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What Makes a Good Label? The Effect of Wine Label Design on Product Evaluation and Purchasing Behaviour

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David Alexandre Jaud
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ABSTRACT

Companies spend billions annually on packaging and labelling, yet little is known about how and why specific features of package design influence consumer responses. This thesis identifies, across two projects, what wine label elements or themes should be used, where and when.

First, while the use of fantasy themes is increasing across product categories, it is unclear how consumers react to fantasy labels. Across five studies, the results unite seemingly contradicting theories predicting the effects of fantasy labels on product evaluation and purchasing behaviour by uncovering an important boundary condition: product quality signal, in line with the principle of hedonic dominance. The results suggest that for low quality products, fantasy labels backfire (consistent with research on metacognition). For products average in quality, fantasy and non-fantasy labels do not differ in their performance. Yet, in the presence of a high quality signal, fantasy labels impact product evaluation and purchasing behaviour positively. This positive effect is sequentially driven by the evocation of the imaginary and affect, in line with research on mental simulation.

Second, it is unclear to what extent elements of wine label design affect sales relative to other marketing mix effects. Specifically, we use wine transactional data for 127 SKUs across two liquor stores in New Zealand, covering 105 weeks. The findings suggest that some specific label elements have strong effects on sales. Specifically, extra text, as a quality cue, has the strongest positive effect. Overall, after price, the combination of image(s) and extra text has the strongest (negative) effect on sales. In line with research on processing fluency, this research also shows whether and when to use simple versus complex elements (typeface, label structure, mode of information). This thesis has important implications for wine companies and retailers.

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Chapter 1

INTRODUCTION

It is common wisdom that we should “not judge a book by its cover.” Yet, this phrase rarely applies to wine packaging and labels. For example, E. & J. Gallo Winery launched a new wine brand Dark Horse in 2015 and has mainly attributed its first-year commercial success (USD 61 million) to its package design in which the company spent a lot of effort (Nielsen, 2017). Wine.net, a wine specialist website, conducted a survey with 2,000 wine drinkers who saw, as only information, the picture of three bottles of red wine, then three bottles of white wine and were asked to choose their favourite wine among each set and what factors affected their choices. Unsurprisingly, 82% of the respondents mainly relied on the label to decide on their favourite wine. These striking examples highlight how important the package and label designs are.

A wine label needs to be noticed and stand out from competitors because 71% of the consumers make their wine purchase decision when they are in the store (Nielsen, 2017). Wine companies compete in a very cluttered retail environment with hundreds of bottles on the shelves. For example, over 3,500 new wines (14% of the whole wine category) were introduced in the US retail stores between mid-2016 and mid-2017 (Nielsen, 2017). Therefore, sticking the right wine label on a wine bottle is critical for wine companies to increase their sales. That is why companies invest big amounts of effort and money on packaging and labelling (Kerin, Hartley, & Rudelius, 2009).

Interestingly, elements of package design have become an important topic to examine in marketing academia (Bloch, 1995; Henderson & Cote, 1998; Krishna, Cian, & Aydinoğlu, 2017; Orth & Malkewitz, 2008). For example, Cian, Krishna, and Elder (2014) demonstrate when the positive effect of perceived dynamic (versus static) logo

design occurs. More specifically, research on wine package and labels has attracted academic attention in the marketing field. That is, in the last decade, several articles have been published in the top journals in Marketing such as *Journal of Marketing* (Orth & Malkewitz, 2008), *Journal of Consumer Research* (Labroo, Dhar, & Schwarz, 2008) or *Journal of Retailing* (Orth & Crouch, 2014; Orth & Malkewitz, 2012). For example, Labroo et al. (2008) examine the effect of unusual wine labels and show that semantic priming is a necessary condition to increase brand evaluation. As wine bottles are relatively homogeneous in design, the label is the key point of differentiation (Labroo et al., 2008; Machiels & Orth, 2017). Yet, there are no guidelines on what makes a good wine label. Specifically, little is known about what label elements influence product evaluation and purchases, particularly while controlling for the marketing mix (e.g. other product, pricing and promotion activities). Furthermore, we do not know about the strength of the effects of wine label elements relative to other marketing mix elements. Therefore, this thesis explores the effect of wine label design on product evaluation and purchasing behaviour. Further, to the best of our knowledge, there is no research that has examined the effect of unusual labels that stimulate the imagination on product evaluation and purchasing behaviour.

The goal of this thesis is to identify what types of label design elements help, backfire or make no difference. We, therefore, examine whether, when and why wine labels impact product evaluation and subsequent purchasing behaviour such as purchase intentions and actual purchase. Specifically, we investigate the boundary conditions (chapters 2 and 3) and underlying mechanisms (chapter 2) on when and why wine labels enhance, reduce or make no effect on purchasing behaviour. This chapter introduces the definition of the key concepts and the plan of the thesis.

1.1 Research questions and contributions

1.1.1 Problem statement

The main purpose of this thesis is to identify what factors should be used to make a good wine label. In this thesis, a good wine label is defined as a label that could increase purchase intentions and sales for bottles of wine. This point is critical for both academics and practitioners. Previous research highlights the importance of package design in affecting consumers' responses (Bloch, 1995) such as product evaluation and purchase intentions (Giese, Malkewitz, Orth, & Henderson, 2014; Labroo et al., 2008; Orth & Malkewitz, 2012). Furthermore, research on sensory marketing (see Krishna, 2012, for a review) demonstrates the importance of visual cues on influencing other senses such as taste or smell as well as product evaluation (Allison & Uhl, 1964; Brochet, 2001; Hoegg & Alba, 2007; Morrot, Brochet, & Dubourdieu, 2001; Shankar, Levitan, Prescott, & Spence, 2009). However, it is unclear what features of label design help, backfire or do not make any effect. Therefore, this thesis precisely investigates what specific elements or themes of label design have a positive or negative or no effect on consumers' responses such as perceived taste, purchase intentions, and actual purchases.

Hence, the main problem statement of this thesis is to examine:

Whether, when, how and why wine label design impact consumers' product evaluation and purchasing behaviour?

Specifically, the research questions of this thesis are:

RQ1: What elements of wine labels influence consumers' purchasing behaviour?

RQ2: Whether, when and why fantasy labels affect product evaluation and purchasing behaviour?

RQ3: To what extent do label design elements influence purchases relative to other marketing mix elements?

1.1.2 Contributions

This thesis makes important theoretical and managerial contributions to the field of marketing.

First, we contribute to the literature on package and label design (Giese et al., 2014; Krishna et al., 2017; Labroo et al., 2008; Nenkov & Scott, 2014; Orth & Malkewitz, 2008) by:

- Empirically identifying what elements of label design work or backfire and understanding better how those elements affect product evaluation and purchasing behaviour (Chapters 2 and 3).

- Investigating unusual labels that stimulate imagination (i.e., fantasy labels) and understanding the underlying mechanisms of why they affect purchase intentions. We also demonstrate when to use unusual labels or not and unite contradicting theories by determining which one applies; namely theories on *meta-cognitive processing* (Reber, Schwarz, & Winkielman, 2004; Winkielman, Halberstadt, Fazendeiro, & Catty, 2006), *mental simulation* (Belk & Costa, 1998; Martin, 2004) and *hedonic dominance* (Chitturi, Raghunathan, & Mahajan, 2007, 2008) (Chapter 2).

- Examining to what extent the wine label elements affect sales relative to other marketing mix elements (Chapter 3).

Second, we contribute to the literature on sensory perception (Hoegg & Alba, 2007; Krishna, 2012; Krishna & Schwarz, 2014). Namely, we demonstrate that products that employ fantasy themes taste better and are more likely to be purchased, but only in the presence of high quality cues (Chapter 2).

Third, we contribute to marketing research on processing fluency (Labroo et al., 2008; Labroo & Lee, 2006; Landwehr, Labroo, & Herrmann, 2011; Landwehr, Wentzel, & Herrmann, 2013; Lee & Labroo, 2004) by examining the effect of the label design elements. Specifically, we demonstrate that the low versus high complexity of the label design elements plays an important role in affecting sales; we also identify under what conditions the complexity of those elements helps or hurts (Chapter 3).

In addition to the three theoretical contributions, this thesis provides important managerial insights by identifying what specific elements of wine labels and moderating factors enhance purchase behaviour or backfire. Specifically, we identify, across our experiments and field studies, several indicators of quality that companies can realistically use to increase their sales. Also, we find, using actual retail sales, what elements of the label design increase or decrease sale volumes.

1.2 Definitions of key concepts of the thesis

1.2.1 Product evaluation and purchasing behaviour

According to Merriam-Webster online dictionary, evaluation is the “determination of the value, nature, character, or quality of something or someone”. In a marketing context, product evaluation is a process in which consumers assess and judge the quality and the value of a product based on prior knowledge or experience and intrinsic and extrinsic cues (Cian, Krishna, & Schwarz, 2015; Dodds, Monroe, & Grewal, 1991; Grewal, Krishnan, Naker, & Borin, 1998; Krishna, 2012, 2013). Specifically, when evaluating a product, people rely on intrinsic (sensory) cues such as visual, olfactory and gustatory inputs (Hoegg & Alba, 2007; Krishna, 2012) and/or extrinsic cues such as price, country of origin, awards, brand name and packaging (Dodds et al., 1991; Grewal et al., 1998; Leclerc, Schmitt, & Dubé, 1994; Melnyk, Giarratana, & Torres, 2014; Melnyk, Klein, &

Völckner, 2012). However, in many purchasing situations, consumers cannot evaluate the product based on intrinsic cues (e.g., smelling and tasting wine) and use instead the extrinsic cues as proxies to evaluate the product quality. In the situations where consumers could actually taste the wine, Veale and Quester (2009) demonstrate consumers still rely more on extrinsic cues (e.g., price) than intrinsic cues (such as tasting the wine) to evaluate its quality.

Specifically, we view product evaluation as the process in which expected taste, or taste as an intrinsic indicator of quality, and label design, awards, price, as extrinsic ones that are considered to make a final purchase decision. It is well established in the literature that purchasing behaviour (purchase intentions and/or actual purchases) is a function of product evaluation (Dodds et al., 1991; Grewal et al., 1998). This suggests that both concepts – product evaluation and purchasing behaviour – are closely related to each other.

The purchasing step is a part of the decision making process. According to the theory of planned behaviour (Ajzen, 1991, Ajzen & Driver, 1992), purchase intention depends on three elements: (1) attitude towards the behaviour, (2) subjective norm and (3) perceived behavioural control; and actual behaviour is a function of intention. Therefore, purchase intention is widely used to predict actual behaviour in the marketing literature, however these intentions do not always convert into actual purchasing behaviour (Chandon, Morwitz, & Reinartz, 2005; Morwitz, Johnson, & Schmittlein, 1993). Namely, consumers may be willing to buy a product but unable to actually buy it because for example the product is too expensive or not available or the decision has been reviewed for some reasons such as another similar product is on price discount that resets the evaluation.

In summary, in this thesis, product evaluation and purchasing behaviour includes measurements of expected taste, actual taste, perceived quality, and both purchase intention and actual purchases. Purchasing behaviour can be defined as the intention/plan to buy a product potentially followed by the act of buying it.

1.2.2 Wine label design

Visuals that include product design strongly impact consumers' responses (Bloch, 1995), particularly, packaging and labels which are powerful tools to influence consumers' product evaluation and subsequent behaviour (Krishna et al., 2017; Labroo et al., 2008). That is because people heavily rely on their vision which is recognised as our dominant sense (Hoegg & Alba, 2007; Krishna, 2012). In this thesis, the focus is on the wine labels that are at the front of wine bottles. That is because the front label is the first element of a wine package that consumers see in store and they cannot visually skip it while shopping. Also, consumers give greater weight to the front label than the back labels (Thomas & Pickering, 2003) because the front label provides the most important information (Gluckman, 1990).

A wine label is part of a wine packaging that also includes the bottle, enclosure, and back label (Orth & Malkewitz, 2008). Specifically, we can define a wine label as an adhesive piece (or multiple pieces) of paper or made of other materials on which visual information is manufactural or digitally printed such as colours, words and images. In line with Orth and Malkewitz (2008), we define and describe the main elements of wine label design as below:

- “*Label fragmentation*” (Orth & Malkewitz, 2008, p. 69): we describe a fragmented or compound label as containing at least two parts (e.g., a compound label with an image on

one label and the wine varietal on another label) whereas a unified label only contains a single part.

- *Images*: we define images included in a label as pictorial logos and/or visual representations of critters/animals, characters, landscape, plants or any man-made constructions. This element includes both realistic and abstract images. Finally, these images can be simple or complex depending on the amount of details (visually complex) or abstractness (conceptually complex) (Miceli, Scopelliti, Raimondo, & Donato, 2014; Pieters, Wedel, & Batra, 2010).
- *Extra-text*: the use of words to describe additional information about the wine or vineyard other than the brand name, varietal, vintage, bottle quantity size and region/country of origin. For example, these extra words can relate to storytelling (story of the wine producing family) or to specific winemaking techniques.
- *Typeface*: an element of typography which McCarthy and Mothersbaugh (2002) define as: “Typeface characteristics deal with factors that affect the appearance of the actual letterforms and include style, size, x-height, weight, slant, stress, color...” (p. 665). Drawing from Henderson et al. (2004), we focus on the typeface of the brand name that has either low elaborateness (i.e., plain, not distinctive, machine-made) or high elaborateness (i.e., ornate, distinctive, man-made).
- *Colour of the label background*: in this thesis, the colour of the label background is defined as the colour that spatially dominates the surface of the (unified or compound) label.

The front label typically contains the main information about the wine such as vintage, grape variety, brand/family/vineyard name, country or region of origin. The wine label and the information cues present on it are critical elements to influence consumers in their

wine purchasing decision because those elements help consumers to evaluate the quality of the wine (Lick, König, Kpossa, & Buller, 2017, Thomas & Pickering, 2003).

1.3 Outline of the thesis

This thesis examines the research questions across two research papers that are respectively depicted in chapters 2 and 3. The first paper (Chapter 2) investigates the effects of fantasy labels on product evaluation and purchasing behaviour. To do so, we follow a mixed-method approach; namely, this chapter includes two online experimental studies, two field experimental studies and one analysis of retail sales data. The article from this chapter is in the second round (revise and resubmit) of *Journal of Consumer Psychology* (A journal in ABDC list, FT50, Impact Factor (I.F.) 2016: 3.385). This paper has also been presented at the following international conferences: *Australian and New Zealand Marketing Academy (ANZMAC)*, *Academy of Wine Business Research (AWBR)* and *European Marketing Academy (EMAC)*. The second paper (Chapter 3) examines the effect of wine label elements on actual retail sales while controlling for the 4 Ps of the marketing mix and environmental factors. Using data from a New Zealand retailer, we analyse 127 wine SKUs over a 105-week period across two stores. This paper is under preparation for submission to *Journal of Retailing* (A* journal in ABDC list, I.F. 2016: 3.772). Finally, the last chapter of this thesis (Chapter 4) presents the main conclusions and managerial implications as well as the limitations and future research.

Chapter 2

A UNICORN ON PACKAGE DESIGN? EFFECTS OF FANTASY THEMES ON WINE LABEL PROCESSING AND PURCHASING BEHAVIOUR

2.1 Introduction

To what extent can our visual imagination determine what we taste? In an informative study, 54 wine experts tasted two glasses of identical white wine (one of these was red-coloured with taste-neutral food colouring). Surprisingly, most of the 54 experts were not able to recognise that the 'red-coloured wine' was, in fact, white wine (Brochet, 2001; Morrot et al., 2001). Similarly, in another study, people perceived the chocolate intensity of brown M&Ms as stronger than that of green ones, which is again surprising because both the brown and green M&Ms had the same flavours (Shankar et al., 2009). Hence, people (even experts) struggle to differentiate accurately by taste, as other senses (particularly vision) interfere with their perception. Managers are well aware of this effect and invest heavily into product labels, providing pictorial and/or textual/word information to influence taste perception, brand impressions and consequent purchase intentions (Lee, Shimizu, Kniffin, & Wansink, 2013; Orth & Malkewitz, 2008, 2012). For example, in the US market alone, companies spend more than \$120 billion annually for packaging and labelling (Kerin et al., 2009), with particular emphasis on unusual visual designs that engage consumers' imagination (Nenkov & Scott, 2014; Zhao, Hoeffler, & Dahl, 2009). Interestingly, in a survey conducted by Wine.net, 2,000 wine drinkers were asked to select their favourite wine based on the picture of three bottles of white wine (as the only information presented), and the winner was "True Myth," a bottle of wine with a fantasy label.

The use of fantasy themes is a current fast-growing trend that is spreading among many product categories seeded by the movie business (e.g., board games, books, fragrances, beers). For example, the Californian wine company Vintage Wine Estates and the television company HBO have released a range of *Game of Thrones* wines in March 2017 (Wine Industry Advisor, 2017). This set of ‘fantasy wines’ includes a red blend and premium Cabernet Sauvignon sold at USD 19.99 and USD 49.99 respectively (see <http://www.gameofthroneswines.com/>). Similarly, Ommegang, an American brewery, has launched a range of *Game of Thrones* beers, with labels referencing the main characters and creatures such as dragons (see <http://www.ommegang.com/> for some examples). This anecdotal evidence emphasizes the current popularity of packaging using fantasy themes. Yet, although designs that stimulate imagination appear to be an increasingly popular choice for practitioners, consumers’ reactions to fantasy labels remain a mystery.

The effect of fantasy labels on purchase intentions is thus not clear *a priori*. On the one hand, unusual visuals are relatively harder to process because they require more cognitive effort (Labroo et al., 2008; Reber et al., 2004; Winkielman et al., 2006), and thus should lower product evaluation. On the other hand, consumers may enjoy processing visuals that engage the imagination (Hirschman & Holbrook, 1982; Holbrook & Hirschman, 1982). Finally, the principle of hedonic dominance further proposes that people tend to make more affective evaluation once their functional requirements are satisfied (Chitturi et al., 2007, 2008). This suggests that unusual visual designs (e.g., fantasy labels) may be affectively processed and enjoyed but only when the quality cut-offs of the product are met.

The goal of this paper is two-fold. First, in one online experiment (Study 1), we explore the direction of the fantasy effect, as it is unclear from the literature whether fantasy labels negatively or positively influence product evaluation (i.e., taste) and purchase behaviour.

Second, across another online experiment (Study 2), two field studies (Studies 3-4) and a study using actual retailing sales data (Study 5), we investigate when and why fantasy labels affect consumers' product evaluation and actual purchase using both real labels (Study 5) and fictitious labels (Studies 1-4). Based on these findings, we provide an extensive theoretical discussion of the principle of hedonic dominance and demonstrate that the presence of quality signals are a necessary boundary condition of the positive fantasy effect (Studies 2-5). We also show that the effect of fantasy labels on purchase intentions is sequentially driven by the evocation of the imaginary and positive affect (Study 2).

Across five studies, the framework unites seemingly contradicting theories and uncovers when and why fantasy labels impact product evaluation and purchase behaviour. The current research makes two important contributions. First, to the best of knowledge, this paper is the first to examine the effects of fantasy labels; hence, we contribute to the literature on unusual designs that stimulate imagination (Labroo et al., 2008; Landwehr et al., 2013; Nenkov & Scott, 2014; Winkielman et al., 2006). Namely, consistent with the principle of hedonic dominance, we suggest when to use fantasy themes to increase product evaluation and purchase behaviour. We also demonstrate the extent to which the evocation of the imaginary and affective processing mediate the positive effect of fantasy labels on purchase intentions is conditional on the presence of quality signals. Second, this research also speaks to the literature on sensory perception (Krishna, 2012; Krishna & Schwarz, 2014) by demonstrating that visuals using fantasy themes can enhance taste perceptions (in the presence of quality signals). The findings have actionable implications for managers who consider integrating unusual visuals such as fantasy elements into their product packaging or labels.

2.2 Theoretical background

2.2.1 Fantasy labels

Fantasy is defined as a fiction or epic genre that contains imaginative or magical features such as mystical and mythological creatures or legendary heroes living in an unreal world (Campbell, 2016; Stableford, 2005). Based on this generic definition, we define fantasy labels as those that engage imagination by including words or images of imaginative creatures, an unreal world, or other fantasy related legends or fairytales. Prior research shows that fantasy stimulates the imagination and daydreaming (Belk & Costa, 1998; Kozinets, 2001; Martin, 2004), which, in turn, elicits experiences of freedom and joy (Zhao et al., 2009). Specifically, the literature suggests that fantasy themes allow people to mentally create a more pleasant and enjoyable alternative world (Belk & Costa, 1998; Kozinets, 2001; Kozinets et al., 2004; Martin, 2004; Seregina, 2014) because the "fantastic imaginary" (Martin, 2004) enables people to freely construct their own thoughts (Kozinets et al., 2004; Schlosser, 2003; St. James, Handelman, & Taylor, 2011).

2.2.2 Effects of visual cues on taste perception and subsequent behaviour

There is ample evidence in the literature that visual cues dominate other sensory cues and that the interpretation of taste inputs is highly susceptible to visual information (Hoegg & Alba, 2007; Krishna, 2012, 2013). That is because taste is an ambiguous sense and relies not only on its sensory input (namely the tongue) but also on other sensory cues (Elder & Krishna, 2010). For example, Hoegg and Alba (2007) conducted a series of experiments where the colour of orange juice (natural vs. darker) and its taste were manipulated. They found that participants rated two identical orange juices with different colours as tasting more differently than two different orange juices that were identical in colour. In a similar vein, Lee, Frederick, and Ariely (2006) found that providing information about beer

ingredients before tasting (versus after or no information) influences people's preferences. Specifically, telling participants prior to tasting two different beers that some balsamic vinegar was added to one of the two beers leads to a lower preference for the adulterated beer (30%); conversely disclosing this information after the tasting or telling participants nothing leads to a higher preference for the same adulterated beer versus the other tasted beer (52% and 59% respectively). Research also shows that a favourable or strong brand name increases quality perception and subsequent purchase intentions (Dodds et al., 1991; Grewal et al., 1998). However, it is unclear how people perceive the taste of products that employ unusual visual designs such as fantasy labels.

2.2.3 Meta-cognitive processing versus mental simulation

Two established streams of research allow making opposite predictions on whether fantasy labels help or hurt consumers' product evaluation and purchase behaviour. The first stream on *meta-cognitive* processing would suggest that unusual visuals (e.g., fantasy labels) are harder to process because they deviate from the content people are used to processing in their daily routine, and this results into a hedonically negative experience (Reber et al., 2004; Winkielman et al., 2006). People are, however, usually unwilling to invest extensive cognitive effort (Song & Schwarz, 2008); instead, they prefer smooth and easy processing of familiar content or stimuli that can be integrated into existing knowledge structures (Bloch, 1995; Veryzer & Hutchinson, 1998; Ward, 1994). Accordingly, visual complexity was shown to lower processing fluency and perceived package attractiveness (Orth & Crouch, 2014). Therefore, this stream would suggest that unusual visual design elements are likely to decrease product evaluation and purchase behaviour (Landwehr et al., 2011).

The second stream of research on *mental simulation* would suggest that fantasy labels are likely to increase product evaluation by facilitating the mental construction of positive

imagery and by activating positive affect (Escalas, 2004; Zhao, Hoeffler, & Zauberan, 2011). This is because consumers would enjoy processing visuals that ignite the imagination (Hirschman & Holbrook, 1982; Holbrook & Hirschman, 1982). Specifically, imagery-based products enable consumers to live an emotional experience (Holbrook & Hirschman, 1982; Hung & Wyer, 2011; MacInnis & Price, 1987) and facilitate the generation of mental images (Belk & Costa, 1998; Martin, 2004). Hence, this stream would suggest that fantasy labels should increase product evaluation and purchase behaviour.

2.2.4 The principle of hedonic dominance: A boundary condition

The principle of hedonic dominance suggests an important boundary condition on when affect can influence product evaluation at the first place. Specifically, it predicts that the fulfillment of consumers' functional requirements is a necessary prerequisite for affective characteristics to enter and dominate consumers' purchasing decisions (Chitturi, Raghunathan, & Mahajan, 2007; 2008). That is, consumers give greater weight to hedonic attributes or affective considerations when they take the primary functional attributes for granted. That is because people tend to avoid losses (e.g., poor product quality), and quality signals are a way to reduce the perceived risk of experiencing a loss (Landwehr, Wentzel, & Herrmann, 2012). Although fantasy labels may generate positive affect, consumers are also likely to consider indicators of functionality (e.g., from the packaging) that influence quality judgments of the product (Page & Herr, 2002).

Therefore, if the quality cut-offs are not met, hedonic aspects of the label will not enter consumers' decision making. However, the low fluency associated with the processing of fantasy labels may further decrease product evaluation (Wänke, Bohner, & Jurkowitsch, 1997). And consumers are likely to avoid such visually unusual products (Noseworthy &

Trudel, 2011). In contrast, once the quality cut-offs are met, purchase intentions are likely to be enhanced by the hedonic evaluation of fantasy labels (Chitturi et al., 2007; 2008).

H₁: In the presence of a high quality signal (vs. low or none), fantasy (vs. non-fantasy) labels enhance product evaluation and purchase intentions.

An interesting consequence of the principle of hedonic dominance is that the product's price should be of special importance for the success of fantasy labels because consumers often perceive a higher price as an indicator of product quality (Dawar & Parker, 1994; Dodds et al., 1991). For example, Dodds et al. (1991) showed that higher prices reflect better quality but still decrease purchases because consumers set their own price limit and may not afford to buy an upmarket product. However, since the price can act as a quality signal, the positive affect elicited by the use of fantasy labels may become the dominant decision criterion that reduces that impact of the more cognitive considerations about price limits. Moreover, the use of a distinctive packaging can be a way to justify a premium (or above average) price and differentiate a product from others within the same product category (Steenkamp, Van Heerde, & Geyskens, 2010). Therefore, fantasy labels may play an important role in consumers' price sensitivity for products that are sold above the average price point of the product category.

H₂: In the presence of an above-average (versus average versus below-average) price as a quality signal, fantasy (vs. non-fantasy) labels decrease consumers' price sensitivity.

2.2.5 Evocation of the imaginary and positive affect: The underlying mechanisms

There is evidence that people enjoy constructing imagery (Zhao et al., 2009). This is because mental imagery allows people to 'transport' themselves from reality to an imaginary world (Green & Brock, 2000; Van Laer, De Ruyter, Visconti, & Wetzels, 2014). A higher level of transportation (e.g., towards an imaginary world) elicits a higher

amount of positive affective responses (Escalas, 2004). Specifically, the creation of such an unreal world is a way of escaping from reality and generating positive emotions by processing fantasy information (Holbrook & Hirschman, 1982; Kozinets et al., 2004). As a result, such mental simulation enable for instance consumers to enjoy processing the product's benefits (Nenkov & Scott, 2014; Zhao et al., 2011) and increase purchase responses (Schlosser, 2003).

Consistently, research shows that positive affective reactions increase product evaluation (Chang & Tuan Pham, 2013; Herr, Page, Pfeiffer, & Davis, 2012; Puccinelli et al., 2009; Shiv & Fedorikhin, 1999). Therefore, subsequently generated emotions (e.g., happiness) strongly influence consumer responses (Mogilner, Aaker, & Kamvar, 2012) and emotional product attachment leads to higher purchase intentions (Fuchs, Schreier, & Van Osselaer, 2015; Norton, Mochon, & Ariely, 2012).

H₃: The conditional positive effect of fantasy labels (proposed in H₁) is serially mediated by the evocation of the imaginary and positive affect.

2.3 Study 1: Online experiment

2.3.1 Method

Design and Stimuli. Study 1 had a 2 (label design: fantasy vs. non-fantasy) × 3 (mode of information: picture–brand name congruence vs. picture–brand name incongruence vs. text only) between-subjects design. *Fantasy* was manipulated by showing a fantasy label with a picture of a fantasy animal (i.e., a dragon or pegasus) and/or a fantasy brand name (i.e., Dragon Estate), whereas non-fantasy labels had a real animal (a falcon or heron) and/or an animal brand name (Falcon Estate). Visual representation of the information was manipulated by showing either picture–brand name congruence (dragon picture and Dragon Estate or falcon picture and Falcon Estate) or incongruence (pegasus picture and

Dragon Estate or heron picture and Falcon Estate), or brand name/text information only (Dragon Estate or Falcon Estate). The purpose of manipulating the mode of information was to cover the whole spectrum of how fantasy themes could realistically appear on the label. For example, previous literature suggests that congruence helps visual information processing (Cian et al., 2014). Similarly, McCracken, and Macklin (1998) showed that congruent associations between picture and brand name (visual) cues lead to easier information processing.

Fictitious wine labels (see Figure 1) were created using Adobe Illustrator CC 2014 and Adobe Photoshop CC 2014. Six simple wine labels were produced and included: silhouettes of (1) a dragon, (2) a pegasus, (3) a falcon, or (4) a heron plus two text-only versions: (5) Dragon Estate or (6) Falcon Estate. The brand names were also present on Labels (1)–(4). To make the labels look more realistic, a year (2010) and the description "Single Vineyard Wines, Limited Editions Red" were put on all labels independent of the condition.

