**Research project folio: Zachary Luke**

**Question refinement**

**15.11.18**

At the beginning of my research I used a lotus diagram to narrow down the various topics for my question that I wanted to pursue. During this process I narrowed down the topics to psychology and marketing. From there I completed PMI’s (plus, minus and interesting) on each of these topics. After completing a PMI on both topics, I decided rather than choose one I would combine the two topics.

**Psychology and marketing – PMI**

Plus

* Wide range of readily available sources
* Has relevant and up to date information on various aspects of the topic
* Has the potential to have various aspects to the question improving research opportunities

Minus

* Topic may have too information within the limitations of the research project

Interesting

* The various ways that the two topics could be combined has the potential to create an outstanding research question

**Initial Question**

|  |  |  |  |
| --- | --- | --- | --- |
| **Broad Topic >** | **Narrowed Topic >** | **Focused Topic >** | **Research Question** |
| Marketing psychology  | Marketing techniques that psychologically affect consumers | Marketing techniques that affect the psychology responses of consumers in super markets | To what extent do various marketing techniques affect the psychology responses of consumers in supermarkets  |

**Question refinement**

To what extent do various marketing techniques affect the psychological responses of consumers in supermarkets?

Positives:

- ‘To what extent’ , makes the question have more depth and to have a measured outcome

-Has a specific target: consumers in supermarkets

Negatives:

* Question is too broad and vague

**Refined question:** To what extent do various marketing techniques affect the spending of consumers in supermarkets?

**Further refinement of question**

**New question:**

To what extent do various subtle marketing techniques influence consumers spending in supermarkets.

* The type of marketing techniques has been made more specific
* The wording of the question has been adjusted from ‘the psychological response of consumers’ to ‘the spending of consumers’ as spending can be quantitively measured

**To what extent do various subtle marketing techniques influence consumers spending in supermarkets.**

**22/11/18**

Our class had practical information session about research project for Year 12 this session was run by Ari from the University of Adelaide. I asked for his expert opinion on my question and how to improve it. He told that that the question was still too broad and could tightened.

From this session I came up with a new question based on Ari’s feedback.

**To what extent do the marketing techniques: product location, colour and background music, affect consumer spending in supermarkets?**

PMI

|  |  |
| --- | --- |
| Plus  | -Has various subtopics that can be looked at in-depth.-Wide range of sources available-Information on topic is up to date and reliable.  |
| Minus  | Question may have to much information that it will be necessary to cull the information down.  |
| Interesting  | The 3 subtopics relate to each other in a way that adds further depth to my outcome.  |

P2 Planning processes

Planning of research processes appropriate to the research project:

**Ethical considerations**

Some ethical consideration I will need to think about whilst perusing this research question are that I may gain access to case studies and test results conducted on various people. This information may be confidential, and I may have to seek permission for the use of this information in my work.

Some additional considerations include being conscious of properly acknowledging and referencing other people’s work.

**Capabilities:**

**Personal and Social Capability:** I plan to develop my Personal and Social Capability through emailing and interacting with people I normally wouldn’t, such as academics and people high up in their field. This will develop my personal identity in enabling me to look outside myself and grow to become more confident in my communication with others. My organisation in doing this project will also be a high priority, and so reviewing and having goals throughout the project, such as personal due dates, will develop this personal and social capability further also.

**Planning to analyse sources**

I plan with each source to highlight and annotate them and summarise them with four main headings: Key findings, effects, leads, usefulness.

**Primary Research:** I intend to find sources of particular Academics, such as various neurologists and psychologists, as well as various marketing professors. I will do this by finding these organisations online that are (if possible) based in Australia, and at best, in Adelaide. I will email these people, as well as ask to interview them face-to-face also. I will contact my primary sources as soon as I can, to give them extra time to reply. I also intend to contact various marketing experts in order to gain firsthand reliable information on my topic. Some examples of potential interviewees and their contact information include; Professor Colin Clifford colin.clifford@unsw.edu.au

Dr Chris Donkin Christopher.donkin@gmail.com

Dr Vincent Laurent Phone: 02 9385 1836

Professor Branka Spehar b.spehar@unsw.edu.au

Primary will be very beneficial for my research at they are extremely reliable and credible. However primary research is harder to obtain as there are fewer primary sources than secondary. Interviews one such type of primary sources are hard to organize, if you get a response to start with.

