perceptions of stores and the store environment including an increase in sales (North et al., 2000). Overall, the role of music in forming a commercial atmosphere has been the subject of several empirical investigations (North et al., 2000).

North and Hargreaves (1996) further investigated the effects of music on responses to a dining area, where they found that a student cafeteria eatery had an increased number of diners when they liked the music that was playing. They authors concluded that music becomes associated with the situation in which the music is played. Based on this, it has been suggested that affected responses to music, such as relaxation or a change in mood, for example, from sadness to happiness, may also be associated with the specific listening environment in which the music is played (North & Hargreaves, 1996). Coupled with Kotler’s (1973) research on atmospheric effects, this understanding could help store managers design their stores with emotional effects such as music and thus assist purchase probability. North et al. (2000) also found that there are significant effects on customers' estimates of the maximum sum they are prepared to pay for products on sale in a bar based on the ‘Type of Music x Time of Day, and Volume x Time of Day’. These results demonstrate that music can have reliable effects on atmosphere and purchase intentions in commercial environments (North et al., 2000).

Another study by researchers North, Shilcock and McKendrick (2003) investigated the use of background music, such as classical music and pop music, versus no music at all in a restaurant setting. They calculated the mean spend per person at each table, with the researchers also calculating customers’ meals (including

their starters, main courses, ending with desserts and whether any drinks were consumed during their mealtimes). The overall food and drinks bill as well as the total spend per table and time spent in the restaurant was also calculated. Their results showed that there was a significant difference between the variables analysed and that classical music lead to higher spending over popular music or when no music was played during their dining experience (North et al., 2003). These findings are consistent with a small number of previous researches in which people reported that they were prepared to spend more when background classical music was played (North et al., 2003).

Past research clearly shows that there are obvious commercial implications in playing background music and it is possible to utilise background music to increase customer spending. In particular, North et al. (2003) found that classical music increases spending intention as it creates an upmarket atmosphere, and this links to contextually appropriate, congruent behaviour. Their results indicate to restaurant managers that they can use classical music to increase customer spending (North et al., 2003).

The consistency of the research findings presented in the literature suggests that the use of music applied in a business context has implications for return on investment. When reviewed, past research demonstrates the need to use or include background music in retail environments based on its positive effects on key dependent variables, that is, affective, attitudinal / perceptual, temporal and behavioural variables (Garlin & Owen, 2006). Garlin and Owen (2006) highlight the considerable body of work that presents evidence of these effects of background music. Under the financial returns variable in their meta-data analysis, they found that sales value and volume, repeat purchase, rate of spend, quantity purchased and gross margin effects can then provide returns to businesses. Furthermore, they believe that ‘indirect’ returns to businesses are apparent, including positive perceptions of quality and venue / store brand image (Garlin & Owen, 2006).

2.3.3 Attitudinal / Perceptual Effects

With a focus on some of the psychology around consumer shopping behaviour, various consumer influences linked to emotion, decision making, finance, purchasing, and customer value proposition are discussed in this next section. This section further discusses research that examines customer perception and satisfaction and provides insight into how marketers and stores can be more aware of consumer behaviour that revolves around doing, engaging, and being.

Since the 1900s, many researchers have acknowledged that consumers are not always rational because they are driven by their emotions. As seen within the affective and phycological effects variable, the impact of emotions upon consumer behaviour is evident through the findings of researchers like Powell (2016). Managers need to consider and use the key store cues when designing an environment where consumers can experience satisfactory consumption, which can be achieved by enhancing or inhibiting certain retail experience dimensions (Areni & Kim, 1993). Quality is key in retailing. We have already identified that music

can add value to stores and the type of music played is also one of the key factors in the value proposition as well as perception of quality (Triantafillidou, Siomkos & Papafilippaki, 2017).

The aim of a study by Triantafillidou et al. (2017) was to help retailers add value, affect consumers' future behavioural intentions and their loyalty, enhance their stores' reputation and their market share, and develop competitive advantage. Music has been shown to have positive influences on various experiences, including flow, socialising, hedonic, challenging, and communitas as music is one of the key ambient elements which has a strong impact and influence on these elements (affecting six out of seven experience elements tested by researchers) (Triantafillidou et al., 2017). Customer feelings such as pleasure, risk, flow, and adventure increase when stores play pleasing music (Triantafillidou et al., 2017). Triantafillidou et al. (2017) also found that the appropriate background music can also produce cognitive as well as social benefits for consumers as it allows them to acquire product information more readily and strengthens their relationships with others or with fellow shoppers. As with previous studies, the authors believe that store music can enhance consumers' feelings of enjoyment, adventure, and immersion (Triantafillidou et al., 2017). Further research revealed that:

> shoppers quite often enter stores with the desire to relax, forget their problems, fantasise about being in a different world. Escapist experiences can be enhanced by offering high-quality products. Satisfaction with product quality attracts shoppers and enables them to escape from reality by imagining themselves using the store's products. (Eroglu et al., 2005, p. 578)

In order to raise shoppers' feeling of risk and adventure, adventure retailers need to use the right kind of music and offer superior product quality targeting adventure shoppers (for example epic adventure music in an adventure type of store). This would increase the challenge dimension of the shoppers' particular shopping experience, especially those who engage in quality assessments during their shopping trip and want to encounter a more challenging experience (Eroglu et al., 2005).

Today, many marketers want to satisfy their customers' needs and their view of the overall store environment. They achieve this by providing a positive shopping experience which in returns establishes their store as their first choice in the minds of consumers (Andersson, Kristensson, Wästlund & Gustafsson, 2012). Marketers use servicescapes to create a good consumer experience, but also to influence consumer behaviour. One of the tools used to achieve this is music (Andersson et al., 2012). Lam (2001) outlines further influences in the store environment that affect the various stages of shoppers' 'cognitive approach' and behaviour, including attention, perception, categorisation, and information processing. Lam (2001) also believes that the store environment may influence consumers' evaluations of a store's service, merchandise, quality, etc. (Lam, 2001).

Modern retail stores have widely recognised that the use of background music is key to influencing consumer behaviour. "Music has been observed as a powerful stimulus in shaping retail experience. It is widely used in retailing for attention, identification, association and remembrance" (Herrington & Capella, 1994, p. 50). Musicscape has emerged as an integral part of the retail environment (Herrington & Capella, 1994) and as a

key ambient factor, it has been shown to engage, involve, energise, refresh, entertain and create pleasurable memorable experiences for shoppers in the retail environment. Background music has a direct impact on the shopping experience by influencing purchase needs, overall affective evaluations, and service evaluations (Herrington & Capella, 1994). Studies that have examined the effect of background music on consumer behaviour have reported how important atmospheric variables are in determining not only overall store effectiveness but also a range of cognitive, affective, and behavioural consumer responses (Jain & Bagdare, 2011).

Research has found "that when shoppers like the background music played in the store, it influences their desire to affiliate in buyer-seller interactions" (Lindquist & Sirgy, 2009, p. 249). Research by Lindquist and Sirgy (2009) also demonstrated that it is important to choose music that 'fits' with the type of store. Unfortunately, music is often tested in combination with other factors such as lighting, which makes it difficult to determine to what extent music is an influential factor. The outcome of Lindquist and Sirgy's (2009) study showed that music and lighting can be combined to create either high or low ambience in a store, and ambience increases the time spent in the store by shoppers as well as the friendliness of the staff who work there (Lindquist & Sirgy, 2009).

Finally, in their study, Jain and Bagdare (2011) evidently recognised that when a music stimulus is present in retail settings, it influences not only consumption experience but also cognitive, emotional, and behavioural responses. Music is a powerful invisible force that surrounds shoppers that cannot be blocked out by human senses (unlike visual stimuli). Even if shoppers do not deliberately pay attention to music, it still effortlessly interacts with shoppers. Research has found that music enters through our ears in an uncontrolled manner which then influences shoppers' heart, mind, and body. Major conclusions were also drawn from their study which include:

- "Music of all types, as a sensory stimulus, has a significant effect on the shopping experience;
- Musical variables both structural (tempo, pitch, volume, mode, genre and harmony) and affective (liking, familiarity, type and style) significantly influence the shopping experience and can be manipulated to produce desired responses;
- A pleasurable shopping experience brings desired consumer responses – cognitive (expectations, perceptions, spending, evaluations, perception of time, quality, etc.), emotional (moods, motivation, feelings, etc.), and behavioural (purchase intentions, patronage, recommendations, speed, etc.);
- The effect of music on the shopping experience is moderated by the consumer profile, store profile, ambient factors and time of purchase."

(**Source:** Jain & Bagdare, 2011, p. 297).

2.3.4 Temporal Effects

Several temporal dimensions were examined in the literature study by Garlin and Owen (2006), which focused on customer perceptions of time duration, actual time duration, time of day / week / year, wait time, and task completion time (e.g., decision-making, serving, consuming, shopping). Studies collectively reveal a clear relationship between background music and the various temporal dimensions.

In their research, Bailey and Areni (2006) reviewed the attentional model's account of duration judgments, which is referred to as monitoring an individual's passage of time. The authors found that between temporal and non-temporal processing, the given intervals and attention of customers may be divided, therefore:

> temporal processing refers to any mental activity related to monitoring time as it passes, either explicitly (i.e., trying to estimate the duration of an interval) or implicitly (i.e., wondering how long a wait has been / will be). Non-temporal processing involves thinking about things that are unrelated to the passage of time during the target interval. (Bailey & Areni, 2006, p. 190)

Findings from research examining whether music expands or contracts perceived duration of time have been inconclusive. Bailey and Areni's (2006) research outcomes help resolve this ambiguity. The authors believe that the passage of time should be redirected away from customers through monitoring and that memory traces should be created to estimate duration. When examining the process of drawing attention away from monitoring the passage of time, they found that there are variables that can reduce perceived duration. When a brand recall task was performed, whilst waiting inactively, study participants' attention was drawn away from the passage of time by background music, which reduced the amount of temporal information required and contracted estimated duration. In addition, when familiar music was played to those respondents who were waiting inactively (whilst monitoring the passage of time), their perceived duration of time was reduced compared to listening to unfamiliar music. "By giving respondents something to listen to, the familiar music reduced estimated duration, again by decreasing the amount of temporal information encoded during the interval" (Bailey & Areni, 2006, p. 199).

Sometimes shoppers may not realise or may not have given any thought to how long they have stayed in a store and it would be interesting to know if some shoppers move to the beat of the music while others opt for a quick exit. In order to provide a point of difference, if store managers programme the right music this can lead to a competitive advantage. Retailers can therefore increase customers' time in store, influence their perceptions of a product or service, make a long-term link with the target audience and build customer-brand relationships, if the right music is played (Morrison & Beverland, 2003). Morrison and Beverland (2003) believe that retailers must identify a sound that will reflect their brand. This will help to not only achieve their strategies, but interact harmoniously with other atmospheric elements.

Kellaris, Mantel and Altsech (1996), on the other hand, conducted a study to examine the influence of the psychophysical stimulus property of music (loudness) on temporal perceptions, as well as the effects of

conditions and processes of these perceptions. Their results showed that when loud music was played, it influenced two aspects of time perception; that is, it influenced perceived duration, where arousal only partially mediated the loudness of music, and which also influenced the perception of pace. They also found that the time interval duration seemed shorter when study participants were exposed to softer music (versus louder music). This effect was more distinct among those in neutral (versus positive) affective states (Kellaris et al., 1996).

The study by Kellaris et al. (1996) indicates that it is possible to manipulate characteristics of the 'stimulus environment' (e.g., background music) in order to influence consumers' time perceptions in commercial settings. Sellers and service providers may be able to generate greater customer satisfaction by diminishing the perceived duration of waiting times. The authors believe this can be done if the perceived duration of an individual service received is augmented, as well as increasing or slowing, as appropriate to a situation, the perceived pace of service. For example, Kellaris et al.'s (1996) study suggests that by playing softer music, an individual's time can be diminished, but by playing louder music time can be augmented in situations where consumers are likely to be in a neutral affective state. Kellaris et al. (1996) also found that when consumers are likely to be in elevated moods, manipulating background music, for example, making it too loud, may not alter their time perceptions.

Finally, the literature reviewed by Garlin and Owen (2006), provides evidence of the effects of music's compositional variables on a range of temporal dimensions. Their research also highlights the complexity of relationships between musical elements and behavioural outcomes (Garlin & Owen, 2006).

2.3.5 Behavioral Effects

Previous sections have focused on theoretical studies on background music in retail settings. Having developed a better understanding of the effects of music and its importance, this next section looks more closely at consumer behaviour, current trends in purchasing, buyer and impulse behaviour, store choice, affiliation, customer numbers, and how these different factors have changed over time. The section will then discuss the links between these factors and the use of background music – that is, how the store environment and background music can influence consumer behaviour.

It has been identified that retailers use background music in order to enhance the atmosphere of their stores. Chebat, Chebat and Vaillant (2001) examined the effects of music on attitudes toward stores and salespersons, and to what extent visits to stores are moderated by cognitive processes (number of thoughts and depth of information processing), with a greater focus on emotional moderators than in previous studies. In their study, when different types of music were played, for example cognitive simulation was low when gloomy music played compared to when soothing music (pleasant and low arousing) was played and an increase in cognitive activity was found. The authors warn retailers that according to their findings, higher cognitive activity is associated with lower attitudes but that they should not see this as the overall solution to

cognitive activity enhancement. The authors suggest that the results can be explained by the fit of the music with the store. They also suggest that the music fit and the cognitive processes triggered by store music should be strong avenues of store atmospherics research (Chebat et al., 2001). The authors further believe that background music is a tool that can help increase sales and enhance positive attitudes toward the store as well as consumers attention to salespersons (Chebat et al., 2001).

Tendai and Crispen (2009) found that the in-store shopping environment has an influence on impulsive buying among consumers. Atmospheric elements or factors such as music, ventilation, or scent, which link to engagement effects, help retailers to retain customers in shops longer, even though impulsive buying may not be directly influenced. When consumers stay longer in a store, price comparisons are more likely to occur, they may respond to a shop assistant's influence more, and they may even search for promotions. These consumers are more likely to act on impulse buying and indulge in it (Tendai & Crispen, 2009). On the other hand, when consumers are poor, factors of an economic nature can be observed, whereby cheaper prices, help from shop assistants, and even coupons can influence impulse buying (Tendai & Crispen, 2009).

Music is an important form of non-verbal communication that has been used as a key tool to help enhance a store's atmosphere including inducing unplanned activities (Turley & Milliman, 2000) and even impulse buying (Mohan et al., 2013). Music can influence consumers to stay longer in stores and spending more money than normal. When unplanned spending occurs, it can also lead to impulse buying behaviour. Mohen et al. (2013) also found that both lighting and music are important prompts that cause consumers to purchase impulsively. Moreover, the authors found that loud music is one of the major irritants of shopping. Improper or loud music may cause physical discomfort and may induce negative affect.

The effects of using background music in contexts such as retail stores have been widely recognised to influence consumer behaviour in different settings and situations as well as affective, behavioural and temporal variables (Andersson et al., 2012). Music provides pleasure and arouses consumers, as confirmed by the study of Garlin and Owen (2006).

Andersson et al.'s (2012) research results show that music affects females and males differently. The authors found that when no music or slow-tempo music was played, females were the most positively affected, whereas males were affected by any music, particularly fast-tempo music. Other studies have also shown that females respond positively to music at lower volumes and prefer slow and soft music compared to males, who prefer fast and louder music (Andersson et al., 2012). Andersson et al. (2012) also found that gender moderates the effect that music has on approach behaviour, but music alone has a positive effect on actual purchase. Overall, Andersson et al. (2012) believe that music makes consumers feel better, which leads them to spend more time in the store and consume more.

Cohen (2006) believes that alongside promoting a product's features, to **entertain** (one of the five E's of marketing) the consumer, whereby musical elements can be included, is central to the shopping experience. When consumers set out to shop, they are committing their precious leisure time – time that they could also use to go to the movies or to be with their friends (Cohen, 2006). Whether they are shopping online or in stores, consumers are using leisure time for that experience; therefore, there is a need to make the experience fun. If consumers dread shopping, it is the responsibility of retailers to turn it into an enjoyable experience (Cohen, 2006). Entertaining consumers while they are shopping and purchasing extends to product usage and sales as well. Consumers are learning very rapidly that investing their discretionary spending across industries that entertain them makes those dollars last a long time. Cohen (2006) notes that we are entering a world where the consumer is seeking entertainment both from the product and from the experience. If a product makes the connection, the retailer is part of the future. If it does not, the retailer will work hard simply to survive. Adding musical effects within the store could support Cohen's (2006) strong recommendation to make the shopping experience both fun and entertaining. Therefore, it is vital to understand the expectations of customers and to do whatever it takes to meet or exceed those expectations (Cohen, 2006).