Procedure and Sample. Participants were contacted online using the Qualtrics Online Survey tool in New Zealand. Participants under 18 years old were not allowed to complete the survey for ethical reasons. Data were collected using a snowball sampling via Facebook and emails. Participants received an invitation to take part in a 10-minute online survey. Participants were randomly assigned to one of the six conditions. The initial sample consisted of 271 participants. We excluded 34 participants because they cancelled the study. The final sample consisted of 237 respondents (68.8% female; $Mod_{age} = 35-44$).

Figure 1: Study 1 stimuli



Dependent variables. While looking at the label, participants were asked to indicate on a seven-point scale their *label liking* “How much do you like this wine label?” (1 = dislike very much; 7 = like very much; adapted from Lee & Labroo (2004)). Next, participants rated their *purchase intentions* on a seven-point scale “How likely are you to buy a bottle of wine with this label?” (1 = very unlikely to buy; 7 = very likely to buy, adapted from Landwehr et al. (2012)). Participants next indicated their *willingness to pay* using a sliding scale from 0 to 100 labelled in NZ\$ (“How much would you be willing to pay for a bottle of wine with this label?”, adapted from Jia, Shiv, and Rao (2014)).

Mediating variables. Next, we measured the *evocation of the imaginary* of the label on a seven-point scale by asking participants: “To what extent does this wine label evoke the imaginary?” (1 = not at all; 7 = very much, adapted from Martin (2004)).

Control variables. We controlled for the *expected taste* as an alternative driver for consumers' responses. We asked participants to report their expected taste ("What would you expect the overall taste of this wine to be?" 1 = very poor taste; 7 = very good taste, adapted from Elder and Krishna (2010)). We also measured some additional control scales that are not further discussed in this chapter, but they can be found in detail in Appendix 1.

2.3.2 Manipulation checks

Fantasy: To test whether the labels differed significantly in their perceived fantasy content, participants answered the question "How much fantasy does this label contain?" (on a seven-point scale: 1 = not at all; 7 = very much). As expected, the results of an independent samples *t*-test showed that participants perceived the amount of fantasy to be higher in the fantasy conditions ($M_{\text{fantasy}} = 4.02$, $SD = 1.97$) than in the non-fantasy conditions ($M_{\text{non fantasy}} = 2.88$, $SD = 1.78$, $t(235) = -4.62$, $p < .001$).

*Picture–brand name congruence*¹. We tested the mode of information of the wine labels (picture–brand congruence versus incongruence). Participants indicated the extent to which the picture and the brand name conveyed the same meaning on a seven-point scale (1 = completely different meanings; 7 = the same meaning), adapted from Houston, Childers, and Heckler (1987). The results revealed that participants rated the congruence of meaning to be higher in the congruent conditions ($M_{\text{congruence}} = 5.38$, $SD = 1.55$) than in the incongruent conditions ($M_{\text{incongruence}} = 2.52$, $SD = 1.85$; $t(151) = -10.39$, $p < .001$). Hence the manipulations of fantasy and picture-brand name congruence were successful.

¹ We only consider the four conditions in which the brand name and the picture appear for this analysis.

2.3.3 Results

The correlation table can be found in Appendix 2.

Dependent variables. We conducted a 2 (label design: fantasy vs. non-fantasy) \times 3 (mode of information: picture–brand name congruence vs. picture–brand name incongruence vs. text only) multivariate ANOVA with *label liking*, *purchase intentions*, and *willingness to pay* as the dependent variables. First, the results revealed an insignificant effect of fantasy across all three dependent variables ($ps > .22$). Second, the effect of the mode of information was significant on *label liking* and *purchase intentions* ($ps < .01$), where the picture–brand name congruence conditions worked best, but not on *willingness to pay* ($p > .10$). Third, there was no significant interaction between fantasy and mode of information across all three dependent variables ($ps > .82$).

The results of Study 1 indicate that when the general style of the wine label is kept constant, there is no difference between fantasy and non-fantasy labels. To better understand why there is no difference between fantasy and non-fantasy labels, we decided to explore the two congruent conditions more deeply. That is because these two conditions represent labels more commonly used in the marketplace. Therefore, the following analyses are limited to the two picture–brand name congruence conditions ($N = 80$).

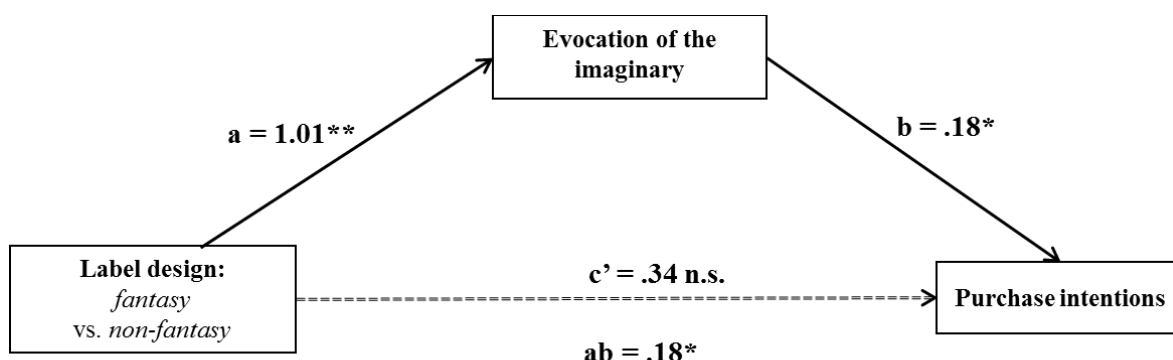
Exploratory sub-sample analysis of the congruent conditions only

Purchase intentions. We conducted an analysis of covariance (ANCOVA) with fantasy as the independent variable, *purchase intentions* as the dependent variable and *expected taste* as a covariate (*expected taste* is not affected by the experimental manipulation of fantasy ($p > .45$), which fulfils a key assumption of ANCOVA). The results revealed a significant effect of fantasy on purchase intentions ($p < .05$). Follow-up results indicated

that participants were more willing to buy a bottle of wine with a fantasy label ($M_{\text{fantasy}} = 3.63$, standard error (SE) = .17) than one with a non-fantasy label ($M_{\text{non fantasy}} = 3.10$, SE = .19, $F(1, 77) = 4.47$, $p < .05$). The main effect of the covariate expected taste was also significant ($F(1, 77) = 114.32$, $p < .001$). These results suggest that expected taste may be a necessary pre-condition that needs to be controlled for to allow for a relationship between fantasy and purchase intentions.

Simple mediation. To shed some light on the underlying process responsible for the effect of fantasy (vs. non-fantasy) on purchase intentions, we tested a simple mediation model (see Figure 2 and Table 1) using a bias-corrected bootstrap procedure (Hayes, 2013; Model 4, $N = 5,000$ resamples) with fantasy as the independent variable, the evocation of the imaginary as the mediating variable, expected taste as the control variable, and purchase intentions as the dependent variable. The results indicated that, in the indirect path, fantasy (vs. non-fantasy) increased the evocation of the imaginary ($a = 1.01$, $SE = .33$, $p < .01$), and holding constant fantasy and expected taste, a greater evocation of the imaginary enhanced purchase intentions ($b = .18$, $SE = .08$, $p < .05$). The effects of expected taste on the evocation of the imaginary and purchase intentions were positive and significant ($Bs = .47$ ($SE = .11$) and $.83$ ($SE = .09$), respectively, $ps < .001$). Most importantly, the indirect effect of fantasy on purchase intentions through the evocation of the imaginary was positive and significant ($a \times b = 0.18$; $SE = .10$), with the 95% confidence interval (CI) excluding 0 (LLCI = .034, ULCI = .464). The direct (c' path) effect of fantasy was not significant ($c' = .34$, $SE = .26$, $p > .18$), indicating indirect-only mediation (Zhao, Lynch, & Chen, 2010). The total effect of fantasy on purchase intentions is significant and positive ($c = .53$, $SE = .25$ ($c = c' + ab$), $p < .05$). These results suggest that evocation of the imaginary may be a potential process variable that is triggered by fantasy labels.

Figure 2: Simple mediation model of fantasy on purchase intentions for Study 1

* $p < .05$.** $p < .01$.*** $p < .001$.

Notes: Unstandardised coefficients are presented.

The non-fantasy condition is the baseline condition (non-fantasy = 0; fantasy = 1).

Table 1: Model summary for the effect of fantasy (vs. non-fantasy) labels on purchase intentions through evocation of the imaginary (Study 1)

Antecedent	Evocation of the imaginary	Purchase intentions
Fantasy	$a = 1.01^{**}$ (.33)	$c' = .34$ (.26)
Evocation of the imaginary	—	$b = .18^*$ (.08)
Expected taste	$.47^{***}$ (.11)	$.83^{***}$ (.09)
Constant	1.32^* (.54)	$-.90^*$ (.41)
	$R^2 = .245$	$R^2 = .624$
	$F(2, 77) = 12.48$	$F(3, 76) = 41.98$
	$p < .001$	$p < .001$

* $p < .05$.** $p < .01$.*** $p < .001$.

Notes: Unstandardised coefficients are presented with standard errors in parentheses.

The non-fantasy condition is the baseline condition (non-fantasy = 0; fantasy = 1).

2.3.4 Discussion

The results of Study 1 suggest that there is no difference between fantasy and non-fantasy labels when the general style of the label is kept constant. An exploratory examination of the labels with congruence between the picture and the brand name shows that fantasy labels may be superior when controlling for expected taste. This variable seems to be crucial for making the fantasy label effect appear. Furthermore, a mediation analysis suggests that the positive effect of the fantasy label may be caused by an evocation of the

imaginary. However, because we did not manipulate fantasy and expected taste independently in Study 1, we were not able to examine the interplay of these two variables in more detail, which is the aim of Study 2. Specifically, in Study 2, we directly manipulate quality signal by using objective criteria (i.e., Robert Parker rating points) to reflect the level of expertise of the wine producer and wine quality.

2.4 Study 2: Online experiment

Based on the findings of Study 1, the goal of Study 2 is to shed light on when (i.e., a test of moderation) and why (i.e., test of mediation) fantasy labels (versus non-fantasy labels) impact purchase intentions. Specifically, with respect to the moderator, we predict that fantasy labels will only positively influence purchase intentions when a quality signal is present (i.e., the principle of hedonic dominance). With respect to the mediating process, we expect that the effect of fantasy (vs. non-fantasy) labels on purchase intentions is serially mediated by i) the evocation of the imaginary and ii) positive affect.

2.4.1 Method

Stimulus development. The study had a 2 (label design: fantasy vs. non-fantasy) \times 3 (quality signal: no vs. low vs. high expert ratings) between-subjects design (see Figure 3). *Fantasy* was manipulated by showing a fantasy label with a picture of a fantasy animal (i.e., a unicorn) and a fantasy-evoked brand name (i.e., Mystery Estate), whereas non-fantasy labels had a real animal (i.e., a horse) and a non-fantasy-evoked brand name (i.e., Mastery Estate). *The quality signal* was manipulated by using a 100-point scale from the specialist wine magazine *Wine Advocate* (established by the international wine expert Robert Parker and commonly used in the US wine market) and showing either no rating as no indication of quality (control groups), 71 points as mediocre quality, or 94 points as high quality. Below the wine rating indications, the Wine Advocate Rating System was provided (including the range of relevant values). Two fictitious wine labels were created

using Adobe Illustrator CC 2014 and Adobe Photoshop CC 2014. The additional information on the label was kept constant across all conditions, namely “2010” as the vintage, “Barossa Valley” as the wine region, “Australia” as the country of origin, and “Cabernet Sauvignon” as the type of grape.

Sample and procedure. A sample of 269 adults from across the US was recruited through Amazon Mechanical Turk (MTurk) to participate in this online experiment in exchange for 40 cents. The MTurk invitation specified participants to be aged 21 years old or over as a condition of taking part in this online experiment. Participants were randomly assigned to one of the six conditions. We excluded 28 participants because they cancelled the study. Therefore, the final sample consisted of 241 respondents ($M_{\text{age}} = 33.46$, 38.6% female).

Dependent and process variables. After the participants saw the label (either fantasy or non-fantasy) and its related expert rating (only for mediocre versus high-quality signal conditions), they indicated their *purchase intentions* on a seven-point scale in the same way as in the previous study. Participants were then asked, as mediating measures for the *evocation of the imaginary* and *affect*, to indicate “To what extent does this wine label evoke the imaginary?” (1 = not at all; 7 = very much, adapted from Martin (2004)), and to what extent they agreed with the following statement: “Looking at this wine label makes me happy” (1 = strongly disagree; 7 = strongly agree, adapted from Mogilner et al. (2012)). We also measured some additional control scales that are not discussed further in this chapter, but they can be found in detail in Appendix 3.

Figure 3: Study 2 stimuli



2.4.2 Manipulation checks

Fantasy. To test whether the labels differed significantly on fantasy (vs. non-fantasy) themes, participants answered the question "How much fantasy does this label contain?"

(1 = not at all; 7= very much). As intended, participants perceived the amount of fantasy to be higher in the fantasy conditions ($M_{\text{fantasy}} = 5.51$, $SD = 1.39$) than in the non-fantasy conditions ($M_{\text{non fantasy}} = 3.92$, $SD = 1.81$, $t(228.52) = -7.66$, $p < .001$).

Quality signal. Participants rated the perceived quality of the wine (“This wine appears to be of...” (1 = very poor quality; 7 = very good quality, adapted from Petroschius and Monroe (1987)). As intended, participants perceived the wine quality to be higher in the high quality conditions ($M_{\text{high}} = 5.95$, $SD = .72$) than in the mediocre quality conditions ($M_{\text{mediocre}} = 4.26$, $SD = 1.03$, $t(143.02) = -12.00$, $p < .001$). Hence the manipulations of fantasy and quality signals were successful.

2.4.3 Results

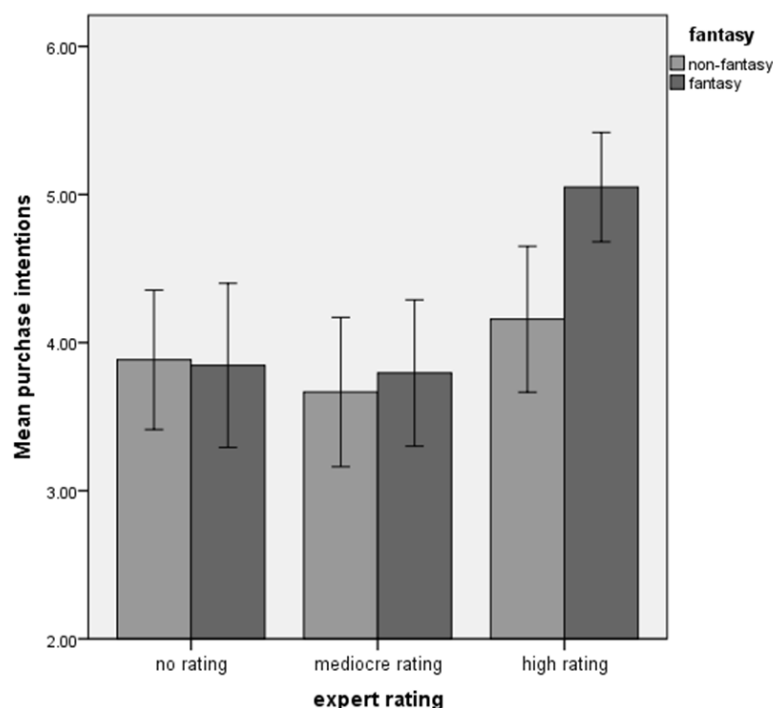
Given the theorising based on the principle of hedonic dominance, we predict that a positive effect of fantasy labels will only occur when a high-quality signal is present.

The correlation table can be found in Appendix 4.

Purchase intentions. A 2 (label design: fantasy vs. non-fantasy) \times 3 (quality signal: no expert rating vs. a mediocre expert rating vs. a high expert rating) between-participants ANOVA was conducted with *purchase intentions* as the dependent variable. The results first revealed that the main effect of fantasy was marginally significant ($F(1, 235) = 2.81$, $p < .10$). Second, the main effect of the quality signal was significant ($F(2, 235) = 7.60$, $p < .001$). Third, we found a weak indication (i.e., near significance) of an interaction between fantasy and quality ($F(2, 235) = 2.12$, $p = .12$). To get a better impression of the pattern of results, we further examined, as follow-up tests, simple effects of fantasy (vs. non-fantasy) for each level of quality signal (see Figure 4). As expected, this revealed a significant effect of fantasy (vs. non-fantasy) on purchase intentions in the high-quality conditions ($F(1, 235) = 6.75$, $p < .01$); but not in the case of either mediocre quality or no

quality information conditions ($ps > .70$). Specifically, participants in the high-quality conditions were more willing to buy Mystery Estate ($M_{\text{fantasy} \times \text{high rating}} = 5.05$, $SD = 1.15$) than Mastery Estate ($M_{\text{non fantasy} \times \text{high rating}} = 4.16$, $SD = 1.50$; $F(1, 235) = 6.75$, $p < .01$). In support of H_1 , the results showed that wine bottles with a fantasy label were more likely to be purchased but only in the presence of a high-quality signal. Consistent with the principle of hedonic dominance, the following mediation analysis was hence focused on the two high-quality conditions ($N = 78$).

Figure 4: Purchase intentions of fantasy labels and non-fantasy labels across conditions of Study 2



Note. Error bars indicate 95% Confidence Intervals (CIs).

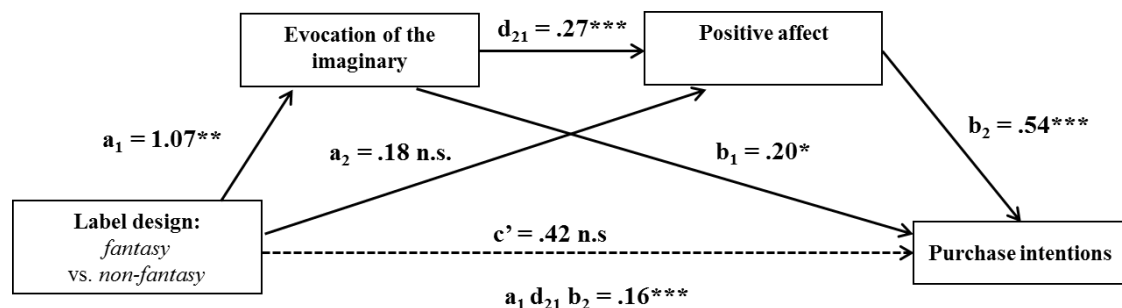
Sequential mediation. The goal was to provide process evidence for the positive effect of fantasy (vs. non-fantasy) on purchase intentions. Specifically, we tested the mediating roles of evocation of the imaginary and affect (in that sequence) in the effect of fantasy on purchase intentions. We expected that fantasy (versus non-fantasy) labels would lead

to greater evocation of the imaginary, which, in turn, would trigger positive affect and ultimately increase purchase intentions. Thus we tested the following sequence:

fantasy → evocation of the imaginary → positive affect → purchase intentions

We tested a serial mediation model (see Figure 5 and Table 2) using a bias-corrected bootstrap procedure (Hayes (2013), Model 6, $N = 5,000$ resamples) with fantasy as the independent variable, evocation of the imaginary and affect as the mediating variables (in that order), and purchase intentions as the dependent variable. In support of H₃, the results indicated a positive and significant serial indirect effect of fantasy on purchase intentions through (1) the evocation of the imaginary and (2) affect ($a_1 \times d_{21} \times b_2 = .16$, $SE = .08$); with a 95% CI excluding 0 (LLCI = .049, ULCI = .410). The direct (c' path) effect of fantasy on purchase intentions was insignificant ($c' = .42$, $SE = .27$, $p = .12$), indicating indirect-only mediation (Zhao et al., 2010). In summary, a combination of fantasy (vs. non-fantasy) and a high-quality cue enhances evocation of the imaginary, which, in turn, triggers positive affect and increases purchase intentions. These results are consistent with the hypothesis regarding the mediating roles of evocation of the imaginary and affect in the effect of fantasy on purchase intentions.

Figure 5: Sequential mediation model of fantasy on purchase intentions (Study 2)



* $p < .05$.

** $p < .01$.

*** $p < .001$.

Notes: Unstandardised coefficients are presented.

The non-fantasy condition is the baseline condition (non-fantasy = 0; fantasy = 1).

Table 2: Model summary for the effect of fantasy labels (vs. non-fantasy labels) on purchase intentions through evocation of the imaginary and affect (Study 2)

Antecedent	Evocation of the imaginary	Affect	Purchase intentions
Fantasy	$a_1 = 1.07^{**}$ (.38)	$a_2 = .18$ (.21)	$c' = .42$ (.27)
Evocation of the imaginary	—	$d_{21} = .27^{***}$ (.06)	$b_1 = .20^*$ (.09)
Affect	—	—	$b_2 = .54^{***}$ (.15)
Constant	4.18^{***} (.28)	3.41^{***} (.28)	.82 (.62)
	$R^2 = .092$ $F(1, 76) = 7.67$ $p < .01$	$R^2 = .270$ $F(2, 75) = 13.86$ $p < .001$	$R^2 = .395$ $F(3, 74) = 16.11$ $p < .001$

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Notes: Unstandardised coefficients are presented with standard errors in parentheses.

The non-fantasy condition is the baseline condition (non-fantasy = 0; fantasy = 1).

2.4.4 Discussion

Based on the findings of Study 1, Study 2 utilises a direct manipulation of the level of quality and a different set of labels. The findings are consistent with prior research on mental simulation qualified, however, by the principle of hedonic dominance. Specifically, the data from Study 2 indicate that even subtle manipulation of the brand name (Mystery vs. Mastery) and using a unicorn versus a horse (with the only difference being the presence of a horn) can significantly increase purchase intentions for the wine labels but only in the presence of high-quality signals. However, as the difference in purchase intentions between fantasy and non-fantasy labels did not differ for conditions with ambiguity (no rating) and with a mediocre rating (i.e., 71 out of 100 points), we cannot rule out that for products with very low quality the fantasy label effect would reverse. We test this possibility in Study 5 by investigating the effect of fantasy labels

across a wider range of quality signals. In addition, the findings of the sequential mediation analysis revealed that the evocation of the imaginary and positive affect were the underlying mechanisms of this fantasy effect. Finally, these results suggest that marketers can effectively use fantasy themes on their products or labels but only when they already have quality cues such as high expert rating points.

In Studies 1 and 2, participants were only exposed to the pictures of the product labels. We wanted to extend the generalisability of the findings to real purchase situations, where the entire products are evaluated by customers. Therefore, we conducted two field studies (Studies 3 & 4) in which people tasted the same wine from bottles with different labels in office and retail environments.

2.5 Study 3: Field experiment in a company environment

In Study 3, we aim to replicate the findings of Study 2 for the high-quality conditions in a field context with a sample of wine *experts* using a within-subjects design. Namely, we investigate the effects of fantasy versus non-fantasy labels on product evaluation (participants have actually tasted the product) and purchase intentions.

2.5.1 Method

Stimuli design. This field study had a within-subjects design (label design: fantasy versus non-fantasy). We used bottles of the same Australian red wines (ensuring it comes from the same batch) across the two conditions, but with different labels (see Figure 6). *Fantasy* was manipulated in the same way as in Study 2 (i.e., Mystery Estate as brand name/unicorn as picture and Mastery Estate as brand name/horse as picture). Because the fantasy effect only occurred in the high-quality conditions, we used a real sticker with a gold medal that is used at the target market for wine as an indicator of high quality for both conditions. This gold medal contained as information: “International Wine & Spirit

Competition Global Award”, “International Winemaker of the Year” (2009, 2011, 2012) and “Australian Producer of the Year” (2009, 2011, 2012). The decision of using an actual gold medal was to enlarge the spectrum of possible quality signals that can be used by marketers.

Figure 6: Study 3 stimuli



Sample and procedure. A sample of 17 employees of a small company operating in the wine business was invited to a wine tasting. The participants were knowledgeable about wine due to working in the wine business environment. Further, there is a tradition in this company, that every Friday late afternoon employees can taste different wines. During one of those regular tastings, participants were informed that an Australian wine producer (based in the Barossa Valley) was launching two new brands and they were asked to complete a short questionnaire while tasting Mastery Estate and Mystery Estate in a fixed order. Three participants were discarded because they only tasted the first wine and cancelled the study due to time constraint. The final sample consisted of 14 participants (35.7 % female, $Mod_{age} = 25-34$). Upon questionnaire completion, participants were

debriefed that they were exposed to two fictitious brands and tasted two identical wines from an existing and well-known brand.

Dependent variables. After participants saw the two bottles of wine, they started the tasting. For each of the two wines, participants first indicated on a seven-point scale the *taste* of the wine ("How do you find the overall taste of this wine?" with 1 = very poor taste; 7 = very good taste, adapted from Elder and Krishna (2010), then their *purchase intentions* ("How likely would you be to buy a bottle of this wine?" with 1 = very unlikely to buy; 7 = very likely to buy, adapted from Landwehr et al. (2012)). At the end of the questionnaire, participants indicated on a seven-point scale the *perceived quality* of the wine ("What do you think about the overall quality of this wine?" with 1 = very poor quality; 7 = very good quality, adapted from Elder & Krishna (2010)).

2.5.2 Results

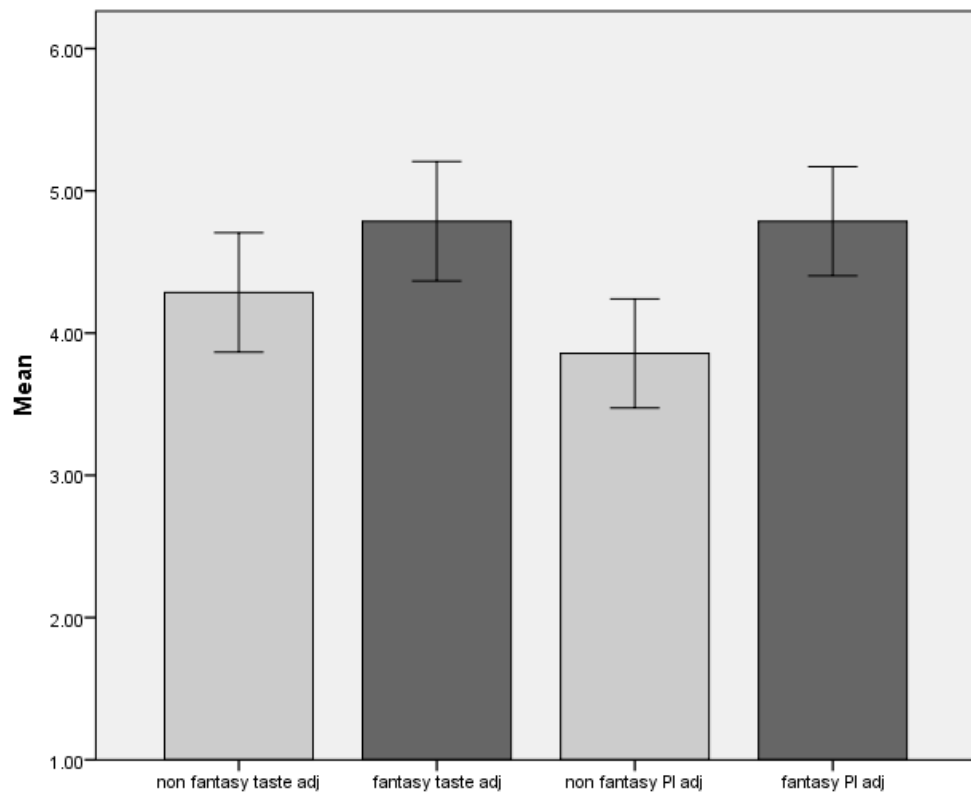
The correlation table can be found in Appendix 6.

Taste. We estimated a repeated-measures ANOVA with label design (fantasy vs. non-fantasy) as within-subjects factor and *taste* as the dependent variable. Although the effect of fantasy did not reach significance ($F(1, 13) = 1.66, p = .22$; see Fig. 7), which is not surprising given that the participants had knowledge on wine, the direction of the effect suggests that participants tended to prefer Mystery Estate ($M_{\text{fantasy}} = 4.79, SD = 1.31$) over Mastery Estate ($M_{\text{non fantasy}} = 4.29, SD = .73$).

Purchase intentions. A repeated-measures ANOVA was estimated with label design (fantasy vs. non-fantasy) as a within-subjects factor and *purchase intentions* as the dependent variable. As expected (see Fig. 7), results revealed a significant main effect of fantasy on *purchase intentions* such that participants were more willing to buy Mystery Estate ($M_{\text{fantasy}} = 4.79, SD = .89$) than Mastery Estate ($M_{\text{non fantasy}} = 3.86, SD = 1.35$;

$F(1, 13) = 6.84, p < .05$). In support of H_1 , these results provide further evidence that fantasy increases purchase intentions in the presence of a high-quality signal (i.e., via using a gold medal).