**Case studies/ Scientific journals/ Scholarly articles:** Case studies, scientific journals and scholarly articles will take up the bulk of my sources. They will provide up to date and reliable information from qualified authors and professionals. This type of source will be used to pursue various leads and questions throughout the research. These sources will be extremely useful to my question as my question has a particular focus on the psychology of marketing techniques. These sources will be acquired from libraries, google scholar and through leads from interviews.

 **Secondary sources**

Secondary sources will be used mainly in the form of online articles and internet sources. These sources will be used as an easy way to get basic information at first. It will also allow me to find pathways to other sources and ideas relating to my question.

These sources will not be used heavily as they generally don’t have credible authors, specific and scientific information needed for my research question. These sources will be used at the start to gain an understanding of my topic during preliminary research. Secondary sources are widely available, although the majority of secondary sources are written by unqualified people. However I plan to use my primary sources to validate the information within my secondary sources.

**Email:** I have prepared the following email to send to various Neuroscientists and Psychology as well as marketing experts

*To whom it may concern,*

*My name is Zachary Luke I am a senior student at Heritage College, Adelaide. I am currently undergoing the Research project for year 12. I am emailing to ask information in regard to, the psychological impact that various marketing techniques including: product location, colour and background music. In relation to supermarkets.*

*The questions I have in relation to my research project are the following:*

* How does the location of product psychologically affect consumers? (this will determine the specific effect product location)
* To what extent does vertical and horizontal positioning affect consumers? (To determine the difference and effects these have in relation to product location)
* How does colour psychologically affect consumers? (this will determine the specific effect of colour)
* What colours provide positive responses from consumers? And why? (Provide examples of the effects certain colours and why)
* What colours provide negative responses from consumers? And why?
* How does background music psychologically affect consumers? (this will determine the specific effect of music)
* Does the genre of music impact consumers? (will either introduce or destroy a section that may be investigated)
* Does the tempo of music impact consumers? (will either introduce or destroy a section that may be investigated)

In addition, any extra information you can provide me with would be helpful. I would greatly appreciate hearing from you. In addition to that, a personal interview face-to-face would also be a distinct advantage to my research, if possible.