It has already been identified, under affective / psychological effects, that music is an important variable in creating an in-store experience and connecting directly with customers' emotions. Therefore, having the right music is important. Part of the strategy involves using music in a meaningful way rather than purely just as background sound. It has been found that a store's brand can be reflected incorrectly or sends mixed signals to consumers when staff members play their own personal music choices. A mismatch between store choice and experiential strategy, including the use of music, could lead to confusing, negative, or unexpected effects on consumers (Morrison & Beverland, 2003).

Music does not always act alone, consequently:

> classical music used in conjunction with soft lighting and multiple salespeople helps create a prestigious image in a retail setting, leading to higher service and quality ratings. Fast-paced classical and slow popular music can induce perceptions of service quality and pleasure in many people, which along with merchandise quality can have a positive effect on approach behaviours. (Morrison & Beverland, 2003, p. 78)

From research already studied on ambience effects, it shows that:

> music is the most widely studied ambience variable in the literature on customer perceptions. Music can have a variety of effects on customer behaviour, ranging from a longer time spent in the store, higher in-store traffic, and increased interaction with salespeople, to positive perception and recognition of store image and amplification of purchase decisions. (Ogruk et al., 2018, pp. 116–117)

2.4 Literature Review Summary

In conclusion, even though the literature review has found that there exists a number of different viewpoints and beliefs relating to the use of background music in retail environments, the general indication is that background music in a retail environment can help create customer satisfaction, increase store traffic, produce higher sales margins, and influence shopping behaviour.

The early studies of Bruner (1990) and Yalch and Spangenberg (1990) laid the foundations for future research and the authors have been referenced by more recent authors, as seen in the literature review. More recently, there have been several researches on the topic of background music in the retail environment and the complex relationship between retail shopping and various atmospheric factors. Current authors point out that in general, previous research on the retail environment focused more on the 'amount of time' that was spent shopping and shoppers' age rather than on the use and type of background music played. Bruner (1990) maintains that if retailers choose to use background music within stores, marketers need to determine whether music that suits the occasion or more familiar music is a better choice.

In addition, music can be used to increase happiness (Mindlin et al., 2012). There has been a great deal of new scientific research documenting the profound influence of music on physical, psychological, and spiritual well-being. Music has proven to have a primary role in all aspects of our lives, unrelated to our backgrounds and beliefs, our customs and traditions (Powell, 2016). "Historically, rhythm, music and song have been used to tune the mind, to heal the body and to strengthen the spirit. Music is even regarded by some as connecting us to the universe itself" (Powell, 2016, p. 214). The "core features of music are rhythm, harmony, resonance, synchrony and dissonance and those are the same processes the brain uses to coordinate its activities and carry out complex behaviours" (Mindlin et al., 2012, p. 2). Therefore, many believe that music can have a profound effect on us (Mindlin et al., 2012). For this reason, marketers and store managers should consider the use of background music in order to help increase sales and the time spent in store.

Bruner (1990) further suggests that even though music has always been known to affect humans in various ways, it is only recently that researchers have attempted to explore the relationships empirically through marketing contexts. Yalch and Spangenberg (1990) point out that many stores play background music because of its appeal to customers; however, they also maintain that serious consideration should be given to establishing desired shopping behaviour and determining how music can affect this behaviour. They are, therefore, concerned with the relationship between store music, mood, and shopping behaviour. We know now from the studies already outlined that music can affect consumers' moods and in return their moods can alter or change their shopping behaviour (Yalch & Spangenberg, 1990).

Finally, based on their findings, Garlin and Owen (2006) foresee the likelihood of return on investment from the use of music in a business context. Past research has demonstrated the capacity of appropriate background music to positively effect affective, attitudinal / perceptual, temporal, and behavioural variables. In turn, this positive effect can provide returns to business in the form of sales value and volume, repeat

purchase, rate of spend, quantity purchased, and gross margin. Many indirect returns to business are apparent, such as positive perceptions of quality and venue / store brand image (Garlin & Owen, 2006).

This research project will further focus on the study undertaken by Garlin and Owen (2006), in which they identified dependent variables after reviewing studies in background music research. Identifying the variables of financial return by looking at the total sales (dollars spent) and the temporal effects (the total time spent in the store) will be the basis of the hypotheses identified for this research project.

Two of the three hypotheses will focus on **financial returns**. The first will look at the total sales and the third will look at the number of items purchased and type of product purchased, which also falls under the variable of financial returns. The second hypothesis relates to the variable of **temporal effects** – time spent in store.

3 CHAPTER THREE: METHODOLOGY

This chapter provides a comprehensive and detailed description of the methodology used in the current study as well as the research design. It starts with a definition of experimental design, including the meaning of observation study, which is the methodology used for this project. Next, it provides an outline and brief background of the two different stores – Deli A and Liquor Centre B (these store names are referred to throughout the research project) – in which data collection took place within the observation study. Following this, the research design and data collection methods are presented, along with reference to the various documents and supporting items used during the observations at the stores (including detailed explanations of the dependent and independent variables). The chapter closes with an outline of the data methods used for the final analysis.

3.1 Quantitative Research Methods: Experimental Design

The methodology chosen for this study was experimental design with observational measures.

An experiment is “a procedure carried out to support, refute or validate a hypothesis. Experiments provide insight into cause-and-effect by demonstrating what outcome occurs when a factor is manipulated but always rely on repeatable procedure and logical analysis of the results” (Druckman et al., 2011, pp. 115–117).

Experiments can vary from informal and natural comparisons, for example, taste testing, to highly controlled experiments such as those in a lab with apparatus, that typically include controls. “Experiments have been designed to minimise the effects of variables other than the single independent variable. This increases the reliability of the results, often through a comparison between control measurements” (Druckman et al., 2011, pp. 118–120) and if the controls worked then the experiment also worked as intended with results due to variables that were tested (Druckman et al., 2011).

This therefore links to observational study which is “an empirical investigation of effects caused by treatments when randomised experimentation is infeasible” (Rosenbaum, 2002, p. 25). The strength and quality of an observation study is largely due to the design of the study (Rosenbaum, 2002). To illustrate the validity of observational studies, the experimenter must be able to account for and also show confounding factors. Observational studies have value because they often suggest hypotheses that can be tested with randomised experiments or by collecting new data (Rosenbaum, 2002).

The research undertook two direct, in-store participant observations that occurred in a suitable location within the store, as agreed to prior by the store manager or store owner. The location also had to be suitable for the observation to take place in order to examine the impact of background music on shopping and purchases made by shoppers.

3.2 Contrast with Observation Study

As one of the various experiments available, controlled experiments "usually compare "the results obtained from experimental samples against controlled samples, which are practically identical to the experimental sample except for the one aspect whose effect is being tested" (Hinkelmann & Kempthorne, 2008, p. 2). Laboratory experiments and natural experiments are also types / forms of experiments that are used by researchers in a controlled environment. Controlled experiments are sometimes impossible or difficult for researchers, therefore they resort sometimes to natural experiments instead (Dunning, 2012).

Another popular experiment used by researchers is that of field experiments, the methodology chosen for this research study (Hinkelmann & Kempthorne, 2008). Field experiments are distinguished from laboratory experiments, which implement scientific control by testing a hypothesis in a controlled or even the artificial setting of a laboratory (Dunning, 2012). Field experiments also have an advantage where the outcomes take place in a natural setting and the conditions can be controlled outside a laboratory environment (Dunning, 2012). For this reason, "field experiments are sometimes seen as having higher external validity than laboratory experiments" (Dunning, 2012, p. 110).

Bailey (2008) believes that the problem with observational studies, where human subjects are involved is the "great difficulty attaining fair comparisons between treatments, because such studies are prone to selection bias, and groups receiving different treatments may differ greatly according to their covariates (age, height, weight, medications, exercise, nutritional status, ethnicity, family medical history, etc.)" (Bailey, 2008, p. 199).

In contrast, randomisation implies that for each covariate, the mean for each sample group is expected to be the same. For any randomised trial, "some variation from the mean is expected, but the randomisation ensures that the experimental groups have mean values that are close" (Bailey, 2008, p. 190), provided the sample size is adequate.

3.3 Store Visits

The research conducted for this study involved two direct, in-store participant observations that occurred in a suitable location within the store, as agreed to prior by the store manager or store owner. The location also had to be suitable for the observation to take place in order to provide an opportunity to examine the impact of background music on shopping and purchases.

Two in-store locations were identified so that if one location did not participate or no useful data could be gathered to answer the research question, an additional in-store location would act as a backup plan for the research project.

One of the chosen venues that was analysed (when the two genres of music were tested) was a liquor store based in Auckland that sold a variety of alcoholic and non-alcoholic drink options from a wide range of wine

from all over the world, as well as beers from large international brands to local New Zealand brews and a huge range of spirits. The other venue was a health / natural organic food store (delicatessen) also based in Auckland, where specialised products sourced locally and nationally were sold.

3.3.1 Store Visit One – Deli A

The first observation study was conducted in **Deli A** over two different days but at the same time each day.

The store offers a variety of health food options. Deli A was established in 2001 when the owner noticed a gap in an affluent suburb / area in Auckland for a deli offering home-made, quality, take-out food. They proceeded to fill that gap, and their doors were opened. They also ventured into business on a shoe-string budget but with plenty of help and support from friends and family. The owner's philosophy is simple: they believe in offering fresh, quality, healthy food that is good value for money. With a little bit of creativity, the owner and her team in the kitchen add an innovative touch to traditional recipes.

The deli offers a selection of salads, gourmet sandwiches and wraps, home-baked slices, cakes and brioches. The cabinets are always stocked with freshly baked marinated free farmed chicken / salmon, vegan cakes, quiches and more. The deli has a number of shelves that are filled with their own home-made chutneys, relishes and various dressings. There are also freezers that line the shop with take-home frozen meals, soups and puddings (Ripe Deli, 2018).

"Although the offerings at the deli are all packaged to take-out, there are a few seats available in front of the shop where people will often gather informally, sharing tables. There is an easy-going, family feel about the place. Like the owner, the staff are friendly, efficient and equally passionate about quality foods and the products they sell. They are intent on making a difference and are environmentally friendly, offering sustainable and recyclable packaging for all their food" (Ripe Deli, 2018).

The range of products and services provided by Deli A shows that they are obviously meeting their target in the region / area, with clientele who value this range of health foods and a number of customers visiting from all over the Auckland region.

Figure 2: Store Visits in Deli A

3.3.2 Store Visit Two – Liquor Centre B

The second observation study was conducted in **Liquor Centre B** over two different days but at the same time each day.

Liquor Centre B is part of the Liquor Centre Group in New Zealand with over 200 stores nationwide, representing the largest liquor chain in the country. Liquor Centre B is a New Zealand owned and operated family run business that prides itself on offering value for money. It also prides itself on being a local store in a close neighbourhood and a one-stop-shop for all liquor needs.

The store offers a variety of alcoholic and non-alcoholic drink options, including a range of wine from all over the world, beers from large international brands to local New Zealand brews and a huge range of spirits and sparkling options. They also sell some snacks and ice at the store.

Figure 3: Store Visits in Liquor Centre B

3.4 Ethics

Ethical approval for the field experiment was obtained from the Auckland University of Technology Ethics Committee (AUTEC) and was approved and granted for this application on the 17 July 2017. The AUTEC application number is 17/174.

Following the correct ethical protocols within the research design in relation to the methodological approach taken for this research study has helped strengthen the research by embedding consideration of the various questions posed in the development of the research design. Ethical protocols were included into this research study based on ethical approval before the study commenced. Key actions, documents and observation methods were included, as mentioned in Section 3.5 and as agreed to by AUTEC. Hard copy examples are provided in the appendices.

3.5 Research Design and Data Collection Methods

The next section outlines the research design and data collection methods used for this study. It also explains why the research design and data collection methods were chosen and why they were considered appropriate to answer the research question.

The researcher undertook the data collection through a direct observation study. The study is therefore classified as a field experiment as it occurred within an actual store location, with real-time shoppers involved. During the set allocated time, each consumer was observed as they entered the store and again within the allocated store space from where the purchase of product/s took place. The frequency of product purchase during the set time was recorded, including the day and time of the purchase. The final dates and times of the in-store studies and observations were also confirmed with the store owners and managers, who agreed to provide final sales costs of the set time/s at which the observation study took place. During the preliminary set up of the research project, an experimental design diagram was created (initial draft) in order to follow the methodology of an observation study. This was also attached to the ethical approval documentation during the pre-approval process and was used to demonstrate to store managers the research design that the researcher would follow (see Appendix G).

During the in-store observations, the researcher positioned themselves within a location in the store, close to the area being observed – for example, closest to the cashiers in the boutique wine store in order to observe purchases made.

The researcher noted the key variables as outlined within the methodology and data collection section. These were recorded in a table as shown in the Observation Protocol document (see Appendix B) and then transferred after each store visit to the data analysis and records spreadsheet, utilising the Researcher's Observation Guide (see Appendix C) as an example.

A poster was placed in the store detailing the study and the observation protocol to provide shoppers with an opportunity to let the store staff or the researcher know if they did not wish to be observed. If this were to occur (and not once during any of the store visits did it occur), the observation would not include the shopper/s who requested to be omitted.

Posters (see Appendix D) were also placed next to the store till / cashier and the shop entrance (the main doors) notifying that an observation study was taking place and to alert shoppers. Participation Information Sheets (see Appendix E) were also available if shoppers requested these and were placed next to the store till / cashier, and the front entrance of the store. Additionally, the researcher wore a name badge identifying themselves as an observer within the store.

Consent forms (see Appendix F) were also available to any shoppers that wished to sign the form or who did not wish to be observed. In this case, they could simply let the store employees or the researcher know. All

data from the observation studies were kept confidential; the answers were not linked to any individual person.

The researcher did on occasion speak to the Deli A and Liquor Centre B staff and owner or store manager during observations. The researcher asked for store information, such as overall clientele, product information, sales information for that particular day, typical music played (if at all) on a normal trading day (as opposed to the music chosen by the researcher on observation days). Additional factors such as the weather, day, time and the time of the year were also recorded.

The observed shoppers were valuable contributors to the overall data collected for the study. Their involvement was their natural shopping behaviour in the selected stores and they were not directly involved in any of the observations. Therefore, shoppers did not influence the nature of the research, its aims, nor its methodology. They were also not involved in conducting the research.

No names of shoppers were requested or recorded. In the final results, findings were reported as percentages aggregated across several shoppers.

Several photographs were taken inside and outside each store (with no shoppers included) to showcase the layout of the store as well as show the various products sold.

Table 3 provides a short overview of the data collection methods and their contribution to answering the research questions.

Table 3: Data Collection Methods and Contribution to Answering the Research Question

Data Collection Method	Contribution to Answer the Research Questions
1. Observation Study	• Analysing the number of sales figures when specific genres of music was played during particular set observation times. • Recording the number of customers that visited the stores between particular times when a specific genre of music was played. • Recording the overall time spent in store by customers when a specific genre of music was played. • Recording the number of items purchased and the types of products purchased as shown by the sales and final data report supplied by the store.
2. Observed Variables (only)	Taking additional notes for personal records to support the research study and other data collection methods as a further analysis of demographic variables that were not recorded in this research project.
3. Photographs	Recording the inside and outside of the stores, showing layout, products etc. to further support the other data collection methods.

3.5.1 Study Variables

The aim was to conduct at least two observations over different time frames in each store. The first in-store observation took place in the delicatessen store (Deli A) and occurred over two Fridays from 10:00am to 1:00pm – Friday, 27 October and 10 November 2017. This provided an opportunity to capture the busy morning rush into the lunch time period.

The second observation took place in the liquor store (Liquor Centre B) also on two Fridays but from 4:00pm to 7:00pm – Friday, 16 March and 27 April 2018. This time frame was suggested time by the store owner as it is generally a busy time just before the weekend.