Figure 7: The effect of fantasy label on taste and purchase intentions for Study 3



Note. Adjusted error bars indicate 95% confidence intervals (Cis)

Perceived quality. We wanted to rule out an alternative explanation that the perceived quality of the product was established not only via the gold medal as a quality cue but also that fantasy (versus non-fantasy) labels also influenced perceived quality. A repeated-measures ANOVA was estimated with label design (fantasy vs. non-fantasy) as within-subjects factor and *perceived quality* as the dependent variable. Results revealed an insignificant main effect of fantasy on *perceived quality*. As expected, the results showed that the main effect of fantasy on perceived quality was not significant ($M_{\text{fantasy}} = 4.79, SD = 1.19$ versus $M_{\text{non fantasy}} = 4.21, SD = 1.12; F(1, 13) = 2.17, p = .16$).

Therefore, the positive effect of fantasy labels on taste perceptions and purchase intentions are not caused by increased quality perceptions; instead, quality perceptions are only triggered by the external quality cue (i.e., the gold medal).

2.5.3 Discussion

The findings of Study 3 with wine experts confirm those from Study 2, in that participants are more willing to buy a bottle of wine with a fantasy label rather than with a non-fantasy label. The findings indicate that wine from a bottle with a unicorn and Mystery Estate on the label tends to taste better than the same wine but from a bottle with a horse and Mastery Estate on the label. Even though the findings of this field study are interesting, there are two main limitations. First, the sample size is small which reduces statistical power. Second, participants tasted the two wines in a fixed order and this could potentially bias the current findings. Prior research has demonstrated the existence of an “order effect” in such that either the first product (“primacy effect”) or last sampled product (“recency effect”) is preferred (Biswas, Grewal, & Roggeveen, 2010; Biswas, Labrecque, Lehmann, & Markos, 2014; Mantonakis, Rodero, Lesschaeve, & Hastie, 2009; O'Brien & Ellsworth, 2012). Therefore, we wanted to replicate these promising findings in another field study setting in a liquor store environment but by (1) using a larger sample of regular consumers and (2) counterbalancing the tasting order.

2.6 Study 4: Field experiment in a retail environment

In Study 4, we aim to replicate the findings of Studies 2 and 3 for the high-quality condition in a real store with regular consumers and investigate the effects of fantasy versus non-fantasy labels on product evaluation and purchase intentions.

2.6.1 Method

Stimulus design. This field study had a within-subjects design (label design: fantasy versus non-fantasy). We used two bottles of the same Australian red wine (ensuring they were the same by mixing up the wine and replacing it in the bottles) across the two conditions but with different labels (see Figure 8). *Fantasy* was manipulated in the same way as in Studies 2 and 3 (i.e., Mystery Estate as the brand name and a unicorn as the picture vs. Mastery Estate as the brand name and a horse as the picture). As confirmed by Studies 2 and 3, the fantasy effect only occurred in the presence of a high-quality signal; therefore we employed another real sticker with a gold medal that is used in the target market as an indicator of high quality for both conditions. This gold medal contained the following information: “Spiegelau” and “International Wine Competition 2014”.

Figure 8: Study 4 stimuli



Participants and Procedure. This field study was conducted at a liquor store in New Zealand. Customers (18 years old or above) of this liquor store were invited to a wine tasting. Those who agreed could participate in the free wine tasting (several people refused to participate for driving or personal reasons). A sample of 43 regular shoppers took part in this field experiment. Participants were informed that an Australian wine producer (based in the Barossa Valley) was launching two new brands, Mastery Estate and Mystery Estate, both made of Cabernet Sauvignon but coming from two different lots in the vineyard. Participants were then shown the bottles with the two labels and were asked to complete a short questionnaire while tasting both wines. The tasting order of the two wines was counterbalanced between participants to control for any effects of order (50 % of the participants tasted Mastery Estate first). Upon questionnaire completion, participants were debriefed that the purpose of this research was to examine whether different labels influence consumers' behaviour. Two participants were excluded due to incomplete questionnaires and one participant due to drinking the wines like 'vodka shots,' i.e., without actually tasting and smelling them. The final sample consisted of 40 participants (35% female; $Mod_{age} = 45-54$).

Dependent variables. After participants saw the two bottles of wine, they started the tasting. For each of the two wines, participants were asked to describe the taste of the wine in a few words (open-ended question). Next, they rated, on seven-point scales, first the *taste* of the wine, then their *purchase intentions* and the *perceived quality* of the wine (all measured in the same way as in the previous studies). At the end of the questionnaire, the participants indicated their gender and age group.

2.6.2 Results

The correlation table can be found in Appendix 7.

Open-ended thoughts about taste. Two independent coders rated the answers from the open-ended statements for the fantasy (Mystery Estate) and non-fantasy (Mastery Estate) conditions using two dummy variables for any positive (0= no; 1 = yes) and negative (0= no; 1 = yes) comments about taste. The intercoder agreement was 88.7%, and the disagreements were resolved by a discussion between the coders. Examples of positive comments included “Very pleasant wine!” or “Full bodied – yum!”, examples of negative comments about taste included “a bit sharp for my taste” or “Very dry. Not pleasant”. We employed a 2×2 non-parametric McNemar test for categorical factors and responses (Adedokun & Burgess, 2012) to investigate if there were any systematic differences between the perceived tastes of wines with fantasy versus non-fantasy labels. The results indicated that there was a marginally significant difference in the number of positive comments between the wines ($p = .057$). Specifically, Mystery Estate was associated with a positive taste more often (34 times, 85%) than Mastery Estate (26 times, 65%; note that participants tasted exactly the same wine). There were no significant differences in the number of negative comments about the taste of the wines ($p > .14$). These results provide the first confirmation of the generalisability of the results from Study 2 and further suggest that fantasy labels may enhance taste perceptions of products if used with a high-quality cue.

Next, we conducted three mixed-factorial ANOVAs on *taste*, *purchase intentions*, and *perceived quality*.

Taste. We estimated a mixed-factorial ANOVA with label design (fantasy vs. non-fantasy) as the within-subjects factor, tasting order (Mastery Estate first vs. Mystery

Estate first) as a between-subjects factor, age as a covariate, and *taste* as the dependent variable. The results (see Figure 9) revealed a marginally significant effect of fantasy on *taste rating* ($F(1, 37) = 3.90, p < .056$). Specifically, despite tasting exactly the same wine, participants indicated that Mystery Estate ($M_{\text{fantasy}} = 5.09, SD = 1.01$) tasted better overall than Mastery Estate ($M_{\text{non fantasy}} = 4.84, SD = 1.28$). The effects of tasting order and age were insignificant ($ps > .30$). The interactions between (1) fantasy and tasting order and (2) fantasy and age were also insignificant ($ps > .10$). These results are consistent with the open-ended coded responses of perceived taste and again suggest that in the presence of a quality cue, fantasy labels enhance taste perceptions providing further support for H₁.

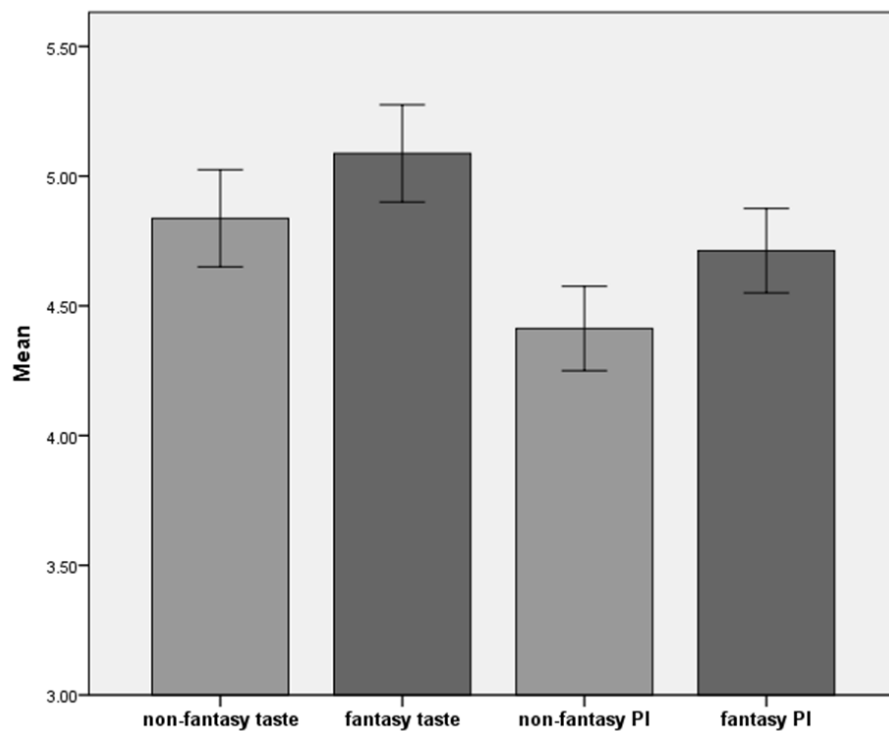
Purchase intentions. We estimated a mixed-factorial ANOVA with label design (fantasy vs. non-fantasy) as the within-subjects factor, tasting order (Mastery Estate first vs. Mystery Estate first) as a between-subjects factor, age as a covariate, and *purchase intentions* as the dependent variable. In support of H₁, the results (see Figure 9) revealed a significant effect of fantasy on *purchase intentions* ($F(1, 37) = 11.39, p < .002$). Specifically, though they tasted exactly the same wine, participants were more willing to buy Mystery Estate ($M_{\text{fantasy}} = 4.71, SD = 1.55$) than Mastery Estate ($M_{\text{non fantasy}} = 4.41, SD = 1.64$). The interaction between fantasy and age was significant ($F(1, 37) = 8.45, p < .01$). In accordance with previous literature (Elliot and Barth, 2012, Wolf and Thomas, 2007), this finding suggests that younger participants were more willing to buy wines with fantasy labels than older participants. The effects of tasting order and age, as well as the interaction between fantasy and tasting order, were all insignificant ($ps > .23$).

Perceived quality. As per Study 3, we wanted to rule out an alternative explanation that the perceived quality of the product was established not only via the gold medal but also that fantasy (versus non-fantasy) labels also influenced perceived quality. We estimated

a mixed-factorial ANOVA with label design (fantasy vs. non-fantasy) as the within-subjects factor, tasting order (Mastery Estate first vs. Mystery Estate first) as a between-subjects factor, age as a covariate, and *perceived quality* as the dependent variable. As expected, the results showed that neither the main effect of fantasy on perceived quality nor any other effect was significant ($ps > .16$).

Therefore, the findings of Study 4 confirmed those from Study 3 (using similar design) in that the positive effect of fantasy labels on taste perceptions and purchase intentions are not caused by increased quality perceptions; instead, quality perceptions are only triggered by the external quality cue (i.e., the gold medal). Therefore, we can rule out (again) this alternative explanation.

Figure 9: The effect of fantasy label on taste and purchase intentions for Study 4



Note. Adjusted error bars indicate 95% CIs without accounting for the covariate age.

2.6.3 Discussion

Study 4 replicates the findings of Studies 2 and 3 by confirming, in support of H₁, that fantasy labels enhance taste and purchase intentions in the presence of a high-quality cue (e.g., a gold medal). Essentially, the findings suggest that although consumers tasted exactly the same wine, they perceived it to taste better when it comes from a bottle with a fantasy label compared to a non-fantasy label; and this effect was consistent across both measures: open-ended description of taste and taste ratings. The findings of Study 4 are consistent with the principle of hedonic dominance and confirm that labels that use fantasy outperform non-fantasy labels in the presence of a high-quality cue. Furthermore, younger people seem to have even stronger preferences for fantasy over non-fantasy labels. Overall, the findings of Study 4 replicate the key patterns of Studies 2 and 3 by providing confirmatory evidence that in the presence of a high-quality cue, fantasy labels increase perceived taste and purchase intentions.

2.7 Study 5: Analysis of actual retailing sales data

While the controlled experimental designs of Studies 1-4 allowed addressing causality by manipulating fictitious fantasy versus non-fantasy labels, they did not allow investigating the effects of the labels across a continuous range of quality signals. Hence, we cannot rule out the possibility that for products with below average quality signals, fantasy labels may backfire (as consistent with the stream of literature on meta-cognitive processing). The goal of Study 5 is to investigate the effects of fantasy versus non-fantasy labels across a wider range of quality signals. Moreover, we aim to address the generalisability and external validity of the findings by examining real purchasing data (rather than purchase intentions; see Chandon et al., 2005; Morwitz et al., 1993), while using an omnipresent heuristic quality signal: the price (because consumers perceive price as an indicator of

product quality, e.g., Dawar & Parker, 1994; Dodds et al., 1991). According to Wine.net, 65% of people consider the perceived price as important in wine selection (based on a sample of 2,000 wine drinkers).

2.7.1 Data description and method

We obtained weekly transactional data from two liquor stores located in New Zealand for 750ml bottles of wine. The data covered a 105-weeks period (from January 2014 to January 2016). We selected all the Stock Keeping Units (SKUs) that fit our definition of fantasy labels ($n=7$; containing words or images related to unreal creatures, legends, or a fantasy world; see Fig. 10). Next, for each of the fantasy labels two coders selected a non-fantasy label that matched it in terms of (1) price (as closely as possible), (2) wine type and region, (3) producing company (when possible), and (4) visual appearance (as closely as possible). The dataset across all 14 (7 fantasy and 7 non-fantasy) labels (SKU), 2 stores, and 105 weeks contains a total of 2,322 observations. The number of observations per SKU varied from 94 to 210 due to occasional stock-out situations. In the case of missing values, they are excluded from the analyses. Among the considered observations, there are also cases where sales = 0, which means that the wine SKUs were on the shelves but did not sell.

The dependent variable, *quantity sold*, is measured in bottles sold per SKU (750 ml bottles) per week per store. *Fantasy* is an effect-coded variable indicating whether the wine label contains fantasy (=1) or non-fantasy themes (=-1). *Actual price* (in NZ-\$) includes 15 % GST (Good and Services Tax) and is z-transformed for all subsequent analyses. We also included two control variables. *Christmas period* captures whether the given week fell within the five-weeks Christmas period (=1) or not (=-1). The effect-coded variable *flyer-based product price promotion* captures whether the wines were on

price promotion (1 = yes; -1 = no) for a given week based on the content of flyers which are used by the retailer as external promotion and send to consumers.

Figure 10: Study 5 label stimuli

Fantasy	Non-fantasy	Fantasy	Non-fantasy

2.7.2 Results

The correlation table can be found in Appendix 8.

The general structure of the data is a three-level nested structure where 105 weekly observations are nested within wine bottle SKUs which are nested within stores. To account for the nested structure of the data, the modeling approach of Landwehr et al. (2013) was followed. In particular, a Linear Mixed Model (LMM) that estimates fixed and random effects and that specifies an autoregressive correlation pattern for the variance-covariance matrix of the error terms was used. To analyse the data, the software SPSS was used following the model specification from West, Welch, and Galecki (2014). The final model to predict sales for a temporal measurement t nested within a wine SKU i nested within a store j has the following form where b indicates the fixed effects, u indicates the random effects, and e_{tij} indicates the residuals that are multivariate normally distributed with mean 0 and a 105×105 variance-covariance-matrix R_{ij} that follows a first-order autoregression (i.e., AR(1)) structure:

$$\begin{aligned} \text{SALES}_{tij} = & b_0 + b_1 * \text{FANTASY}_i + b_2 * \text{PRICE}_{tij} + b_3 * \text{FANTASY}_i * \text{PRICE}_{tij} + \\ & b_4 * \text{PRICE}_{tij}^2 + b_5 * \text{FANTASY}_i * \text{PRICE}_{tij}^2 + b_6 * \text{CHRISTMAS}_t + \\ & b_7 * \text{FLYER}_{ti} + u_{0j} + u_{0ij} + e_{tij} \end{aligned}$$

To check the robustness of the model, we estimate a total of three models that differ in the number of included fixed effects (see Table 3). The first model is a pure linear model without the two control or quadratic variables (i.e., omitting b_4 - b_7 from the model formula). The second model is a pure linear model including the two control variables (i.e., omitting b_4 and b_5 from the model formula). The third model is the full model including the quadratic effects and the control variables which is represented by the model formula.

The general pattern of results with respect to direction and significance of effects does not change across the model specifications, confirming the robustness of the modelling approach. Comparing the predictive strength of the three models penalized for the number of estimated parameters, the third model should be selected due to the lowest AIC and BIC. Hence, we will only report the results of Model 3 in more detail.

Table 3: Comparison of three different statistical models of the effect of fantasy (non-fantasy) labels and price on sales (Study 5).

Parameter	Model 1) Linear w/o controls	Model 2) Linear with controls	Model 3) Quadratic with controls
b ₁ : fantasy	b ₁ = -.98	b ₁ = -1.18	b ₁ = -.42
b ₂ : price	b ₂ = -4.10***	b ₂ = -2.86***	b ₂ = -2.42***
b ₃ : fantasy * price	b ₃ = 3.06***	b ₃ = 2.94***	b ₃ = 2.19***
b ₄ : price ²			b ₄ = 1.03***
b ₅ : fantasy * price ²			b ₅ = -.66***
b ₆ : Christmas		b ₆ = .98***	b ₆ = .95***
b ₇ : Flyer promotion		b ₇ = 1.77***	b ₇ = 1.52***
AIC	13243.40	13139.20	13067.29
BIC	13272.15	13167.94	13096.03

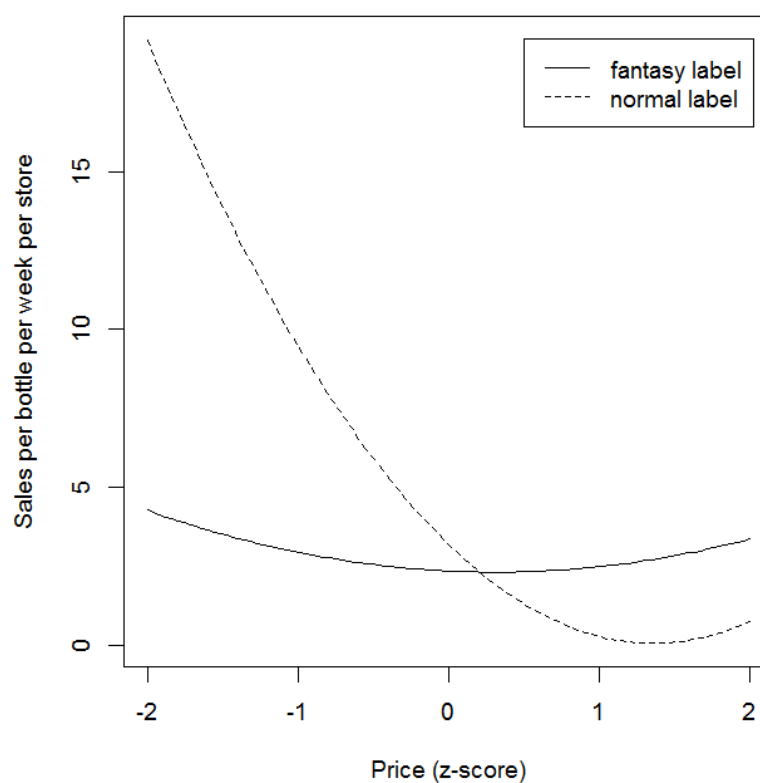
Note. ***p < .001; **p<.01; *p<.05; †p<.10. Reported are the results of Linear Mixed Models (LMM) that account for the nested data structure.

The results of Model 3 (see Table 3) reveal a non-significant main effect for fantasy (b₁ = -.42, *p* = .53) but significant effects for price (b₂ = -2.42, *p* < .001), the interaction of fantasy*price (b₃ = 2.19, *p* < .001), the quadratic effect of price (b₄ = 1.03, *p* < .001), and the interaction of fantasy*price² (b₅ = -.66, *p* < .001). The effects of the control variables Christmas period (b₆ = .95, *p* < .001) and flyer promotion (b₇ = 1.52, *p* < .001) are also significant. To clarify the pattern of the results, Figure 11² illustrates the estimated relationship between fantasy, price, and sales (the control variables of the model are effect-coded and set to zero to pool the estimates across the specific levels of the control

² This figure comes from the paper authored by Jaud, Melnyk, & Landwehr (2017) submitted to Journal of Consumer Psychology, currently at the ‘revise and resubmit’ stage.

variables). As indicated by the negative main effect of price and the positive quadratic effect of price, sales of non-fantasy labels drop quickly with increasing prices and reach a constant but low level of sales once they pass the average price (i.e., the value 0 on the z-standardized x-axis of Figure 11). In contrast, fantasy labels start off at a considerably lower level of sales, show a slight decrease until the average price is reached, and start to increase slightly for prices above the average in support to H_2 .

Figure 11: Visualisation of the estimates of Model 3 for Study 5



2.7.3 Discussion

The results of Study 5 reveal that sales of wines with non-fantasy labels follow the usual negative price-sales function. That is, the higher the price, the lower the sales. This effect is not linear but levels off once the price of the wine is above the average price. In contrast, the effect for wines with fantasy labels seems to reflect two opposing forces. On the one hand, fantasy labels used for cheap wines (i.e., price below the average) do not attract

many consumers relative to non-fantasy wines at the equivalent price, consistent with the idea that fantasy labels are harder to process (while the positive affective reaction to fantasy is not enabled by a quality cue as required by the principle of hedonic dominance). On the other hand, fantasy labels used for expensive wines (i.e., price above the average) become inherently attractive for consumers because the price serves as a quality signal and allows positive affect to enter the decision process. Thus, these products become attractive to consumers but may be above the final willingness-to-pay for some consumers (see, e.g., Dodds et al., 1991). Therefore, the sales of high-priced wines with fantasy labels increase only slightly. Importantly, in support of H₂, expensive wines with fantasy labels outperform expensive wines with non-fantasy labels.

2.8 General discussion

The goal of this research is to investigate when and why fantasy labels affect product evaluation and purchase behaviour. Specifically, in the exploratory Study 1 the findings suggest that when the general style of the wine label is kept constant, preferences for non-fantasy labels do not differ from fantasy labels. By focusing on the labels with the picture–name congruence, which are more commonly used in the marketplace, the findings further suggest that a fantasy label led to greater evocation of the imaginary, which, in turn, enhanced purchase intentions when controlling for the expected taste of the product. Hence, in Study 2, we tested the theorisation by (1) manipulating fantasy and quality signals and (2) examining the process more directly. Consistent with the literature on mental simulation (Belk & Costa, 1998; Martin, 2004; Zhao et al. 2011) qualified, however, by the principle of hedonic dominance, the findings suggest that (1) fantasy labels increase purchase intentions but only in the presence of high-quality signal and (2) this conditional positive effect of fantasy labels increase purchase intentions through an evocation of the imaginary and positive affect.

In Study 3, we replicated the findings of Study 2 by using a sample of wine experts. Namely, in the presence of a high-quality signal, showing a unicorn versus a horse on the label increases purchase intentions. However, this field study had two limitations: a small sample size and a fixed-order of tasting. In Study 4, we, therefore, collected a bigger sample and counterbalanced the tasting order. The findings of Study 4 confirmed those from Studies 2 and 3 by using a sample of regular shoppers. Namely, in the presence of a high-quality signal (i.e., gold medal), fantasy labels increase purchase intentions, but also the taste perceptions of the wine. The latter finding is consistent with the current literature on sensory perception, which provides convincing evidence that visual cues strongly influence other sensory systems such as taste perception (Elder & Krishna, 2010; Hoegg & Alba, 2007; Lee et al., 2006). Finally, in Study 5, price is used as another quality signal and actual purchases as a different dependent variable to confirm the positive effect of fantasy using actual sales data. The findings show that the non-fantasy labels outperform fantasy labels for cheap wines, however this effect reversed for premium wines.

Taken altogether, the results unite seemingly contradicting theories predicting the effects of labels with fantasy themes on product evaluation and purchasing behaviour. Specifically, we uncover as an important boundary condition: the presence of a product quality signal determining which of the theories applies. In particular, the results of Study 5 suggest that for products *below average quality* (e.g., with below average price), labels with fantasy themes are likely to backfire. This finding is consistent with the literature on meta-cognitive processing, suggesting that unusual visuals are harder to process, which is a hedonically negative experience (Reber et al., 2004; Winkielman et al., 2006). Next, when products are perceived as *average* in quality (Studies 1-2 and Study 5), fantasy and non-fantasy labels do not seem to differ much in their performance. Yet, in line with the

principle of hedonic dominance (Chitturi et al., 2007), fantasy labels increase purchase intentions (Studies 2-4), taste perceptions (Study 4), and decrease consumers' price sensitivity (Study 5) in the presence of an *above average* quality signal (Studies 2-5). Study 1 also suggests that the evocation of the imaginary mediates the relationship between fantasy labels and purchase intentions when the brand name and the picture present on the label are congruent. In line with the latter findings, Study 2 further demonstrates that the 'fantasy effect' is driven by the underlying processes of the evocation of the imaginary and positive affect, which is consistent with the literature on mental simulation and imagination (Belk & Costa, 1998; Martin, 2004).

2.8.1 Theoretical contributions and practical implications

The present research essentially makes two theoretical contributions. First, it participates to the debate in the literature on unusual designs (Labroo et al., 2008; Landwehr et al., 2013; Nenkov & Scott, 2014; Winkielman et al., 2006) by uncovering a boundary condition determining when these designs are likely to decrease or increase consumers' product perceptions and subsequent purchases. This research also sheds light on why fantasy labels affect purchase intentions by providing evidence that this effect is sequentially driven by the evocation of the imaginary and positive affect. In particular, in accordance with the principle of hedonic dominance (Chitturi et al., 2007; Landwehr et al., 2012) the presence of a high-quality cue is required to enable any positive effects of unusual designs that evoke imagination (e.g., fantasy labels). Second, in addition to contribute to understanding the impact of fantasy labels on purchase behaviour, the results also speak to the literature on sensory perception (see Krishna, 2012; Krishna & Schwarz, 2014). Specifically, the findings suggest that products that use fantasy labels taste better in the presence of a high-quality cue.

In addition to the theoretical contributions, the findings have clear managerial implications for brand managers and practitioners dealing with package designs. The findings suggest that unusual designs such as fantasy labels should be used with care and only in the presence of quality signals. Specifically, companies that already hold quality recognitions for their products (e.g., medals, awards, high rating points from wine experts) could use unusual label designs featuring fantasy themes in combination with these quality cues to differentiate themselves in the marketplace.

In this research, to address causality, we used expert ratings, awards (i.e., medals) and price as quality signals, however, we expect the same pattern of results for other quality signals such as expertise cues (Doney & Cannon, 1997), perceived brand strengths (Dawar & Parker 1994; Landwehr et al., 2012), a brand's quality or leadership position within the category (van der Lans, van Everdingen, & Melnyk, 2016) or the country of origin (Leclerc et al., 1994; Melnyk et al., 2012). Hence, strong brands and companies able to provide high-quality signals would benefit from using fantasy labels because the results suggest that in the presence of such cues, fantasy labels outperform non-fantasy labels. In contrast, for less-known brands, especially operating in lower-priced segments without quality signals, the results would suggest that refraining from using unusual labels would be a sensible choice. Furthermore, the results of Study 5 suggest that the use of a distinctive packaging can be a way to justify a premium (or above average) price and to differentiate a product from others within the same product category (Steenkamp et al., 2010). Therefore, fantasy labels may play an important role in consumers' price sensitivity for products that are sold above the average price point of the product category.

2.8.2 Limitations and future research

This paper is, to the best of knowledge, the first series of studies on product labels that include fantasy themes. Therefore, we consider this research as a first step towards understanding the effect of fantasy themes on product evaluation and purchase behaviour. Therefore, many interesting avenues can be explored for future research. For example, the current paper looks at only one product category: wine. Further research could replicate and extend the findings of this paper by using other (e.g., utilitarian) product categories. Another limitation is that we kept the country of origin cue constant in Studies 1 to 4 (i.e., Australia) as well as in Study 5 (i.e., New Zealand). However, country of origin in itself can be used as a quality cue to reduce consumer uncertainty (e.g., Swiss or Belgian chocolate), mostly when the product is made in a country associated with a positive image (Leclerc et al., 1994; Melnyk et al., 2012; Orth, McGarry Wolf, & Dodd, 2005). That is because the country of origin (and region of origin) is widely used by consumers to primarily evaluate the product quality (Verlegh, Steenkamp, & Meulenberg, 2005), and such geographical indication strongly influences consumers when, for example, it comes to buy a bottle of wine (Ling & Lockshin, 2003; Orth et al., 2005).