Thanks Zac

|  |
| --- |
| Source type – Interview  |
| Reference – Interview with Vijay Pugaell: Woolworths night produce manager and marketing analysist Interview done face to face over a 3 week period ending on the 5th of April  |
| Key findings MusicMusic is used all day and every day, even when the store is shut. The genre and tempo of the music vary throughout the day in order to influence the customers in the way we want at a particular time. During the mornings between 8-12 medium tempo music is used with indie style genre similar to Jack Jonson’s music. This is done as the medium tempo causes customers to move around the store at a reasonable pace allowing greater traffic flow, as during the morning the store is reasonably busy. During the middle of the days on weekdays between 12-3 the music has a slow tempo as during this time of the day is the least busy, so the slow tempo music is used in order to keep customers in the store as long as possible so that the chances of impulse purchases are increased. During 3-5 is generally the busiest time of the day during weekdays. During this time fast music is used in order to increase the turnaround of customers, and to prevent the store from overcrowding. This fast tempo music is occasionally supplemented with a classical genre song this use of classical music is used to try and prevent mainly male teenager who have just finished school loitering in and around the store, to try and prevent levels of teenage shoplifting. Then from 5-8:30 the tempo of the music returns to the medium tempo indie style music as the store during this time isn’t too busy but enough to still need influencing customers to shorten their shop. Finally during the last 30mins before the store shuts the tempo of the music is significantly increased with the genre being the modern top 100 music chart songs which are generally louder and have a higher tempo. This music is played in order to make the customers finish off their shop quickly before the store shuts. Once the store shuts the music plays the classics from the 80,90 and 00’s, as this causes the productivity in night fill staff to increase the boxes/min by about 15%. Having music playing throughout the day also reduces the distraction for the employees as well as the overall mistakes made. When music isn’t playing instore throughout the day the profit for the day decreases by roughly 7%. On a normal weekday Woolworths Mitcham makes a total profit of roughly $5,500 with music playing, without music playing this would decrease to approximately $5,100 this doesn’t seem like much but over a year it adds up with the yearly profit for the store with music being $2,007,500 and without music $1,866,975 that’s a decrease of $140,525 per year for just one store. On a national level every year Woolworths would lose $91,000,000 just by not playing music in store.Product location When entering Woolworths Mitcham, you are greeted with the fruit and vegetable section this is used in order to promote the sense of healthiness and promote Woolworths image of being the fresh food people. Alongside the wall on the perimeter of the store is the bakery section this section has been strategically placed there as it has been scientifically proven that the smell of fresh baked goods causes your saliva glands to go crazy and cause the customer to become hungry this in turn leads to and increase purchasing as studies have already shown that customers are more likely to spend more when they are hungry. Fruit and vegetables also are more appealing to the eye under natural light which is why placing them at the entrance where they will receive the most amount of natural sunlight is an advantage. Placing the butchery and meat and fish section towards the back of the store as some recent studies have shown that meat seems more appealing under artificial light, being at the back of the store reduces the amount of natural light and allows for the artificial light to do its thing. Milk as is is one of the most common items on everyone’s shopping list is places right at the back corner of the store the furthest away from the entrance. Milk is placed there to make people have to walk past all the colourful and promotional items in the hopes that on the way to the milk section they will have an impulse purchase. The horizontal positioning of the products is one of the things that influences the total profit of Woolworths. The more mundane products that are essential like rice pasta, flour sugar are placed in the middle of the isles as people are still willing to go to the middle to get a product they need. Whereas towards the edges of the isles are the more tempting products that you wouldn’t normally purchase but because you have to go to the middle to get the mundane products these products catch your attention and promote impulse purchasing. The ends of the isles that face outwards produce the most profit as it is the colourful chocolate, chips and lollies and non-essential products that have been reduced and that are tempting as you walk past them to get where you are wanting to go, this causes the most impulse buying than any other section of the store.The Vertical positioning is also extremely important. Its so important that the brands that supply our store pay what is called a shelf allowance which gives them the best position vertically on the shelves. Generally the most expensive items are placed at the customers eye level in order to increase profit, with slightly less expensive item the further you stray from eye level. On the bottom of the shelves is the cheapest products generally the bulk rice flour or any other product. This is one of the main ways that Woolworths uses to increase profit. Another way that increases profit through product location is complimentary food grouping. Food groups they go together or are associated with each other are generally placed in the same isle, such as; cheese and crackers, chips and dip, pasta and pasta sauces and pesto. These groups located together promoted the purchase of both even when both are not needed by the consumer.Colourcolour of the packaging of the products themselves with lollies and chips with really colourful and vibrant colours to attract attention to themselves in order for that product to be bought. This vibrant use of colour on those types of product makes them perfect for them to be placed on the exposed ends of the isles as they grab the customers attention and lure them in and cause more impulse spending. Another way colour is utilised by Woolworths is the bright yellow colour of all the on sale products attracting their attention and once again promoting more impulse purchasing. Colour in Woolworths is not always used to attract attention, an example of this is the plain dull creamy coloured walls and the dull light blue ceilings, these colour are used to make the customers relax and it also doesn’t draw any attention away from the products.  |
| Usefulness and Reliability This source is extremely reliable the interviewee has done a 3 year course at Adelaide University on marketing and communications. He has also had first had experience with these particular marketing techniques that I am researching as it is his job to know how to maximise the profits by using these techniques. He had been doing this same job at Woolworths for the past 20 years so he has a wide range of knowledge through experience. The information is extremely useful as it directly relates to my chosen topic directly and it very extensive and comprehensive and will be very helpful in my outcome.  |
| Capabilities developedWhilst obtaining this interview I developed my social awareness capability within my work as I had to build up a work relationship with Vijay as me is my store manager as I work part time in the night fill department. Whilst working I have had to be respectful and hardworking in order to build a positive working relationship, I have been developing this relationship for over a year while working at Woolworths Mitcham. This relationship that I have built up over time allowed me to approach him and ask him for and interview concerning my topic. This close work relationship allowed the interview to be less formal and rigid with the question but more became a conversation.This style of interview was more helpful as I was able to develop my critical and creative thinking cap ability by creating new ideas and questions. This style allowed me to ask more questions and change the way I asked questions in order to gain a better understanding and better information. This relation also allowed us to continue the interview over a few weeks with 15 mins discussion before and after my shifts. This allowed me to analyse the note that I took from the interview and bring back more questions to further my question and outcome. During the process of the interviews I developed my organisation and analysing of sources, as I had to take brief notes and when I got home I had to type out all the information from the interview and organise it and then analyse it to find leads or to create new question to ask Vijay. I also had to develop my ethical capabilities as some of the information received I was told that it is not to be copied to anywhere other than my research folio and my notes, and for it not to be sent to anyone other than my Research project teacher and to SACE, as the information provided may be sensitive or contain results or information from studies conducted by their marketing team and specialists, that are the property of the Woolworths Group Co. Some of the things talked about in my interview I was not to record as they were to sensitive for even my Research Folio. A copy of my Research Folio was also requested before being sent to SACE so that all the information was correct and none of the sensitive material was in the Folio.  |