3.5.1.1 Manipulated Variables

The two experimental conditions that were chosen for this observation study were the playing of **classical jazz music** versus **popular music** (Top-Forty music). These two genres were counterbalanced based on the day of the week to compare the latter to the former.

Classical jazz music, that included songs, was sourced from music compilations:

- *The Jazz Collection* – classical jazz compilation. Sample songs include ‘Just One Of Those Things’ by Nat King Cole, ‘Cry Me A River’ by Chris Connor, ‘My Blue Heaven’ by Matt Dennis and ‘All Of You’ by Annie Ross.

- *The Jazz Club Hour* – mix of swing, funk and smooth jazz. Sample songs include ‘Also Sprach Zarathustra’ by Deodato, ‘Touch’ by John Klemmer, ‘Kari’ by Bob James & Earl Klugh and ‘Breezin’ by George Benson.

- *Jazz Lounge and Bossa Nova Café Music*. Sample songs include ‘Ela é Carioca’ (She is Carioca) by João Gilberto and ‘Aguas de Março’ (March’s Waters) by Tom Jobim and Elis Regina.

Nobody has yet discovered an adequate definition of classical music as the term is understood today. It has been defined as ‘serious’ music, but it is viewed today as being worthy of respect and superior to other forms of music, such as jazz or folk music (Collins, 2003). Popular music as opposed to classical music is commonly in the form of a song with accompaniment and is strategically designed for easy listening. It is used by most cultures as a major communication tool (Morris & Munro, 2004).

Next, Top-Forty popular music songs that appear on the Top Forty List of *Billboard Magazine* were played. These included popular songs that drew from a range of pop, R&B, funk, 80’s and folk song versions. Examples of popular song artists that were played included the following:

- Christina Aguilera

- Ed Sheeran

- Bee Gees

- Rihanna

- Mariah Carey

- Luis Fonsi

Popular music is any form of music that is an expression of youth culture, whereby life’s excitement and agonies are distilled into a song and unforgettable tunes that capture moments in time (Shuker, 2017). Popular music covers all music genres that are non-classical and non-jazz music (Morris & Munro, 2004). Classical jazz was chosen instead of just simple classical music on the request of the store owner and manager at the time.

The volume of the music was also held constant across both conditions at both store visits. Table 4 outlines the independent variables, including the manipulated variables that were used during each observation at the stores and which particular music genre was played when.

Table 4: Store Visit Comparisons Based on the Genre of Music Played (at each visit)

Deli A Delicatessen / Organic Food Store		Liquor Centre B Liquor & Wine Store	
Day of week: Friday	Day of week: Friday	Day of week: Friday	Day of week: Friday
Times: 10:00am-1:00pm	Times: 10:00am-1:00pm	Times: 4:00pm-7:00pm	Times: 4:00pm-7:00pm
Date: 27 October 2017	Date: 10 November 2017	Date: 16 March 2018	Date: Friday 27 April
Genre played: Popular Music	Genre played: Classical Jazz Music	Genre played: Popular Music	Genre played: Classical Jazz Music

3.5.1.2 Observed Variables

Handwritten notes were made for the following observed variables (see Appendix H):

- Gender type (male, female)
- Age type (20 to 29, 30 to 39, 40 to 49, 50 to 59, 60 and up)
- Ethnicity (if possible, to group European, Maori, Pasifika, Asian descent, etc.)
- Grouping type (single male, single female, male/female couple, family or groups of people together, business to active wear shoppers)
- Weather conditions
- Additional factors including inside and outside store variables when those occurred or were useful to note as part of the observation study

3.5.2 Dependent Variables

The dependent variables that were measured were:

- Number of customers
- Sales (dollar spent)
    - Total sales for the store
    - Average sales per customer
- Time spent within the store
    - Time spent per customer
    - Average time spent per customer
- Number of items purchased / type of product purchased – for Deli A
    - Total number of items purchased

    - Average number of items purchased per customer
    - Number of salads, pastries and sweet slices purchased in the Delicatessen / Organic Food Store
- Number of items purchased / type of product purchased – for Liquor Centre B
    - Total number of items purchased
    - Average number of items purchased per customer
    - Manager's estimate of sales of wine and beer in the Liquor and Wine Store

3.6 Data Analysis Methods

This section outlines the data analysis methods used. Data collected at the two store visits were recorded and analysed separately in order to enable comparisons to be made between the two store observation days when a different genre of music was played. Additionally, analysis of the two store visits followed the same procedure for each consecutive visit in order to facilitate comparisons within the findings.

First, preliminary analysis was conducted by using the notes made during the observations (see Appendix H), from photographs taken at the various store observations, from comments made by the store owner, workers and from some shoppers (as recorded in Appendix H), and the from data analysis collation reports. Second, data were calculated via descriptive statistics including counts and means. Also, a parametric test of differences between counts using a z calculation was used for each of the main hypotheses.

Before data were analysed, all the handwritten notes from the researcher (see Appendix H) were typed into a full report in order to prepare the data for statistical analysis and the production of reports and tables as part of the findings.

An outline of the data analysis method used for both store visits is described below.

3.6.1 Preliminary Analysis

The notes made during the observations (see Appendix H), comments made by the store owner, workers and some shoppers (as recorded in Appendix H), and the data analysis collation reports, provided an overview for the researcher even before the data was analysed using descriptive and parametric statistics.

Furthermore, photographs that were taken at the various store observations and various statements recorded as additional observation notes, were used to support impressions about shoppers' behaviour when a genre of music was played in the store.

3.6.2 Justification for using Descriptive and Parametric Statistics

The objective of the research was to examine **the overall effect of classical jazz versus popular music genres used as background music in a retail store and to evaluate their influence on shopping behaviour.** In order to do that, a series of research hypothesis were tested.

Descriptive statistics helps to simplify large amounts of data in a practical way. Each descriptive statistic reduces a large amount of data into a simpler summary in order to easily analyse the data (Trochim, 2006). Descriptive statistics are summary statistics that quantitatively describe or summarise features of a collection of information (Everitt, 2006).

Descriptive statistics are separated from inferential or inducive statistics, in that “descriptive statistics aim to summarise a sample, rather than using the data to learn about the population that the sample of data is thought to represent” (Everitt, 2006, p. 317). Therefore, descriptive statistics are also not developed based on probability theory and are known as frequently being nonparametric statistics (Everitt, 2006).

Firstly, frequency tables and descriptive statistics were run from data sets entered into SPSS software in order to analyse the minimum, maximum, mean and standard deviation for each variable tested for each time variant that shoppers spent in each store at each visit.

Next, the two sales report figures provided by the store manager / owner from both stores were tabulated into a comparison table to compare the figures between both genres of music. From here, each hypothesis outlined for this research project was identified and noted prior to the two store visits. A z score was calculated to test for differences in the dependant variables between the two music genres.

Finally, to the test the hypotheses, a z score was chosen as the appropriate statistical method for this study instead of a t test. Even though a t test tells you how significant the differences between groups are (still measured with means and averages), a z score which uses numerical measurements normally used in statistics, were utilised instead. This was to establish the value relationship to the mean or average of a group of values as well as measured in terms of the standard deviation from the mean, more suitable in this instance. Alternatively, due to the study seeking to further explore the manipulation of musical genres in various store environments, this study also wanted to view how people’s behaviour (from individual to group observations) in a non-controlled environment would occur (due to the control over music choice were not always possible in particular settings). Therefore, a z score was chosen over a t test without controlled group/s.

4 CHAPTER FOUR: FINDINGS

This chapter presents the findings of the research. The focus of the chapter is to address the research hypotheses set out for this research project in order to support the aim of the research.

The aim of the research was to examine **the overall effect of classical jazz versus popular music genres used as background music in a retail store and to evaluate their influence on shopping behaviour.** The research hypotheses are as follows:

1. **H1:** Sales (dollar spent) – Congruency between the store environment and the type of music (classical jazz genre versus popular music genre) can positively influence the amount of dollars spent in the store.

2. **H2:** Time spent within the store – Congruency between the store environment and the type of music (classical jazz music genre versus popular music genre) can positively influence the time spent in the store by shopper/s.

3. **H3:** Number of items purchased / type of product purchased – Congruency between the store environment and the type of music (classical jazz music genre versus popular music genre) can positively influence the type of product purchased – convenience products are purchased more often when a popular music genre is played versus the of purchase of high-end products when classical jazz music is played.

The chapter is divided into the two different store visits and then further divided into the findings from each store visit related to the three hypotheses. A full table that includes the comparison of the two genres of music in both the Deli A and Liquor Centre B is presented with key statistical analysis for each store (Tables 5 and 8). Finally, the findings for each store visit are extended with additional observation notes for each store and photographs taken of the inside and outside of the stores to support these notes.

4.1 Store Visit Findings

4.1.1 Store Visit One – Deli A

The following hypotheses were identified and noted prior to the two store visits at Deli A:

- H1: **Sales figures** will be lower when **popular music genre** is played in Deli A as opposed to **classical jazz music genre**.

- H2: **Time spent** in store will be shorter when **popular music genre** is played in the Deli A as opposed to **classical jazz music genre**.

- H3a: The **number of items purchased** in the store by a customer will be less when **popular music genre** is played in the Deli A as opposed to **classical jazz music genre**.

- H3b: The type of product purchased will be impacted by the choice of music genre – i.e., **salads** will have lower sales figures and **pastries and slices** will have lower sales figures when **popular music genre** s played in Deli A as opposed to **classical jazz music genre**.

4.1.1.1 Store Visit Observations One and Two – Deli A

Observations at Deli A occurred on two Fridays. From observations made, the busiest times in Deli A were between 10:00am-11:00am, during which time a number of customers entered the store. These included mothers in active wear, clearly following their morning exercise after dropping off their children, and others in business attire dropping in before the busy lunch rush. A few customers were likely to have been regulars who knew what they wanted and lived locally. Several visitors were greeted by name by the staff which was a clear indication that they were regulars to the store.

There were also a few customers who took a long time to decide what they wanted, especially in front of the salad and quiche glass cabinets, whereas the items sold in the pastry glass cabinet in the coffee nook were always purchased quickly. Close to lunch time, after 11:00am, a few construction workers came into the store. There was also a longer waiting time closer to 12:00pm as this was the busiest time of the day. Prior to this, mostly non-working mothers occupied the seats outside during the morning period according to observation.

Following the two store visits at Deli A, an analysis was conducted to test the hypotheses as shown in Table 5.

Table 5: Deli A – Comparison of the Two Genres of Music

DELI A – DATA						
Hypothesis			**Popular Music Genre** *27 October 2017*	**Classical Jazz Music Genre** *10 November 2017*	**z**	**p**
	In-store visits					
		10.00am-11.00am	39	68		
		11.00am-12.00pm	59	54		
		12.00pm-1.00pm	49	76		
		Total visits	147	198	2.75	<.01
H1	**Total sales**		$3,234.37	$5,252.89	21.91	<.001
	Sales per customer (average)		$22.00	$26.53	.65	n.s.
H2	**Time spent in store (average in min)**		7.53	6.01	.41	n.s.
H3a	**# items sold**		644	1170	12.35	<.001
	Items sold per customer (average)		4.38	5.90	.47	n.s.
H3b	**Salads vs pastries vs slices**					
	i.	Salads (all sizes)	69	93	1.89	n.s.
	ii.	Pastries (savoury and sweet)	14	11	-.60	n.s.
	iii.	Slices (savoury and sweet)	43	46	.32	n.s.

The figures in Table 5 indicate firstly the total number of Deli A store visits when **popular music genre** was played on the first observation day – Friday, 27 October 2017 between the observation times of 10:00am to 1:00pm with a total of 147 visitors. The total number of items sold was 644, of which 69 were salads (a mix of small, medium to large) and only 14 pastries (a mix of savory and sweet scones, donuts and muffins). The total number of slices sold was also calculated at 43 (a mix of sweet and savory slices). These store items were chosen to show the difference between the sale of healthier items such as salad versus pastries or slices which could be seen as a more average items that are not as healthy as salads.

Next, the figures in Table 5 indicate the total number of Deli A store visits when **classical jazz music genre** was played on the second observation day – Friday, 10 November 2017 between the observation times at Deli A from 10:00am to 1:00pm with a total of 198 visitors. The total number of items sold was 1170, of which 93 were salads (a mix of small, medium to large) and only 11 pastries (a mix of savory and sweet scones, donuts and muffins). The total number of slices was also calculated at 46 (a mix of sweet and savory slices).

A comparison between the number of visits during the two observations showed a score of $z = 2.75$ is significantly as $p < .01$. There were more store visits when the classical jazz music was played.

Even though the average time customers stayed in the store was higher than the total amount of minutes estimated (from 1-5 minutes), it indicates that most customers moved in and out of the shop more slowly (making the time spent in store longer) once they had received their purchased food items when **popular music genre** (high tempo of music) was played. This was particularly the case on Friday, 27 October 2017

when the weather was cold and rainy. However, surprisingly, a few customers who sat outside, stayed much longer when the observations were made during these weather conditions. Customers stayed a shorter time during the observation day on Friday, 10 November 2017 when **classical jazz music genre** was played.

4.1.1.1.1 Hypothesis One – Findings

In relation to Hypothesis 1, the total number of sales (dollars spent) was calculated according to the full PLU Sales Total Report provided by Deli A. The total sales figure during the first observation day at Deli A was $3,234.37 when **popular music genre** was played. In contrast, the total sales figure during the second observation at Deli A was $5,252.89 when **classical jazz music genre** was played.

The total sales figures during these set observation days and times showed that there was a highly significant difference between the two sales figures with an outcome of $z = 21.91$, $p < .001$. This supports Hypothesis 1 in that the sales figures were lower when **popular music genre** was played.

The average sales figure per customer in the first observation on the 27 October was $22.00 when **popular music genre** was played, whereas in the second observation on the 10 November was $26.53 when **classical jazz music genre** was played. Regarding the average sales per customer, there was no significance shown with a z score of $z = .65$ (n.s.).

In support of H1, this acknowledges that the hypothesis was not supported when the current, questionable, and statistical hypothesis were tested. The number of sales were higher when more consumers were present in store. Also, the mean or medium purchases per customer were not tested for H1, but rather the mean differences which turned out to be non-significant for Deli A. Alternatively, H1 could be tested again by reviewing whether music will affect the number of customers who enters the store. Further testing all hypotheses could be trialled whilst utilising an alternative statistical method and investigating whether the experimental design impacts the conclusions as per the data currently recorded in the findings (which will also affect the quantitative assessment of the hypotheses).

4.1.1.1.2 Hypothesis Two – Findings

When **popular music genre** was played, the length of time spent in store by most customers varied from 1-5 minutes. A small number of customers spent 80 minutes or more in store.

Some customers ordered their food items and sat at the café outside the store, some for over an hour and some for even 80 minutes or more; however, most visitors were not at the store for long after their orders or selections were made.

The data was analysed for outliers, which equalled $z > 2.5$. There were 10 people that stayed outside for 80 minutes. These 10 people were outliers ($z > 2.5$). These 10 people were also excluded from the calculations

of average. Furthermore, the three visitors that stayed for approximately 45 minutes or more were outliers and were therefore also deleted from the final calculations of the average time spent in store, which was 7.53 minutes when **popular music genre** was played in the store.

On the day that **classical jazz music genre** was played, the time spent in store varied from 1-6 minutes approximately. Some customers ordered their items and sat at the café outside for around an hour to 80 minutes; however, most customers were not at the store for long after their orders were ready, and purchases were made.

The data was also analysed for outliers, which equalled z > 2.5. There were four people that stayed in the store for 45 minutes and two people who stayed for a total of 80 minutes. These six people were outliers (z > 2.5). These six people were also excluded from the calculations of average. The mean time spent in store equalled 6.01 minutes when **classical jazz music genre** was played in the store.

The overall time spent in store during these set observation days and times showed that there was no significant difference. The outcome of z = .41 (n.s.).

The following tables and figures show that people stayed longer in the store when **popular music genre** was played, but the sales figures were higher when **classical jazz music genre** was played. Hypothesis 2 is not supported.