In addition, this paper examined the effect of fantasy labels using the wine category and samples from “New World wine countries.” Specifically, this effect may differently affect consumers from “Old World wine countries” such as France where wine reflects traditions, and French people are attached to heritage and “terroir” values (Mouret, Lo Monaco, Urdapilleta, & Parr, 2013). For example, would including a fantastic creature on a French heritage-based label enhance product evaluation and purchase responses for a bottle of wine? Finally, findings of Study 4 suggest that wine from a bottle with a fantasy label (i.e., a visual cue), enhances consumer’s taste perception. These findings call for more research into the field of sensory marketing. For example, would fantasy motifs on

a bottle of fragrance positively affect the perceived smell? Such findings could represent substantial managerial implications for fragrance companies. Similarly, to what extent would decorating a retail space (e.g., supermarkets or specialised stores) so that it looks like an enchanted forest with elves and unicorns – or even a rocky place (e.g., a volcano) with orcs and dragons – change customer behaviour? For example, the department store Printemps Haussmann (based in Paris) was transformed into a *Alice in Wonderland* environment for the premiere of this Tim Burton movie in 2010 (Gomes, 2010). The results suggest that such a fantasy setting may facilitate consumers' imagination and enable them to live a more positive shopping experience. Overall, we hope this research sparks further interest in investigations of 'fantasy effects' in consumer behaviour.

Chapter 3

**WHAT WINE WILL I PICK UP TODAY? FACTORS INFLUENCING
PURCHASE OF WINES**

3.1 Introduction

According to Statista (2018), in the US market alone, the total retail value for wine has sharply increased since 2000, reaching USD 60 billion in 2016 which represents a 128% jump compared to 2000 (USD 26.3 billion) and a significant 7.5% increase on the year before (USD 55.8 billion). This clearly demonstrates the importance of wine sales in the retail industry. Retailers are well-aware of the importance of the package and label design to attract and keep the customers' attention (Clement, Kristensen, & Grønhaug, 2013; Orth & Malkewitz, 2012). The information that is included on the front label strongly influences customers' buying decision (Thomas & Pickering, 2003) because the front label is the first element of the wine packaging they see when browsing the store shelves. Furthermore, consumers heavily rely on the visual elements present on the label to evaluate a wine (Laeng, Suegami, & Aminihajibashi, 2016) and reduce the risk to buy the wrong wine (Mitchell & Greatorex, 1989). That is because wine is a complex product to buy, especially when its taste is uncertain or unknown (Mitchell & Greatorex, 1988; Campbell & Goodstein, 2001). Consequently, wine companies spend a significant amount of money on packaging design. For example, in 2015, a representative sample of NZ wine companies spent between NZD 0.80 and NZD 1.22, per bottle, on packaging; this cost represented between 4.30 % and 15% of their total revenue (Deloitte, 2015).

Marketers and merchandisers are well aware of the need for a bottle of wine to have a label that cleverly stands out from competitors. For example, the brand Yellow Tail was launched in 2001 featuring an "arty wallaby" on the label and, in a few years, the sales in

the US market jumped from 60,000 to 8.5 million cases (Veseth, 2008). The simple and catchy wine label of Yellow Tail has contributed to the success of the brand. Because pictorial elements on a label catch and anchor the customers' attention and increase wine preferences (Laeng et al., 2016), the Yellow Tail case suggests that arty (unusual) designs may help differentiate the label by grabbing attention.

Hence, brand name and specific pictorial and textual information elements on the labels drive consumers' decision making and choices (Jarvis, Mueller, & Chiong, 2010; Laeng et al., 2016; Mueller, Lockshin, & Louviere, 2009). For example, labels usually provide important information to consumers such as the geographical origin of the wine, grape variety, vintage, and wine/vineyard descriptions. This type of information helps consumers make their final decision and better purchases (Lockshin & Cohen, 2011). Moreover, visual aesthetics of the design (e.g., images, colours) may also influence consumers' purchase responses (Bloch, 1995). Previous literature has looked at multiple or separate elements of design such as package (Orth, Campana, & Malkewitz, 2010; Orth & Crouch, 2014; Orth & Malkewitz, 2008, 2012), logo (Cian et al., 2014; Hagtvedt, 2011; Henderson & Cote, 1998; Henderson, Cote, Leong, & Schmitt, 2003; Janiszewski & Meyvis, 2001; Sundar & Noseworthy, 2014; Van der Lans et al., 2009) or label (Labroo et al., 2008; Lick et al., 2017; Machiels & Orth, 2017; Orth & Malkewitz, 2008).

The seminal article authored by Orth and Malkewitz (2008) covered parts of the packaging such as bottle, enclosure and label design, however, there is no study that looked at multiple elements of label design at the same time while controlling for the four Ps of the marketing mix (see table 4). Examining the effects of label elements relative to other marketing mix variables have strong implications for both academics and practitioners because it helps understanding what elements are stronger to affect purchases. In addition, we do know that wine labels are important in affecting consumers'

responses (Labroo et al. 2008; Machiels & Orth, 2017; Orth & Malkewitz, 2008), yet it is unclear to what extent and how strong the effects are.

Table 4: Summary table of key articles on design elements, packaging/labelling³

Citation	Journal	Design elements, package or label characteristics					Marketing mix
		Visuals ^a	Logo/image	Typeface	Text	Colour	
Cian, Krishna, and Elder (2014)	JMR		✓				
Giese et al. (2014)	JBR	✓		✓			
Hagtvedt (2011)	JM		✓	✓			
Henderson and Cote (1998)	JM		✓	✓			
Henderson et al. (2003)	IJMR		✓				
Henderson, Giese, and Cote (2004)	JM			✓			
Janiszewski and Meyvis (2001)	JCR		✓				
Labroo, Dhar, and Schwarz (2008)	JCR	✓	✓				
Lick et al. (2017)	JRCS	✓				✓	
Machiels and Orth (2017)	JRCS	✓					
Mai, Symmank, and Seeberg-Elverfeldt (2016)	JR	✓				✓	
Mueller, Lockshin, and Louviere (2010)	ML	✓				✓	
Orth and Crouch (2014)	JR	✓	✓				
Orth and Malkewitz (2008)	JM	✓	✓	✓	✓	✓	
Sundar and Noseworthy (2014)	JM	✓	✓				
van der Lans et al. (2009)	MS		✓				
This research		✓	✓	✓	✓	✓	✓

JMR = Journal of Marketing Research; JBR = Journal of Business Research; JM = Journal of Marketing; IJMR = International Journal of Research in Marketing; JCR = Journal of Consumer Research; JRCS = Journal of Retailing and Consumer Services; JR = Journal of Retailing; ^{ML} = Marketing Letters; MS = Marketing Science; ^a Visuals means either package or label design

³ This table only considers the articles that have been published in A* or A journals according to the ABDC journal ranking list available on <http://www.abdc.edu.au/news.php/100/abdc-releases-new-journal-quality-list>

From a methodology perspective, previous research on package and label design tested hypotheses by using designers and students' ratings and consumers' surveys (Orth & Malkewitz, 2008) or experiments (Cian et al., 2014; Giese et al., 2014; Labroo et al., 2008; Machiels & Orth, 2017; Mai, Symmank, & Seeberg-Elverfeldt, 2016; Orth & Malkewitz, 2012; Sundar & Noseworthy, 2014) and eye tracking studies (Laeng et al., 2016; Orth & Crouch, 2014) or field studies (Lick et al., 2017). For example, some studies provided guidelines to help companies in selecting specific separate parts of packaging such as their logos and brand name typefaces to increase perceived brand strength and consumers' impressions (Henderson & Cote, 1998; Henderson et al., 2003; Henderson, Giese, & Cote, 2004) by using professional designers' ratings and students' samples. Similarly, Orth and Malkewitz (2008) provided guidelines to assist companies in choosing elements of package designs (such as bottle type, brand name and logo size, location or contrast, image and label contents or types, and typography design dimensions) that can increase consumer brand impressions. However, the current research is the first – to the best of knowledge – to investigate the effects of label design using real sales data. The use and analysis of actual sales is very important to understand and predict consumers' purchasing behaviour, and increase the generalisability of the findings (Chandon et al. 2005; Landwehr et al. 2011; Landwehr et al. 2013). In other words, actual sales provide strong evidence on how consumers behave in real-life.

The goal of this research is to examine the effects of wine label elements on retail sales while controlling for the “4 Ps” of the marketing mix. This research is important for both academics and practitioners and makes three key contributions to the marketing field. First, this research contributes to the literature on packaging and labelling (Giese et al., 2014; Labroo et al., 2008; Nenkov & Scott, 2014; Orth & Malkewitz, 2008) by empirically investigating the effects of different label design elements on actual wine

sales and examining for the first time the strength of the effect of wine labels design versus the effects of the marketing mix. Second, this research contributes to the literature on processing fluency (Labroo et al., 2008; Labroo & Lee, 2006; Landwehr, Labroo, & Herrmann, 2011; Landwehr, Wentzel, & Herrmann, 2013; Lee & Labroo, 2004) by specifying whether and when to use fluent (simple) or dis-fluent (complex/detailed) elements on the labels. Graf, Mayer, and Landwehr (in press) define processing fluency as “a subjective feeling of ease or difficulty associated with any type of mental processing.” (p. 2). This research builds on psychological and marketing literature on processing fluency and provides evidence that both simple (vs. complex) and more detailed (vs. less detailed) label elements have a positive impact on sales. This research also shows that visually complex label elements can increase sales in the presence of indicators of quality such as premium prices and extra-textual information. This may suggest that consumers expect a more sophisticated (complex) design for expensive wine, and simple design can be perceived as boring overtime (Bornstein, Kale, & Cornell, 1990; Cox & Cox, 2002). The current research addresses a call in the literature made by Pieters et al. (2010) for a need to investigate the effect of specific wine labels and complexity in a cluttered retail environment.

Finally, this research provides useful insights for the wine and retail industry. This research helps managers to better understand how and when specific label elements increase or decrease wine purchases while controlling for the marketing mix. This also contributes to understanding better the effects of wine label designs and features on purchasing behaviour in the context of retail stores. Specifically, this current research can help wine companies and retailers to know whether and when to use simple or complex package designs to improve their sales.

3.2 Theoretical background and hypotheses

The literature on processing fluency suggests that people respond more positively to visual stimuli that are easy to process (Reber et al., 2004; Reber, Winkielman, & Schwarz, 1998; Winkielman et al., 2006). The literature on meta-cognitive processing has defined and considered different types of fluency such as perceptual and conceptual fluency (Graf et al., in press; Labroo et al., 2008; Labroo & Lee, 2006, Lee & Labroo, 2004, Reber & Schwarz, 1999; Reber et al. 1998; Reber et al., 2004; Whittlesea, 1993, Winkielman et al. 2006). In line with research on package processing (Janiszewski & Meyvis, 2001; Labroo et al. 2008), the current research focuses on perceptual and conceptual fluency. In a marketing context, Labroo and Lee (2006) defined perceptual and conceptual fluency respectively as “A brand that is perceptually fluent is one that can be recognised and identified easily by consumers, and a brand that is conceptually fluent is one whose meaning and other associations (i.e., its knowledge structure) come to mind more readily.” (p. 376). In this research, perceptual fluency is the ease of processing visual features of a wine label, and conceptual fluency is about what comes to customers’ mind (in terms of associations) to help comprehending the meaning of the information present on the wine label. Namely, this research examines the effects of wine label elements that are easy or hard to process perceptually (i.e., label composition, typeface elaborateness) and conceptually (i.e., extra-textual and pictorial information).

3.2.1 Factors influencing fluency: The negative effect of complexity on purchases

A large body of literature suggests a number of factors that increase the ease of processing such as clarity and contrast (Mosteller, Donthu, & Eroglu, 2014; Reber & Schwarz, 1999; Reber et al., 2004; Reber et al., 1998), low complexity of the context (Orth & Crouch, 2014), mere exposure (Janiszewski, 1993; Landwehr, Golla, & Reber, 2017; Landwehr

et al., 2013; Zajonc, 1968), priming (Labroo et al., 2008; Labroo & Lee, 2006; Lee & Labroo, 2004; Reber et al., 1998), prototypicality and typicality (Landwehr et al., 2011; Winkielman et al., 2006), unity (Veryzer & Hutchinson, 1998), and symmetry (Reber et al., 2004). Moreover, simple visuals are easier-to-process and increase consumers' perceptual fluency (Janiszewski & Meyvis, 2001; Orth & Malkewitz, 2008; Reber et al., 2004).

Further, familiar visuals are easier to process than unfamiliar visuals because they can be recognised more quickly (Lee & Labroo, 2004). Interestingly, the reverse process is also true. Namely, people perceive easy to process objects to be more familiar (Whittlesea, 1993). That is because people feel recognising and remembering the stimulus that is supposedly stored in their memory and this fluency misattribution is described as "Illusions of familiarity" (Whittlesea, 1993, Whittlesea, Jacoby, & Girard, 1990). Overall, factors that facilitate processing fluency increase consumers' responses because they do not want to make cognitive efforts and prefer smoother process (Song & Schwarz, 2008). Furthermore, easy processing helps to establish people' confidence in their judgment (see Alter & Oppenheimer, 2009, for a review). Previous studies show that fluent processing increases product/brand evaluation (Labroo et al., 2008; Lee & Labroo, 2004), purchase intentions (Orth & Crouch, 2014) or actual sales (Landwehr et al., 2011). Therefore, from a perceptual perspective, people like more prototypical or simple visual designs over unusual or complex ones (Berlyne, 1971; Creusen, Veryzer, & Schoormans, 2010), because they are quicker to recognise, easier to process and look more familiar (Winkielman et al., 2006). Similarly, a research conducted by Miceli et al. (2014) shows that even though visual complexity (related to perceptual fluency) initially increases consumers' attitude toward visuals such as logos by grabbing interest and attention, this

effect reverses and becomes negative after multiple exposures, because people do not perceive complex visuals to be familiar.

Hence, consumers are more likely to perceptually prefer products with simple and familiar package designs.

Plain typefaces, unified label and minimalist text coverage on a label are easier to process due to the simplicity of their design. Complexity is one of the components of elaborateness and includes elements such as label fragmentation (i.e., multiple sub-parts), ornate typography and extra-text (Henderson & Cote, 1998; Henderson et al., 2003; Henderson et al., 2004; Orth & Malkewitz, 2008). A unified label is in one piece/part whereas a compound label consists of several parts that may include strips and/or informational stickers. Unified (or single) labels are more commonly used in the marketplace than compound (or multiple) labels because they are easier to process, and people prefer simple designs (Veryzer & Hutchinson, 1998). In contrast, compound labels are more elaborate than a unified label and are harder to process because people need to mentally assemble the multiple bits and organise them as a whole (see Gestalt theory; Orth & Malkewitz, 2008). Therefore, fluent (simple) visuals include unified labels, and disfluent (complex) visuals include compound labels. This suggests that compound labels, as more complex designs than unified labels, would negatively affect sales

H₁: Compound (versus unified) labels decrease product sales.

The literature on perceptual fluency shows that high readability and visual clarity are easier to process and increase consumers' responses (Reber & Schwarz, 1999; Reber et al., 2004; Reber et al., 1998; see Alter & Oppenheim, 2009). For example, Song and Schwarz (2008) reported an increased fluency for the easy-to-read font (i.e., Arial, 12 point) compared to the difficult-to-read font (i.e., Brush or Mistral, 12 point) which in

turn increased behavioural responses. Similarly, in their Study 1, Novemsky, Dhar, Schwarz, and Simonson (2007) demonstrated that people deferred more their purchase decision when reading product information in a difficult-to-read (unclear) font compared to an easy-to-read (clear) font. The literature on typeface also showed that simple typefaces are more attractive than complex typefaces (Henderson et al., 2004). That is because easier-to-process designs increase consumers' perceived attractiveness and subsequent purchase intentions (Reber et al., 2004). Therefore, bottles that include plain or not distinctive (i.e., simple) brand name typeface on the label are easier to process and recognise, whereas bottles that include ornate or distinctive (i.e., complex) brand name typeface on the label are harder to process and recognise (and feel less familiar), and ultimately decrease sales.

H₂ Labels with an elaborate (versus simple) brand name typeface decrease product sales.

3.2.2 Factors influencing fluency: The positive effect of complexity on purchases

Visual designs that include pictorial or extra-textual elements might be harder to process due to a higher amount of details. Hence, those elements are perceptually complex. However, pictures can be an effective way of communicating information (Scott & Vargas, 2007), as they are quicker to recognise compared to words (Edell & Staelin, 1983). This suggests that pictorial elements facilitate the processing of perceptual fluency. For example, Maier and Dost (2018) show, in an online context, that contextual images increase consumers' liking because they help product recognition. Thus, pictorial elements capture attention (e.g., picture on a wine label; Laeng et al., 2016) and increase recognition (Henderson et al., 1998). Plus, meaningful pictorial elements are conceptually easier to process (Reber et al., 2004).

The use of pictures on a package/label design may also enable consumers to live a sensory experience in connection with the product by engaging the imagination (Underwood, Klein, & Burke, 2001, MacInnis & Price, 1987; see Krishna et al., 2017 for a review on package design and sensory engagement). Thus, the addition of pictorial elements on design has positive effects on consumers' attitudes (Underwood & Klein, 2002) and also facilitate the decision making by grabbing attention (Underwood et al., 2001). For example, Underwood et al. (2001) suggest the insertion of a picture on the package of an unfamiliar brand to increase attention to the brand. Specifically, the use of pictures enhances the brand familiarity and facilitate processing when the interplay between the brand name and the picture is meaningful (Janiszewski, 1993). Finally, the use of pictures increases the number of thoughts associated with the product and subsequently generate positive affective responses (Miniard et al., 1991). This would imply that pictorial elements spark consumers' interest and curiosity towards the product. This also suggests that consumers could purchase a bottle of wine because they like the picture on the label.

H₃: Labels with pictorial (versus no pictorial) elements enhance product sales

Wine labels usually contain some basic information such as the brand name, geographical indications ("Central Otago", "New Zealand"), vintage or grape variety(ies). A fewer amount of wine labels also contain additional information, e.g. description of wine characteristics, vineyard, winemaker or winemaking techniques. Alike the presence of pictorial elements on a label design, additional textual information (as an element of elaborateness, Orth & Malkewitz, 2008) is visually complex due to a higher amount of details (Henderson & Cote, 1998; Henderson et al., 2004; Orth & Malkewitz, 2008). Specifically, the extra description of the wine characteristics, vineyard location, or producer's story on the front label makes the customer to read it further. Therefore, the use of technical words (e.g. "barrel fermented"), vineyard or producer description may

hamper information processing. However, in the context of food and beverage related categories such as wine, information that describes wine flavours (e.g. “citrus”, “cherry”) and texture (e.g., “opulent”, “soft”) or induced quality (e.g. “Reserve”, “single vineyard”, “Estate bottled”) are helpful cues to orientate taste perception. Specifically, the use of sensory descriptors in visuals (e.g., providing haptics and gustatory cues) increase taste perception and evaluation of the product (Elder & Krishna, 2010).

Therefore, in the absence of product tasting, a wide range of extra text details on the label can serve as quality cues, and then those details help consumers in their product evaluation and decision making (Mitchell & Greatedorex, 1988, 1989, Thomas & Pickering, 2003). Moreover, the use of technical terms related to winemaking or certification (“carbon zero”) or producer/winemaker history (e.g., “115 years of winemaking experience”) can reduce the perceived risk and establish trust (Doney & Cannon, 1997; Park, Herr, & Kim, 2016). Finally, extra text information helps the customer to evaluate the product more accurately and make a more informed purchase decision (Orth & Malkewitz, 2012).

H₄ Labels with extra text (versus no extra-text) information increase product sales

3.2.3 Moderating factors of the effect of fluency on purchases

The negative effect of ‘double-disfluency.’

In some conditions, the negative effect of disfluency cannot be helped, and the interaction between two complex factors like extra-text and pictorial information lead to negative consumers’ responses and a decrease in sales. The literature on selective visual attention (Desimone & Duncan, 1995) emphasises the fact that too much visual information is harder to process and people may allocate most of their attention to one visual element. For example, the combination of extra-text and pictorial contents may distract consumers’

attention due to elements' competition to attract attention (Pieters et al., 2010). And consumers may not pay much attention to the extra-text information because pictorial elements attract more their attention (Lurie & Mason, 2007; Pieters & Wedel, 2004). This suggests that the abundance of details included in a label design hampers consumers' information processing (i.e., information overload).

H₅ Extra-textual information moderates the effect of pictorial information on sales such that the presence of both extra-text and image on a wine label decreases sales

The positive effect of "double disfluency" and price

The literature shows that some factors can increase the perceived quality of a product such as price or brand name (Dawar & Parker, 1994; Dodd et al., 1991; Teas & Agrawal, 2000). Indicators of quality contribute to establishing trust into the product/brand and avoid consumers to experience a loss (Landwehr et al., 2012). Specifically, consumers perceive premium products to be of better quality than cheap products thereby reducing the perceived risk to make a poor purchasing decision (Chitturi, Chitturi, & Raghavarao, 2010; Dawar & Parker, 1994; Dodds et al., 1991). Similarly, consumers may perceive a wine label that includes a further description of particular winemaking process or unique 'terroir' to be of higher quality. Hence, consumers start to consider and enjoy the hedonic elements of the product when the functional cut-offs of the product (i.e., perceived product quality) are met or exceeded (Chitturi et al., 2007, 2008).

Furthermore, higher levels of elaborateness lead to more engaging and interesting but less pleasing and reassuring typefaces (Henderson et al., 2004). Therefore, premium price or extra-text information may contribute to reverse the negative effect of elaborate typefaces on brand reassurance by satisfying the product quality requirements. Similarly, familiar (and strong) brand names that use elaborate typeface can be a good choice because

elaborate typefaces are engaging and the familiarity of the brand compensates their lack of reassurance. For example, previous literature showed that combining prototypicality and visual complexity increases product preference and sales (Landwehr et al., 2011; Reber et al., 2004). Put differently, the interplay between a simple (high perceptual fluency) and a complex (low perceptual fluency) design elements may affect consumers positively. The reason is that people like familiar designs due to an uncertainty reduction and quick recognition, but they get bored over time if the design is visually too simple (Cox & Cox, 2002). And, despite being harder to process, elaborate design elements (e.g., ornate typeface) capture more attention and interest (Pieters et al., 2010; van der Lans et al., 2009). Furthermore, consumers are more prone to the visual complexity of design when they look for product quality (Creusen et al., 2010).

Hence, the negative effect of visually difficult-to-process elements (e.g., ornate brand name typeface) can be reversed by the presence of quality signals such as price or extra-text. That is because consumers start to enjoy processing the hedonic parts of the design or expect more elaborate visuals. As a result, people may be interested in the complex label design and willing to process it (Silvia, 2005). This also suggests that consumers, at higher prices (e.g., premium products), are more interested in unique and creative design.

H₆ Extra textual information moderates the effect of a complex brand name typeface on sales such that in the presence of extra-text, bottles with ornate brand name typeface increase sales.

H₇ Recommended Retail Price (RRP) moderates the relationship between complex brand name typeface and sales such that customers purchase more bottles with a complex (versus simple) brand name typeface on the label when RRP is higher.

The negative interaction between pictorial elements and price

Consumers usually go through an extensive decision making process when purchasing expensive or premium products such as wine and are more likely to further process information from particular elements of the label such as the grape varieties, geographical provenance or description about the wine/vineyard (Famularo, Bruwer, & Li, 2010; Orth et al., 2005; Thomas & Pickering, 2003). For example, Beverland (2005, 2006) highlights the importance of brand authenticity and story to affect consumers' perception of the brand for ultra-premium wines. Specifically, findings from Beverland (2006) show that brand heritage and the name strengthen the trust into the product. Therefore, the brand name has a strong effect when it comes to buying more expensive products. Specifically, brand reputation increases perceived trust and quality in the product (Dawar & Parker, 1994; Grewal et al., 1998). A well-known brand is also perceived as a familiar brand. Interestingly, familiar brands do not seem to significantly benefit from adding a picture on their package designs (Underwood et al., 2001). Similarly, Pieters and Warlop (1999) show in their study that highly-motivated participants skipped more pictorial information than textual and brand name information. This suggests that for more expensive wines, the brand name and text elements are stronger factors than pictorial elements to affect purchase decision which is made more cognitively (and less emotionally). Conversely, for cheaper wines, consumers are more likely to make an emotionally-based decision and give greater importance to the pictorial elements (e.g. I buy this wine because I like the label or picture on the label).

H₈ RRP moderates the relationship between pictorial information and sales such that customers purchase fewer bottles with image(s) (versus no image) on the label when RRP is higher

3.2.4 Controlling for the marketing mix

Price.

Research on price effect commonly uses Recommended Retail Price (RRP) and price index to examine the relationship between price and sales (Bijmolt, Van Heerde, & Pieters, 2005; Ataman, Mela & Van Heerde, 2008; Ataman, Van Heerde, & Mela, 2010) or as a control to make models more robust (Braak, Dekimpe, Geyskens, 2013). The RRP is similar to the regular price and can be defined as the price manufacturers suggest to retailers to apply, and it generally represents the maximum price of a product. As the price-sales function is usually negative, we expect wine bottles with lower (higher) RRP to have a higher (lower) level of sales.

Price index is used to control for the depth of the price cut (Bijmolt et al., 2005, Ataman et al. 2010). In line with Bijmolt et al. (2005) and Van Heerde, Leeflang, and Wittink (2004), price index is the ratio of the price that customers actually pay (i.e. actual price) to RRP. Price cuts are very effective to increase sales because those discounts are good incentives for customers who buy the product for the first time and repeat the purchase after (Anderson & Simester, 2004). However, a price cut is a double sword edge because sales of a product that was priced down for a certain period decrease when the price goes closer to its normal level (i.e. RRP) generating a “postpromotion dip” (Srinivasan, Pauwels, Hanssens, & Dekimpe, 2004; Van Heerde, Leeflang, & Wittink, 2000). Therefore, the retailer may decide to maintain and extend the price cuts because discounts generate a higher price sensitivity (Van Heerde et al., 2000). Furthermore, we expect customers to be highly price sensitive to the wine product category (alike spirits) and to buy higher volumes when discounted (Mulhern, Williams, Leone, 1998).

Promotion.

Retailers heavily utilise flyers as an external promotional instrument (Arnold, Kozinets, & Handelman, 2001). Flyers that target specific markets and demographics are effective tools to increase retail sales (Gijbrecchts, Campo, & Goossens, 2003). However, Burton, Lichtenstein, & Netemeyer, (1999) demonstrates that flyers can be ineffective to increase sales because consumers receive flyers but may ignore them; therefore such consumers are not exposed to the promoted content and less likely to visit the retail store. Another reason could be that retailers do not target specific geographical areas or demographics; as a result, the content of the flyer may not match the needs and wants of consumers who received it (Gijbrecchts et al., 2003). Therefore, the potential advantage of using flyers can be wasted and ineffective to achieve the retailers' goal: increasing sales.

The presence of awards (e.g. gold medals) are common in the wine product category because they do affect wine purchases in a positive manner (Lockshin, Jarvis, d'Hauteville, & Perrouty, 2006; Orth, 2002). Consumers rely on awards to identify wines of quality more easily and reduce perceived risk to buy an unknown wine without tasting it (Mitchell & Grottel, 1988). In addition, the presence of awards such as a gold medal helps wines to stand out visually from competitors by attracting customers' attention (Neuninger, Mather, & Duncan, 2017). Therefore, the presence of this visual (quality) cue plays an important role in increasing sales for awarded wines.

3.2.5 Controlling for other design elements

Colour of the label background

Previous literature has reported the importance of choosing the right colours on food package (Mai et al., 2016), nutritional label (Vasiljevic, Pechey, & Marteau, 2015) or wine label (Lick et al., 2017) to increase consumers' responses. And the choice of colours

can affect the visual clarity of design (Henderson et al., 2003; Orth & Malkewitz, 2008). Specifically, high visual clarity increases perceptual fluency and helps brand recognition, and the contrast between the background and the design content affects consumers' responses positively (Pieters et al., 2010; Reber et al., 2004; Reber et al., 1998). For example, Reber et al. (1998), in their experiment 2, showed that high-contrast stimuli are perceived as prettier (e.g., dark forms on a white background) and people like them more because such stimuli are easier to process. Similarly, Pieters et al. (2010) show that the low visual complexity of white background (categorised as "low feature complexity") increases consumers responses by avoiding visual clutter; also the high contrast between the brands and its background increases brand identification. However, wine labels can be complex visual designs, and even those with off-white as the predominant colour of the background can also include other competing colours. Therefore, in such situations, it is hard to accurately predict the sole effect of the colour of the label background – hence, we refrain from formulating any hypothesis about this effect and consider the colour of the label background as additional control into the model.

Label change

People like familiar designs because those designs reduce uncertainty and gain quick recognition. Existing research, however, shows that familiar and typical design can backfire under particular conditions. For example, Landwehr et al. (2013) showed that consumers found typical visual designs to be less appealing after multiple exposures and would go for atypical ones. The preference for atypical and familiar visuals over time can be explained by the fact that familiar visuals become boring after several exposures over time (Bornstein et al., 1990), mostly when the design is visually too simple (Cox & Cox, 2002). And boredom results in a hedonically negative experience (Graf & Landwehr, 2015). Therefore, an incremental change of label design may affect sales positively. That

is because a novel but still familiar label design can reduce consumers' boredom to be exposed to the same label over time. In this research, we control for label changes that occurred during the examined period; however, the information about when exactly label changes happened, across the examined stores, is unknown. More importantly, we do not know when the new labels reached the shelves of the examined stores, and these changes may happen at different moments across the stores depending on their stocks at that given time. Therefore, we refrain from formulating any hypothesis about this effect and consider the change of label as additional control into the model.