**Reliability:**

This source is a primary source as it is an interview. The interviewee is Christopher Donkin who is a fully qualified psychologist with a PHD. He is also a Professor of psychology at the university of NSW, a reputable institute which is world recognised for its tushery education. Christopher has researched the effect of music on the moods and spending patterns, which is extremely relevant to my research question. This source is extremely reliable and will be used to cross-reference other less reliable sources in order to validate its information.

**Source type: Interview**

Christopher Donkin – Professor of psychology at NSW university

**Key findings**

Shoppers who travel in an anti-clockwise direction will on average spend $2 more per trip compared to clockwise shoppers. The most common travel path in supermarkets is around the perimeter, as a result the ends of each isle is the most profitable. People rarely travel systematically up and down each isle.

Fruit and Veg is the first shopping zone when entering a store this is deliberate to create a positive health image of the store. The word or label “special” sparks a psychological process in our brain causing us to believe that whatever is on “special” is good and that we need it.

Essential items are placed towards the back of the store to encourage short-term shoppers to walk through and be tempted to buy other products along the way. Unplanned purchases account for a greater percentage of the total shopping bill for a short-term shop.

Products that have an emotional involvement or variety of choice causes confusion take a longer decision time increasing the shopping time. Due to the long decision time these products such as; baby food, pet food and soup choice, are placed in specific areas where the shopper will not feel hurried, rushed, crowded or getting in the way.

Basic colour psychology

Red = gets attention Green = freshness and health

Blue = trust Yellow/gold = hunger

Largest profit margins will be found at eye level. Ends of the isles are the most profitable, manufacturers often pay a premium to have their products placed there. Displays act as lures for customers to go further down the aisles.

**Source type: Online article**

#### shop?, W. (2019). *Supermarket sales tricks - shopping - CHOICE*. [online] CHOICE. Available at: https://www.choice.com.au/shopping/everyday-shopping/supermarkets/articles/supermarket-sales-tricks [Accessed 2 May 2019].

**Skills and capabilities developed**

This interview developed my ability to critically think about what areas I wanted to know more about and to come up with creative questions to obtain this information. It also developed my ability to approach and talk to individuals.

**Leads**

In the interview with Christopher Donkin he gave me a direct lead that he told to pursue, which was “integrated marketing communications”.

This lead has pointed my question in a slightly different direction which will allow me to answer my question to a greater extent.

**Key findings**

Louder music promotes longer shopping time for younger people as well as increased expenditure. Whereas older people had a reduced shopping time while still maintaining the same expenditure.

Classical music has been trailed in public areas in order to prevent young people from loitering. This trial has proved successful.

The music played must fit the setting and mood of a shop.

Not all music is good for getting people to spend more.

All stores try to create an image in the mind of the customers in order to increase the money and time they spend in store. this image is constructed in many spaces: online, mass media advertising and in the shop itself. If the music in this setting is wrong, then the picture is jumbled and doesn’t make sense and the brands image and message is lost decreasing the time and money spent.

Music with fast tempo will decrease the time spent instore whilst still maintaining the same profits.

Classical music generally effects only the upper-class people stimulating a more expensive taste, leading to increased expenditure. Although this can also provoke a sense of elitism causing a more expensive taste leading to increased expenditure, this typically works for people over 25 years old.

It is well known by psychologists that music can make you feel sad, happy, anxious, or anything else.

Movies use music extensively to manipulate the emotions very effectively. The same way that music is used in movies can be applied to stores to manipulate the consumers into a buying mood.