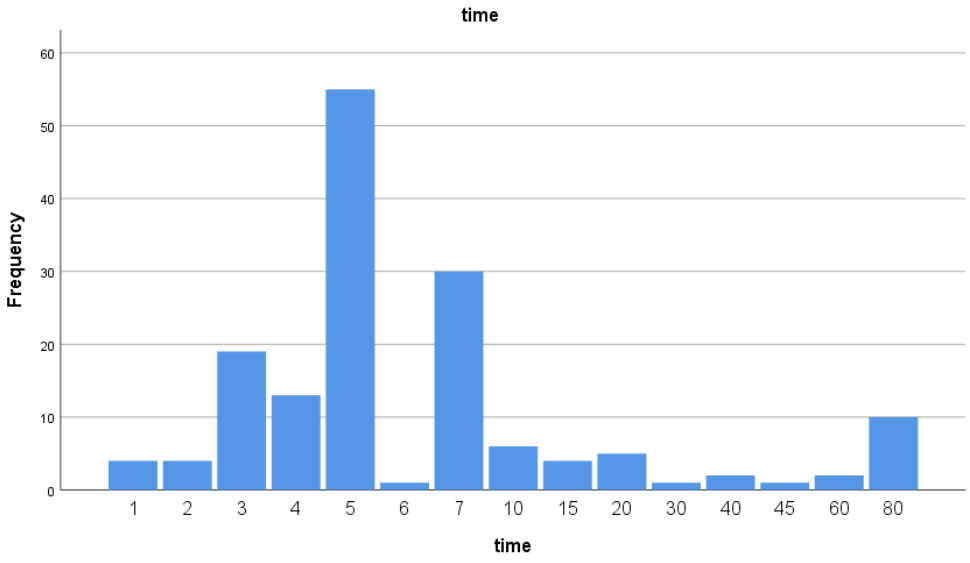

Figure 4: H2 – Time spent in store when popular music genre was played on Friday, 27 October 2017

Table 6: H2 – Frequency Table Showing Time Average when Popular Music Genre was Played on Friday, 27 October 2017

time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	2.5	2.5	2.5
	2	4	2.5	2.5	5.1
	3	19	12.1	12.1	17.2
	4	13	8.3	8.3	25.5
	5	55	35.0	35.0	60.5
	6	1	.6	.6	61.1
	7	30	19.1	19.1	80.3
	10	6	3.8	3.8	84.1
	15	4	2.5	2.5	86.6
	20	5	3.2	3.2	89.8
	30	1	.6	.6	90.4
	40	2	1.3	1.3	91.7
	45	1	.6	.6	92.4
	60	2	1.3	1.3	93.6
	80	10	6.4	6.4	100.0
	Total	157	100.0	100.0	

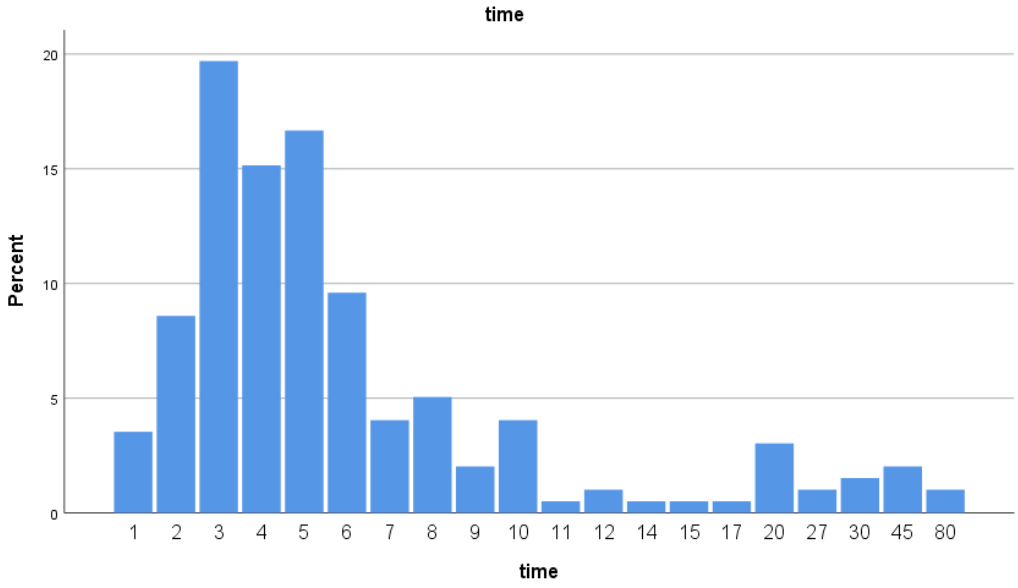

Figure 5: H2 – Time spent in store when classical jazz music genre was played on Friday, 10 November 2017

Table 7: H2 – Frequency Table Showing Time Average when Classical Jazz Music Genre was Played on Friday, 10 November 2017

time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	3.5	3.5	3.5
	2	17	8.6	8.6	12.1
	3	39	19.7	19.7	31.8
	4	30	15.2	15.2	47.0
	5	33	16.7	16.7	63.6
	6	19	9.6	9.6	73.2
	7	8	4.0	4.0	77.3
	8	10	5.1	5.1	82.3
	9	4	2.0	2.0	84.3
	10	8	4.0	4.0	88.4
	11	1	.5	.5	88.9
	12	2	1.0	1.0	89.9
	14	1	.5	.5	90.4
	15	1	.5	.5	90.9
	17	1	.5	.5	91.4
	20	6	3.0	3.0	94.4
	27	2	1.0	1.0	95.5
	30	3	1.5	1.5	97.0
	45	4	2.0	2.0	99.0
	80	2	1.0	1.0	100.0
	Total	198	100.0	100.0	

4.1.1.1.3 Hypothesis Three – Findings

In relation to Hypothesis 3a, the total number of items sold on the first observation visit on Friday, 27 October 2017 was 644 when **popular music genre** was played, whereas the total of items sold on the second observation visit on Friday, 10 November 2017 was 1170 when **classical jazz music genre** was played. The difference between these two was z = 12.25 with a significant score of p <.001, which was a highly significance outcome for this comparison.

Furthermore, the total number of items sold per person during the three-hour visit time frame came to an average of 4.38 on the day when **popular music genre** was played and an average of 5.90 on the day when **classical jazz music genre** was played. The difference between these two was z = .47 with a significance score of p = n.s., which shows that there was no significant outcome for this average. Hypothesis 3a is not supported.

In relation to Hypothesis 3b, the PLU Sales Total Report showed when **popular music genre** was played the total number of salads sold was 69, whereas the total number of pastries sold (a mix of savoury and sweet) was 14 and the number of slices sold (a mix of savoury and sweet) was 43. When **classical jazz music genre** was played, the total number of sales for salads was 93, whereas the total number of pastries sold

was 11 and the number of slices sold 46. When the total final figures were compared between salads vs pastries vs slices, the scores came to z = 1.89 (for salads), z = -.60 (for pastries) and z = .32 (for slices) which all received a final p = n.s., therefore showing that all these final scores were not significant. Hypotheses 3b is not supported.



Figure 6, Figure 7 and Figure 8: Examples of pastries, slices, salads and other products sold at Deli A

4.1.1.1.4 Additional Observation Notes – Deli A

Further to the data analysis, during set observation times at Deli A additional notes were taken by the researcher relating only to the observation and comments by staff and customers – no demographic measurable variables were recorded as part of this study. The overall atmosphere in Deli A was that of high energy, which staff commented was typical. The staff commented numerous times that the music played at the store made a huge difference not only to their job in the Deli but also to their customers. The days when **popular music genre** was played it was noticed that several visitors swayed to the music, especially in front of the glass cabinets whilst deciding what to buy. A few hummed along to the songs playing and there was a positive, fun feeling in the Deli yet professional at the same time.

Figure 9: The layout and outside location of Deli A in Auckland

The same happened the day that **classical jazz music genre** was played, but there was a definite change in the staff in response to the slower paced music – something they were not used to in the Deli. They commented that they preferred more up-beat music to the slower swing, classical and funk jazz music beat.

The second observation visit saw the same type of visitors as observed on the first visit but with a few more grandparents and children. The weather was sunnier – without the rain and the wind of the previous visit.

For some reason the day was quieter than on the first visit when up to 10 customers in the store at any one time. The key observation was that when sitting outside, it was quite hard to hear the music coming from within the Deli (even though the main doors and windows were open), although the music was clear when sitting at the shop window seats. This was due to the busy and noisy road outside and sometimes the coffee machine also made it difficult to hear.

Several customers swayed to the music when classical jazz music was played from 11:00am and a number hummed. The staff commented that they found it hard to concentrate when **classical jazz music genre** was played earlier in the morning.



Figure 10, Figure 11 and Figure 12: The inside layout and outside view of Deli A

An overall conclusion can be drawn from the analysis of store observation data in Deli A: when **popular music genre** was played in store, the sales figures were not as high as when **classical jazz music genre** was played.

4.1.2 Store Visit Two – Liquor Centre B

The following hypotheses were identified and noted prior to the two store visits at Liquor Centre B:

- H1: Sales figures will be higher when **classical jazz music genre** is played in Liquor Centre B as opposed to **popular music genre**.
- H2: Time spent in store will be longer when **classical jazz music genre** is played in Liquor Centre B as opposed to **popular music genre**.
- H3c: The number of items purchased in the store by a customer will be more when **classical jazz music genre** is played in Liquor Centre B as opposed to **popular music genre**.

- H3d: The type of product purchased will be impacted by the music genre – i.e., **wine** will have higher sales figures as a proportion of total purchases made when **classical jazz music genre** is played in Liquor Centre B as opposed to **popular music genre** and **beer** which will have lower sales figures when **classical jazz music genre** is played.

4.1.2.1 Store Visit Observations One and Two – Liquor Centre B

On both observation days at Liquor Centre B the weather was good with no rain and just slightly overcast. During the first visit in March, it was still light later in the day, whereas on the second visit in April, day-light saving had finished, and it was already much darker and slightly colder than on the first observation visit.

It was extra busy between the hours of 4:00pm-5:00pm, when many people had finished work for the day. As both observations were made on a Friday afternoon / evening – earlier shoppers who wore construction clothes must have just finished work, whereas from approximately 5:00pm onwards, more customers were in business attire, making a quick stop directly after work and before heading out for the night. Between the hours of 5:00pm-7:00pm there was a real mix of customers, most of whom were going out for the evening. Several shoppers asked the owner (who was working both the evenings my observations took place) for advice on what to purchase for the particular occasion they were attending, rather than buying their usual purchases.

Those who came into Liquor Centre B to buy their usual purchases clearly lived in the surrounding neighbourhood and they were particularly quick with their selection as they already knew what they wanted. There were also a few customers who were greeted by name whom the staff in the shop knew well. Also, several customers came into the store who also took slightly longer with their decision/s as they were thinking of what to buy and purchasing several items (this may have been in response to a 'special' on their regular items).

One of the key observations made in both store observation visits was that the store had several 'specials' on particular items, which was apparent to new shoppers and regulars. This meant it took longer for some customers to make decisions. The store was only open until 10:00pm and the owner noted that they did not get a high influx of customers after the 8:00pm timeslot as most shoppers had already bought either their regular items or impulse purchases for an evening's occasion.

Following each of the store visits at Liquor Centre B, the following analysis was conducted to test the hypotheses as shown in Table 8.

Table 8: Liquor Centre B – Comparison of Two Genres of Music

LIQUOR CENTRE B – DATA						
Hypothesis			**Popular Music Genre** ***16 March 2018***	**Classical Jazz Music Genre** ***27 April 2018***	**z**	**p**
	In-store visits					
		4.00pm-5.00pm	28	46		
		5.00pm-6.00pm	41	63		
		6.00pm-7.00pm	40	40		
		Total visits	109	149	2.49	<.02
H1	**Total sales**		$3,313.06	$4,602.35	14.49	<.001
	Sales per customer (average)		$30.39	$30.88	.06	n.s.
H2	**Time spent in store (average in min)**		1.89	1.49	.14	n.s.
H3c	**# items sold**		192	258	3.11	<.01
	Items sold per customer (average)		1.76	1.73	.02	n.s.
H3d	**Beer vs wine**					
	i.	Beer (all types/brands)	70%	40%	-2.86	<.01
	ii.	Wine (all types/brands)	30%	60%	3.16	<.01

The figures in Table 8 indicate firstly the total number of store visits when **popular music genre** was played on the first observation day – Friday, 16 March 2018. During the observation time at Liquor Centre B – 4:00pm to 7:00pm – there was a total of 109 customers. In total, 192 items were sold, of which approximately 70% were beer* (a mix of all types and brands) and approximately 30% were wine* (a mix of all types and brands). These store items were chosen to show the difference between the sale of beer, which can be seen as a more average costing item and a less premium drink, versus wine, which can be seen as a more high-end item and a more premium drink.

Next, the figures in Table 8 indicate that the total number of store visits when **classical jazz music** was played on the second observation day – Friday, 27 April 2018 between 4:00pm to 7:00pm – was 149 customers. In total, 258 items were sold, of which approximately 40% were beer* (a mix of all types and brands) and approximately 60% were wine* (a mix of all types and brands).

* *Note: The final Store Trading Summary Report that was provided by Liquor Centre B does not show these final beer vs wine percentage figures due to the store not wanting to disclose these additional figures. Eventually, the store provided these overall figures verbally and they are included in the final data analysis*.

A comparison between the total number of visits showed a score of z = 2.49, which represented a significant difference in the number of visitors at p <.02.

4.1.2.1.1 Hypothesis One – Findings

The total sales figure during the first observation at Liquor Centre B was $3,313.06 when **popular music genre** was played. This compares to the total sales figure during the second observation of $4,602.35 when **classical jazz music genre** was played. The total sales figures during these set observation days and times showed that there was a highly significant difference between the two sales figures with an outcome of z = 14.49 which equalled to a significant figure of p <.001. Thus, Hypothesis 1 is supported.

In contrast, the average sales per customer had the opposite affect with p = n.s., therefore there was no significance shown with a z score of z = .06. The average sales figure per customer on the first observation on 16 March was $30.39 when **popular music genre** was played, whereas the second observation on the 27 April was $30.88 when **classical jazz music genre** was played.

4.1.2.1.2 Hypothesis Two – Findings

The length of time spent in store varied from 1-5 minutes for most customers, with one person in store for about nine minutes. This meant an average time of approximately two minutes per shopper when **popular music genre** was played in the store. The majority of shoppers already knew the items they wanted to buy, and their time spent in store was between 1-2 minutes (depending on how the long the queue was – there was only one till in the store). Several stayed slightly longer as there was also a tequila tasting by one of the new brands on Friday, 16 March 2018.

The data was analysed for outliers which equalled z > 2.5. There was one person that stayed in the store for nine minutes. Therefore, this one person was an outlier (z > 2.5). This person was also excluded from the calculations of average and the final calculations of the average time spent in store came to a mean of 1.89 minutes when **popular music genre** was played in the store.

On the day that **classical jazz music genre** was played, the time spent in store also varied from 1-5 minutes for most customers, with one shopper staying for about six minutes, four shoppers staying for about seven minutes and one shopper staying in the store for about nine minutes.

The data was analysed for outliers which equalled z > 2.5. There were four people that stayed in the store for seven minutes and one person who stayed for nine minutes. These five people were outliers (z > 2.5). These five people were also excluded from the calculations of average. The mean time spent in store equalled 1.49 minutes when **classical jazz music genre** was played in the store.

The final outcome was z = .14 (n.s.). Therefore, there is no significant difference between the two observation times. Hypothesis 2 is not supported.

The following tables and figures show that people stayed longer in the store when a quicker pace of music was played compared to **classical jazz music genre**, but the sales figures were higher when **classical jazz music genre** was played compared to **popular music genre**.