3.2.6 Controlling for external factors

Temperatures

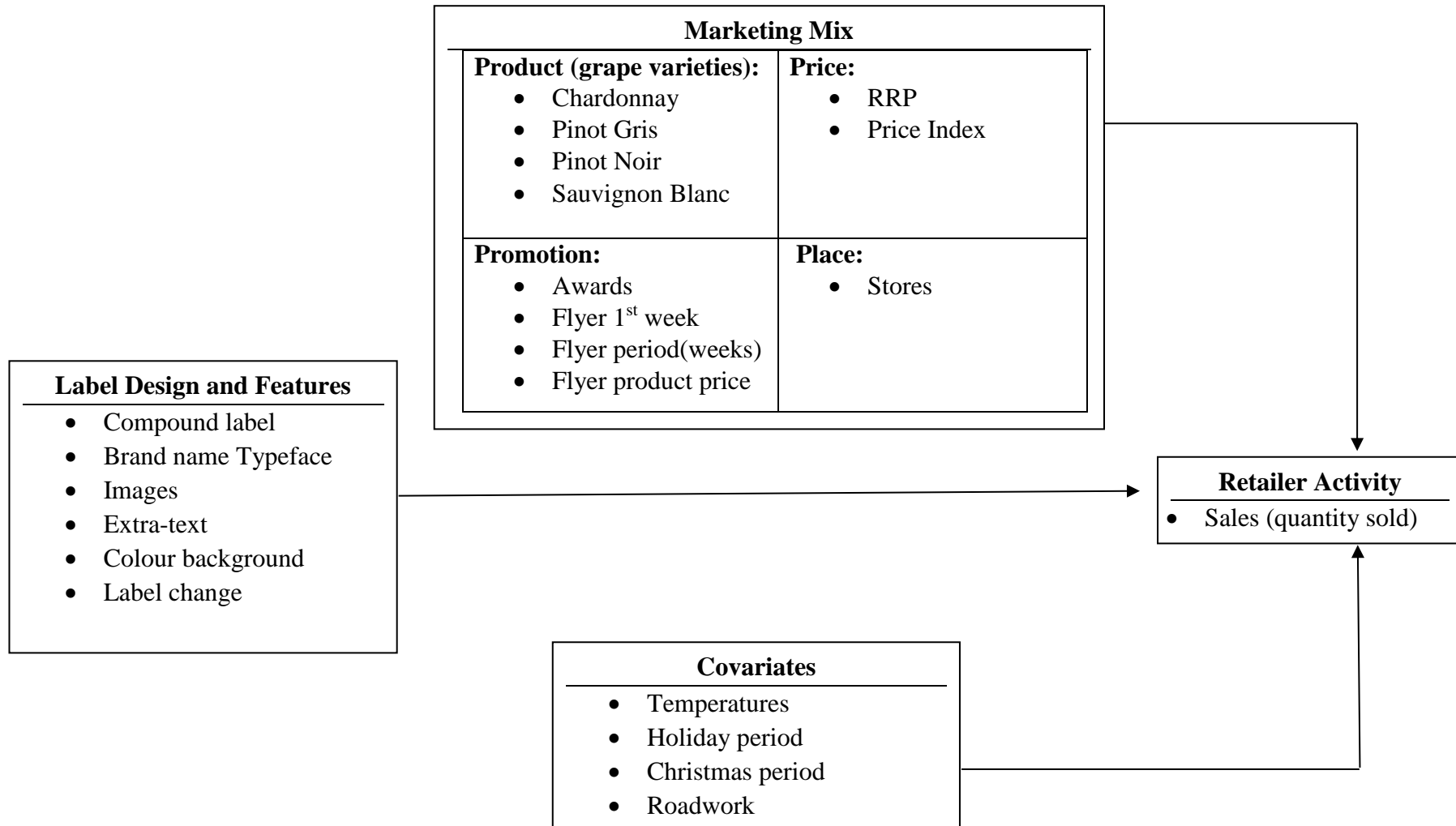
There is evidence in the literature that atmospheric factors influence consumer behaviour such as shop foot traffic (Parsons, 2001) and shopping behaviour (Turley & Milliman, 2000). That is because the weather and seasons impact customers' mood and cognition (Cheema & Patrick, 2012; Keller et al., 2005). Across multiple experiments, Zwebner, Lee, and Goldenberg (2014) have demonstrated that warm temperatures or products generate emotional warmth (and positive affect) which in turn lead to higher product evaluation and purchase intentions. Further, Bruno, Melnyk, and Völckner (2017), in their research on homeostatic optimum, show that people prefer visual stimuli that are emotionally cold (warm) when they feel hot (cold); also, people go for a hot drink in cold conditions and either cold or hot drink in optimal conditions (i.e. neither perceived to be hot or cold). Hence, we would expect people to go for a cold drink in warm conditions. Therefore, the atmospheric temperatures may influence the sales of red wines versus white wines, in that an increase (decrease) of temperatures may result in higher sales of white (red) wines.

Holiday and Christmas periods

The Christmas magic ignites greater consumers' excitement and stimulation, and is a period favourable to gift giving (Fischer & Arnold, 1990; Spangenberg, Grohmann, & Sprott, 2005). Therefore, during that period people are more prone to purchase hedonic products and enjoy their shopping experience (Babin, Darden, & Griffin, 1994; Fischer & Arnold, 1990). This positive effect may be even stronger in New Zealand because Christmas period falls during summer and people are more likely to be in a good mood due to the pleasantness of the weather at that time of the year (Keller et al. 2005). As a result, we expect wine sales to rise during the Christmas period.

Holidays generally follow the same pattern as Christmas period in terms of consumer purchasing behaviour; namely, sales are higher during the holiday period compared to the rest of the year. However, we expect the reverse effect in Auckland (New Zealand). That is because the inhabitants of Auckland (aka the 'Aucklanders') leave en masse during public holidays and in January for spending time at the seaside or country side parts of New Zealand. Hence, we expect the retailer's activity (like the other retailing sectors) to be down at those specific periods whereas it is at the peak the five weeks prior Christmas.

Figure 12: Conceptual framework (only considering the main effects)



3.3 Data and measures

3.3.1 Data cleansing and description

I collected this sales data directly from two liquor stores that are located in Auckland (New Zealand) and part of a retail chain. Specifically, transactional data was first extracted per week from the point of sale stores' transactions database, then aggregated to generate a longitudinal data set (weekly period) for each of the two stores. I obtained the marketing mix information from the stores and the retail chain. Specifically, the price promotion periods and product special prices were collected by analysing and tracking information on the flyers made available by the retailer.

This study utilises weekly transactional data for 750ml bottles of wine on 127 wine Stock-Keeping Units (SKUs) that covers a 105-week period: from 13/01/14 to 17/01/2016. A total of 111 wine SKUs were sold in both stores and a further 16 SKUs in one of the two stores only. With respect to the two stores, they are comparable in terms of (1) opening hours and days (7 days a week); (2) location (both based in the same broad suburban area) and environment (i.e., with a car park, near other shopping stores, on a major road); (3) foot-print size, and (4) had been respectively managed by the same owners during the examined period. However, the two stores are different in terms of foot traffic and sales. Namely, Store 2 is much larger in sales term than Store 1. The decision to use data from two stores was made to increase external validity and demonstrate the robustness of the sales model across the stores even though their sales levels are substantially different.

In this research, we only consider the 750ml bottle format and the still (red and white) wine category. In terms of country of origin, most of the wines are from New Zealand – i.e., 119 SKUs out of 127 (representing 93.70% of the sample), the remaining 8 SKUs (6.30%) are wines from Australia or Australian/NZ blends. In addition, we excluded,

from the dataset and subsequent analyses, the observations with negative sales in \$ that correspond to ‘product returns’ ($N = 17$). This decision was made because the current research focuses on purchasing behaviour and not post-purchasing behaviour. Another four additional observations were excluded due to very high price-indices (> 130) that reflects potential inconsistencies in the sold price.

Out of the 127 selected SKUs, 118 SKUs represent a part of the retailer’s full core range and 9 SKUs were added following a request from one of the stores’ managers. The selected SKUs are representative of four grape varieties: Chardonnay, Pinot Gris, Pinot Noir, and Sauvignon Blanc. I chose these four varieties because they are the four best-selling/popular grape varieties totalling about one-third of the wine category (including all formats) in NZ\$. Therefore, the aggregated data set contains, across 127 SKUs, two stores and 105 weeks, a total of 22,383 observations (the number of observations per SKU varied due to occasional stock-out situations or when a particular SKU was not ranged during a given period).

The general structure of the data is a three-level nested structure where 105 weekly observations are nested within wine bottle SKUs which are nested within stores. The examined data set includes observations when a given SKU was on the shelf in a given week but no sales happened. The number of observations when there are no sales account for 39.4% of the total observations included in the dataset. To unravel between when the SKUs 1) were actually on the shelves but sales did not happen and 2) were not ranged or stocked out for a given period, I collected the corresponding weekly stock movement data and examined whether the SKUs of interest were in stock or not. From this analysis, we could determine, when no sales occurred, whether the corresponding cells/observations in the dataset were ‘0’ (i.e., the product was on the shelves, but customers did not buy it)

or a 'blank' (i.e., stock was missing). Namely, when a given SKU was recorded in the given store stock but no sell, the corresponding cell/observation was determined as 0; when a given SKU did not appear in the stock, a blank was left in the corresponding cell/observation. The stock movement records for weeks 1-23 were not available (i.e., not recorded anymore), therefore an estimation was made on whether the SKUs with no sales were on the shelves or not, based on additional information provided by the stores' managers and wine companies; for example, some SKUs were ranged by the stores later on.

3.3.2 Picture collection and standardisation

I took high-resolution digital pictures of the selected range of wine bottles. Pictures were taken in two sessions in the back-room of one of the two stores where there was no natural light during those two sessions. Pictures were taken using the same manual camera settings and an auto-timer to enable standardisation over all bottles. Also, the bottles were displayed exactly at the same place to conserve size and proportion variances. Moreover, the pictures were taken at the same distance, direction, and location. Two (indirect) white light sources were used – on the left and right sides of the displayed bottle – to ensure the same illumination. Then, the front labels were cropped – using Adobe Photoshop – including any strips that are perceived to be part of the label. To reduce error variance across labels, any (award and informational) stickers⁴ were removed from the labels by using Adobe Photoshop again. The aim of this cropping procedure was to provide standardised pictures of the labels to the professional designer for the rating of the label elements.

⁴ With respect to one SKU, the informational sticker was kept and considered in the designer's coding process because the full name of the brand appears only on the large sticker that is above the main label.

3.3.3 Measurement of variables

Dependent Variable.

Quantity sold: The dependent variable ‘Quantity sold’ is measured in bottles sold per SKU (all 750ml bottles) per week per store.

Label Design Elements

The following elements were drawn from the set of label elements used by Orth and Malkewitz (2008):

Compound label: A dummy variable was used to capture whether the labels had at least two parts (0 = no; 1 = yes) such as the main label and a strip and/or an information sticker.

Brand name typeface: Drawing from Henderson et al. (2004), one dummy variable was created to capture the complexity/elaborateness of the brand name typeface (0 = plain (not distinctive), 1 = ornate (distinctive)), as assessed by a professional graphic designer.

Pictorial information: A dummy variable (0 = no; 1 = yes) was created to capture whether the labels contain any images, as assessed by a professional graphic designer.

Extra-textual information: A dummy variable (0 = no; 1 = yes) was created to capture whether the labels contain any text other than the brand name, varietal, vintage (year), bottle size and region/country of origin (e.g., “single estate”, wine description or story), as assessed by a professional graphic designer.

Colour of the label background: To categorise the predominant colour on the label background, the designer coded a multi-level variable (that includes ‘off-white,’ ‘dark,’ ‘gold’ and ‘others’). In line with the theoretisation on visual contrast (Reber & Schwarz, 1999; Reber et al., 2004; Reber et al., 1998), we derived one dummy variable where we

specified if the label background was predominately off-white or not (0 = else; 1 = off-white).

Change of labels: We controlled for the potential change of labels during the examined period. First, the wine suppliers/distributors were contacted by asking them – for the SKUs that are included in our list – whether the retailer’s customers may have seen any change of labels on the stores’ shelves between 13/01/2014 and 17/01/2016. We got information from the wine suppliers/distributors for 76.5 % of the total range of SKUs, for the remaining 23.5 % we got information from the stores’ owners. A total of 27.4% of labels underwent change during the period (see Table 5).

Marketing mix variables

Products (grape varieties): We use four dummy variables to capture the different grape varieties. Namely, we coded whether the wine product/SKU was a Chardonnay or Pinot Gris or Pinot Noir or Sauvignon Blanc respectively (0 = no; 1 = yes). Pinot Noir served as the base group in the models. The varieties accounted for 21.5%, 24.4%, 24.8% and 29.3% of cases/observations respectively.

Awards: Drawing from Orth & Malkewitz (2008), we controlled for the effects of awards (e.g., medal stickers) on wine bottles/labels based on the initial photographs of the wine bottles. While these stickers might have changed during the 105-week period and across stores, we had no way to identify when this would be seen by customers in-store or in other promotional material. We therefore assumed any award applied to the whole period.

Recommended Retail Price (RRP): We use RRP including 15% GST (Good and Services Tax) as a measure for regular prices observed in the two stores. The change of RRPs was tracked over time as accurately as possible. This variable was grand mean-centred in the full model.

Price Index: In line with Van Heerde et al. (2004), we define the price index variable as the ratio between the actual price of a wine product at time of sale and its RRP (aka regular prices). To be consistent with the RRP that include 15% GST, we added 15% GST in the calculation of the actual prices as they were excluding GST. The price index is expressed in percentage.

$$\text{Price Index} = \frac{\text{Actual price}}{\text{RRP}} * 100$$

To determine the actual price of a given SKU that was not sold in a given week, we applied a series of rules that can be found in detail in Appendix 9.

Flyer Price Promotional Weeks (Flyer_PPW): We control for whether a given week was on price promotional weeks (0 =no; 1 = yes). Each promotion cycle lasts either four or five weeks (including two price promotion periods of two or three weeks). Specifically, the retailer sends at the beginning of each period a flyer to customers in their mail boxes. The flyers include a range of core brands that are on price promotions. This dummy variable is consistent for each SKU and each store, varying only across weeks.

Flyer 1st week (Flyer_1st): We control for whether a given week was the 1st week of the price promotional weeks (0 = no; 1 =yes) to capture the (short-term) effects of flyers on sales. Customers generally receive the flyers a couple of days before the price promotional period starts. This dummy variable is consistent for each SKU and each store, varying only across weeks.

Flyer-based Product Price Promotion (Flyer_PPP): We coded whether each SKU was on price promotion (0 = no; 1 = yes) for a given week based on the flyers' contents. This varies by week and by SKU, but not by store.

Stores. We use a dummy store (0 = store 1; 1 = store 2) to control for the two stores.

Control Variables.

Atmospheric temperatures. In line with Ataman et al. (2010) and Van Oest, Van Heerde & Dekimpe (2010), we control for the effect of weekly outside temperatures. To do so, we collected weekly average high temperatures measured in degree Celsius for Auckland from the weather specialist website “Weather Underground” (<https://www.wunderground.com/>). We accounted for the average high temperatures because most of the wines are purchased in the mid-afternoon/early evening (‘peak time’). Therefore, the average high temperatures reflect this time of the day where consumers purchase their wines the most, after leaving work and going back home.

Christmas. A dummy variable indicated whether the given week fell within the Christmas period (=1) or not (=0). The Christmas period consistently lasted five weeks (i.e., from late November to the Christmas week). In line with Dinner, van Heerde, and Neslin (2014) who controlled for the Christmas period (their selected period runs from Thanksgiving to the end of the year), we control for this period because the level of sales is exceptionally high and does not reflect the activity of the rest of the year.

Holidays. We use the dummy variable Holidays (0 = no; 1 = yes) to capture the effects of the public holidays observed in the Auckland region and the January month (as a major holiday month). In line with Divakar, Ratchford, and Shankar (2005), we consider both the week prior the public holiday and the week of the public holiday in this dummy as 1. The Christmas day and period are not considered as a holiday in this dummy. That is because we already control for the Christmas period and the customer behaviour is dramatically different between (1) the Christmas period and (2) public holidays and January.

*Roadworks*⁵. A dummy variable captured whether each store was affected by roadworks for a given week (0 = no; 1 = yes). We control for it in the model because the proximity of roadworks to a retail store makes its access difficult and is likely to decrease its foot traffic and sales. One store in particular had significant nearby roadworks for a sustained period of time during the observed period.

⁵ Only one store was affected by roadworks in a given period.

Table 5: Descriptive statistics and correlations (Pearson Coefficient)

N = 22383

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1 <i>Quantity sold</i>	1.00											
2 <i>Compound label</i>	-.11	1.00										
3 <i>Brand name Typeface</i>	-.05	-.20	1.00									
4 <i>Images</i>	.09	-.43	.03	1.00								
5 <i>Extra text</i>	.01	.39	-.14	-.21	1.00							
6 <i>Colour of label background</i>	.07	.12	.12	.07	-.07	1.00						
7 <i>Label change</i>	.15	-.29	-.13	.05	-.15	-.16	1.00					
8 <i>Awards</i>	.10	-.24	-.00	.14	-.09	-.07	.25	1.00				
9 <i>Store</i>	.21	.01	-.02	-.03	-.00	-.04	.01	-.05	1.00			
10 <i>RRP</i>	-.29	-.01	.21	-.28	-.15	-.16	-.18	.09	-.02	1.00		
11 <i>Price Index^a</i>	-.33	.01	.02	-.02	-.01	.04	-.11	-.13	.10	.16	1.00	
12 <i>Chardonnay</i>	-.04	.00	-.09	.00	.03	.11	.03	-.11	-.00	-.09	-.06	1.00
13 <i>Pinot gris</i>	-.02	.02	-.02	.05	.04	.09	.05	.07	-.01	-.25	-.05	-.30
14 <i>Pinot Noir</i>	-.16	-.02	.17	-.01	-.14	-.10	-.09	-.05	.00	.54	.14	-.30
15 <i>Sauvignon blanc</i>	.21	-.01	-.06	-.04	.07	-.09	.01	.08	.01	-.20	-.04	-.34
16 <i>Flyer 1st week</i>	.02	-.00	.00	.00	-.00	-.00	.00	.00	-.00	.00	-.04	.00
17 <i>Flyer PPW</i>	.02	-.00	.01	-.00	-.01	-.00	-.00	.00	-.00	.00	-.07	.00
18 <i>Flyer PPP</i>	.17	.05	.00	-.07	.08	-.00	.00	-.01	.01	-.04	-.30	.00
19 <i>Temperatures</i>	.02	.00	.00	-.00	-.00	.00	.00	-.00	.00	.01	-.04	.00
20 <i>Holiday</i>	-.02	-.00	.00	.00	-.00	.00	.00	.00	.00	.01	-.01	.00
21 <i>Christmas</i>	.04	-.00	.01	-.01	-.01	.00	-.00	.00	-.00	.01	-.08	-.00
22 <i>Roadwork</i>	-.12	-.02	.02	.01	-.00	-.02	-.01	.05	.47	.01	-.04	.00
Mean	3.88	23.3%	28.5%	77.7%	42.2%	75.7%	27.4%	16.3%	48.3%	19.38	90.89	21.5%
Standard Deviation	7.25	—	—	—	—	—	—	—	—	6.57	8.65	—
Minimum	0	0	0	0	0	0	0	0	0	8.99	45.48	0
Maximum	101	1	1	1	1	1	1	1	1	44.99	126.10	1

Variable	13	14	15	16	17	18	19	20	21	22
13 <i>Pinot Gris</i>	1.00									
14 <i>Pinot Noir</i>	-.33	1.00								
15 <i>Sauvignon Blanc</i>	-.37	-.37	1.00							
16 <i>Flyer 1st week</i>	.00	.00	.00	1.00						
17 <i>Flyer PPW</i>	.00	.00	-.00	.44	1.00					
18 <i>Flyer PPP</i>	.02	-.04	.01	.08	.18	1.00				
19 <i>Temperatures</i>	-.00	.01	-.00	.05	.22	.05	1.00			
20 <i>Holiday</i>	-.00	.00	-.00	-.03	.13	.02	.33	1.00		
21 <i>Christmas</i>	.00	.00	-.00	.13	.21	.08	.19	-.20	1.00	
22 <i>Roadwork</i>	.01	-.01	-.00	-.02	-.01	-.01	-.24	-.08	.06	1.00
Mean	24.4%	24.8%	29.3%	31.6%	70.9%	7.4%	18.97	25.8%	10%	19.2%
Standard Deviation	—	—	—	—	—	—	3.61	—	—	—
Minimum	0	0	0	0	0	0	13	0	0	0
Maximum	1	1	1	1	1	1	26	1	1	1

Notes: All correlations in bold are significant at the 5% level (two-sided). Descriptive statistics are reported before mean-centring.

^aThe maximum of price index is above 101 for 42 observations (11 cases above 106) due to potential changes in RRP for a short term period or errors/inconsistencies in the sold prices.

For the dummy variables, we report the percentage of the observations taking the value 1.

3.4 Results

3.4.1 Model specification

The full-effects model accounts for a temporal measurement t nested within a SKU i nested within a store j and it has the following equation:

$$\begin{aligned}
 SALES_{tij} = & b_0 + b_1 * COMPOUND_i + b_2 * TYPEFACE_i + b_3 * IMAGES_i + b_4 \\
 & * EXTRATEXT_i + Y_1 * IMAGES_i * EXTRATEXT_i + Y_2 * TYPEFACE_i \\
 & * EXTRATEXT_i + Y_3 * TYPEFACE_i * (RRP_{tij} - \overline{RRP}) + Y_4 \\
 & * IMAGES_i * (RRP_{tij} - \overline{RRP}) + b_5 * COLOUR_i + b_6 \\
 & * LABELCHANGE_i + b_7 * CHARDONNAY_i + b_8 * PINOTGRIS_i + b_9 \\
 & * SAUVBLANC_i + b_{10} * (RRP_{tij} - \overline{RRP}) + b_{11} * PRICE_INDEX_{tij} \\
 & + b_{12} * AWARD_i + b_{13} * FLYER1st_t + b_{14} * FLYER_PPW_t + b_{15} \\
 & * FLYER_PPP_{ti} + b_{16} * STORE_j + b_{17} * TEMPERATURE_t + b_{18} \\
 & * HOLIDAY_t + b_{19} * CHRISTMAS_t + b_{20} * ROADWORK_{tj} + e_{tij}
 \end{aligned}$$

Following the recommendations of the literature (Aiken & West, 1991, Hayes, 2013, Irwin & McClelland, 2001), the continuous variable RRP was grand-mean-centred for one main reason: to make straightforward and meaningful interpretation of the RRP coefficients (i.e., avoiding meaningless interpretations: RRP = \$0). The (full-effects) Models 1 and 2 (see Table 6) present all parameter estimates, including the four interaction terms (see in the above equation the following parameters: Y_1, Y_2, Y_3, Y_4).

First, we tested for potential strong correlation in the models. In Table 5, we report the correlations, which are all .54 or less. These coefficients are well below .80 and do not arise any preliminary concerns for multicollinearity (Judge, Hill, Griffiths, Lütkepohl, & Lee, 1998). The maximum variance inflation factors (VIFs) value are all below 8, except for RRP and the interaction Images \times RRP (respectively 14.43 and 11.71) in Model 1 (see Table 5). Even though these two values are above the threshold of 10 (Hair, Black, Babin,

& Anderson, 2010), recent literature shows that multicollinearity is not a problem when using moderated multiple regressions (MMR) and high VIFs often occur in such cases (Disatnik & Sivan, 2014; McClelland, Irwin, Disatnik, & Sivan, 2017). For example, this absence of multicollinearity issue is explicitly stated by Disatnik and Sivan (2014, p.407): “We point out that MMR does not suffer from a multicollinearity problem when the independent variables are highly correlated with their product since the multicollinearity is simply a matter of interval scaling.” Finally, the results are respectively considered significant and marginally significant at the 5% and 10% levels (two-sided tests).

We first use Ordinary Least Squares (OLS) to estimate Model 1. Following the recommendations of Leeflang, Wieringa, Bijmolt, and Pauwels (2015), we then employ the Generalised Least Squares (GLS) approach, best used in the case of time-series data, to estimate Model 2 (see Table 6). More specifically, we use the Prais-Winsten estimation that follows an AR(1) structure which is a better and more robust alternative than OLS in the presence of first-order autocorrelation. Using GLS estimation method, we rule out serial correlation issues. Hence, we only report and interpret the results of Model 2 (Table 6)⁶. We also estimated main-effects models and the detailed results can be found in Appendix 11. Finally, two separate models were estimated per store as robustness checks, their descriptions are presented in the robustness checks part, and the results are reported in Appendix 12.

⁶ In the results sections 3.4.2 to 3.4.5, the unstandardised coefficients (i.e. B coefficients) are reported and interpreted. In the following discussion section (3.5), the standardised coefficients (i.e. β coefficients) are reported to enable relative effects comparisons.

Table 6: Multiple regression full-effects models

DV = Sales in units; N = 22383	OLS Estimation Method (E.M)		GLS E.M Prais-Winsten		
	Model 1		Model 2		
	B	SE	B	SE	β
Independent variables					
Label Design and Features					
Compound label: 0= no; 1 = yes	b ₁ = -2.48***	.13	b ₁ = -2.57***	.28	-.08***
Brand name typeface: 0=plain;1=ornate	b ₂ = -1.32***	.13	b ₂ = -1.36***	.27	-.04***
Images: 0=no; 1 = yes	b ₃ = 1.49***	.20	b ₃ = 1.38**	.43	.04**
Extra-text: 0=no; 1 = yes	b ₄ = 2.39***	.22	b ₄ = 2.40***	.47	.08***
Extra text \times Images	Y_1 = -3.17***	.23	Y_1 = -3.23***	.49	-.10***
Brand name typeface \times Extra text	Y_2 = 1.51***	.21	Y_2 = 1.55***	.45	.03***
Brand name typeface \times RRP ^a	Y_3 = .18***	.02	Y_3 = .15***	.03	.04***
Images \times RRP ^a	Y_4 = -.13***	.02	Y_4 = -.12*	.05	-.05*
Controls related to label design					
Label colour background: 0=else; 1=off-white	b ₅ = 1.60***	.11	b ₅ = 1.53***	.23	.05***
Label change: 0 =no; 1 = yes	b ₆ =.18 ^{N.S}	.11	b ₆ =.28 ^{N.S}	.23	.01 ^{N.S}
Marketing mix					
Chardonnay: 0 = else; 1 =Chardonnay	b ₇ = -1.58***	.14	b ₇ = -1.36***	.28	-.04***
Pinot Gris (PG): 0= else; 1= PG	b ₈ = -1.49***	.14	b ₈ = -1.45***	.29	-.05***
Sauvignon Blanc (SB):0=else; 1= SB	b ₉ = 1.51***	.13	b ₉ = 1.59***	.28	.05***
RRP ^a	b ₁₀ = -.19***	.02	b ₁₀ = -.19***	.05	-.09***
Price Index (actual price/ RRP)*100	b ₁₁ = -.24***	.01	b ₁₁ = -.21***	.01	-.24***
Awards: 0 =no; 1 = yes	b ₁₂ = 1.22***	.12	b ₁₂ = 1.17***	.26	.03***
Flyer_1st: 0=others, 1=1 st week of the PPW	b ₁₃ = .11 ^{N.S}	.10	b ₁₃ =.07 ^{N.S}	.05	.01 ^{N.S}
Flyer-based PPW ^b : 0 = no; 1 = yes	b ₁₄ = -.35***	.11	b ₁₄ = -.31***	.08	-.03***
Flyer-based PPP ^c :0=no; 1=yes	b ₁₅ = 2.18***	.17	b ₁₅ = 2.07***	.15	.09***
Store: 0 =store 1; 1=store 2	b ₁₆ = 3.16***	.09	b ₁₆ = 3.13***	.20	.11***
Covariates					
Average high temperature	b ₁₇ =.02 ^{N.S}	.01	b ₁₇ = -.00 ^{N.S}	.02	-.00 ^{N.S}
Holiday: 0=else; 1 = holiday	b ₁₈ = -.30**	.10	b ₁₈ = -.28**	.09	-.02**
Christmas: 0=else.; 1=Christmas period	b ₁₉ = .37*	.15	b ₁₉ =.83***	.17	.03***
Roadwork: 0 = no; 1 = yes	b ₂₀ = -.60***	.12	b ₂₀ = -.52*	.21	-.02*
Constant	b ₀ = 22.31***	.60	b ₀ = 19.88***	.82	—
R ² (adj. R ²) in %	29.3 (29.3)		13.6 (13.5)		
F	386.76***		—		
Max VIF ^d	14.43		—		

+ p <.10 * p <.05 ** p <.01 *** p <.001 N.S (Not Significant) Notes: Standardised coefficients = β ; Unstandardised coefficients (B) are presented with standard errors (SE); ^aRRP is grand mean-centred; ^bPPW = Price Promotion Weeks; ^cPPP = Product Price Promotion; ^dAll the VIFs are below 8 except for RRP = 14.43 and Images \times RRP = 11.71

3.4.2 Label design variables and interactions terms

Compound label: In support of H₁, the effect of the compound label (vs. unified label) on sales quantity is negative and significant ($b_1 = -2.57$, $p < .001$) such that customers purchase fewer bottles with fragmented labels than bottles with a single label. In line with the literature on perceptual fluency (Janiszewski & Meyvis, 2001; Reber et al., 2004; Reber et al., 1998), this finding suggests that the perceived complexity of the label design discourage customers to investigate further and decreases sales.