**Case studies**

<http://www.acrwebsite.org/search/view-conference-proceedings.aspx?Id=7467>

<http://www.acrwebsite.org/search/view-conference-proceedings.aspx?Id=7531>

[https://link.springer.com/article/10.1023/A:1015095508749](https://link.springer.com/article/10.1023/A%3A1015095508749)

<https://www.sciencedirect.com/science/article/pii/S0957417412002205>

<https://www.sciencedirect.com/science/article/pii/S0277953614001361>

<https://www.tandfonline.com/doi/abs/10.1300/J046v16n02_03>

<http://edepot.wur.nl/369091>

<http://www.graham-kendall.com/papers/bbkw2013.pdf>

<https://core.ac.uk/download/pdf/82728789.pdf>

<https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?referer=https://www.google.com.au/&httpsredir=1&article=1015&context=mkt_fac>

<https://www.semanticscholar.org/paper/An-exploratory-look-at-supermarket-shopping-paths-Larson-Bradlow/59e9f12557ad1860aeb8d642c2260035efa2152c>

[https://link.springer.com/article/10.1007%2FBF00994188](https://link.springer.com/article/10.1007/BF00994188)

**Secondary sources**

<https://feinternational.com/blog/marketing-psychology-9-strategies-influence-consumers/>

#### <https://www.helpscout.com/blog/psychology-of-color/>

<https://www.soundjack.com/blog/how-background-music-influences-shopping-behaviour/>

<http://smart-retailer.com/growyourbiz/displaydesign/putting-your-customers-in-a-buying-mood/>

<https://tribalinsight.wordpress.com/2008/08/19/supermarket-psychology/>

 <https://theconversation.com/the-science-that-makes-us-spend-more-in-supermarkets-and-feel-good-while-we-do-it-23857>

<https://digitalcollections.sit.edu/cgi/viewcontent.cgi?referer=https://www.google.com.au/&httpsredir=1&article=3623&context=isp_collection>

<https://concertblog.wordpress.com/2010/03/07/foreground-vs-background-music/>

<https://visual.ly/community/infographic/other/psychology-color>

<https://www.laurengreutman.com/save-more-money-in-the-grocery-store-by-paying-attention-to-product-placement/>

<https://www.realsimple.com/food-recipes/shopping-storing/more-shopping-storing/grocery-store-layout>

<https://www.choice.com.au/shopping/everyday-shopping/supermarkets/articles/supermarket-sales-tricks>

<http://www.stuff.co.nz/business/money/9489165/The-secrets-of-the-supermarket>

#### <http://blog.motivemetrics.com/The-Psychology-of-Music-Why-Music-Plays-a-Big-Role-in-What-You-Buy>

#### Journals

#### <http://freakonomics.com/media/Using%20Background%20Music%20to%20Affect%20the%20Behavior%20of%20Supermarket%20Shoppers.pdf>

 <http://www.usailighting.com/stuff/contentmgr/files/1/2f6fafec517a66b6c3857c06b2bffffc/misc/psychologycolormarketingbranding_entrepreneur.pdf>

<https://marketing.wharton.upenn.edu/wp-content/uploads/2016/10/the_location_effect_in_packaging_design.pdf>

<https://www.researchgate.net/publication/262291170_Effect_of_Product_Packaging_in_Consumer_Buying_Decision>

<https://journals.plos.org/plosone/article/figure?id=10.1371/journal.pone.0151915.g002>

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0151915>

**Library online article**

<https://onlinelibrary.wiley.com/doi/abs/10.1002/agr.20141>

**In-store experiment**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4807029/>

**Interviews**

Interview with Vijay Pugaell: Woolworths night produce manager and marketing analysist.

Interview with Christopher Donkins: professor of psychology at NSW University

**Skills developed (D3)**

Mar 20 2019 – During the process of interviewing Christopher Donkins I developed my critical and creative thinking. I did this through creating specific questions for Chris, analyzing and reflecting on what he said in order to create more creative questions to prompt the questions in certain directions.

Mar 29 2019 – I developed my critical and creative thinking through analyzing, synthesizing and evaluating information from various sources. Which were then condensed and displayed in a systematic review, in order to add more depth to my research.

Apr 10 2019 – towards the end of my folio I organized all my key findings into relevant sub-topics and highlighted them in different colors, in order to help with my outcome. This process developed my organization of information and ideas

I developed my numeracy skills when analyzing source

 <http://smart-retailer.com/growyourbiz/displaydesign/putting-your-customers-in-a-buying-mood/>

As I had to various calculations to work out the average percentage as well as the mean and variance of all the results.

I developed my critical and creative thinking by learning and applying new knowledge and skills including; how to analyses sources effectively, how to organize and run an interview, how to research and find reliable sources.