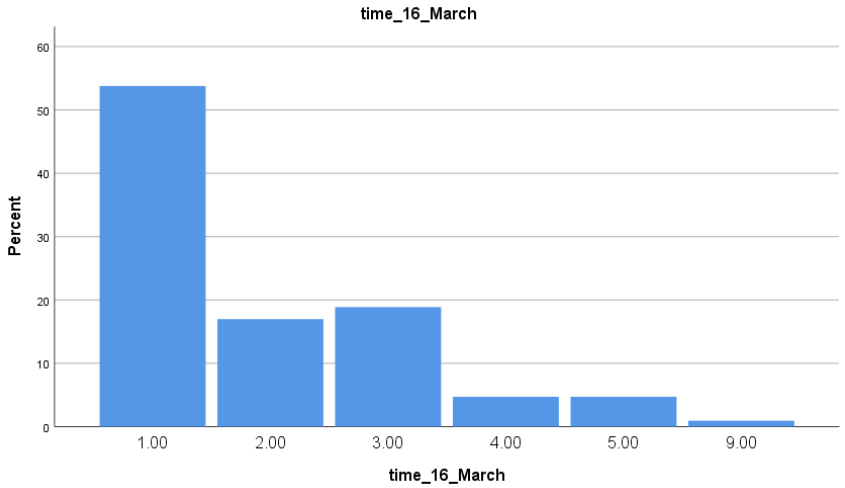

Figure 13: H2 – Time spent in store when popular music genre was played on Friday, 16 March 2018

Table 9: H2 – Frequency Table Showing Time Average when Popular Music Genre was Played on Friday, 16 March 2018

time_16_March

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	57	37.7	53.8	53.8
	2.00	18	11.9	17.0	70.8
	3.00	20	13.2	18.9	89.6
	4.00	5	3.3	4.7	94.3
	5.00	5	3.3	4.7	99.1
	9.00	1	.7	.9	100.0
	Total	106	70.2	100.0	
Missing	System	45	29.8		
Total		151	100.0		

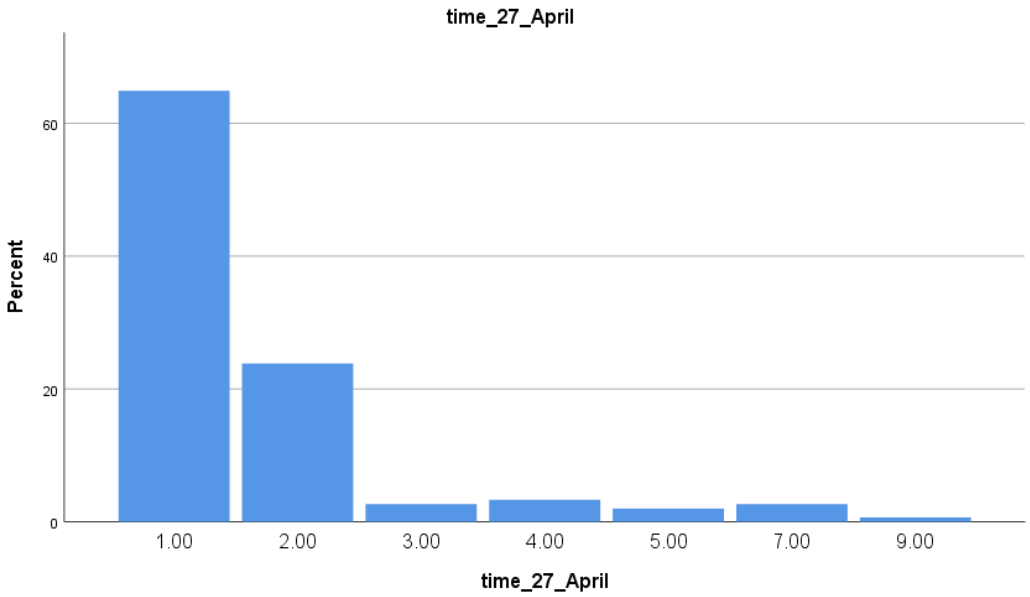

Figure 14: H2 – Time spent in store when classical jazz music genre was played on Friday, 27 April 2018

Table 10: H2 – Frequency Table Showing Time Average when Classical Jazz Music Genre was Played on Friday, 27 April 2018

time_27_April

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	98	64.9	64.9	64.9
	2.00	36	23.8	23.8	88.7
	3.00	4	2.6	2.6	91.4
	4.00	5	3.3	3.3	94.7
	5.00	3	2.0	2.0	96.7
	7.00	4	2.6	2.6	99.3
	9.00	1	.7	.7	100.0
	Total	151	100.0	100.0	

4.1.2.1.3 Hypothesis Three – Findings

In relation to Hypothesis 3a, the total number of items sold on the first observation visit on Friday, 16 March 2018 was 192 when **popular music genre** was played, whereas the total number of items sold on the second observation visit on Friday, 27 April 2018 was 258 when **classical jazz music genre** was played. This equated to z = 3.11 (p = <.01), thus showing a significant difference.

Furthermore, the total number of items sold per person during the three-hour visit time frame came to an average of 1.76 on the day that **popular music genre** was played and 1.73 on the day that **classical jazz**

music genre was played. This equated to z = .02 (n.s.), which showed that there was no significant difference in items sold per customer. Hypothesis 3c is not supported.

In relation to Hypothesis 3b, the Store Trading Summary Report did not include the final and total sales for the total amount of wine or beer sold on both observation visits; however, verbal estimates were provided. Therefore, it was understood from the figures provided by the store managers that the total sales amount for **beer** was approximately 70% on Friday, 16 March 2018 (a mix of all types and brands) when **popular music genre** was played, whereas on Friday, 27 April 2018 when **classical jazz music genre** was played the figure was approximately 40%. This equalled a z score of -2.86 (p = <.01), which showed that there was a significant difference between these figures.

Next the final sales figures for the total amount of **wine** sold came to approximately 30% on Friday, 16 March 2018 (a mix of all types and brands) when **popular music genre** was played, whereas, the figure was approximately 60% on Friday, 27 April 2018 when **classical jazz music genre** were played. This equalled a z score of 3.16 with a significant score of p = <.01, which showed that there was a significant difference between these figures. Hypothesis 3d is not supported.

These findings support the hypothesis in that when **popular music genre** was played, the number of items purchased in the store was less than when **classical jazz music genre** was played. The type of product – i.e., **beer** – showed lower sales figures when **classical jazz music genre** was played rather than **popular music genre** and **wine** showed higher sales figures when **classical jazz music genre** was played rather than **popular music genre**.

Figure 15 and Figure 16: The inside layout shows the diverse products sold at Liquor Centre B

4.1.2.1.4 Additional Observation Notes – Liquor Centre B

Further to the data analysis, during set observation times at the Liquor Centre B, additional notes were taken by the researcher – no demographic measurable variables were recorded as part of this study. The staff were very friendly and most of them knew local customers by name as most would have come from the local neighbourhood. From further observation, the store's aim is to provide outstanding value to their customers and to exceed customer expectations in full, all the time (Liquor Centre, 2017). Several customers (especially

some of the regulars) commented on the overall music, especially during the second observation visit when **classical jazz music genre** was played.

The overall atmosphere of the store was of mid-high energy. From observation, this could be related to regular customers only briefly coming into the store for 1-5 minutes, as they already knew exactly what they wanted, knew the store manager and generally had a brief conversation with the manager at the store till. At the time the observation took place – at the end of the day – most customers were either happy the day or week was over or were excited about going out that evening, hence buying drinks. Only a small number of customers stayed longer than 1-5 minutes, which may have related to the occasion they were preparing for that evening and resulted in a lower and quieter energy.

A significant difference was noted between observation visits, when the music was switched **popular music genre** to **classical jazz music genre** and a few customers commented on this. A number of customers clearly enjoyed the change to **classical jazz music genre** as they swayed to the music. Several customers questioned the store manager about the change in music. When **popular music genre** was played, it was observed that customers were smiling and in a good mood in general. Even when the store manager asked a few customers for their ID there were never any issues. The security at the store was tight with security cameras in all areas of the store including the enclosed fridge area.

Figure 17: The layout and outside location of Liquor Centre B in Auckland

Furthermore, comments by customers were overheard when the music changed in the second observation visit. A few regulars asked the store manager where their up-beat or ‘party’ music – as they called it – had disappeared to, but several older customers commented on the great swing jazz music and that it brought back memories for them. The store manager also commented later that store may even start mixing up the music slightly during the night as different types of customers come in at different times.

During 4:00pm-5:30pm there are generally more business and construction workers coming into the store after work, whereas from 6:00pm onwards, less post-work visits are expected. It was clearly visible that many customers were getting ready to go out for the evening, with more wine sales in April (getting colder) as opposed to more beer sales in March (slightly warmer and the end of day light saving).

As mentioned, the final observation study occurred during the start of autumn (in April) when it begins to get much colder in Auckland. The data show suggests that the increased number of in-store visits at that time reflected customers' desire to warm themselves up during the colder nights with their favourite drink/s. Also, with the end of daylight saving in April, it was getting darker outside at an earlier time. The total sales percentage figures showed an increase in wine sales of approximately 60%, perhaps due to the cooler evenings making wine more desirable than beer. An increase in the total number of items sold during this observation also suggested that customers were stocking up, while the higher number of customers visiting the store may have reflected that the out-door events of summer had ended, and customers were preparing for more inside activities.

An overall conclusion can be drawn based on store observation data analyses that showed that when **popular music genre** was played in Liquor Centre B, the sales figures were not as high as when **classical jazz music genre** was played. Also, a higher number of items were purchased within the three-hour observation time frame when **classical jazz music genre** was played than when **popular music genre** was played in the store.

Table 11: Results of Hypothesis Testing

	Deli A	Liquor Centre B
H1	✔	✔
H2	**X**	**X**
H3a	**X**	-
H3b	**X**	-
H3c	-	**X**
H3d	-	✔

5 CHAPTER FIVE: DISCUSSION

This last chapter provides a short summary of the findings and an interpretation of these findings, leading to the final discussion. Based on the findings, theoretical and managerial implications, and limitations and directions for future research are identified.

Firstly, the research objective presented in Chapter 1 is reviewed and the research questions are answered. Next the two store visits are compared with reference to the hypotheses, and a summary of the key findings after each store observation visit is presented.

The chapter then provides a brief outlook of the future use of music in a retail setting. Subsequently, contributions and managerial implications are presented. The chapter closes with an outline of the limitations of the research and future research directions are suggested.

5.1 Research Objective

The research objective for this research project was to identify the role of background music in a retail setting. Background music in retail settings has been the subject of much academic enquiry (Garlin & Owen, 2006), as shown throughout this research project. This research project identified and discussed literature / empirical studies conducted on the immediate effects of background music but also showed how some of the intermediate effects have been ignored altogether. The various dependent variables examined through two in-store observation studies included time spent in the store, dollars spent, number of items purchased, and types of products purchased from a delicatessen (health / organic food) store and a liquor store, both in the Auckland region.

The research objective which is to examine **the overall effect of classical jazz versus popular music genres used as background music in a retail store and to evaluate their influence on shopping behaviour** was addressed by investigating the effect of two musical genres, classical jazz music versus popular music, as background music in a retail setting within two different store environments. Music is powerful, emotional and motivational; therefore, early research encouraged retailers to investigate further relationships between store music, moods and shopping behaviour in order to keep retailers' focus on customer's needs and assist customer decision making (Bruner, 1990) in order to increase overall sales and the quality perception of their merchandise sold to customers.

An overall analysis of the research published on this topic indicated that research on music in retail settings has been surprisingly limited and the influence of music on consumer behaviour is still an under-researched area. Even though the effects of music, such as volume and tempo, were researched and discussed by Yalch and Spangenberg (2000) and Bruner (1990), the style or genre of music was not approached. More recent studies have discussed the use of background music in retail settings in a general sense rather than focusing

on the various effects of music and its influence on product choice, in-store environment, buyer-seller interactions, real and perceived shopping times and overall shopping behaviour within various shopping environments.

Atmospherics were also investigated and analysed based on the theory and categories put forward by several researchers. The key atmospheric effect that this research project focused on and further analysed was that of the use of **music** in a store. Music has been shown to influence a wide range of behavioural and cognitive responses in customers. Furthermore, music has also been used to create a particular image in the minds of consumers within retail settings, even when consumers have not knowingly been aware that this has been done deliberately (Lindquist & Sirgy, 2009).

Garlin and Owen (2006) provided a meta-analytical review of the effects of background music in retail settings and identifies the need for further research on how background music influences the purchase and shopping behaviour of clientele. Turley and Milliman (2000) investigated the effects of atmosphere on shopping behaviour and notes that music is the most commonly studied general interior cue. They suggest that more retailers need to grasp on to this very easy yet effective method of not only changing the mood of shoppers, but, in the long term, changing shopping behaviour. Turley and Milliman (2000) also found that a variety of atmospheric effects have an impact on sales, the amount spent in store/s, the gross margin, actual and perceived time in the environment, patronage, unplanned purchases, brand/store image and evaluation, rate of purchase, pace of shopping, brand choice, brand switching and satisfaction.

Similarly, the literature examined showed that there were no studies and literature found that focus on the genre of background music (in this case classical jazz music versus popular music) and its effect and how it could influence shopping behaviour, therefore, a definite gap within the literature. Furthermore, there is no indication of how the genre of music operates (including various empirical testing done) in any particular store, other than within one ‘wine store’ environment (Areni & Kim, 1993).

This research project analysed the importance of music as well as the effect of background music in a retail environment. There is strong potential in making use of perceptual elements within a store environment to influence customers’ buying behaviour, and it is therefore important that retailers recognise this opportunity (Areni, 2003b).

This research identified how shopping behaviour, such as time spent in the store, dollars spent and the number of items purchased, can be affected by the choice of background music. After investigating research published in various journals, ranging from psychology to marketing and consumer behaviour, it was recognised that the use of genre of music is an area that has not been fully approached in the literature previously and this study therefore fills an important research gap.

5.2 Research Questions

Even though there are a number of beliefs and viewpoints concerning the effects of background music in retail environments, indicating how it can create customer satisfaction, increases store traffic, achieve higher sales margin etc., Yalch and Spangenberg (1990) found that there had been minimal evidence supporting this topic and the complex relationship between retail shopping and various atmospheric factors at the time of their research. Today, more researchers are investigating atmospheric effects, such as the study by Ogruk et al. (2018) on ambience factors within a retail setting and that of Lindquist and Sirgy (2009), which stresses the importance of examining various internal variables, in particular music as it appears to have the ability to influence a wide range of cognitive and behavioural responses in consumers.

The research questions that this research project investigated, with brief answers to both questions, include:

RQ1 – Does the genre of music impact on shopping behaviour?

One of the main retail atmospherics includes background music, the focus of this research project. Background music “stimulates emotions and perception especially when other cognitive cues have either been lessened or are absent” (Andersson et al., 2012, p. 553). However, no studies have analysed the effect of musical genre on consumer behaviour. By analysing the effect of the type of music, whether popular music (also referred to as ‘famous’ music) and/or classical music or not, this research has filled a gap in the literature. Findings show that “popular music reduces shoppers' cognitive activity. It distracts attention from store ‘cues’ such as promotion messages. On the other hand, popular music enhances positive feelings that, in turn, enhance shoppers' patronage” (Andersson et al., 2012, p. 555).

Furthermore, based on the total sales figures when popular music and classical jazz music genres were played at both stores, the findings showed that there were highly significant differences in the sales figures between both observation days. Sales figures were therefore higher when classical jazz music was played in contrast to when popular music was played at the Liquor Centre B but when popular music was played, the sales figures were lower in contrast to the day that classical jazz music was played at Deli A.

Yalch and Spangenberg (1990) believe that most stores select music based on its appeal to their customers and employees but stressed that serious considerations should be given to establishing desirable shopping behaviour and how music can affect this behaviour (Yalch & Spangenberg, 1990). This was evident when the store employees preferred popular music as their main musical choice for the store’s background music over classical jazz music, but the sales figured were higher when classical jazz music was played. Even though it has been established that popular music can enhance positive feelings and triggers emotions, a number of studies already identified, showed in their findings that when classical music was played that it also increased spending intention. This should be a useful cue to store managers that they can use classical music to increase customer spending behaviour as also identified in the study by North et al. (2003).

Bruner (1990) further suggested that even though music has always affected human beings in various ways, only recently have researchers attempted to explore the relationships empirically through marketing contexts. At the time of his research, he regarded the relevant body of literature as insufficient and encouraged further research on the topic of mood affects and purchasing as he recognised that human moods and their role within consumer behaviour was likely to become more important in the future and music has been shown to be a powerful emotional motivator (Bruner, 1990).

Further links to the genre of music and how it may impact on variables tested such as temporal effects and financial returns are identified in RQ2.

RQ2 – Does congruence between the retail environment and the genre of music impact shopping behaviour (temporal effects and financial returns)?