Brand name typeface: Similarly, the effect of the brand name typeface on sales is negative and significant ($b_2 = -1.36$, $p < .001$) such that customers purchase fewer bottles with complex (i.e., ornate/distinctive) brand name typeface than bottles with simple (i.e., plain/not distinctive) brand name typeface on the label. In support of H₂, such finding again suggests that the complexity of a visual design element like an ornate typeface is difficult to process and harder to recognise. Customers prefer to purchase bottles with easier (and quicker) to recognise brand names such as those that are written with simple typeface.

Pictorial information: In support of H₃, the effect of pictorial elements is positive and significant ($b_3 = 1.38$, $p < .01$) such that customers purchase more bottles with image(s) on the label than bottles with no image on the label. In line with the literature on fluency, this result suggests that bottles with pictorial information captures more attention (conceptual fluency) and are easier to recognise or identify (perceptual fluency) which leads to higher sales.

Extra-textual information: In support of H₄, a significant and positive effect of extra-text information on sales ($b_4 = 2.40$, $p < .001$) such that bottles with extra-textual information on the label result in higher sales than bottles no with extra-textual information on the

label. In line with our theorisation, this result reveals detailed information as a cue for quality helps to increase product evaluation, particularly in the absence of wine tasting.

The results of the main effects suggest that bottles with a compound label strongly backfire and those with extra-text strongly help to increase sales. The results overall suggest that visually complex information can decrease sales due to a low perceptual fluency (in the case of compound label and ornate brand name typeface), but increase sales due to a high conceptual fluency (in the case of pictorial or extra-text elements).

Pictorial and extra-textual information: Conversely, in support of H₅, extra text information negatively moderates the relationship between pictorial information and sales. Namely, in the presence of extra-text information on the labels, bottles with images on the label have a negative and significant effect on sales ($Y_1 = -3.23$, $p < .001$). This suggests that the combination of both pictorial and extra-text information leads to information overload which has a negative impact on sales of bottles with visually too complex labels. The interpretation of the main effects suggests that including extra-text on the label ($b_4 = 2.40$) is a better option to increase sales than having images ($b_3 = 1.38$).

Brand name typeface and extra-textual information: In support of H₆, extra-text information moderates the relationship between brand name typeface and sales ($p < .001$). Namely, in the presence of extra-text information on the labels, bottles with a complex brand name typeface have a positive effect on sales ($Y_2 = 1.55$, $p < .001$).

Brand name typeface and RRP: In support of H₇, we find evidence for a positive and significant interaction between complex brand name typeface and RRP ($p < .001$). Namely, at higher prices, consumers are less averse to bottles with a complex brand name

typeface ($Y_3 = .15, p < .001$). By digging further, we find that above \$28.24⁷, the effect of bottles with a complex brand name typeface on sales becomes positive. In line with our theorisation, this suggests that indicators of quality help the processing of complex design elements and extra details.

Pictorial information and RRP: Finally, in support of H₈, the interaction effect between images and RRP on sales is negative and significant ($p < .05$). Namely, at higher prices, consumers are less likely to purchase bottles with images ($Y_4 = -.12, p < .05$). When digging further, we find that above \$30.54⁸, the effect of bottles with images on sales becomes negative. This suggests that pictorial elements affect sales negatively because consumers look for more rational cues such as brand name and information on the label at higher price points. With respect to the interaction effects, we find support for all four hypotheses 5-8.

3.4.3 Controls related to label design

Colour of the label background: The effect of the colour of the label background is positive and significant ($b_5 = 1.53, p < .001$). However, we refrain from interpreting this result given the opposite directions of the effect between the stores (although it is not significant for Store 1, see Models A and A' in Appendix 12).

Label change: The effect of label change is not significant ($b_6 = .28, p > .10$). This non-significance can be explained by the opposite directions of this effect between the stores

⁷ The price was calculated as follow: $-1.362 + (0.154 * 8.86) \approx 0$. Considering that -1.362 is the b coefficient of 'brand name typeface'; 0.154 is the b coefficient of the interaction between 'brand name typeface' and 'Mean-centred RRP'; 8.86 is the dollar amount above the mean price (19.38). Therefore, $19.38 + 8.86 = \$28.24$. This calculation is valid for the wines included in this study. Other wines might have a different break point.

⁸ The price was calculated as follow: $1.377 + (-0.124 * 11.15) \approx 0$. Considering that 1.377 is the b coefficient of 'images'; -0.124 is the b coefficient of the interaction between 'images' and 'Mean-centred RRP'; 11.15 is the dollar amount above the mean price (19.38). Therefore, $19.38 + 11.15 \approx \$30.54$. This calculation is valid for the wines included in this study. Other wines might have a different break point.

(see Appendix 12, Models A and A'). This may be because it is unclear when the new labels reached the shelves of the examined stores, and these changes may happen at different moments across the stores depending on their stocks at that given time.

3.4.4 Marketing mix variables

To better understand the effect of label design relative to the effects of company's marketing mix on sales, the model includes the marketing mix variables.

Product: Turning to the product varietals, the results showed significant and negative effects for Chardonnay and Pinot Gris respectively ($b_7 = -1.36$; $b_8 = -1.45$, $p < .001$) and positive effect for Sauvignon blanc ($b_9 = 1.59$, $p < .001$). This last finding is not surprising given the importance of the Sauvignon Blanc sales (47 % versus 53% for the other three grape varieties combined).

Price: The respective effects of RRP and price index are significantly negative ($b_{10} = -.19$; $b_{11} = -.21$, $p < .001$). These findings suggest that 1) higher RRP reduces sales which is consistent with the common negative price-sales relationship and 2) a reduction of the depth of the price promotion (i.e., closer to the RRP) decreases sales which is consistent with the common positive price promotion-sales relationship. To further explain the effect of price on sales, the price elasticity was calculated for both RRP and price index following the recommendations of Bijmolt et al. (2005). The elasticity is $-.95$ ($-.19 * (19.38/3.88)$) for RRP and -4.92 for price index ($-.21 * (90.89/3.88)$)⁹. Both elasticities are consistent with the literature on price elasticities (Bijmolt et al. 2005), particularly in the liquor category in which customers are highly price sensitive (Mulhern et al., 1998). We would also expect a high price sensitivity of New Zealand customers as price

⁹ The calculation of the price elasticity is as follow: $RRP\ elasticity = b_{10} * (\overline{RRP}/\overline{Sales})$
 $Price\ index\ elasticity = b_{11} * (\overline{Price\ index}/\overline{Sales})$

promotions are very common in retail stores in this country (Hollebeek, Jaeger, Brodie, & Balemi, 2007).

Promotion: First, the effect of awards is significant and positive for awarded bottles compared to the non-awarded bottles ($b_{12} = 1.17, p < .001$) such that the presence of an award (versus not) on a bottle of wine increases sales. This finding is not surprising given that consumers perceive awards as a strong cue for product quality. Turning to the retailer's external advertising, the immediate effect of the flyer (i.e., the first week of the promotional period) is not significant ($b_{13} = .07, p > .10$). This suggests that the fact of sending a flyer to consumers does not influence the sales of our selected wines in the first week. Next, the effect of the price promotion week advertised by the flyer is significantly negative ($b_{14} = -.31, p < .001$). This finding suggests that using a flyer as external advertising affects the level of sales negatively compared to a period without any flyer advertising. This may be because we only have a subset of the stores' wine SKUs, which does not logically provide deeper explanations for what happens for all SKUs (including beers and spirits) sold in the stores. Put differently, this result may suggest that people are switching to other brands, grape varieties, types of wines (e.g. sparkling) or beers and spirits product categories that are also included in the flyer. As expected, the products on price promotion that are specifically included in the flyer (Flyer based_PPP) have better sales ($b_{15} = 2.07, p < .001$) than those which are not flyer-advertised. This result shows how strong the effect of price promotion can be on sales.

Place: The effect of stores on sales is positive and significant such as Store 2 has a higher level of sales than Store 1 ($b_{16} = 3.13, p < .001$). The strong magnitude of this parameter estimate is expected because the level of sales is much higher in the second store than in the first store.

Apart from the effect of the price promotion period advertised by the flyer, all other marketing mix effects are in the expected directions.

3.4.5 Covariates

Outside temperatures: As for the external environment, the results indicate a non-significant effect of outside average high temperatures ($b_{17} = -.00$, $p > .10$).

Holidays and Christmas: As expected, the level of sales is lower during the holiday period compared to a non-holiday period ($b_{18} = -.28$, $p < .01$). This finding is not surprising because Aucklanders travel outside Auckland during the long weekends and in January (summer school holiday). In contrast, the level of sales is higher during the Christmas period ($b_{19} = .83$, $p < .001$). Such a result is again expected and not surprising as the Christmas period is the busiest period of the year and it is consistent with the sales model from Dinner et al. (2014).

Roadwork. Finally, the effect of roadwork is unsurprisingly negative ($b_{20} = -.52$, $p < .05$). That is because one of the two stores was affected by nearby roadwork for a prolonged period. As a result, the in-store foot traffic and sales decreased (due to difficult access to the store) compared to the weeks without any nearby roadwork. Including this control allows to examine relative changes caused by other influences.

3.4.6 Robustness checks

The detailed results of the robustness checks models can be found in Appendix 12. We estimated the models presented in this research project using pooled data across the two stores. Hence, the last observation of Store 1 is correlated to the first observation of Store 2. To correct for the potential issue of an autocorrelation between the residuals, we estimated separate models for each store (Models A and A' in Appendix 12) using GLS estimation method (Prais-Winsten method and AR(1) structure) and reported their

respective Durbin Watson statistics (2.161 for Store 1 and 2.361 for Store 2). The robustness checks show support that the effects of the hypothesised predictors are all significant (at the 10% level for H_8 , Store 1, and H_6 , Store 2) and in the same direction across the two stores.

3.5 Discussion

3.5.1 Implications for researchers, retailers and wine companies

In this chapter, we investigate the relationships between label design elements and sales while controlling for the marketing mix, environmental and seasonal factors. To examine the effects of label design elements, we analysed a data set of 127 SKUs in the wine category that covers a 105-week period and that represents sales of two retail stores. Our findings indicate that label elements have strong effects on sales. Amongst the wine label elements, extra text holds the strongest positive effect on sales ($\beta = .08$, $p < .001$). For example, the presence of extra-textual information ($\beta = .08$, $p < .001$) or pictorial elements ($\beta = .04$, $p < .01$) have stronger effects on sales than awards ($\beta = .03$, $p < .001$). However, while adding either extra-text or pictorial elements on the label help sales, the combination of both extra-textual and pictorial elements has the strongest negative effect ($\beta = -.10$, $p < .001$) due to information overload. Also, the presence of a compound label on a bottle strongly backfires ($\beta = -.08$, $p < .001$). This suggests that visual complexity should be used with care by avoiding information overload, since the combination of extra-textual and pictorial elements holds the strongest negative effect relative to all other label elements.

Amongst the marketing mix variables, price index has the strongest (negative) effect on sales ($\beta = -.24$, $p < .001$). Interestingly, the effects of RRP and product price promotion based on the flyer ($\beta = -.09$, $p < .001$) are smaller in term of magnitude than the combined

effect of extra-textual and pictorial elements ($\beta = -.10$, $p < .001$). Finally, the depth of the price promotion has a stronger effect on sales compared to RRP; this suggests that customers do look at the difference between the RRP and the actual (discounted) price, both present on the shelf. Surprisingly, the first week of the price promotion period does not affect sales significantly ($\beta = .01$, $p > .10$). This suggests that sending physical mailers to customers may not be the best way to reach them in a fast-growing online world. For example, many households may not receive them due to “no junk mail” stickers on their mailboxes. The variable ‘store’ has a strong effect ($\beta = .11$, $p < .001$) on sales. This latter finding is not surprising given a higher sales activity in Store 2 compared to Store 1; however, this variable is a control for distribution and not a measurement. Overall, apart from price, the combination between extra-textual and pictorial elements on the label has the strongest effect on sales.

To the best of our knowledge, this study is the first to examine the magnitude of the effects of label design elements on actual sales relative to other marketing mix variables. Our findings provide important contributions to research on label and package design, visual complexity and implications to wine companies and retailers. First, this research contributes to the literature on label design elements (Giese et al., 2014; Labroo et al., 2008; Machiel & Orth, 2017; Orth & Malkewitz, 2008) by looking at the effect of multiple label design elements such as a compound label, brand name typeface, pictorial and textual information relative to the elements of the marketing mix. Our findings overall provide evidence about the strong effect of wine label elements in enhancing or reducing sales.

Second, this research contributes to the theorisation on processing fluency by specifically looking at the effect of label complexity such as whether and when complex design should be used. Our findings suggest that perceptually simple label designs affect sales more

positively than complex label design. For example, bottles with a unified label or a simple brand name typeface work better than bottle with a compound label or a complex brand name typeface. However, in line with Henderson et al. (2003) and Van der Lans et al. (2009), our findings show a positive effect of elaborate/complex visuals. Specifically, the presence of detailed (complex) elements such as extra-text and pictorial information has a positive effect, unless both are present – in which case the effect is negative. Also, the effect of perceptually complex elements (e.g. ornate brand typeface), that initially have a negative effect on sales, reverses when in the presence of quality cues. Thus, premium price and extra-text information, play an important moderating role in the positive effect of label design complexity. Namely, our findings show that at higher prices, consumers are less averse to complex label design such as ornate brand name typeface and this effect becomes positive for premium wines.

The findings are consistent with previous research that demonstrated the positive effect of product design complexity under some conditions. For example, repeated exposures to visually complex designs increase consumers' product preferences whereas simple designs become boring over time (Cox & Cox, 2002). Similarly, prototypical but complex design positively impact car sales (Landwehr et al., 2011).

3.5.2 Limitations and future research.

This research has several limitations which leave new avenues for further research. First, research could consider using the reviews made by wine specialists (e.g., critics, magazines, websites). That is because reviews from specialists, as opinion leaders, can strongly influence consumers' purchases. Second, even though we could detect in-store promotion using price index and controlling for external price promotion communication conducted by the retail chain, future research should include information about in-store price promotions and display location. Third, we did not get any information concerning

the retailer's competitors. Future research could, therefore, examine how competitors' marketing actions affect a specific retailer's sales such as including whether competitors also have flyers at the same time. Fourth, future research should consider using objective measures of label design complexity, typicality, contrast, and symmetry (see Landwehr et al., 2011; Mayer & Landwehr, 2014, 2016). That is because these four objectives measures are contingent on each other and all related to the concept of fluency (Landwehr et al., 2011; Reber et al., 2004). Therefore, such objective measures of fluency could allow better estimations of the relationship between label design elements and sales.

Fifth, previous research on sensory marketing and package design (see Krishna et al., 2017 for a review) has highlighted the importance of the location of visual elements. Specifically, it has examined how location and congruence perception of visuals (e.g., pictures, logos) on a package (e.g., top or bottom, left or right) can affect fluency processing, product evaluation and subsequent intentions (Deng & Kahn, 2009; Sundar & Noseworthy, 2014). Based on such interesting findings on picture location on the package, we encourage further research to investigate the effect of picture location and congruence on actual purchases. Moreover, previous research highlighted the importance of in-store atmospheric factors as driving customers' evaluation and behaviour (Areni & Kim, 1994; Mattila & Wirtz, 2001; Spangenberg, Crowley, & Henderson, 1996; Spangenberg et al., 2005; Spence, Puccinelli, Grewal, & Roggeveen, 2014; Turley & Milliman, 2000). For example, Areni and Kim (1993) show that customers buy more expensive wines when listening to classical (versus Top-Forty) music in a wine store. Similarly, North, Hargreaves, and McKendrick (1997) show that the congruence between the in-store music and the country of origin of the wine plays an important role in affecting wine sales such as people purchase more bottles of French (German) wines while listening French (German) music. We, therefore, encourage more research in the fields of in-store

atmospherics and sensory marketing (see Krishna, 2012, 2013 for a review) to account for the effects of factors such as store lighting, ambient scent, or music on wine sales. In addition to that, does the presence of a bakery or food retail besides the wine shop influence the consumers' decision about which wine(s) to buy? For example, does the smell of a fresh pizza subconsciously drive the consumer to purchase a red wine instead of white wine?

Sixth, in this research, we do not consider the congruity between the brand name and the pictorial elements. From a (conceptual) "fit fluency" (i.e. match between two features or elements; Graf et al., in press), it would be interesting to look at the impact of a meaningful match between the brand name and the picture (Reber et al., 2004, Labroo et al., 2008). Future research could, therefore, consider the congruence of the textual and pictorial parts of the package design because congruence helps to understand the visual stimulus meaning and increases consumers' responses (Janiszewski & Meyvis, 2001).

Finally, in this research, we do not control for demographic aspects. Future research should, for instance, investigate the 'generations' effect. That is because the behaviour of wine consumers is changing and young consumers (i.e., millennials) are favourable to design novelty. For example, Elliot and Barth (2012) show that Canadian Millennials prefer innovative over traditional wine label design and when selecting a wine bottle, they may give more weight to visual design (including images and brand name) than the verbal description (e.g., the wine producer or country of origin). A study from Gallo (2015) indicated a similar trend in the US market: label design strongly influences US Millennials in their wine choice. This suggests that wine companies and retailers should highly consider this fast-growing market.

Chapter 4

CONCLUSIONS

The primary goal of this thesis is to explore the effect of wine labels on consumers' responses. In particular, this thesis identifies what themes and elements of wine label design should be employed or avoided to influence product evaluation and purchasing behaviour positively. This final chapter presents the main conclusions of the thesis by answering the three research questions. Then, this chapter provides practical implications of the thesis. Finally, this chapter addresses limitations and proposes avenues for future research.

4.1 Main conclusions

RQ1: What elements of wine labels influence consumers' purchasing behaviour?

Based on the findings of two online experiments, two field studies and two analyses of retail sales (Chapters 2 and 3), we find that the elements of label design do impact sales while controlling for the marketing mix. In particular, we find that the elements of labels that are harder to process (fantasy themes, ornate brand name typeface) decrease or have no effect on consumers' responses; however those elements are beneficial in the presence of high quality cues such as expert ratings, award/medal stickers, price and extra textual information (Chapters 2 and 3). We also find that simple label elements (unified label and plain brand name typeface) and detailed information (either images or extra text) on a label increases sales, but the combination of extra-textual and pictorial information (as too many details) or the presence of images at higher price decrease sales (Chapter 3).

RQ2: Whether, when and why fantasy labels affect product evaluation and purchasing behaviour?

Across four experiments (two online experiments and two field experiments) and one analysis of retail sales data, we find that fantasy (versus non-fantasy) labels do affect product evaluation and purchasing behaviour (Chapter 2).

Whether and When: We identify under what conditions fantasy labels increase or decrease product evaluation and purchasing behaviour. Specifically, we find that fantasy labels increase taste perception (Study 4), purchase intentions (Studies 2-4) and actual purchases (Study 5), yet only in the presence of high-quality indicators such as high expert ratings, gold medal stickers, and premium prices. These findings are consistent with the principle of hedonic dominance (Chitturi et al., 2007) that suggests that the hedonic parts of the product are more important to people when the functional requirements are met or exceeded. In other words, consumers go through a hedonic evaluation of the product when it has high-quality cues. In the presence of low-quality cues, fantasy labels do not differ from non-fantasy labels in terms of purchase intentions (Study 2), but fantasy labels backfire in terms of actual purchases (i.e., for cheap wines; Study 5) which is in line with the literature on meta-cognitive processing (Reber et al., 2004; Winkielman et al., 2006). In the absence of quality indicators, there is no difference between fantasy and non-fantasy labels (Studies 1-2 and Study 5).

Why: We finally find that the evocation of the imaginary (Studies 1-2) and positive affect (Study 2) are the underlying mechanisms of why fantasy labels affect purchase intentions. Namely, in the presence of high-quality cues, fantasy labels stimulate consumers' imagination and this mental process makes them happy; as a result, they are more willing to buy a bottle of wine with a fantasy label (versus a non-fantasy label). This finding is

consistent with the literature on mental simulation and imagination (Belk & Costa, 1998; Martin, 2004).

RQ3: To what extent label design elements influence purchases relative to other marketing mix elements?

Based on the analysis of retail sales (across two stores, 127 SKUs and 105 weeks), we find evidence that, apart from price, wine label elements such that the combination of extra textual and pictorial information has a stronger effect on sales compared to the individual effects of other marketing mix elements. Among the marketing mix, price has the strongest effect on sales. Among the wine label elements, the combination of image(s) and extra text has the strongest effect. Moreover, the main effect of wine label elements or the interaction between two wine label elements strongly increase or decrease sales. In particular, label elements that are perceptually complex have a strong negative effect. Also, labels with detailed information have a stronger positive effect on sales than the presence of awards. Importantly, the combination of images and extra text strongly backfires. Interestingly, we find that the negative effect of complex label elements reverses when the price is premium. Conversely, we also find that the positive effect of detailed labels reverses when the price is premium.

4.2 Managerial implications

The findings of this thesis have strong implications for marketers, store and brand managers involved in the wine and retail industries. Our results overall help managers involved in the wine business industry to identify what labels and themes they should use for their brands to enhance product evaluation and sales. Similarly, our findings guide retailers towards what wines they should sell to attract customers by identifying the elements of label design that are effective to increase purchases. We further show to what

extent the marketing mix elements and external factors (such as roadwork, seasonality) impact sales.

Specifically, the decision to use unusual or complex labels can be strategic to enable wine brands standing out from competitors by attracting consumers' attention and interest. Yet, such decisions should be taken with care because our results suggest that simple or meaningful labels are easier to recognise and process. However, more complex labels can be used in the presence of high quality cues. For example, we recommend managers to employ unusual wine labels when consumers perceive the wine product to be of high quality. A wide array of quality cues is available to wine companies that are willing to introduce such wine labels into the marketplace. In particular, managers can consider using fantasy labels for their wine brands that have received awards or positive critics from reputable wine experts. Wine brands or "chateaux" that are well-known for the quality of their wine or stand at premium prices can also employ such labels. For companies that do not hold quality recognitions, it would be wise *not* to use unusual wine labels such fantasy labels. However, a number of wine companies that produce high-quality wine may still consider using unusual labels even though they do not hold any quality recognitions or are unknown. In these specific cases, we would recommend them participating in wine competitions to gain awards and approaching well-known wine experts or influencers (e.g., wine bloggers) to receive positive critics and build up their reputation. In Table 7, we further present the main managerial implications for wine companies and retailers to increase (and avoid decreasing) consumers' product evaluations and subsequent sales.

Taken altogether, our findings suggest that managers in the wine business industry should carefully select the elements or themes to include on a label. The identification and the selection of the right label elements are critical, mostly in the retail environment where

the wine category is very cluttered. Furthermore, as the customers' knowledge about wines and time to process complex information can be rather limited, it is also critical for wine companies and retailers to understand and predict consumers' responses. Thus, the identification of the right label elements increases product evaluation and give the advantage for wine brands (and subsequently for retailers) to stand out from competitors in a positive manner. Specifically, the design of a good label can enable wine companies to increase their allocated stock in retail stores and their brand visibility within the stores' shelves. In return, retailers that sell wines with the right label, will gain favourable responses from their customers.

Table 7: Main managerial implications for wine companies and retailers

What wine companies and retailers should do.	What wine companies and retailers should NOT do.
<p>1) If the following quality cues are present:</p> <ul style="list-style-type: none"> - Strong brand - Medal stickers - Awards - Positive critics from experts - Price above average <p>Wine companies should use fantasy labels</p> <p>2) Wine companies that consider using fantasy labels in a near future and produce high-quality wines should communicate on the quality of their wine to ensure/strengthen consumers' quality perception.</p> <p>3) Wine companies (Retailers) should employ (sell wines with) the following label elements for red and white wines:</p> <ul style="list-style-type: none"> - Unified label - Pictures/images for entry and medium level price segments - Extra textual description about the wines - Fancy and sophisticated brand name typeface for premium wines OR extra textual description. <p>4) Wine companies and retailers should allocate more budget towards label designing.</p> <p>5) Retailers should reconsider their external promotional strategy such as reducing the mailer budget and transferring it towards other promotional channels (e.g. online or in-store).</p>	<p>1) If consumers are not unclear about how they perceive the quality of the wines.</p> <p>If consumers perceive the wines to be of low quality</p> <p>If the wines do not display awards, have not received positive critics from experts or are ranged on the below average or average price levels</p> <p>Wine companies (retailers) should not use (sell wine with) fantasy labels</p> <p>2) Wine companies (Retailers) should not use (buy wines with):</p> <ul style="list-style-type: none"> - Fragmented labels - Fancy and sophisticated brand name typeface for entry and medium price segments - Basic textual description of the wine - Pictorial elements on the label for premium and ultra-premium wines. - Too detailed labels because consumers mentally saturate and such labels decrease sales.

4.3 Limitations and future research

This research comes with a few limitations that enable the creation of fertile ground for future research.

First, we examined the effect of visual elements or themes on taste perception and subsequent purchasing behaviour. However, there is a need to conduct more research on sensory perception and specifically explore the interplay between other senses (Krishna, 2012). For example, further research should investigate how a retailer can positively stimulate the consumers' senses by carefully designing the store from a multisensory perspective (Spence et al., 2014). More precisely, how can a wine label design engage the consumers' senses other than vision? It would be interesting to know whether and to what extent a tactile wine label affects product evaluation and sales.

Second, we focused on the category of still wines. Future research could consider investigating the effect of unusual/complex labels using sparkling wine as an example of the wine product category. Sparkling wine is a product that reflects fun and happiness because consumers strongly associate sparkling wines with special occasions and events (Judica & Steven Perkins, 1992; Velikova et al., 2016), e.g., celebrations and professional achievements. In line with the research article on 'cute products' from Nenkov and Scott (2014), it would be interesting to explore the effect of 'fun' wine labels on consumers' responses.

Third, we focused on 750ml bottles typically used for wine, however there is a growing trend to use uncommon packages for the wine product category such as glass bottles usually used for fruit juice or lemonade, Tetra Pak cartons or even canned wine (Kennedy, 2017; Stein, 2017). For example, Misty Cove Wines, a New Zealand wine company, launched their wine in an aluminum-canned package (Kitt, 2016). Future research could

look at what types of labels or design should be used for such unconventional wine packages and how they affect product evaluation and purchasing behaviour.

Fourth, the data used for this thesis come from US and NZ samples only, and those two countries are considered as highly individualistic countries (Hofstede Insights, 2018; Minkov, 2012) and ‘new world wine’ countries (Hollebeek et al., 2007, Mouret et al., 2010). Therefore, it would be interesting to extend our results about the effect of unusual or complex labels using samples from different countries. For example, future research could consider using samples from ‘Old world wine countries’ (e.g., France; Mouret et al., 2010) or countries with a collectivistic culture (e.g., China). It is possible that traditional wine countries or Eastern cultures reveal different patterns of consumers’ responses to unusual or complex wine labels. In line with the meta-analysis conducted cross-countries by Van der Lans et al. (2009) about logo evaluation, more research should be done to understand cross-cultural differences between countries in product evaluation and purchasing behaviour when exposed to wine labels.

Finally, this thesis only focused on wine labels and leaves avenues for future research about other forms of wine packaging. While Orth & Malkewitz (2008) have considered multiple elements of the wine package design in their seminal article, research is needed to conduct a comprehensive study on the different elements of wine package (i.e. closure, bottle shape, back labels) and investigate the effect of those elements on actual purchasing behaviour while controlling for in-store (e.g. displays, special event communications, tasting) and external factors (e.g., demographics, competition).

REFERENCES

- Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Nonprofits are seen as warm and for-profits as competent: Firm stereotypes matter. *Journal of Consumer Research*, *37*(2), 224–237.
- Adedokun, O. A., & Burgess, W. D. (2012). Analysis of paired dichotomous data: A gentle introduction to the McNemar Test in SPSS. *Journal of MultiDisciplinary Evaluation*, *8*(17), 125–131.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage Publications.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179–211.
- Ajzen, I., & Driver, B. L. (1992). Contingent value measurement: On the nature and meaning of willingness to pay. *Journal of Consumer Psychology*, *1*(4), 297–316.
- Allison, R. I., & Uhl, K. P. (1964). Influence of beer brand identification on taste perception. *Journal of Marketing Research*, 36–39.
- Alter, A. L., & Oppenheimer, D. M. (2009). Uniting the tribes of fluency to form a metacognitive nation. *Personality and Social Psychology Review*, *13*(3), 219–235.
- Anderson, E. T., & Simester, D. I. (2004). Long-run effects of promotion depth on new versus established customers: Three field studies. *Marketing Science*, *23*(1), 4–20.
- Areni, C. S., & Kim, D. (1993). The influence of background music on shopping behavior: classical versus top-forty music in a wine store. *Advances in Consumer Research*, *20*, 336–340.
- Areni, C. S., & Kim, D. (1994). The influence of in-store lighting on consumers' examination of merchandise in a wine store. *International Journal of Research in Marketing*, *11*(2), 117–125.