I improved my literacy skill while analyzing various scientific and marketing case studies and journals as they were written by experts of their fields the sources contained various terms that required looking up definitions to fully comprehend.

**Capabilities Developed (D4)**

**Social capabilities**

Nov 15 2018 – I developed my social awareness whilst choosing and researching my topic as I had to look out side of myself and my biases towards the topic and approach the question without letting any of my preconceived ideas affect my research.

Nov 22 2018 – I developed my social awareness and management during a practical information session run by Ari from the university of Adelaide. When I asked for his opinion on how to improve my research question and when I used the information to help develop my question further.

Mar 3 2019 – I developed my social awareness and established relationships within the community, when I went to Mitchum library and had to interact and develop a respectful relationship with the librarians in order to obtain one of my sources.

Mar 20 2019 – I developed my social awareness during my face to face interview with Christopher Donkin a professor of psychology at NSW university. As I had to conduct myself is a polite manner.

Which sources will you give the most weight to because they are the most reliable?

I will give the interviews the most weight, because they were all conducted at different times during my research project timeline, and this allowed me to confirm information from other secondary sources. Also, all of my interviews were conducted with specialists in their fields , which meant they were more reliable than just a random person on the street.

What conclusion or conclusions can be drawn from several or all of the sources?

I conclude that all my sources included in this folio, and in my cross-referencing, document are all reliable and they all present the same information. This was checked by specifically looking up different facts that seemed untrue and confirming all the secondary information with the marketing experts and psychologists that I talked to, to make sure that my folio and outcome were made up of correct information.

What information is common to several or all sources and what conclusion can be drawn from this evidence?

The information that that is common in all my primary research is that music interacts with age not gender in the supermarket context and that tempo and genre of music played affects the shop time and spending of customers.

 Colour of products affects customers perception of products and can lead to an increase in item purchased.

To what extent do all the sources resolve the various aspects of the question

The sources in on the folios final page have all helped me to resolve the three aspects of my question, and they allowed me to get a deeper knowledge on my topic.

**Systematic review of key findings within my various sources**

Key findings relating to colour

Key findings relating to product location

Key findings relating to music

Enticing food like sweets and chocolate biscuits on prominent displays.

Fruit and vegetables are placed at the front of the store as it tells the customers we are clean, green and fresh.

Bakery reinforces this sense of freshness and is located next to or behind the fruit and vegetable section

classical music led them to buy more expensive items. The implications of this result are discussed below.

90% of snap judgments are based of colour alone

Relationship between brands and colour hinges on the perceived appropriateness of the colour, Does the colour fit?

Make employees happier

Reduce employee turnover

Stimulate consumer purchasing

**Flow** was significantly slower with the slow tempo music (M1 mean =127.53 s)

fast tempo music (M2 mean= 108.93 s)

M1 had a slower traffic rate than M0 with a mean of 119.86 s

**Sales** impact between M1 and M2.

M1 mean per day =$16,740.23

M2 mean per day =$12,112.85

An average increase of $4,627.39 per day or a 38.2% increase in sales volume

Purchasing is influenced by the perceived personality of the brand ( no one would buy a Harley is they didn’t think it was cool and rugged

Ends of the isles are the most profitable.

the most profitable items are placed at eye level.

Bulk items or drab but necessary items are placed on the bottom of the shelves

Manufactures pay a “shelf allowance” to get a good spot on the shelves.

63% said that they either purchased more of probably purchased more in stores with background music playing while they shopped.

Another study of 200 patrons 77% said that they preferred background music when shopping,

67% said that background music made them feel as though management cared about their customers.

Most believed that they would stay instore longer when background music was playing.

Eastern Airlines employee turnover decreased 53% after the installation of a background music system.

keypunch operators productivity increased 18.6% and their errors decreased 37% because of the installation of background music system.

Fruit looks better in natural light whereas fish and meat look better under artificial light.

supermarket are typically painted in soft and bland colours. This is soothing for the customers and also ensures that there is no competition with the goods on the shelves.

loudness of music effected the length of shopping with loud music resulting in shorter shopping period whilst

soft music resulted in longer shopping times. Although the length of the shop changed, the overall sales were not affected my the volume of the music.

95% of consumers classified music with 72 beats or less at slow music, 94 beats per minute was considered fast music.