This question leads to key issues linked within marketing and advertising. Marketing is about understanding who the customers are, where they can be found, what they require and how much they are willing to pay to satisfy their needs (Male, 1999). This understanding, especially in a retailing environment, can be cleverly utilised if techniques are kept simple and focused towards customers' needs. Retailers should be asking questions that include: Who wants to shop at a store like mine? What is it that they like about my store? (Hammond, 2003).

Research and analysis of the elements of the in-store environment that can be used to customise the retail experience mostly identify the importance of store layout, store advertising and promotions in the success of any store. Customers need to be tempted to come into a store and to view the store's specials and promotional displays. Moreover, the way the store's culture is communicated to its customers is imperative (Hammond, 2003).

This research investigated several dependent variables, for example the time spent in store and the total sales figures, and found that the total sales figures, including the overall customer experience, were influenced by the background music that was being played but the time spent in store was not influenced. During both store observations, the findings showed that when popular music was played, the general sales figures (relating to the financial returns variable) were lower than when classical jazz music was played. However, no significant difference was found in terms of time spent in store and the type of products purchased.

Even though not all expected propositions were supported, congruence still had an effect on sales and the total number of items sold at both observation stores – Deli A and Liquor Centre B. Congruence is a key factor between the types of music played in a retail environment and even though the findings showed that not all variables were significant, it is vital for managers to recognise the importance of congruence, as shown by the literature and this research.

One of the key issues that consumers must contend with today is the complexity of purchasing decisions. In today's current marketplace, that is offering ever-increasing diversity of innovative and new products that consumers can purchase (with limited dollars) and which also continue to change at a high speed, businesses can no longer use yesterday's marketing formulas. As competition increases, it is crucial for businesses to respond to consumer buying behaviour factors and to understand their drivers (Cohen, 2006). The trade-offs that have been made between service and price are a key factor in today's market trends and the future (Cohen, 2006).

Finally, few of the studies examined in this research have discussed further environmental factors, such as how background music within a store can influence product choice and purchasing behaviour. The literature reviewed for this study mentions the role of music in product choice, the in-store environment, buyer-seller interactions, real and perceived shopping times and overall shopping behaviour within various shopping environments. However, this study adds to the literature by discussing the influence of music genre on customer behaviour. Once retailers grasp the concepts and theories related to the use of background music within stores, it could increase not only their overall sales margin, but also the quality perception of their merchandise by consumers (Male, 1999).

5.3 Hypotheses Results – Comparison Between the Two Stores

The objective of the research was to examine **the overall effect of classical jazz versus popular music genres used as background music in a retail store and to evaluate their influence on shopping behaviour.** The research hypotheses that were tested from both in-store observation visits are repeated below with a short summary of the findings for each hypothesis, as follows:

5.3.1 H1: Sales (dollar spent)

Congruency between the store environment and the type of music (classical jazz music versus popular music) can positively influence the amount of dollars spent in the store.

a. H1: **Sales figures** will be lower when **popular music genre** is played in Deli A as opposed to **classical jazz music genre**.

b. H1: Sales figures will be higher when **classical jazz music genre** is played in Liquor Centre B as opposed to **popular music genre**.

Findings summary H1a: Based on the total sales figures on two observation days when both popular music and classical jazz music were played in Deli A, there was found to be a highly significant difference in the sales figures between both observation days. Therefore, H1a was supported: when popular music was played, the sales figures were lower in contrast to the day that classical jazz music was played.

Findings summary H1b: On the other hand, when classical jazz music was played at Liquor Centre B, the sales figures were again higher in contrast to when popular music was played on the second observation day. Therefore, H1b was also supported, as the sales figures were higher when classical jazz music was played in contrast to when popular music was played.

Furthermore, this recognises that the total sales for hypothesis one (H1 – dollar spent) was significant due to the total number of customers equating higher in store. Therefore, the mean comparison was completed instead of only exploring the overall value. As already identified, contextual factors such as the weather, time of year, time of day etc. possibly affected the total number of visitors entering the store on the particular days when the observations were made.

In order to create memorable experiences, it has been suggested that managers construct a pleasant atmosphere in stores that includes using the appropriate background music as well as using other ambience effects such as décor and scent, as seen from the research findings of Triantafillidou et al. (2017).

Important elements such as the availability of products and the price of products help contribute to the positive experiences of shoppers in store. Alternatively, the 'flow' factor of the overall shopping experience should also be considered as this can be enhanced with the right product quality and by carefully designing the store's overall layout. Moreover, soft background music and an arousing ambient scent may also attract shoppers' attention and focus and could further increase sales outcomes if carefully planned (Triantafillidou et al., 2017).

In their literature summary, Mohan et al. (2013) found that the pleasant experience of the in-store environment is a key factor and predictor of customers' willingness to spend longer periods of time in a store, which could then influence them to spend more money than what they may have originally planned. Utilising music as an atmospheric effect influences impulse purchasing as well as behavioural approach (Mohan et al., 2013).

Summarising the findings of major studies on the behavioural effects of music, Garlin and Owen (2006) observed that a very limited number of studies have examined this issue. They believe that:

> the retail experience deals with patronage, frequency, store choice, behaviour speed, affiliation, items examined, in-store traffic flow, and recommended service. Research and practices clearly suggest that customers' affective and cognitive responses to a shopping experience influence the likelihood of behaviours which directly impact an organisation's financial returns in terms of value of sales, repeat purchase, items purchased, rate of spend, quantity purchased and gross margin. (Garlin & Owen, 2006, p. 755)

Kellaris et al. (1996) reported that an indirect influence on shopping time could positively affect the total time spent in store if the right music fit is used, which, in turn, again shows the enjoyment of music in a natural

retail setting. Happy, popular music has been shown to have a significant effect on customers' purchase intentions and behaviour in a retail setting (Triantafillidou et al., 2017).

5.3.2 H2: Time spent within the store

Congruency between the store environment and the type of music (classical jazz music versus popular music) can positively influence the time spent in the store by shopper/s.

a. H2: **Time spent** in store will be shorter when **popular music genre** is played in the Deli A as opposed to **classical jazz music genre**.

b. H2: **Time spent** in store will be longer when **classical jazz music genre** is played in Liquor Centre B as opposed to **popular music genre**.

Findings summary H2a: On the observation day that popular music was played, the average time each shopper spent in the store was 7.53 minutes. On the day that classical jazz music was played, the average time each shopper spent in the store was 6.01 minutes. Calculations of the overall time spent in store during the two observation days and times show that there was no significant difference between the average minutes and therefore H2a was not supported.

Findings summary H2b: When popular music was played at Liquor Centre B on the first observation day, the average time each shopper spent in the store was 1.89 minutes. On the day that classical jazz music was played, the average time each shopper spent in the store was 1.49 minutes. This calculation again shows no significant difference between the two observation times and therefore H2b was not supported.

As pointed out in the literature review, Kellaris et al. (1996) found there have been many studies on the effects of atmospheric music, which can also be interpreted in terms of discrete events models. The authors reported that in a retail setting, when louder music was played versus softer music, customers' estimation of time was longer. They also found that estimates of duration were expanded when music was played louder as this may have left more traces in consumers' memory.

Further Kellaris et al. (1996) found that when music was played in a major key as opposed to a minor key, the perceived duration was longer. Their research further found that more familiar music also increases perceived duration, when played in major keys as opposed to minor keys, as it is more pleasant. Similarly, Hul et al. (1997) found that music likeability and estimated time are positively connected. In their study, Yalch and Spangenberg (1999) found that when respondents heard familiar music as opposed to unfamiliar music, their perceived duration in store was longer. When anonymous selections of music were played, Kellaris et al. (1996) found that familiar music helped expand the final duration of shoppers, as it firstly caused respondents to link it to their memory and then secondly to an internal target.

5.3.3 H3: Number of items purchased / type of product purchased

Congruency between the store environment and the type of music (classical jazz music versus popular music) can positively influence the type of product purchased – convenience products are purchased more often when popular music is played versus the sale of high-end products when classical jazz music is played.

a. H3a: The **number of items purchased** in the store by a customer will be less when **popular music genre** is played in the Deli A as opposed to **classical jazz music genre**.

b. H3b: The type of product purchased will be impacted by the choice of music genre – i.e. **salads** will have lower sales figures and **pastries and slices** will have lower sales figures when **popular music genre** is played in Deli A as opposed to **classical jazz music genre**.

Findings summary H3a: When popular music was played on the first observation day at Deli A, the total number of items purchased / sold averaged 4.38 per person, whereas the approximate number of items purchased / sold when classical jazz music was played was 5.90. There was no significant difference between these two figures and therefore hypothesis H3a was not supported. However, the total number of items sold was recognised as less when popular music was played, and higher when classical jazz music was played.

Findings summary H3b: Even though the results presented in the findings chapter showed that the total sales figures for salads and for pastries and slices were lower when popular music was played as opposed to when classical jazz music was played at Deli A, when the totals were compared between the final figures of these items, the final scores came to no significance. Therefore, hypothesis H3b was not supported.

a. H3c: The number of items purchased in the store by a customer will be more when **classical jazz music genre** is played in Liquor Centre B as opposed to **popular music genre**.

b. H3d: The type of product purchased will be impacted by the music genre – i.e., **wine** will have higher sales figures as a proportion of total purchases made when **classical jazz music genre** is played in Liquor Centre B as opposed to **popular music genre** and **beer** which will have lower sales figures when **classical jazz music genre** is played.

Findings summary H3c: When classical jazz music was played at Liquor Centre B on the second observation day, the total average number of items purchased / sold was 1.73 whereas the average total was 1.76 when popular music was played. There was again no significant difference in the number of items sold per customer.

Finding summary H3d: The results concerning the purchase totals of wine and beer showed that when popular music was played, the total number of beers purchased was higher but lower when classical jazz music was played. The opposite figures occurred for the sale of wine on both of these observation days.

When classical jazz music was played, wine sales were higher and beer figures were lower, with the opposite occurring when popular music was played. The significant difference between these figures therefore supports H3d.

Alternatively, H3d could also have been significant due to fact (as mentioned earlier from the observation notes made by the researcher on the set observation days) when classical music played, shoppers could have associated it with the style of music which fits well when normally drinking wine. Also, the data show suggests that the increased number of in-store visits at that particular time reflected customers' desire to warm themselves up during the colder nights (with the start of the autumn season in Auckland) which signifies the increase in wine sales whilst purchasing their favourite drink/s to keep warm during that particular season.

Furthermore, comments by customers were overheard when the music changed in the second observation visit. A few regulars asked the store manager where their up-beat or 'party' music – as they called it – had disappeared to, but several older customers commented on the great swing jazz music and that it brought back memories for them. The store manager also commented later that store may even start mixing up the music slightly during the night as different types of customers come in at different times.

During 4:00pm-5:30pm there are generally more business and construction workers coming into the store after work, whereas from 6:00pm onwards, less post-work visits are expected. It was clearly visible that many customers were getting ready to go out for the evening, with more wine sales in April (getting colder) as opposed to more beer sales in March (slightly warmer and the end of day light saving).

As mentioned, the final observation study occurred during the start of autumn (in April) when it begins to get much colder in Auckland. The data show suggests that the increased number of in-store visits at that time reflected customers' desire to warm themselves up during the colder nights with their favourite drink/s. Also, with the end of daylight saving in April, it was getting darker outside at an earlier time. The total sales percentage figures showed an increase in wine sales of approximately 60%, perhaps due to the cooler evenings making wine more desirable than beer. An increase in the total number of items sold during this observation also suggested that customers were stocking up, while the higher number of customers visiting the store may have reflected that the out-door events of summer had ended, and customers were preparing for more inside activities.

Stores are considered by many shoppers as social environments where they can meet and interact with fellow customers. If retailers can understand these social motives, they can set up and create store settings for customers where they can socialise and communicate with one another and also create settings that enhance customers' feelings at the same time (Yalch & Spangenberg, 1993).

It has been proven that music can also contribute to the social experience of shoppers. According to Yalch and Spangenberg (1990), louder music can suppress conversations between customers when shopping,

whilst softer music is preferred as it does not restrain conversations. The researchers believe, therefore, that shoppers' interactions often occur in low-volume music conditions. Similarly, Eroglu et al. (2005) found that when slow-tempo music was played in their retail study, shoppers interacted more with other customers. Areni and Kim (1993) also found that when soft music was played, it helped customers relax and engage in conversation with others as it 'broke the ice', specifically when calm, instrumental music was chosen.

5.4 Contributions and Managerial Implications

The next sub-section will discuss the two managerial implications emerging from this research project. Based on the research findings, several recommendations will also be made that hopefully will guide store managers and New Zealand retailers in developing their store environment and making better choices in the music they choose to play. Firstly, the study stresses the importance of music in affecting consumer behaviour. Secondly, congruence between the store environment and musical genre is also vital and is key in targeting and approaching consumers in retail settings.

5.4.1 Musical Importance – Consumer Behaviour

Firstly, more attention should be paid by stores to the use of music in a store environment and setting. As already discussed in this research project, Garlin and Owen (2006) identified dependent variables after reviewing studies in background music research. Based on the five categories relating to the independent variable, the researchers found to be an important variable that can drive sales in the store and managers should take this into consideration.

Garlin and Owen (2006) examined **affective variables** / responses within three dimensions: arousal, pleasure and dominance with a strong link to mood, emotion and nostalgia. Their analysis showed that when pleasure was increased, it was associated with higher evaluation of a service or venue and increased arousal with a greater tendency to affiliate with customers or staff. However, the authors found that dominance was of little predictive value (Garlin & Owen, 2006). The authors also found that **value returns** are a very important factor when examining the effects of background music on sales / purchases, intention to purchase, intention to return and intention to recommend the service / product (Garlin & Owen, 2006). In their study, Garlin and Owen (2006) reviewed effects of music such as tempo, volume, complexity, genre, liking / familiarity and absence / presence of music. An interesting finding was that 'genre' and the differences in genre effects were listed in the absence-presence analysis and regarded as significant, as a range of genres were compared against no music. They concluded that genre has a medium positive outcome and almost regardless of the type of music, its presence has a small positive effect on customers that is also robust (Garlin & Owen, 2006).

Finally, in terms of **duration behaviour,** as part of temporal effects, and based on the actual time spent in a location or on an activity, the majority of the research has found that when some form of background music is played or present in a store as opposed to no background music, customers stay longer. It has also been

found that when background music is set to a lower volume as opposed to a higher volume, the tempo is slower rather than faster, and the music is liked despite being lower in complexity, customers also stayed longer in store (Garlin & Owen, 2006).

Based on prior studies on the atmospheric effects of music, Powell (2016) further investigated background music and how our emotions can be linked to it. He believes that most of the music that we hear on a day-to-day basis is not chosen by us. Itis chosen by a committee of salespeople who have decided that this or that selection will optimise our willingness to buy clothes or shoes – or persuade us to linger longer over lunch in their trendy new restaurant (Powell, 2016). A surprisingly large majority of people are quite happy to be fed a steady diet of music chosen by others, but there is a small minority who really do not like it. However, three quarters of us find background music pleasant most of the time, and it generally supports, or moves us toward a positive emotional state (Powell, 2016).

Therefore, we know that music influences and affects consumers when they go shopping and therefore it influences their shopping behaviour. Music also influences people's perception of retail environments and how they are going to spend. Thus, managers of stores would benefit from placing increased emphasis on merchandise quality and factors of ambience and design that include music, scent, and store layout. However, managers should avoid any negative experience outcomes for customers and instead adopt a variety of strategies that result in these potential outcomes (Triantafillidou et al., 2017).

Given the importance of consumer satisfaction in retail stores, the study of Andersson et al. (2012) specifically focused on effects that highlight differences between males versus females when particular music is played. The researchers further suggest that retailers should consider consumer satisfaction and be aware of how music can really affect this. This understanding would allow different demographic segments to be reached if retailers decide to either format / change their background music so that it is varied. Even if no background music is chosen at all, this too could have an effect on ultimately increasing either consumer satisfaction, sales, or even consumer loyalty (Andersson et al., 2012).