- Arnold, S. J., Kozinets, R. V., & Handelman, J. M. (2001). Hometown ideology and retailer legitimation: the institutional semiotics of Wal-Mart flyers. *Journal of Retailing*, 77(2), 243–271.
- Ataman, M. B., Mela, C. F., & Van Heerde, H. J. (2008). Building brands. *Marketing Science*, 27(6), 1036–1054.
- Ataman, M. B., Van Heerde, H. J., & Mela, C. F. (2010). The long-term effect of marketing strategy on brand sales. *Journal of Marketing Research*, 47(5), 866–882.
- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20(4), 644–656.
- Belk, R. W., & Costa, J. A. (1998). The Mountain Man myth: A contemporary consuming fantasy. *Journal of Consumer Research*, 25(3), 218–240.
- Berlyne, D. E. (1971). *Aesthetics and psychobiology*: New York, Appleton-Century-Crofts [1971].
- Beverland, M. B. (2005). Crafting brand authenticity: The case of luxury wines. *Journal of Management Studies*, 42(5), 1003–1029.
- Beverland, M. (2006). The ‘real thing’: Branding authenticity in the luxury wine trade. *Journal of Business Research*, 59(2), 251–258.
- Bijmolt, T. H., Heerde, H. J. V., & Pieters, R. G. (2005). New empirical generalizations on the determinants of price elasticity. *Journal of Marketing Research*, 42(2), 141–156.
- Biswas, D., Grewal, D., & Roggeveen, A. (2010). How the order of sampled experiential products affects choice. *Journal of Marketing Research*, 47(3), 508–519.
- Biswas, D., Labrecque, L. I., Lehmann, D. R., & Markos, E. (2014). Making choices while smelling, tasting, and listening: The Role of sensory (dis)similarity when sequentially sampling products. *Journal of Marketing*, 78(1), 112–126.

- Bloch, P. H. (1995). Seeking the ideal form: Product design and consumer response. *Journal of Marketing, 59*(3), 16–29.
- Bornstein, R. F., Kale, A. R., & Cornell, K. R. (1990). Boredom as a limiting condition on the mere exposure effect. *Journal of Personality and Social Psychology, 58*(5), 791–800.
- Brochet, F. (2001). Chemical object representation in the field of consciousness. *Application presented for the Grand Prix of the Académie Amorim following work carried out towards a doctorate from the Faculty of Oenology, University of Bordeaux.*
- Bruno, P., Melnyk, V., & Völckner, F. (2017). Temperature and emotions: Effects of physical temperature on responses to emotional advertising. *International Journal of Research in Marketing, 34*(1), 302–320.
- Burton, S., Lichtenstein, D. R., & Netemeyer, R. G. (1999). Exposure to sales flyers and increased purchases in retail supermarkets. *Journal of Advertising Research, 39*(5), 7–15.
- Campbell, J. (2016). Fantasy. In *Salem Press Encyclopedia of Literature*. Retrieved 5 December 2016, from Research Starters, EBSCOhost database.
- Campbell, M. C., & Goodstein, R. C. (2001). The moderating effect of perceived risk on consumers' evaluations of product incongruity: Preference for the norm. *Journal of Consumer Research, 28*(3), 439–449.
- Chandon, P., Morwitz, V. G., & Reinartz, W. J. (2005). Do intentions really predict behavior? Self-generated validity effects in survey research. *Journal of Marketing, 69*(2), 1–14.
- Chang, H. H., & Tuan Pham, M. (2013). Affect as a decision-making system of the present. *Journal of Consumer Research, 40*(1), 42–63.

- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(2), 81–93.
- Cheema, A., & Patrick, V. M. (2012). Influence of warm versus cool temperatures on consumer choice: A resource depletion account. *Journal of Marketing Research*, 49(6), 984–995.
- Childers, T. L., Houston, M. J., & Heckler, S. E. (1985). Measurement of individual differences in visual versus verbal information processing. *Journal of Consumer Research*, 12(2), 125–134.
- Chitturi, R., Chitturi, P., & Raghavarao, D. (2010). Design for synergy with brand or price information. *Psychology & Marketing*, 27(7), 679–697.
- Chitturi, R., Raghunathan, R., & Mahajan, V. (2007). Form versus function: How the intensities of specific emotions evoked in functional versus hedonic trade-offs mediate product preferences. *Journal of Marketing Research*, 44(4), 702–714.
- Chitturi, R., Raghunathan, R., & Mahajan, V. (2008). Delight by design: The role of hedonic versus utilitarian benefits. *Journal of Marketing*, 72(3), 48–63.
- Cian, L., Krishna, A., & Elder, R. S. (2014). This logo moves me: Dynamic imagery from static images. *Journal of Marketing Research*, 51(2), 184–197.
- Cian, L., Krishna, A., & Schwarz, N. (2015). Positioning rationality and emotion: Rationality is up and emotion is down. *Journal of Consumer Research*, 42(4), 632–651.
- Clement, J., Kristensen, T., & Grønhaug, K. (2013). Understanding consumers' in-store visual perception: The influence of package design features on visual attention. *Journal of Retailing and Consumer Services*, 20(2), 234–239.

- Cox, D., & Cox, A. D. (2002). Beyond first impressions: The effects of repeated exposure on consumer liking of visually complex and simple product designs. *Journal of the Academy of Marketing Science*, 30(2), 119–130.
- Creusen, M., E. H. , Veryzer, R., W. , & Schoormans, J., P. L. (2010). Product value importance and consumer preference for visual complexity and symmetry. *European Journal of Marketing*, 44(9/10), 1437–1452.
- Dahl, D. W., Chattopadhyay, A., & Gorn, G. J. (1999). The use of visual mental imagery in new product design. *Journal of Consumer Research*, 36(1), 18–28.
- Dawar, N., & Parker, P. (1994). Marketing universals: Consumers' use of brand name, price, physical appearance, and retailer. *Journal of Marketing*, 58(2), 81–95.
- Deloitte (2015). *Vintage 2015 New Zealand wine industry benchmarking survey: A joint publication between Deloitte and New Zealand Winegrowers*. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/nz/Documents/wine/nz-en-Vintage-2015-wine-survey.pdf> (accessed 19/08/2017).
- Deng, X., & Kahn, B. E. (2009). Is your product on the right side? The “location effect” on perceived product heaviness and package evaluation. *Journal of Marketing Research*, 46(6), 725–738.
- Desimone, R., & Duncan, J. (1995). Neural mechanisms of selective visual attention. *Annual review of neuroscience*, 18(1), 193–222.
- Dinner, I. M., van Heerde, H. J., & Neslin, S. A. (2014). Driving online and offline sales: The cross-channel effects of traditional, online display, and paid search advertising. *Journal of Marketing Research*, 51(5), 527–545.
- Disatnik, D., & Sivan, L. (2016). The multicollinearity illusion in moderated regression analysis. *Marketing Letters*, 27(2), 403–408.
- Divakar, S., Ratchford, B. T., & Shankar, V. (2005). Practice Prize Article—CHAN4CAST: A Multichannel, Multiregion Sales Forecasting Model and

- Decision Support System for Consumer Packaged Goods. *Marketing Science*, 24(3), 334–350.
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307–319.
- Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer–seller relationships. *Journal of Marketing*, 61(2), 35–51.
- Edell, J. A., & Staelin, R. (1983). The information processing of pictures in print advertisements. *Journal of Consumer Research*, 10(1), 45–61.
- Elder, R. S., & Krishna, A. (2010). The effects of advertising copy on sensory thoughts and perceived taste. *Journal of Consumer Research*, 36(5), 748–756.
- Elliot, S., & Barth, J. E. (2012). Wine label design and personality preferences of millennials. *Journal of Product & Brand Management*, 21(3), 183–191.
- Escalas, J. E. (2004). Imagine yourself in the product: Mental simulation, narrative transportation, and persuasion. *Journal of Advertising*, 33(2), 37–48.
- Evaluation (2017). In *Merriam-Webster.com*. Retrieved from <https://www.merriam-webster.com/dictionary/evaluation> (accessed 21/12/2017).
- Famularo, B., Bruwer, J., & Li, E. (2010). Region of origin as choice factor: Wine knowledge and wine tourism involvement influence. *International Journal of Wine Business Research*, 22(4), 362–385.
- Fischer, E., & Arnold, S. J. (1990). More than a labor of love: Gender roles and Christmas gift shopping. *Journal of Consumer Research*, 17(3), 333–345.
- Fuchs, C., Schreier, M., & van Osselaer, S. M. J. (2015). The handmade effect: What's love got to do with it? *Journal of Marketing*, 79(2), 98–110.

- Gallo (2015). *Top Ten Trends of the American Wine Consumer*. 2015 Gallo Consumer Wine Trends Survey. Retrieved from <http://gallowinetrends.com/home/> (accessed 21/08/2017)
- Giese, J. L., Malkewitz, K., Orth, U. R., & Henderson, P. W. (2014). Advancing the aesthetic middle principle : Trade-offs in design attractiveness and strength. *Journal of Business Research*, 67(6), 1154–1161.
- Gijsbrechts, E., Campo, K., & Goossens, T. (2003). The impact of store flyers on store traffic and store sales: a geo-marketing approach. *Journal of Retailing*, 79(1), 1–16.
- Gluckman, R. L. (1990). A consumer approach to branded wines. *European Journal of Marketing*, 24(4), 27–46.
- Gomes, L. A. (2011). The Printemps Haussmann 'Alice in Wonderland'. *Trend Hunter Fashion*. Retrieved from <http://www.trendhunter.com/trends/printemps-haussmann-alice-in-wonderland> (accessed 05/12/2016)
- Graf, L. K. M., & Landwehr, J. R. (2015). A dual-process perspective on fluency-based aesthetics. *Personality and Social Psychology Review*, 19(4), 395–410.
- Graf, L. K. M., Mayer, S. & Landwehr, J. R. (in press). Measuring Processing Fluency: One versus Five Items, *Journal of Consumer Psychology*. doi: 10.1002/jcpy.1021.
- Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, 79(5), 701–721.
- Grewal, D., Krishnan, R., Baker, J., & Borin, N. (1998). The effects of store name, brand name and price discounts on consumers' evaluations and purchase intentions. *Journal of Retailing*, 74(3), 331–352.
- Hagtvedt, H. (2011). The impact of incomplete typeface logos on perceptions of the firm. *Journal of Marketing*, 75(4), 86–93.
- Hair, J. F., Black, W. C., Babin, J. B., & Anderson, R. E. (2010). *Multivariate Data Analysis: A Global Perspective*. Upper Saddle River, NJ: Pearson/Prentice Hall.

- Hayes, A. F. (2013). *Introduction to mediation, moderation and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Heckler, S. E., & Childers, T. L. (1992). The role of expectancy and relevancy in memory for verbal and visual information: What is incongruity? *Journal of Consumer Research*, 18(4), 475-492.
- Henderson, P. W., & Cote, J. A. (1998). Guidelines for selecting or modifying logos. *Journal of Marketing*, 62(2), 14-30.
- Henderson, P. W., Cote, J. A., Leong, S. M., & Schmitt, B. (2003). Building strong brands in Asia: Selecting the visual components of image to maximize brand strength. *International Journal of Research in Marketing*, 20(4), 297-313.
- Henderson, P. W., Giese, J. L., & Cote, J. A. (2004). Impression management using typeface design. *Journal of Marketing*, 68(4), 60-72.
- Herr, P. M., Page, C. M., Pfeiffer, B. E., & Davis, D. F. (2012). Affective influences on evaluative processing. *Journal of Consumer Research*, 38(5), 833-845.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, 46(3), 92-101.
- Hoegg, J., & Alba, J. W. (2007). Taste perception: More than meets the tongue. *Journal of Consumer Research*, 33(4), 490-498.
- Hofstede Insights (2018). *Country comparison*. Retrieved from <https://www.hofstede-insights.com/country-comparison/new-zealand,the-usa/> (accessed on 19/01/2018).
- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132-140.
- Hollebeek, L. D., Jaeger, S. R., Brodie, R. J., & Balemi, A. (2007). The influence of involvement on purchase intention for new world wine. *Food Quality and Preference*, 18(8), 1033-1049.

- Houston, M. J., Childers, T. L., & Heckler, S. E. (1987). Picture-word consistency and elaborative processing of advertisements. *Journal of Marketing Research*, 24(4), 359–369.
- Hung, I. W., & Wyer, R. S. (2011). Shaping consumer imaginations: The role of self-focused attention in product evaluations. *Journal of Marketing Research*, 48(2), 381–392.
- Irwin, J. R., & McClelland, G. H. (2001). Misleading heuristics and moderated multiple regression models. *Journal of Marketing*, 38, 100–109.
- Janiszewski, C. (1993). Preattentive mere exposure effects. *Journal of Consumer Research*, 20(3), 376–392.
- Janiszewski, C., & Meyvis, T. (2001). Effects of brand logo complexity, repetition, and spacing on processing fluency and judgment. *Journal of Consumer Research*, 28(1), 18–32.
- Jarvis, W., Mueller, S., & Chiong, K. (2010). A latent analysis of images and words in wine choice. *Australasian Marketing Journal*, 18(3), 138–144.
- Jaud, D. A., Melnyk, V., & Landwehr, J.R. (2017). Fantastic beasts and when to present them? The effect of fantasy labels on product evaluation and purchase behavior. *Unpublished manuscript: revise and resubmit*.
- Jia, J. S., Shiv, B., & Rao, S. (2014). The product-agnosia effect: How more visual impressions affect product distinctiveness in comparative choice. *Journal of Consumer Research*, 41(2), 342–360.
- Judge, G. G., Hill, R. C., Griffiths, W. E., Lütkepohl, H., & Lee, T-C. (1998). *Introduction to the Theory and Practice of Econometrics*. 2d ed. Hoboken, NJ:John Wiley & Sons
- Judica, F., & Steven Perkins, W. (1992). A means-end approach to the market for sparkling wines. *International Journal of Wine Marketing*, 4(1), 10–18.

- Keller, M. C., Fredrickson, B. L., Ybarra, O., Côté, S., Johnson, K., Mikels, J., . . . Wager, T. (2005). A warm heart and a clear head the contingent effects of weather on mood and cognition. *Psychological Science, 16*(9), 724–731.
- Kennedy, J. (April 25, 2017). *In slender cans and 40 ounces, fine wine gets ready to party. The new picnic wines to pack ahead.* Bloomberg. Retrieved from <https://www.bloomberg.com/news/articles/2017-04-25/in-slender-cans-and-40-ounces-fine-wine-gets-ready-to-party> (accessed 19/01/2018).
- Kerin, R. A., Hartley, S. W., & Rudelius, W. (2009). *Marketing* (9th ed.). Boston: McGraw-Hill/IRWIN.
- Kitt, Jeffrey (August 25, 2016). *New Zealand first as Marlborough wine company swaps bottle for can.* Stuff. Retrieved from <https://www.stuff.co.nz/business/83462445/new-zealand-first-as-marlborough-wine-company-swaps-bottle-for-can> (accessed 19/01/2018)
- Kozinets, R. V. (2001). Utopian enterprise: Articulating the meanings of Star Trek's culture of consumption. *Journal of Consumer Research, 28*(1), 67–88.
- Kozinets, R. V., Sherry, J. F., Storm, D., Duhachek, A., Nuttavuthisit, K., & Deberry-Spence, B. (2004). Ludic agency and retail spectacle. *Journal of Consumer Research, 31*(3), 658–672.
- Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology, 22*(3), 332–351.
- Krishna, A. (2013). *Customer Sense : How the 5 Senses Influence Buying Behavior.* New York: Palgrave Macmillan.
- Krishna, A., Cian, L., & Aydınoglu, N. Z. (2017). Sensory aspects of package design. *Journal of Retailing, 93*(1), 43–54.

- Krishna, A., & Schwarz, N. (2014). Sensory marketing, embodiment, and grounded cognition: A review and introduction. *Journal of Consumer Psychology, 24*(2), 159–168.
- Labroo, A. A., Dhar, R., & Schwarz, N. (2008). Of frog wines and frowning watches: Semantic priming, perceptual fluency, and brand evaluation. *Journal of Consumer Research, 34*(6), 819–831.
- Labroo, A. A., & Lee, A. Y. (2006). Between two brands: A goal fluency account of brand evaluation. *Journal of Marketing Research, 43*(3), 374–385.
- Laeng, B., Suegami, T., & Aminihajibashi, S. (2016). Wine labels: An eye-tracking and pupillometry study. *International Journal of Wine Business Research, 28*(4), 327–348.
- Landwehr, J. R., Golla, B., & Reber, R. (2017). Processing fluency: An inevitable side effect of evaluative conditioning. *Journal of Experimental Social Psychology, 70*, 124–128.
- Landwehr, J. R., Labroo, A. A., & Herrmann, A. (2011). Gut liking for the ordinary: Incorporating design fluency improves automobile sales forecasts. *Marketing Science, 30*(3), 416–429.
- Landwehr, J. R., Wentzel, D., & Herrmann, A. (2012). The tipping point of design: How product design and brands interact to affect consumers' preferences. *Psychology & Marketing, 29*(6), 422–433.
- Landwehr, J. R., Wentzel, D., & Herrmann, A. (2013). Product design for the long run: Consumer responses to typical and atypical designs at different stages of exposure. *Journal of Marketing, 77*(5), 92–107.
- Leclerc, F., Schmitt, B. H., & Dubé, L. (1994). Foreign branding and its effects on product perceptions and attitudes. *Journal of Marketing Research, 31*(2), 263–270.

- Lee, A. Y., & Labroo, A. A. (2004). The effect of conceptual and perceptual fluency on brand evaluation. *Journal of Marketing Research*, *41*(2), 151–165.
- Lee, L., Frederick, S., & Ariely, D. (2006). Try it, you'll like it: The influence of expectation, consumption, and revelation on preferences for beer. *Psychological Science*, *17*(12), 1054–1058.
- Lee, W. C. J., Shimizu, M., Kniffin, K. M., & Wansink, B. (2013). You taste what you see: Do organic labels bias taste perceptions? *Food Quality and Preference*, *29*(1), 33–39.
- Leeflang, P. S., Wieringa, J. E., Bijmolt, T. H., & Pauwels, K. H. (2015). *Modeling Markets*. Springer New York.
- Lick, E., König, B., Kpossa, M. R., & Buller, V. (2017). Sensory expectations generated by colours of red wine labels. *Journal of Retailing and Consumer Services*, *37*, 146–158.
- Ling, B. H., & Lockshin, L. (2003). Components of wine prices for Australian wine: How winery reputation, wine quality, region, vintage, and winery size contribute to the price of varietal wines. *Australasian Marketing Journal*, *11*(3), 19–32.
- Lockshin, L., & Cohen, E. (2011). Using product and retail choice attributes for cross-national segmentation. *European Journal of Marketing*, *45*(7/8), 1236–1252.
- Lockshin, L., Jarvis, W., d’Hauteville, F., & Perrouy, J. P. (2006). Using simulations from discrete choice experiments to measure consumer sensitivity to brand, region, price, and awards in wine choice. *Food quality and preference*, *17*(3-4), 166–178.
- Lurie, N. H., & Mason, C. H. (2007). Visual representation: Implications for decision making. *Journal of Marketing*, *71*(1), 160–177.
- Machiels, C. J. A., & Orth, U. R. (2017). Verticality in product labels and shelves as a metaphorical cue to quality. *Journal of Retailing and Consumer Services*, *37*, 195–203.

- MacInnis, D. J., & Price, L. L. (1987). The role of imagery in information processing: Review and extensions. *Journal of Consumer Research*, *13*(4), 473–491.
- Mai, R., Symmank, C., & Seeberg-Elverfeldt, B. (2016). Light and pale colors in food packaging: When does this package cue signal superior healthiness or inferior tastiness? *Journal of Retailing*, *92*(4), 426–444.
- Maier, E., & Dost, F. (2018). The positive effect of contextual image backgrounds on fluency and liking. *Journal of Retailing and Consumer Services*, *40*, 109–116.
- Mantonakis, A., Rodero, P., Lesschaeve, I., & Hastie, R. (2009). Order in choice: Effects of serial position on preferences. *Psychological Science*, *20*(11), 1309–1312.
- Martin, B. A. S. (2004). Using the imagination: Consumer evoking and thematizing of the fantastic imaginary. *Journal of Consumer Research*, *31*(1), 136–149.
- Mattila, A. S., & Wirtz, J. (2001). Congruency of scent and music as a driver of in-store evaluations and behavior. *Journal of Retailing*, *77*(2), 273–289.
- Mayer, S. & Landwehr, J. R. (2016). Objective measures of design typicality that predict aesthetic liking, fluency, and car sales, in: *Advances in Consumer Research*, Vol. 44, eds. Page Moreau and Stefano Puntoni, 556–557.
- Mayer, S. & Landwehr, J. R. (2014). When complexity is symmetric: The interplay of two core determinants of visual aesthetics, in: *Advances in Consumer Research*, Vol. 42, eds. June Cotte and Stacy Wood, 608–609.
- McCarthy, M. S., & Mothersbaugh, D. L. (2002). Effects of typographic factors in advertising-based persuasion: A general model and initial empirical tests. *Psychology & Marketing*, *19*(7-8), 663–691.
- McClelland, G. H., Irwin, J. R., Disatnik, D., & Sivan, L. (2017). Multicollinearity is a red herring in the search for moderator variables: A guide to interpreting moderated multiple regression models and a critique of Iacobucci, Schneider, Popovich, and Bakamitsos (2016). *Behavior research methods*, *49*(1), 394–402.

- McCracken, J. C., & Macklin, M. C. (1998). The role of brand names and visual cues in enhancing memory for consumer packaged goods. *Marketing Letters*, 9(2), 209–226.
- McGarry Wolf, M., & Thomas, S. M. (2007). How Millennial, Generation X, and Baby Boomer wine consumers evaluate wine labels. *Journal of Food Distribution Research*, 38(1), 170–181.
- Melnyk, V., Giarratana, M., & Torres, A. (2014). Marking your trade: Cultural factors in the prolongation of trademarks. *Journal of Business Research*, 67(4), 478–485.
- Melnyk, V., Klein, K., & Völckner, F. (2012). The double-edged sword of foreign brand names for companies from emerging countries. *Journal of Marketing*, 76(6), 21–37.
- Miceli, G., Scopelliti, I., Raimondo, M. A., & Donato, C. (2014). Breaking through complexity: Visual and conceptual dimensions in logo evaluation across exposures. *Psychology & Marketing*, 31(10), 886–899.
- Miniard, P. W., Bhatla, S., Lord, K. R., Dickson, P. R., & Unnava, H. R. (1991). Picture-based persuasion processes and the moderating role of involvement. *Journal of Consumer Research*, 18(1), 92–107.
- Minkov, M. (2012). *Cross-cultural analysis: the science and art of comparing the world's modern societies and their cultures*. Sage.
- Mitchell, V. W., & Greatorex, M. (1989). Risk reducing strategies used in the purchase of wine in the UK. *European Journal of Marketing*, 23(9), 31–46.
- Mitchell, V. W., & Greatorex, M. (1988). Consumer risk perception in the UK wine market. *European Journal of Marketing*, 22(9), 5–15.
- Mogilner, C., Aaker, J., & Kamvar, S. D. (2012). How happiness affects choice. *Journal of Consumer Research*, 39(2), 429–443.

- Morrot, G., Brochet, F., & Dubourdieu, D. (2001). The color of odors. *Brain and Language, 79*(2), 309–320.
- Morwitz, V. G., Johnson, E., & Schmittlein, D. (1993). Does measuring intent change behavior? *Journal of Consumer Research, 20*(1), 46–61.
- Mosteller, J., Donthu, N., & Eroglu, S. (2014). The fluent online shopping experience. *Journal of Business Research, 67*(11), 2486–2493.
- Mouret, M., Lo Monaco, G., Urdapilleta, I., & Parr, W. V. (2013). Social representations of wine and culture: A comparison between France and New Zealand. *Food Quality and Preference, 30*(2), 102–107.
- Mueller, S., Lockshin, L., & Louviere, J. J. (2010). What you see may not be what you get: Asking consumers what matters may not reflect what they choose. *Marketing Letters, 21*(4), 335–350.
- Mulhern, F. J., Williams, J. D., & Leone, R. P. (1998). Variability of brand price elasticities across retail stores: Ethnic, income, and brand determinants. *Journal of Retailing, 74*(3), 427–446.
- Nenkov, G. Y., & Scott, M. L. (2014). “So cute I could eat it up”: Priming effects of cute products on indulgent consumption. *Journal of Consumer Research, 41*(2), 326–341.
- Neuninger, R., Mather, D., & Duncan, T. (2017). Consumer's scepticism of wine awards: A study of consumers' use of wine awards. *Journal of Retailing and Consumer Services, 35*, 98–105.
- Nielsen (August 31, 2017). *How package design attracts today's wine consumer*. Retrieved from <http://www.nielsen.com/us/en/insights/news/2017/how-package-design-attracts-todays-wine-consumer.html> (accessed 17/01/2018).
- North, A. C., Hargreaves, D. J., & McKendrick, J. (1999). The influence of in-store music on wine selections. *Journal of Applied Psychology, 84*(2), 271–276.

- Norton, M. I., Mochon, D., & Ariely, D. (2012). The IKEA effect: When labor leads to love. *Journal of Consumer Psychology, 22*(3), 453–460.
- Noseworthy, T. J., & Trudel, R. (2011). Looks interesting, but what does it do? Evaluation of incongruent product form depends on positioning. *Journal of Marketing Research, 48*(6), 1008–1019.
- Novemsky, N., Dhar, R., Schwarz, N., & Simonson, I. (2007). Preference fluency in choice. *Journal of Marketing Research, 44*(3), 347–356.
- O'Brien, E., & Ellsworth, P. C. (2012). Saving the last for best: A positivity bias for end experiences. *Psychological Science, 23*(2), 163–165.
- Orth, U. (2002). Research note: Targeting the un-experienced and the convenience shopper. *International Journal of Wine Marketing, 14*(3), 80–82.
- Orth, U. R., Campana, D., & Malkewitz, K. (2010). Formation of consumer price expectation based on package design: Attractive and quality routes. *Journal of Marketing Theory and Practice, 18*(1), 23–40.
- Orth, U. R., & Crouch, R. C. (2014). Is beauty in the aisles of the retailer? Package processing in visually complex contexts. *Journal of Retailing, 90*(4), 524–537.
- Orth, U. R., & Malkewitz, K. (2008). Holistic package design and consumer brand impressions. *Journal of Marketing, 72*(3), 64–81.
- Orth, U. R., & Malkewitz, K. (2012). The accuracy of design-based judgments: A constructivist approach. *Journal of Retailing, 88*(3), 421–436.
- Orth, U. R., McGarry Wolf, M., & Dodd, T. H. (2005). Dimensions of wine region equity and their impact on consumer preferences. *Journal of Product & Brand Management, 14*(2), 88–97.
- Page, C., & Herr, P. M. (2002). An investigation of the processes by which product design and brand strength interact to determine initial affect and quality judgments. *Journal of Consumer Psychology, 12*(2), 133–147.

- Park, Y. W., Herr, P. M., & Kim, B. C. (2016). The effect of disfluency on consumer perceptions of information security. *Marketing Letters*, 27(3), 525–535.
- Parsons, A. G. (2001). The association between daily weather and daily shopping patterns. *Australasian Marketing Journal*, 9(2), 78–84.
- Petroshius, S. M., & Monroe, K. B. (1987). Effect of product-line pricing characteristics on product evaluation. *Journal of Consumer Research*, 13(4), 511–519.
- Pieters, R., & Warlop, L. (1999). Visual attention during brand choice: The impact of time pressure and task motivation. *International Journal of Research in Marketing*, 16(1), 1–16.
- Pieters, R., & Wedel, M. (2004). Attention capture and transfer in advertising: Brand, pictorial, and text-size effects. *Journal of Marketing*, 68(2), 36–50.
- Pieters, R., Wedel, M., & Batra, R. (2010). The stopping power of advertising: Measures and effects of visual complexity. *Journal of Marketing*, 74(5), 48–60.
- Puccinelli, N. M., Goodstein, R. C., Grewal, D., Price, R., Raghubir, P., & Stewart, D. (2009). Customer experience management in retailing: Understanding the buying process. *Journal of Retailing*, 85(1), 15–30.
- Reber, R., & Schwarz, N. (1999). Effects of perceptual fluency on judgments of truth. *Consciousness and Cognition*, 8(3), 338–342.
- Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience? *Personality and Social Psychology Review*, 8(4), 364–382.
- Reber, R., Winkielman, P., & Schwarz, N. (1998). Effects of perceptual fluency on affective judgments. *Psychological Science*, 9(1), 45–48.
- Schlosser, A. E. (2003). Experiencing products in the virtual world: The role of goal and imagery in influencing attitudes versus purchase intentions. *Journal of Consumer Research*, 30(2), 184–198.