The temptation is to reward yourself for having finished a task

Customers will is weakened by the stress of the shopping experience

Likely to give in to kids nagging and indulge themselves a bit

Slower music = longer instore with greater purchasing

Loud music = quicker shop although not buying less

Classical music = made customers buy more expensive items

Hottest and most dinamic colours, red is activating stimulating, passionate, exciting, powerful and expanding.

Orange, not as overwhelming as red, balanced colour that is vibrant and energetic while being friendly and inviting.

Yellow, brightest and most energising of warm colours, yellow is happy warm stimulating and expansive.

Green, calming balancing, rejuvenating, represents stability and inspires possibility

Blue represents dependability trustworthiness, and security, also characterise calm and spirituality

Purple represents nobility abundance dignity also creativity and imagination

Black represents power elegance and modernity mysterious

Grey = neutrality, calm lack of energy

White = cleanness clarity hope openness sterility and simplicity

**Cross- referencing**

Throughout the entire research process, I cross-referenced between sources to find similar thoughts and facts between my sources, with the main points being the effect of product location, effect of music and the effect of colour. Throughout the systematic review I found a lot of information which was backed up by other journals. Another positive from the systematic review was that it provided many reliable sources which I used to cross reference other less reliable websites. Cross referencing will lead to more reliable information, which will lead to my outcome being more reliable and therefore useful.

**Skills and Capabilities developed**

 During the process of doing the systematic review I developed my critical and creative thinking, by accessing, organising, using, and evaluating information. In the systematic review I had to organise all my sources key findings, I then had to evaluate which key findings were to be used and how. Then finally using them in my systematic review to further my research and improve my outcome.

**Organisation of key findings**

During the research processes, I gathered a lot of information. However, it was important that I was able to cull all this information down so that it can be used in my outcome. To do this, I chose key topics from the information which were relevant to my question, and using highlighters, I was able to find all the information relating to my 3 specific sub topics; colour, product location and music. I was then able to summarise all this information into a concise summary which I will be able to use in my outcome. Organising my key findings in this way also aided me in finding cross references, as I didn’t have to read through all the information but just look for the common colours of the topic I was interested in.

**Capabilities developed / Reliability**

This source as it is only an online article and the author has limited qualifications on the topic it seemed as though this source was unreliable and should be discarded. I decided to cross check the information in this unreliable source with that of various reliable sources. The information in this source I found was completely accurate, it even has some new leads that I also checked to see if it was accurate and found that it was. This allowed me to develop my research further. During this process I developed my critical and creative thinking by analysing and cross checking various sources and evaluating the accuracy of the information.

**Key findings**

At the checkout last minute temptation are places to entice tired bored shoppers while they wait to be served

Essential items are placed at the back of the store to entice shoppers to buy other items along the way. Complimentary products are placed close by such at coffee and biscuits, this is to prompt you to buy both items. Right hand entrances encourage shoppers to travel anti-clockwise.

**Leads**

The use of right hand entrances to promote a counter-clockwise direction travel as a counter-clockwise shop on average spends more. -This adds another sub heading within product location, to be used in my outcome

More recent research presented in this article show that it is more efficient to have a small selection of essential products like bread and milk at the front of the store alongside other impulse products. With a more extensive selection at the back of the store. – adds a different perspective that can be explored to further my research

**Source type: Case study**

#### Reference : Yalch, R. and Spangenberg, E. (1993). Using Store Music For Retail Zoning: a Field Experiment. *ACR North American Advances*, [online] NA-20, p. Available at: http://www.acrwebsite.org/search/view-conference-proceedings.aspx?Id=7531 [Accessed 1 Feb. 2019].

**Reliability**

This source was written by two highly credible authors; Richard F Yalch, a psychologist and Eric Spangenberg a PHD psychologist. Both authors have occupations that relate to the topics discussed in the source making the information more reliable. The source however was written in 1993 just under 30 years ago making the information in this source probably unreliable today.

**Overall this source is highly unreliable and will not be relied upon without further conclusive evidence from other credible sources.**

**Skills and capabilities developed**

Internet sources taught me to think critically about the reliability and relevance of sources. A lot of my research came from the internet through journals and case studies found online. I learnt how to more effectively and efficiently take the information I had gathered, critically analyse is and then apply it in answering my question.

This particular source required certain key words and phrases in order to find relevant information regarding a sub-topic or my research.

**Key findings**

- Store music interacts with age but not gender

- Middle aged (25-49) people spent more and shopped longer while foreground music was playing.