Andersson et al. (2012) found that a number of store owners do not have enough knowledge of which background music to play and tend to play music 'just because everyone else does'. This also shows a lack of understanding of the influence of music on consumer behaviour. Their study suggests that music does have an influence, and they further suggest that store managers' key focus should be directed away from their store, prioritising background music instead that is played based on the choice of their clientele (which could differ across a variety of days and times of the day). Half of a store's customers could become stressed or unhappy if store managers do not consider these factors and they could run the risk of their customers having an unpleasant experience or outcome in store (Andersson et al., 2012).

Lastly, in their meta-analysis, Garlin and Owen (2006) examined the effects of background music and indicated the various limitations of their study analysis as well as future research opportunities. They propose a number of questions that they believe should be answered in future research, particularly as many studies

have focused on the immediate effects of music alone and / or ignored the intermediate effects altogether. Ultimately, the authors ask a question that cannot be answered with data: Are researchers studying the right variables and what else should they be studying? Garlin and Owen (2006) further suggest that genre can be a tougher variable to test, compared to other variables, as they believe music can be differently perceived by consumers when played as background music. In this researcher's view, we are living in a changing society with changing target audiences. Due to the vast developments in music, especially in our popular culture, music and its various genres are constantly changing. It would therefore be interesting to investigate any further findings as to whether or not musical **genre** plays a role in consumer behaviour. This is not a unit of analysis that should be ignored; instead, using customers' and retailers' own description and opinion on the matter could be a great starting point to investigate this topic further (Garlin & Owen, 2006).

5.4.2 Congruence Importance – Store Environment versus Musical Genres

The second managerial implication refers to the importance of congruence. The findings in this research project may be perceived as counterintuitive. Store managers were found to mostly play Top-Forty music, which falls under the genre of popular music. However, the sales figures during the observation times were found to be higher when classical jazz music was played.

Therefore, stores and store managers should really consider the genre of music played as background to enhance their store environment, while also considering other atmospheric effects that could be used with the variable of music.

The music that is generally played within stores is usually straightforward and its emotional content can be identified very quickly. Background music that is normally played for shopping or eating is intentionally designed to be non-distracting and utterly unmemorable – so it creates a sort of aural wallpaper, allowing one to focus on the pros and cons of a product (Powell, 2016). The result of listening to background music is generally a diluted version of the emotional response to listening to music that might have been chosen. Background music could mean a minor reduction in boredom when doing something tedious, or a gradual shift from feeling fed-up to not-quite-so-fed-up. Furthermore, it is believed that such small changes should not be dismissed as unimportant. The accumulation of little positive pushes has been shown to enrich life by improving how one performs both socially and intellectually (Powell, 2016).

If managers want to set an environment for their store and even increase sales, they should find music that can help. Atmospheric effects, especially in terms of ambience, are an important area of consideration. Ensuring congruence between music and season, such as happy, party-style music in the summer and classical jazz in the autumn or winter, could result in higher sales figures, particularly in more high-end stores. Also, the research of North et al. (1997) suggests that congruency between marketing and stimuli is moderated if considered in terms of the effect of musical stimuli on consumer perceptions. For example, in the wine study by Areni and Kim (1993), the researchers showed that French wines sold better when

combined with congruent (i.e., French) music than with incongruent (i.e., German) music; a similar outcome and pattern was achieved when German wines were sold (North et al., 1997).

Even though the employers and employees in the stores that were observed for this study preferred listening to popular music, results showed that classical jazz music is effective in driving sales figures and increasing the time spent in store. This could relate to personal taste, or what is trending at present. Retailers should consider these factors when they set up their retail environment and register what customers want to listen to rather than following their own preferences. This a crucial factor that could affect variables such as sales, consumer satisfaction, time spent in store, the purchase of more items / quantity – leading to business success and profit.

5.5 Limitations

Four limitations are identified in this research project that are of importance to store managers and any future researchers. Firstly, the time of the year and the weather conditions when the observations of this study took place are discussed. Secondly, the choice of stores is discussed. Next, the data that were missing from one store report are listed. Finally, the type of research undertaken in this study is discussed, and recommendations are presented in response to each of the limitations outlined in this sub-section.

5.5.1 External Factors: Time of the Year and Weather

When the overall observations of two stores were made, there was a clear distinction between the time of the year when the observations were carried out and the weather conditions in Auckland during both store visits. A key environmental factor, weather, played a significant role and affected how the overall findings were perceived.

The time of year also played a vital role as a social factor, which falls under macro-environmental factors that have a profound impact on not only an organisation’s performance but even that of a store environment.

As identified in the findings of the research project, the first observation study that took place at Deli A occurred at the end of the year when day-light saving was already in existence with longer evenings, moving into the summer season in New Zealand. It is a known fact that Auckland experiences high levels of rainfall throughout the year, and the weather is unpredictable moving from spring into summer. During the first store observation, there was a great deal of rain. On the second visit, the weather was much improved and sunnier. This may have caused differences in the measures of independent variables.

The first observation at Liquor Centre B took place in March when it was still light in the evenings. The second visit was in April and a huge contrast was observed by the researcher; New Zealand had moved out of day-light saving and it was already much darker and slightly colder than on the first observation visit.

It is highly recommended that should this study be undertaken again; the time of the year is considered in more depth. It is vital to undertake the observations at set times on the same days as part of the experimental design. However, more consistency could be achieved with shorter observation sessions over a longer period of time in order to gather more data and to provide consistency when the weather as an external factor may skew any data gathered. Even though the weather was considered when the observations were made, and the researcher tried to control for this, it was still difficult to find days that had similar weather patterns.

The researcher was also mentally exhausted as it was not previously known how busy the stores would be during a three-hour observation period. There were sometimes four to five customers walking into the stores at any given minute, and every minute within the hour. It is suggested that the study be completed during shorter observation periods over extended days instead of a continuous three-hour period at a time. This would provide more generisability and when different genres of music were being tested.

5.5.2 Store Choice

This study required contacting retail stores to achieve the aims of the research question and objectives. The researcher approached retail stores requesting an opportunity use their store environment for an observation study. Surprisingly, on reflection the entire process was very disheartening, as several stores were not willing to support the study.

A few key stores were contacted that fit the criteria, from delicatessens to liquor stores, including a number of well-known branded stores that were large in size and in perfect locations to gather a larger sample in Auckland. The reason behind selecting a delicatessen food store and a liquor store (chosen for this study) was due to both stores selling and specialising in niche goods. The deli sells organic and health food options where the liquor store sells unique wines from both international to local New Zealand brands. An alternative store choice was outlined in Section 5.6.3 as a suggested trial for a future wine comparison study. As mentioned, the researcher reached out to a number of key stores, but in the end, the stores that responded to assist the researcher undertake this study and whom were accessible at the time, were selected. These stores would have fit the criteria research objectives perfectly; however, stores either did not respond or made an excuse.

On reflection, it was likely that the stores did not understand that only a simple observation was involved, with no disturbance to their store environment or customers likely – however, this was clearly explained in phone calls, email correspondence and in all the key research documentation as shown in Appendix B to Appendix F. In the future, further word-of-mouth contacts where possible, could be trialled or in person, to convince stores to assist.

Alternatively, if this study was tested again in the future, different scenarios could be trialled for example – lifestyle enhancing product such as healthy eating versus exercise – which could also triangulate the data to enhance reliability of the findings.

5.5.3 Missing Research Data – Store Sales Report

One of the main criterion identified to the store manager or owner when they agree that the study can take place in their store, and which is agreed to in writing from the beginning, is that the store share – for the purpose of this study only – the final sales reports relating to the days and times that the researcher undertook observations.

Unfortunately, one of the stores in this research project was confused as to what was agreed to beforehand. As with Deli A, Liquor Centre B's full sales report was provided, which classified the types of products, but when the final product analysis with sales figures was requested again from Liquor Centre B, they notified that they were not able to provide that data but would provide an overall figure of the product type.

To complete a breakdown product analysis of the final beer versus wine percentage figures in order to work out the average comparison of these item sales, the researcher tried their best to provide the most accurate figures where possible from the oral information provided by the store. Eventually the store provided these overall product percentage figures verbally only (even though they had agreed in writing to provide them on paper). These oral figures were included in the final data analysis and the findings of the research project in order to answer hypothesis H3d. It would be useful in the future to iterate again to store managers and owners how crucial data is for a research project and that their cooperation on this would be most grateful.

5.5.4 Type of Study

Even though this research project included observation as part of an observation study within a field study of experimental design, and it gathered several key data and findings to match the research aim and objective – observation study is also limited by what can be recorded as well as by the answers that can be obtained to help answer the overall research question/s.

It is suggested that future researchers include within their methodology a survey / questionnaire (as identified as one of the key limitations of this research project as a qualitative study) with specific questions that could be asked either within the store or as shoppers depart from a store after observation has taken place. Based on this, a field study could be trialled. Questions could include: How did you feel when music was playing in the store? Did you notice that any music was playing whilst you shopped? Did you like or dislike the type of music that was playing? Is there anything you specifically like to listen to when you go shopping?

Raw data was collected during the observation study, but this limited the researcher when the findings were analysed for further, in-depth research results. If this study were to be undertaken again in the future, combining research methods such as surveys (e.g. asking questions about mood) and noting down observation notes could provide additional data that could lead to further analysis and key results.

Furthermore, a t test, as a non-parametric method (after testing for equality of variances), could be utilised as a different statistical methodology type to test the hypotheses outlined instead. By positioning this study

within the classification of an observation study, could further identify whether there are any flaws in the experimental design and if this would impact the conclusions already identified in the findings.

This study could also be trialled in the future by observing two genres of music via the sales variable for example, but rather trial a controlled group in order to claim a validating result if tested or experimented again. It will have to be agreed prior with the stores beforehand, as the current testing concluded turned out quite challenging in order to control the music in both store environments (trilled in this study), as stores normally play their own style/genre of music. Therefore, the current study conducted incorporated a number of particular parameters put in place (of which this study had to compromise on), which was also identified as one of the limitations to this study.

5.6 Future Research Directions

As previously shown, the 'effects of music', as analysed in the empirical studies examined by Garlin and Owen (2006), are vital within our popular culture today. We know now that music is in all of us and it is a key component and means of communication and recreational activity in all human behaviour. It is regarded as a socio-economic factor and an economic product that is invested with ideological significance (Shuker, 2017). We now know that music is one form of sound that can be used to create an atmosphere that customers can find pleasant and welcoming. Collins (2003) research was conducted on the atmospheric effects of music and on how these can affect a shopper – meaning that music is a vital and useful tool that retailers need to understand (Collins, 2003). However, none of the literature has compared genres of music to see if they can influence consumer behaviour, especially in New Zealand.

Given this importance, future research including other genres or even styles of music could be trialled, along with a different methodology and research design. It is important to review what other studies could be done on this topic, including testing other hypotheses and perhaps conducting a specific wine study.

5.6.1 Genre and Style of Music

Music can alter and affect moods, which then alters behaviours. Music likeability exerts a positive influence on consumers' mood (Petruzzellis et al., 2014). It is powerful, emotional and motivational. Therefore, store managers and retailers are recommended to further investigate relationships between store music, moods and shopping behaviour in order to keep their focus on customer's needs and assist customer decision making (Bruner, 1990).

If this study, or variations of it, was repeated, it is suggested that further variables are tested on the emotional as well as perceptual aspects of customers relating to atmospherics such as music. This project's research design did not include participant interactions, such as speaking to customers in-store and asking a series of questions at the end of shopping times related to the background music played in the store environment. Including such interactions in future research could give researchers and store managers further insight into

this study area, as previous studies have shown that moods induced by music can account for shopping differences. Difficulties in assessing moods could be dealt with by using a brief survey in a field setting. When behavioural effects were tested and associated with perceptual differences in a study by Andersson et al. (2012), shoppers perceived store departments to have more desirable characteristics when certain types of music were played, and they also purchased more.

Music has been “manipulated both in its structural characteristics such as time (rhythm, tempo and phrasing), pitch (melody, mode and harmony) and texture (timbre, orchestration and volume), and in its affective elements such as valence (liking), familiarity and types” (Petruzzellis et al., 2014, p. 39). No studies have yet analysed the notoriety of music and its effect on consumer behaviour. Familiar music, the researchers believe, does not imply notoriety (Petruzzellis et al., 2014). However, some papers have considered familiarity as a substitution for notoriety, as seen in the studies of Garlin and Owen (2006) and Yalch and Spangenberg (2000). It is also believed that notoriety is an objective experience, therefore, a music track is seen as famous when it has become widely recognised (Petruzzellis et al., 2014).

This means that the likelihood that individuals have been previously exposed to music is high, implying that they could be familiar with the music. However, familiarity, like originality, is a subjective experience. People may not be familiar with popular music (which is also referred to in pop culture theory as famous music), yet they may be familiar with non-famous music since they could have been exposed to it before. This can also be related to the function of the tempo, tone, and melody of a song (Petruzzellis et al., 2014) and how people recall a song. Furthermore, over time, the familiarity effects of music are shown to fade. In order for this familiarity to occur and to create feelings, a listener needs to have heard a particular piece of music in the past so it is familiar, which can also relate to context effects. In order to increase music recognition and liking overall, there should be multiple exposures to the background music heard. However, if the background music is heard repeatedly, it could then lead to negative effects due to people being overexposed to similar or the same music over a period of time (Petruzzellis et al., 2014).

Andersson et al.’s (2012) efforts to identify other factors in their study that might moderate the music / shopping behaviour relationship were unsuccessful due to not being able to test a number of possible relationships within their sample size. They believe that there are several key factors that may influence shopping behaviour and that designing the right store atmosphere could remain an art rather than a science for a number of years to come (Andersson et al., 2012). It is highly recommended that this area is trialled when the next study is carried out again in the future.

5.6.2 Research Design

The previous sub-section suggested that future studies include participant interaction and a research design and methodology that differ from this research project. Future research could include more in-depth objectives measures, whether it is testing different atmospheric effects, or conducting a specific wine study,

as identified as another recommendation for future research. This could further help researchers establish how music makes shoppers think and feel after their shopping experience.

Customer satisfaction should be the key concept and key to success of any business; therefore, it is beneficial for retailers to not only consider key aspects like window presentation, clear signage, ticketing, walkways, staff grooming, in-store presentation, image, product merchandise, price differentials, lighting, efficiency and whether there is a point of difference (Male, 1999), but furthermore consider this new, yet effective factor of background music. We know now that researchers believe that background music should be included in this very vital 'list' that retail mangers abide by in order to develop and maintain strong customer satisfaction. Nowhere within the standard context of successful retailing, according to the resources available on this topic, do they encompass background music as a key concept. However, in their study, Garlin and Owen (2006) point out that among the many in-store elements purported to impact patrons or shoppers, the use of background music is a leading feature of academic enquiry within these commercial settings (Garlin & Owen, 2006) that should be considered in future research and the development of retail study and enquiry.

Bruner (1990) suggests that efforts should be made to raise the level of experimental complexity to report for the complicated workings of musical motivation. Marketers and retailers are much more concerned today about successfully affecting the behaviour of their consumers and music-related research should become more common in the future to assist with this observed gap. Retailers have always been concerned with selling products that they their customers to buy; however, retailers that focus on improving shopping experiences and are not always concerned with merely making their profit margins 'fat' will have a winning recipe for success. They should always be concerned with the five C's of putting their customers in control. These are concept clarity, choice clarity, control of the experience, communications of the concept and closure (Ander & Stern, 2004).

Retailers are recommended to utilise these simple yet effective marketing and retailing concepts to improve and increase customer satisfaction. Further studies can be conducted to test and utilise additional structural music affects such as melody, harmony and tonality, to assist retailers in their purpose (Andersson et al., 2012).

5.6.3 Music and Wine Comparison Study

The final recommendation is to conduct a research study similar to that of Areni and Kim (1993). The slight difference from their study would be to trial it within a New Zealand retail setting where a number of different wines are tested to review the same variables used by this research study – that is, time spent in the store, dollars spent, number of items purchased, and types of products purchased. Future research could even test further variables such as product placement tested alongside a number of additional atmospheric effects including music.

Areni and Kim (1993) dedicated a complete study to investigate the influence of background music on shopping behaviour and whether classical music versus Top-Forty music in a 'wine store' would affect consumer choice. Their findings showed that when classical music was played, it influenced shoppers to spend more money than when Top-Forty popular music was played. Also, during this time, as well as purchasing more wine, customers were purchasing more selected and expensive wines when classical music was played as background music within the store compared with Top-Forty music. Overall, customers did not seem to be aware of the affect that the corresponding music had on their purchasing choices and behaviour / selections (Areni & Kim, 1993).

Areni and Kim (1993) noted similar findings with their classical versus popular music analysis. They found that music is more persuasive when it 'fits' the persuasion context in order to produce desired outcomes. Based on their wine store environmental study, they suggest that consumers associate wine consumption with prestige and sophistication and classical music fits this context, rather than Top-Forty music that implies a less refined environment. They further suggest that retailers should use their findings to their advantage and pay attention to the symbolic meaning underlying each purchase experience. If customers are seeking sophistication as within the wine store example, in-store cues should be considered to facilitate that experience (Areni & Kim, 1993).

If this study was repeated again, it is recommended to firstly test the purchase behaviour of consumers, in particular their decision / preference for either German wines or New Zealand wines or even for French wines over Spanish wines when classical jazz or popular music is played as background music. These are two independent variables and opposite in content and classification, as seen in the product example. Secondly, in such a wine study, German versus French music could be played combined with other atmospheric effects (to test counter effects) such as visuals where a digital screen in the store is strategically placed to show imagery and video of the culture or country whilst that particular music from the culture or country is also played. The two wines could also be placed next to one another on a shelf for easier comparison within the store environment.

5.7 Conclusion

This study has examined the literature on background music in retailing. It has also discussed the limitations of the research and made suggestions for future research, drawing on Bruner (1990) and Smith and Curnow (1966). It has aimed to give a better understanding of the **the overall effect of classical jazz versus popular music genres used as background music in a retail store and to evaluate their influence on shopping behaviour.**

Research has shown us that today, marketers and retailers are increasingly concerned with developing successful and effective behaviour in their consumers and music-related research should become more common in the future to assist with this aim. If retailers can utilise the simple yet effective marketing and retailing concepts presented in this study to alter consumer behaviour, then further empirical studies can be

conducted to test and utilise additional structural music affects such as melody, harmony and tonality. In turn, such studies could further assist retailers with their aims (Andersson et al., 2012).

We know now from the studies outlined that music can affect consumers' moods and in return their moods can alter or change their shopping behaviour (Collins, 2003). It is vital for retailers to consider and be careful when they do select background music in their stores that the music chosen reflects a desired symbolic meaning and that the music chosen creates the best overall and desirable retailing experience for shoppers at the same time.

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APPENDICES

1. Appendix A: Ethical Approval

The final ethical approval received from AUTEC for the research project.

AUTEC Secretariat

Auckland University of Technology
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www.aut.ac.nz/researchethics

17 July 2017

Marilyn Giroux
Faculty of Business Economics and Law

Dear Marilyn

Re Ethics Application: **17/174 In what ways does the genre of music influence purchasing behaviour in retail stores?**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 17 July 2020.

Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through http://www.aut.ac.nz/researchethics.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through http://www.aut.ac.nz/researchethics.
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: http://www.aut.ac.nz/researchethics.
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact ethics@aut.ac.nz

Yours sincerely,

Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: calista.ferreira@aut.ac.nz

2. Appendix B: Observation Protocol

The observation protocol utilised for both in-store visits for the research project.

AUT
TE WĀNANGA ARONUI O TĀMAKI MAKAU RAU

OBSERVATION PROTOCOL

Project Title: ***In what ways does the genre of music influence shopping behaviour in retail stores?***

Project Supervisor: ***Marilyn Giroux***

Researcher: ***Calista Ferreira***

Background music in retail settings is the subject of much academic enquiry (Garlin and Owen, 2006). This research proposal identifies and discusses literature / empirical studies conducted on *immediate effects* of background music, but shows how some of the *intermediate effects* have been ignored altogether. Some of the various dependent variables examined include value returns, duration of shopping and affective response of shoppers. The research question *'In what ways does the genre of music influence shopping behaviour in retail stores?'* will be answered by investigating the effect of two music genres, classical versus popular music, as background music in a retail setting. Music is powerful, emotional and motivational therefore retailers should investigate further relationships between store music, moods and shopping behaviour in order to keep their focus on customer's needs and assist customer decision making (Bruner 1990) in order to increase overall sales and the quality perception of their merchandise sold to customers.

HOW WILL PEOPLE BE RECRUITED?

No recruiting of participants will be required for this study. The methodology that has been chosen for this study will be an experimental design (quantitative research methods). "Experimental designs should be utilised to assist in sensibly outlining the difference between main and interaction effects of various structural components of music" and further research and study could be conducted to test the "familiarity of music" as suggested within the study of Bruner (1990) where he links music, mood and marketing together as vital and useful tools that retailers should consider for future development on this topic (Bruner, 1990). Therefore, the research will be conducted within two in-store direct, participant observations that will occur within a suitable location within the store, as agreed to by the store owner. The location will have to be suitable in order for the observation to take place in a unique setting to provide an opportunity to examine the impact of background music on shopping and purchases made.

Two in-store locations has been identified therefore if one location won't participate or no useful data could be gathered in order to conduct the right research to answer the research question from the findings analysed, then an additional in-store location has been allocated for this research project.

The store observations for this research project will be conducted within the following stores:

1. Organic / Health Food Store: Auckland store
2. Liquor Store – Auckland store

The chosen product that will be analysed (when the two genres of music will be tested) could be either a high-end wine store and/or organic food store based in Auckland or even a specialised store where a number of products are sold from a number of cities or even countries. Once the final product that will be tested within the retail setting has been established, the final location will be notified and booked with the owner of the store to assist with the in-store participation observation.

HOW WILL PEOPLE BE INFORMED ABOUT THE OBSERVATION?

Participants will be provided with further information from the organiser with a sign placed close to the cashier / till that an observation study will be conducted. A copy of the sign is attached. The researcher will also be carrying a Participant Information Sheet for Observation if participants inquire about the research if they do enquire whilst in the store (so it will be available as a back-up). Furthermore, a name badge will be worn by the observer within the store at all times.

HOW WILL PEOPLE CONSENT TO THE OBSERVATION?

Consent from the organisers / researcher will only be required from the actual store owner / manager and will be sought out at the start of the research to cover the full period of the study. The store owners will receive a consent form before they start participating in the study and sign on agreement of the observation study to be undertaken within their store. A consent form is also available for any shoppers in the store and will be evident at the stores till / cashier for any shopper to complete. This provides shoppers the opportunity if they do not wish to be observed, they may simply let the store staff or the researcher know. When this occurs, the observation will not proceed for the particular shopper/s whom requested so.

Participation in this study is indicative of the store owners consent to take part in the study. The researcher will seek owners consent once again before the start of the observation within their store otherwise observation will not take place.

WHAT WILL BE OBSERVED, WHAT DATA WILL BE COLLECTED AND HOW WILL THE DATA BE COLLECTED?

Data collection will occur via direct, participant observation. It is therefore classified as a field experiment as it occurs within an actual store location, with real-time shoppers involved. Each consumer will be observed as they enter the store and within the allocated store space from where the purchase of the identified product/s will take place. The frequency of the product purchase will be recorded including the noted day and time of the purchase and how this could affect the final decision of the purchase/s made. The final dates and times of the in-store studies and observations are still to be confirmed once the store confirmations with store owners have been received and approved.

- Independent Variables

The aim is to conduct at least two observations over different timeframes in each store and within different timeframes. Suggestion would include observations during Thursday evenings from 5:00pm to 8:00pm and a second observation day, Saturdays from 1:00pm to 4:00pm. The days and hours can then be repeated over a second week over similar hours in order to capture data over the same period of time where possible.

Dependent Variables:

The dependent variables to be measured are:

- Sales (dollar spent)
- Time spent within the store (within a particular location)
- Number of items purchased / type of product purchased

HOW ANY DECEPTION INVOLVED WILL BE MANAGED?

The research will do her best to avoid any deception during observation by not coercing, deceiving or leading people to believing the researcher's intentions when within the stores. The researcher will be observing within a dedicated location within the store and could be genuinely as an active member assisting within the store (agreed to with the shop owner) whilst the observations take place. With good faith towards other people, the researcher will manage any possible deception by not noting down any quotes said by people that will not be relevant to the research, will not write down real names or unnecessary descriptors of individuals, and will not observe or note confidential or incriminating situations that occur that might put them at risk. The aim of the research is to understand the impact of the genre of music on purchasing within retail stores. The research will observe which particulate items shoppers purchased. The research will not be profiling shopper/s demographics. Posters (store sign) and participation information sheets will be displayed prominently within the store, so that shoppers will clearly be aware of the observation study to be undertaken. Furthermore, a name badge will be worn by the observer within the store at all times.

THE DATA COLLECTION INSTRUMENT

Data collection instruments include a pen and a notebook. Pictures and videos will not be used in the field of observation during the observations to ensure anonymity and confidentiality. Only photos will be taken by the researchers to show the overall store look and feel from where the observation took place, but with no participants in the photos.

3. Appendix C: Observation Guide

The observation guide (sample) utilised as an outline for each in-store visit for the research project.

RESEARCHER'S OBSERVATION GUIDE

Store Visit 1 – Popular Music (Friday 1 – 10:00am to 1:00pm)

Date	Location	Physical environment – atmospherics, weather	Sales – $ spend in store	Time – spent in store (time in, time left)	Consumption artefacts – # items purchased	Bodily aspects – any affects to music?	Purchasing Behaviour – type of person, anything stands out
27/10/17	Health Store						
27/10/17	Health Store						
27/10/17	Health Store						
27/10/17	Health Store						
27/10/17	Health Store						
27/10/17	Health Store						
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27/10/17	Health Store						
27/10/17	Health Store						
27/10/17	Health Store						

4. Appendix D: Store Sign

The store sign (sample) utilised for each in-store visit for the research project.

PLEASE NOTE

There is currently an observation study undertaken with this store during the following:

Day/s: _____

Time/s: _____

This observation study, which entails observing shopping behaviour (to answer the thesis title below), is part of a Masters of Business thesis study from Auckland University of Technology.

Project Title: ***In what ways does the genre of music influence shopping behaviour in retail stores?***

Researcher & Observer: ***Calista Ferreira***

We will be observing the amount of time spent in the store, number of items purchased, type of product and dollar spent. Please see the store staff or manager if you wish not to be observed during this study. A participation information sheet and consent form are available at the stores till / cashier and at the entrance of the store for further information.

Thanks for your understanding and kind regards,

STORE LOGO GOES HERE

The Store Management Team

5. Appendix E: Participation Information Sheet

The participation information sheet utilised for both in-store visits for the research project.

PARTICIPATION INFORMATION SHEET

For use when observations are involved.

Date Information Sheet Produced:

19 May 2017

Project Title

In what ways does the genre of music influence shopping behaviour in retail stores?

How was I identified and why am I being invited to participate in this research?

My name is Calista Ferreira. I am completing the last component of my Master of Business qualification. The research is part of my Master of Business thesis study as part of my final qualification. I have background in business and music therefore is a personal choice for the research topic studied, however still undergoing higher study will be a great experience in order to put to practice the other skill-base learnt from my other master's papers studied and also in preparation for further study such as a PhD. Therefore, my interest has always entailed to research how the influence on musical genre has on consumer behaviour. It is an area that still surprisingly limited research topic involving music in retail settings. I want to see throughout this study if there are various effects of music and how this in return affects customer's choice either through product choice, in-store environment, associating in buyer-seller interactions, affects real and perceived shopping times and overall shopping behaviour within various shopping environments.

How do I agree to participate in this research?

It only involves shoppers within the store of which I have been given permission to access.

Therefore, it involves shoppers agreeing to participate as they would have sited the sign has been placed within the store notifying of the research, there is the participation information sheet available for anyone to read and view and shoppers are happy to be observed – at the front door of the store and at the stores still / cashier. A consent form is available if any shopper would require one, which will be made available. You can easily identify the observer in the store, as they will have a name badge evident.

What will happen in this research?

Data collection will occur via direct observation. It is a field experiment since it occurs within an actual store location, with real-time shoppers involved. Each consumer will be observed as they enter the store and within the allocated store space from where the purchase of the identified product/s will take place. The frequency of the product purchase will be recorded including the noted day and time of the purchase. The final dates and times of the in-store studies and observations are still to be confirmed once the store confirmations with store owners have been received and approved. No other data will be collected from participants.

What are the discomforts and risks?

There are no discomforts or risks expected for this research study. It only involves direct observation of your shopping of which direct observation will be conducted within two stores in the Auckland region.

What are the benefits?

The aim of the research is to understand the impact of the genre of music on purchasing within retail stores and sales. This is therefore valuable information for marketing practices within the retail industry and could strongly contribute to the success of an establishment. Furthermore, the benefits for this study is also an interest of mine to research how the influence on musical genre has on consumer behaviour. If this study does benefit music and shopping behaviour research at the same time, then this will be an additional bonus.

How will my privacy be protected?

All the potential shoppers will be informed about the research, its goals and objectives through a sign within the store notifying of the observation study as well as participant information sheet. Names of participants will not be recorded. In the final reporting of results, findings will be reported as aggregated data.

The researcher will also work closely with his supervisor to ensure that the ethical aspects of the research meet the high standard set by AUT. No participant's names will be recorded or used for this study.

What are the costs of participating in this research?

There is no time or cost involved within this research study.

Will I receive feedback on the results of this research?

The final findings of the research will be presented in a bound thesis copy available as public record in the AUT Library. If any further information of the study were to be shared, the project supervisor (as per below) can be contacted if you wish.

The observations records will be stored securely on a computer with a limited access in office at AUT University, WO1217, WO Building, Level 12. It will be stored for approx. 5-6 years which is standard protocol, after which Electronic copies will be erased. Hardcopies will be shredded.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Marilyn Giroux, *marilyn.giroux@aut.ac.nz*, Tel: 921 9999 Ext. 5078

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, ethics@aut.ac.nz, Tel: 921 9999 Ext. 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Calista Ferreira
AUT University
WO Building, Level 12
56 Wakefield Street, Auckland, CBD, 1010
Phone: (09) 921 9468

Project Supervisor Contact Details:

Dr Marilyn Giroux
AUT University
Lecturer - Marketing, Advertising, Retailing & Sales (MARS)
WY Building, 120 Mayoral Drive, Auckland CBD, 1010
Phone: (09) 921 9999 Ext. 5078

Approved by the Auckland University of Technology Ethics Committee on 17 July 2017, AUTEC Reference number project 17/174.

6. Appendix F: Consent Form

The consent form utilised for both in-store visits for the research project.

CONSENT FORM

Available for Participants

For use when observations are involved.

Project Title: ***In what ways does the genre of music shopping purchasing behaviour in retail stores?***

Project Supervisor: ***Marilyn Giroux***

Researcher: ***Calista Ferreira***

O I have read and understood the information provided about this research project from the observation study guideline and information document.

O I have had an opportunity to ask questions and to have them answered.

O I understand that the researcher will observe my shopping behaviours within the store.

O I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way. If you wish not to be observed, simply let the store staff or the researcher know.

O I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.

O I agree to take part in this research.

O I wish to receive a summary of the research findings (please tick one): Yes O No O

Participants Signature: .....

Participants Full Name: .....

Date: .....

Approved by the Auckland University of Technology Ethics Committee in **2017, AUTEC Reference number 17/174.**
Note: The Participant should retain a copy of this form.

7. Appendix G: Experimental Design Diagram

The experimental design diagram (initial draft) created in order to lay out and follow the methodology of observation study for the research project.

AUT
TE WĀNANGA ARONUI O TĀMAKI MAKAU RAU

EXPERIMENTAL DESIGN DIAGRAM

Project Title: *In what ways does the genre of music influence shopping behaviour in retail stores?*

Project Supervisor: *Marilyn Giroux*

Researcher: *Calista Ferreira*

The following diagram shows the counter balance of the different products observed, within the various stores (A and B) alongside the two different genres of music tested during this observation study: classical vs pop music within two different days and timeframes set out to answer the research question *'In what ways does the genre of music influence shopping behaviour in retail stores?'*

- **Store A** – Organic Food / Health Store (Auckland)
- **Store B** – Liquor Store (Auckland)

8. Appendix H: Researcher's Original Handwritten Observation Notes

A sample copy of the researcher's original handwritten observation notes, conducted in the same style, for both observation days and times for the research project.