- Shoppers over 50 shopped longer and purchased more when no music was playing

- Music is a key atmospheric factor that is able to differentiate a between different stores

- Music as an atmospheric factor is relatively inexpensive and able to be easily changed

- supermarket shoppers shopped longer, moved slower and purchased more when slow tempo music was played compared to fast tempo music

 - When background music was playing compared to no music shoppers were more likely to make a purchase (66.5% versus 41.5%)

- When background music was playing compared to no music shoppers were more likely to spend more ($56.40 versus $27.04)

- Older shoppers (50+) spent less money $13 and time 10.4 mins when listening to background music, compared to no music $20.5 and 12 mins

- Middle aged shoppers (25-49) spent more money $33 and time 12.3mins when listening to background music, compared to no music $25 and 11.3 mins

- The youngest shoppers (25 and under) spent more money $19.60 and time 12mins when listening to background music. Compared to no music $6.10 and 9 mins

**Leads**

Using the term “atmospheric factors” when researching will allow me to broaden the scope of my research with more sophisticated sources by using scientific language that will be contained in sources I am looking for.

Zachary Luke.

**Key findings**

Different genres of music can create various moods. A study conducted by Milliman Inc showed that when background music was playing consumer spent 34% longer, leading to an increase in sales. Another study found that familiar music had a negative effect on consumers causing them to become distracted and focus on the music, leading to a decrease in sales. Unfamiliar but pleasant music has a positive effect. Study found that classical background music increased the amount consumers are willing to spend.

Colours can affect our perception of time and products as well as influence our mood. Colours have different effects depending of culture.

Western colour chart

White- clean, neutral, youth, innocence

Red – danger, passion, excitement

Black – Power, death

Yellow – happy, friendly

Purple – royal, dignified, classy

Blue – relaxing, peaceful, loyal

**Source type: Web article**

#### Reference: Retailer, S. (2015).*Putting Your Customers in a Buying Mood*. [online] Smart-retailer.com. Available at: http://smart-retailer.com/growyourbiz/displaydesign/putting-your-customers-in-a-buying-mood/ [Accessed 5 Feb. 2019].

**Leads**

A lead gain from this source is the connections between genre of music and: time spent in store as well as sales. This lead is extremely helpful as it directly relates to the effect that music has on consumer spending, just at a smaller sub-topic level.

Another lead to follow up is how each colour effects the spending mood of customers, as it directly relates back to the question of how colour affects consumer spending

#### 2019].

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**Reliability**

The author of this source, **William J. Lynott, is a freelance journalist. He has no background in the psychology of marketing techniques, or any qualifications relating to the source. As the author is a journalist he would be heavily influenced by his bias. The information found in this source is very basic, and fairly vague. The source was published in 2015 so the information should be fairly up to date.**

**Overall this source is highly unreliable and will not be relied upon without further conclusive evidence from other credible sources.**

#### 2019].



**Source type: University marketing textbook**

**Reference:** MKTG3 / Charles W. Lamb, Joseph F. Hair, Carl McDaniel, Jane Summers, Michael Gardiner 2009 Cpt 4 pg 63

**Usefulness and limitations**

This source was useful as it provided an in-depth understanding on various marketing techniques with a sophisticated use of key terms.

The source was also limited in the amount of relevant information to my specific question, it only contained a few small paragraphs of which select sentences were of use to my research.

**Capabilities developed**

 My social capability was developed whilst finding and obtaining this source. I established relationships within the community amongst the librarians at Mitcham in order to communicate the type of books I was looking for.

This capability was also developed when I contacted the editor to gain permission to use this source in my research. As I had to develop a positive relationship with the editor through my emails in order to gain permission to cite this source.

**Reliability**

The university marketing textbook was written by 4 credibly authors including marketing professors and psychologists. The marketing text book was also revised and re-published in 2013. This source is extremely reliable as it has credible author and has recent information. Although as it is a text book utilised mainly by young adults, the text book author may be biased in the writing in order to make it more engaging and fun for students.

**Key findings**

An individual’s buying decisions are influenced by perception of product. Psychological influences can be affected by a person’s physical environment. Colour is a cue that plays a key role in consumer perception.

**Marketing Implications of perception**

For example, consumers will pay more for chocolate bars wrapped in expensive-looking-foil packages. But shiny labels on wine bottles signify expensive wines. Companies often find that the more expensive products sell better because consumers perceive them to be of a higher quality – this is often the case in relation to wine, where more expensive wines sell better than cheaper ones.