- Scott, L. M., & Vargas, P. (2007). Writing with pictures: Toward a unifying theory of consumer response to images. *Journal of Consumer Research*, 34(3), 341–356.
- Seregina, A. (2014). Exploring fantasy in consumer experiences. In J. W. Schouten, D. M. Martin, & R. Belk (Eds.), *Consumer Culture Theory, Vol. 16*. (pp. 19–33). Bingley, UK: Emerald Group Publishing.
- Shankar, M. U., Levitan, C. A., Prescott, J., & Spence, C. (2009). The influence of color and label information on flavor perception. *Chemosensory Perception*, 2(2), 53–58.
- Shiv, B., & Fedorikhin, A. (1999). Heart and mind in conflict: The interplay of affect and cognition in consumer decision making. *Journal of Consumer Research*, 26(3), 278–292.
- Silvia, P. J. (2005). What is interesting? Exploring the appraisal structure of interest. *Emotion*, 5(1), 89–102.
- Spangenberg, E. R., Crowley, A. E., & Henderson, P. W. (1996). Improving the store environment: Do olfactory cues affect evaluations and behaviors? *Journal of Marketing*, 60(2), 67–80.
- Song, H., & Schwarz, N. (2008). If it's hard to read, it's hard to do: Processing fluency affects effort prediction and motivation. *Psychological Science*, 19(10), 986–988.
- Spangenberg, E. R., Grohmann, B., & Sprott, D. E. (2005). It's beginning to smell (and sound) a lot like Christmas: The interactive effects of ambient scent and music in a retail setting. *Journal of Business Research*, 58(11), 1583–1589.
- Spence, C., Puccinelli, N. M., Grewal, D., & Roggeveen, A. L. (2014). Store atmospherics: A multisensory perspective. *Psychology & Marketing*, 31(7), 472–488.
- Srinivasan, S., Pauwels, K., Hanssens, D. M., & Dekimpe, M. G. (2004). Do promotions benefit manufacturers, retailers, or both?. *Management Science*, 50(5), 617–629.

- St. James, Y., Handelman, J. M., & Taylor, S. F. (2011). Magical thinking and consumer coping. *Journal of Consumer Research*, 38(4), 632–649.
- Stableford, B. M. (2005). *Historical dictionary of fantasy literature*. Scarecrow Press.
- Statista (2018). *Total retail value of wine sales in the U.S. 2000-2016*. Retrieved from <https://www.statista.com/statistics/233744/total-retail-value-of-wine-sales-in-the-us/> (accessed 08/02/2018).
- Steenkamp, J.-B. E. M., van Heerde, H. J., & Geyskens, I. (2010). What makes consumers willing to pay a price premium for national brands over private labels? *Journal of Marketing Research*, 47(6), 1011–1024.
- Stein, J. (August 14, 2017). *We taste-tested 10 canned wines so you don't have to: Whites, rosés, reds, and bubbies*. Bloomberg. Retrieved from <https://www.bloomberg.com/news/articles/2017-08-14/best-canned-wines-sparkling-ros-white-red> (accessed 19/01/2018).
- Sundar, A., & Noseworthy, T. J. (2014). Place the logo high or low? Using conceptual metaphors of power in package designing. *Journal of Marketing*, 78(5), 138–151.
- Teas, R. K., & Agarwal, S. (2000). The effects of extrinsic product cues on consumers' perceptions of quality, sacrifice, and value. *Journal of the Academy of Marketing Science*, 28(2), 278–290.
- Ter Braak, A., Dekimpe, M. G., & Geyskens, I. (2013). Retailer private-label margins: The role of supplier and quality-tier differentiation. *Journal of Marketing*, 77(4), 86–103.
- Thomas, A., & Pickering, G. (2003). The importance of wine label information. *International Journal of Wine Marketing*, 15(2), 58–74.
- Thompson, D. V., & Ince, E. C. (2013). When disfluency signals competence: The effect of processing difficulty on perceptions of service agents. *Journal of Marketing Research*, 50(2), 228–240.

- Turley, L. W., & Milliman, R. E. (2000). Atmospheric effects on shopping behavior: A review of the experimental evidence. *Journal of Business Research, 49*(2), 193–211.
- Underwood, R. L., & Klein, N. M. (2002). Packaging as brand communication: Effects of product pictures on consumer responses to the package and brand. *Journal of Marketing Theory and Practice, 10*(4), 58–68.
- Underwood, R. L., Klein, N. M., & Burke, R. R. (2001). Packaging communication: Attentional effects of product imagery. *Journal of Product & Brand Management, 10*(7), 403–422.
- Van der Lans, R., Cote, J. A., Cole, C. A., Leong, S. M., Smidts, A., Henderson, P. W., . . . Schmitt, B. H. (2009). Cross-national logo evaluation analysis: an individual-level approach. *Marketing Science, 28*(5), 968–985.
- Van der Lans, R., van Everdingen, Y., & Melnyk, V. (2016). What to stress to whom and where? A cross-country investigation of the effects of perceived brand benefits on buying intentions. *International Journal of Research in Marketing, 33*(4), 924–943.
- Van Heerde, H. J., Leeflang, P. S. H., & Wittink, D. R. (2004). Decomposing the sales promotion bump with store data. *Marketing Science, 23*(3), 317–334.
- Van Laer, T., De Ruyter, K., Visconti, L. M., & Wetzels, M. (2014). The extended transportation-imagery model: A meta-analysis of the antecedents and consequences of consumers' narrative transportation. *Journal of Consumer Research, 40*(5), 797–817.
- Van Oest, R. D., van Heerde, H. J., & Dekimpe, M. G. (2010). Return on roller coasters: A model to guide investments in theme park attractions. *Marketing Science, 29*(4), 721–737.

- Vasiljevic, M., Pechey, R., & Marteau, T. M. (2015). Making food labels social: The impact of colour of nutritional labels and injunctive norms on perceptions and choice of snack foods. *Appetite, 91*, 56–63.
- Veale, R., & Quester, P. (2009). Do consumer expectations match experience? Predicting the influence of price and country of origin on perceptions of product quality. *International Business Review, 18*(2), 134–144.
- Velikova, N., Charters, S., Fountain, J., Ritchie, C., Fish, N., & Dodd, T. (2016). Status or fun? A cross-cultural examination of young consumers' responses to images of champagne and sparkling wine. *British Food Journal, 118*(8), 1960–1975.
- Verlegh, P. W., Steenkamp, J. B. E., & Meulenberg, M. T. (2005). Country-of-origin effects in consumer processing of advertising claims. *International Journal of Research in Marketing, 22*(2), 127–139.
- Veryzer, R. W., & Hutchinson, J. W. (1998). The influence of unity and prototypicality on aesthetic responses to new product designs. *Journal of Consumer Research, 24*(4), 374–394.
- Veseth, M. (February 26, 2008). *[Yellow Tail] Tales*. The Wine Economist. Retrieved from <https://wineeconomist.com/2008/02/26/the-yellow-tail-tale/> (accessed 11/07/2017).
- Voss, K. E., Spangenberg, E. R., & Grohmann, B. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research, 40*(3), 310-320.
- Wänke, M., Bohner, G., & Jurkowitsch A. (1997). There are many reasons to drive a BMW: Does imagined ease of argument generation influence attitudes? *Journal of Consumer Research, 24*(2), 170–177.
- Ward, T. B. (1994). Structured imagination: the role of category structure in exemplar generation. *Cognitive Psychology, 27*(1), 1–40.

- West, B. T., Welch, K. B., & Galecki, A. T. (2014). *Linear mixed models: a practical guide using statistical software*. CRC Press.
- Whittlesea, B. W. A. (1993). Illusions of familiarity. *Journal of Experimental Psychology: Learning, Memory and Cognition*, *19*(6), 1235–1253.
- Whittlesea, B. W., Jacoby, L. L., & Girard, K. (1990). Illusions of immediate memory: Evidence of an attributional basis for feelings of familiarity and perceptual quality. *Journal of Memory and Language*, *29*(6), 716–732.
- Wine Industry Advisor (March 14, 2017). *Game of Thrones Wines Debut with Chardonnay, Red Blend & Cabernet Sauvignon*. Retrieved from <http://www.wineindustryadvisor.com/2017/03/14/game-of-thrones-wine-debut> (accessed 08/05/2017).
- Wine.net (n.d.). Wine bottle talk: Does the label matter. Retrieved from <https://www.wine.net/wine-bottle-talk/> (accessed 24/01/2018).
- Winkielman, P., Halberstadt, J., Fazendeiro, T., & Catty, S. (2006). Prototypes are attractive because they are easy on the mind. *Psychological Science*, *17*(9), 799–806.
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, *9*(2p2), 1–27.
- Zhao, M., Hoeffler, S., & Dahl, D. W. (2009). The role of imagination-focused visualization on new product evaluation. *Journal of Marketing Research*, *46*(1), 46–55.
- Zhao, M., Hoeffler, S., & Zauberan, G. (2011). Mental simulation and product evaluation: The affective and cognitive dimensions of process versus outcome simulation. *Journal of Marketing Research*, *48*(5), 827–839.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, *37*(2), 197–206.

- Zwebner, Y., Lee, L., & Goldenberg, J. (2014). The temperature premium: Warm temperatures increase product valuation. *Journal of Consumer Psychology, 24*(2), 251–259.

APPENDICES

Appendix 1: Full phrasing of the instructions, questions and scales of Study 1

Dear participant, you must be over 18 to participate to this survey, are you 18 or over?

- Yes
- No

Dear Participant, I am David JAUD, a PhD student from Massey University, investigating consumers' perceptions. I would like to invite you to participate in this study about wine label perceptions. Your participation in this survey is highly valued, but voluntary. You may stop participating in this research at any time. Please be assured that your response is private, confidential, anonymous, and protected to the fullest possible extent. Your honest opinion is very important to this study. The survey will take less than 10 minutes to complete. Thank you for your participation in the Survey. Note: This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research. If you have any questions about this survey, please contact the director (Research Ethics), Tel: +6463505249; Email: humanethics@massey.ac.nz

While showing the stimulus for the first time and then for each of the sequences, participants read the following questions

-
- Please, write down what comes to mind when viewing this wine label?
 - What would you expect this wine to taste like?
 - *How much do you like this wine label? (1. Dislike very much – 7. Like very much)
adapted from Lee & Labroo (2004)
 - *How likely are you to buy a bottle of wine with this label? (1. Very unlikely to buy – 7. Very likely to buy) *adapted from Landwehr et al. (2012)*
 - How much would you be willing to pay for a bottle of wine with this label (in NZ\$)? (\$0 to \$100) Please, move the slider to make your choice. *adapted from Jia et al. (2014)*
 - *What would you expect the overall taste of this wine to be? (1. Very poor taste – 7. Very good taste) *adapted from Elder & Krishna, (2010)*
 - *While looking at this wine label, please indicate the amount of visualisation you used to help your evaluation? (1. No visualisation – 7. A lot of visualisation) *adapted from Zhao et al. (2009)*
 - *To what extent does this wine label engage the imaginary? (1. Not at all – 7. A lot) *adapted from Martin (2004)*
 - *While looking at this wine label, to what degree do you use mental pictures that go beyond a "normal" wine label? (1. Not at all – 7. A lot) *adapted from Dahl et al. (1999)*
 - *How easy or difficult was it to visualise the information on the wine label? (1. Very difficult to visualise – 7. Very easy to visualise) *adapted from Labroo et al. (2008)*

* Participants read: 'If you wish to leave the slider in the middle, please move it forward and backward again'.

- *How easy or difficult is it to create mental pictures while looking at this wine label? (1. Very difficult to create mental pictures – 7. Very easy to create mental pictures) *adapted from Zhao et al. (2009)*
- To what extent do you agree with the following statements (1. Strongly disagree – 7. Strongly agree): *adapted from Mogilner et al. (2012) and Nenkov & Scott (2014)*
 - Looking at this wine label makes me happy
 - Looking at this wine label makes me think about good things
 - Looking at this wine label makes me think about good things in the past
 - Looking at this wine label makes me imagine myself experiencing good things
- *How related do you believe this wine label is to wine? (1. Not at all related – 7. Very closely related) *adapted from Lee & Labroo (2004)*
- *How typical is this label compared to usual wine labels? (1. Very typical – 7. Very atypical) *adapted from Campbell & Goodstein (2001)*
- *How much fantasy does this label contain? (1. Not all – 7. Very much)
- *To what extent does this wine label evoke the imaginary? (1. Not all – 7. Very much) *adapted from Martin (2004)*
- *Please, rate the extent to which the picture and the brand name convey the same meaning. (1. Completely different meanings – 7. The same meaning) *adapted from Houston et al. (1987)*
- *To what extent was this wine label easy or difficult to understand? (1. Very difficult to understand – 7. Very easy to understand) *adapted from Heckler & Childers (1992)*
- *How much are you interested in wine? (1. Not at all interested – 7. Very interested) *adapted from Labroo et al. (2008)*
- *How much do you like wine? (1. Dislike very much – 7. Like very much) *adapted from Labroo et al. (2008)*

- How much do you usually pay for a bottle of wine (in NZ\$)? (\$0-\$100) (Please, move the slider to make your choice.)
- The aim of this exercise is to determine the style or manner you use when carrying out different mental tasks. Please, answer to the following statements. (1. Always false – 7. Always true) *adopted from Childers, Houston, & Heckler (1985)*
 - a) I like to picture how I could fix up my house or a room if I could buy anything I wanted
 - b) I like to daydream
 - c) I find it helps to think in terms of mental pictures when doing many things
 - d) My thinking often consists of mental "pictures" or images
- Finally could you please provide some information about yourself.
 - Please, indicate your gender. Male Female
 - In which age bracket do you belong to?
18- 24 years 25-34 years 35-44 years 45-54 years 55-64 years 65 years or older
 - What is your highest completed education?
None formally completed High School/ College Polytechnic/ Institute of technology (or equivalent) Bachelor's Degree Master's Degree PhD Degree Other- please specify
 - Which ethnic group do you belong to?
New Zealand European English Australian Other European Maori Samoan Cook Islands Maori Tongan Niuean Chinese Indian Other- please specify

Appendix 2: Correlation matrix table of Study 1

		Correlations ^b						
		Fantasy	Mode of information	Expected taste	Evocation of the imaginary	Positive affect	Purchase intentions	Amount of fantasy
Independent variable: Fantasy	Pearson Correlation	1						
	Sig. (2-tailed)							
Moderator Mode of information	Pearson Correlation	.022	1					
	Sig. (2-tailed)	.732						
Control variable Expected taste	Pearson Correlation	.032	-.055	1				
	Sig. (2-tailed)	.623	.402					
Mediator 1: Evocation of the imaginary	Pearson Correlation	.202**	-.231**	.425**	1			
	Sig. (2-tailed)	.002	.000	.000				
Mediator 2: Positive affect	Pearson Correlation	.008	-.040	.631**	.528**	1		
	Sig. (2-tailed)	.908	.544	.000	.000			
Dependent variable: Purchase intentions	Pearson Correlation	.081	-.033	.728**	.489**	.672**	1	
	Sig. (2-tailed)	.214	.608	.000	.000	.000		
Manipulation check: Amount of fantasy	Pearson Correlation	.289**	-.356**	.348**	.782**	.425**	.413**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=237

Appendix 3: Full phrasing of the instructions, questions and scales of Study 2

Dear Participant,

We cordially welcome you to our scientific study on consumer reactions to wine. In the course of the study, you will be asked to evaluate wines on several dimensions.

There are no right or wrong answers! We are just interested in your personal reaction to the wines!

You can start the study by clicking on the “>” button.

While showing the stimulus for the first time, participants read the following statement

Please, take a look at this wine (and its expert rating). You can take as much time as you like to familiarize yourself with the product before proceeding to the questions.

- What would you expect this wine to taste like?
- How much do you like this wine label? (1. Dislike very much-7. Like Very much)
adapted from Lee & Labroo (2004)
- What would you expect the overall taste of this wine to be? (1. Very poor taste- 7 Very good taste)) *adapted from Elder & Krishna (2010)*
- How likely are you to buy a bottle of wine with this label? (1. Very unlikely to buy- 7. Very likely to buy) *Adapted from Landwehr et al. (2012)*
- How much would you be willing to pay for a bottle of wine with this label in US\$?
(Please, move the slider to make your choice. If you would like to indicate a price above 50, please select 50), *(use of a sliding scale from 0 to 50) adapted from Jia et al. (2014)*

- The process of studying the wine label felt... (1. Difficult-7. Easy) *adapted from Landwehr et al. (2011)*
- Looking at this wine label makes me...: (1. Strongly disagree-7. Strongly agree)
 - a) Happy, *adapted from Mogilner et al. (2012)*
 - b) Think about good things, *adapted from Nenkov & Scott (2014)*
 - c) Think about good things in the past, *adapted from Nenkov & Scott (2014)*
 - d) Imagine myself experiencing good things, *adapted from Nenkov & Scott (2014)*
- How do you perceive this wine to be? (scale from 1 to 7) *adapted from Voss, Spangenberg, & Grohmann (2003)*
 - a) Not fun-Fun, b) Dull-Exciting, c) Not delightful-Delightful, d) Not thrilling-Thrilling, e) Not enjoyable-Enjoyable
- To what extent do you agree or disagree with the following statements. (1. Strongly disagree-7. Strongly agree) *adapted from Chaudhuri & Holbrook (2001)*
 - a) I trust this wine, b) I rely on this wine, c) This is an honest wine, d) This wine is safe
- My evaluation of this wine was driven by? (scale from 1 to 7) *adapted from Shiv & Fedorikhin (1999)*
 - a) My thoughts – My feelings, b) My willpower– My desire, c) My prudent self–My impulsive self, d) The rational side of me–The emotional side of me, e) My head–My heart
- How much fantasy does this label contain? (1. Not at all-7. Very much)
- To what extent does this wine label evoke the imaginary? (1. Not at all-7. Very much) *adapted from Martin (2004)*
- To what extent do you believe this wine producer is... (1. Not at all-7. Very much) *adapted from Aaker, Vohs, & Mogilner (2010)*
 - a) Credible, b) Competent

- This wine appears to be of... (1. Very poor quality- 7 Very good Quality) *adapted from Petroshtus & Monroe (1987)*
 - To what extent do you believe this wine producer is... (1. Not at all-7. Very much) *adapted from Aaker et al. (2010)*
- a) Warm, b) Kind, c) Generous
- How much are you interested in wine? (1. Not at all interested-7. Very interested) *adapted from Labroo et al. (2008)*
 - How much do you like wine? (1. Dislike very much-7. Like Very much) *adapted from Labroo et al. (2008)*
 - How much do you rely on expert ratings when shopping wine? (1. Not at all-7. Very much)

You are almost done! Lastly, we would like you to answer some basic questions about yourself and your participation in the study.

- While participating in this study, I was... (scale from 1 to 7)
- a) Concentrating very little/ concentrating very hard; b) Paying very little attention/ paying a lot of attention *adopted from Miniard, et al. (1991)*
- Please indicate your gender. (Male, Female)
- How old are you?
- What is your highest completed education?

No High School Diploma High School Diploma Bachelor's degree Master's degree
 Professional school degree Associate degree Doctorate degree

- Do you have any remarks about our study? Anything you want to tell us?

Appendix 4: Correlation matrix table of Study 2

		Correlations ^b						
		fantasy	Expert rating	evocation of the imaginary	Positive affect	Purchase intentions	Amount of fantasy	Wine quality
Independent variable:	Pearson Correlation	1						
Fantasy	Sig. (2-tailed)							
Moderator: expert rating	Pearson Correlation	.030	1					
	Sig. (2-tailed)	.641						
Mediator 1: evocation of the imaginary	Pearson Correlation	.336**	.008	1				
	Sig. (2-tailed)	.000	.908					
Mediator 2: positive affect	Pearson Correlation	.068	.069	.409**	1			
	Sig. (2-tailed)	.294	.286	.000				
Dependent variable:	Pearson Correlation	.109	.193**	.415**	.609**	1		
Purchase intentions	Sig. (2-tailed)	.090	.003	.000	.000			
Manipulation check:	Pearson Correlation	.442**	-.015	.722**	.351**	.278**	1	
amount of fantasy	Sig. (2-tailed)	.000	.820	.000	.000	.000		
Manipulation check:	Pearson Correlation	-.010	.381**	.188**	.487**	.591**	.109	1
wine quality	Sig. (2-tailed)	.874	.000	.003	.000	.000	.092	

** . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=241

Appendix 5: Full phrasing of the instructions, questions and scales of Studies 3 - 4

MASTERY ESTATE (MYSTERY ESTATE)

You are invited to taste and rate this wine.

- Please, describe in few words how you find the taste of this wine.

For the following questions, please circle the number that represents your opinion the best.

- How do you find the overall taste of this wine? (1. Very poor taste; 7. Very good taste)
- How likely would you be to buy a bottle of this wine? (1. Very unlikely to buy; 7. Very likely to buy)
- What do you think about the overall quality of this wine? (1. Very poor quality; 7. Very good quality)

Please, turn over this page to rate the second wine

MYSTERY ESTATE (MASTERY ESTATE)

- Please, describe in few words how you find the taste of this wine.

For the following questions, please circle the number that represents your opinion the best.

- How do you find the overall taste of this wine? (1. Very poor taste; 7. Very good taste)
- How likely would you be to buy a bottle of this wine? (1. Very unlikely to buy; 7. Very likely to buy)
- What do you think about the overall quality of this wine? (1. Very poor quality; 7. Very good quality)

Finally, could you please answer some basic questions about yourself?

- Which age group do you belong to?

Under 18 years 18-24 years 25-34 years 35-44 years 45-54 years 55-64 years 65 years or older

- Circle your gender: *male* *female*

THANK YOU VERY MUCH FOR YOUR PARTICIPATION!

Appendix 6: Correlation matrix table of Study 3

		Correlations ^b					
		Non fantasy taste	Non fantasy PI	Non-fantasy quality	Fantasy taste	Fantasy PI	Fantasy quality
Dependent variable: non- fantasy taste	Pearson Correlation	1	.672**	.486	.069	-.017	-.191
	Sig. (2-tailed)		.008	.078	.814	.954	.513
Dependent variable: non-fantasy purchase intentions (PI)	Pearson Correlation	.672**	1	.530	.242	.356	.171
	Sig. (2-tailed)	.008		.052	.405	.212	.558
Dependent variable: non-fantasy quality	Pearson Correlation	.486	.530	1	.086	.203	.210
	Sig. (2-tailed)	.078	.052		.770	.486	.471
Dependent variable: fantasy taste	Pearson Correlation	.069	.242	.086	1	.681**	.857**
	Sig. (2-tailed)	.814	.405	.770		.007	.000
Dependent variable: fantasy purchase intentions (PI)	Pearson Correlation	-.017	.356	.203	.681**	1	.679**
	Sig. (2-tailed)	.954	.212	.486	.007		.008
Dependent variable: fantasy quality	Pearson Correlation	-.191	.171	.210	.857**	.679**	1
	Sig. (2-tailed)	.513	.558	.471	.000	.008	

** . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=14

Appendix 7: Correlation matrix table of Study 4

		Correlations ^c							
		Non-fantasy taste	Non-fantasy PI	Non-fantasy quality	fantasy taste	fantasy PI	fantasy quality	age	tasting order
Dependent variable:	Pearson Correlation	1							
non- fantasy taste	Sig. (2-tailed)								
Dependent variable:	Pearson Correlation	.824**	1						
non-fantasy purchase intentions (PI)	Sig. (2-tailed)	.000							
Dependent variable:	Pearson Correlation	.923**	.768**	1					
non-fantasy quality	Sig. (2-tailed)	.000	.000						
Dependent variable:	Pearson Correlation	.500**	.523**	.389*	1				
fantasy taste	Sig. (2-tailed)	.001	.001	.013					
Dependent variable:	Pearson Correlation	.578**	.797**	.519**	.690**	1			
fantasy purchase intentions (PI)	Sig. (2-tailed)	.000	.000	.001	.000				
Dependent variable:	Pearson Correlation	.626**	.583**	.666**	.709**	.656**	1		
fantasy quality	Sig. (2-tailed)	.000	.000	.000	.000	.000			
Covariate:	Pearson Correlation	.273	.123	.215	.038	-.168	.092	1	
Age	Sig. (2-tailed)	.088	.450	.182	.815	.300	.571		
Control variable:	Pearson Correlation	.168	.116	.168	.163	-.041	.035	.170	1
Tasting order	Sig. (2-tailed)	.301	.476	.299	.316	.803	.829	.293	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

c. Listwise N=40

Appendix 8: Correlation matrix table of Study 5

		Correlations ^c				
		Fantasy	actual price	quantity sold	Flyer-based product price promotion	Christmas period
Independent variable:	Pearson Correlation	1				
Fantasy	Sig. (2-tailed)					
Moderator:	Pearson Correlation	.212**	1			
actual price	Sig. (2-tailed)	.000				
Dependent variable:	Pearson Correlation	-.320**	-.324**	1		
quantity sold	Sig. (2-tailed)	.000	.000			
Control variable:	Pearson Correlation	-.045*	-.215**	.320**	1	
Flyer-based product price promotion	Sig. (2-tailed)	.031	.000	.000		
Control variable:	Pearson Correlation	.014	-.030	.134**	.059**	1
Christmas period	Sig. (2-tailed)	.485	.150	.000	.004	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

c. Listwise N=2322

Appendix 9: Rules to determine the actual price of observations when sales = 0

A series of rules was applied to estimate and determine the actual price (including 15% GST) when the SKUs were on the shelves but not sold in a given week. In order to apply the following rules, we sorted and split the data by (1) store, (2) SKU ID, (3) retailer cycles, and (4) flyer promotional period. Then, if there is/are:

1) a price that exists for a given SKU/product in a given store within the retailer cycle period, price blanks were filled in by the mean of the existing prices – excluding prices that are within the flyer promotional period. The mean of the existing prices was employed because in some cases, the prices were different within a same cycle.

2) a price included within the promotional period based on the flyer, the blanks were filled in by using the mean price of that period for the given SKU in the given store excluding – prices that are outside the flyer promotional period. It is possible to have different prices within such short period (e.g. two different prices in a three-week period and one blank). That is because an additional special offer may occur at that time as part of the flyer promotion (e.g. “2 for deals”).

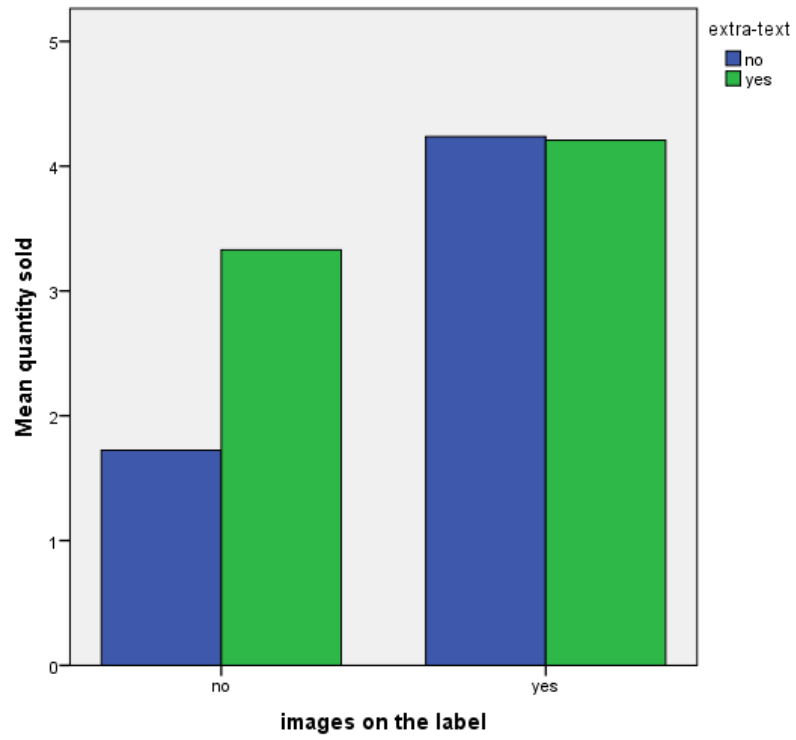
3) no price (i.e. no sales) for a whole retailer cycle, blanks were filled in by using the RRP of the corresponding SKU. Some products had a change in RRP within the examined period. Therefore, the change of RRPs – in terms of new prices and when it occurs – were identified for each product based on information provided by the retailer, found on the Wine Searcher website and estimated by examining the data set. In this case, the use of the RRP (i.e. full price) makes sense because customers are unlikely to buy a product at this full price, mostly in New Zealand where the price promotions run on a regular basis.

4) no price (i.e. no sales) that exists within the promotional period based on the flyer, blanks were filled in by using the prices from the corresponding flyers.

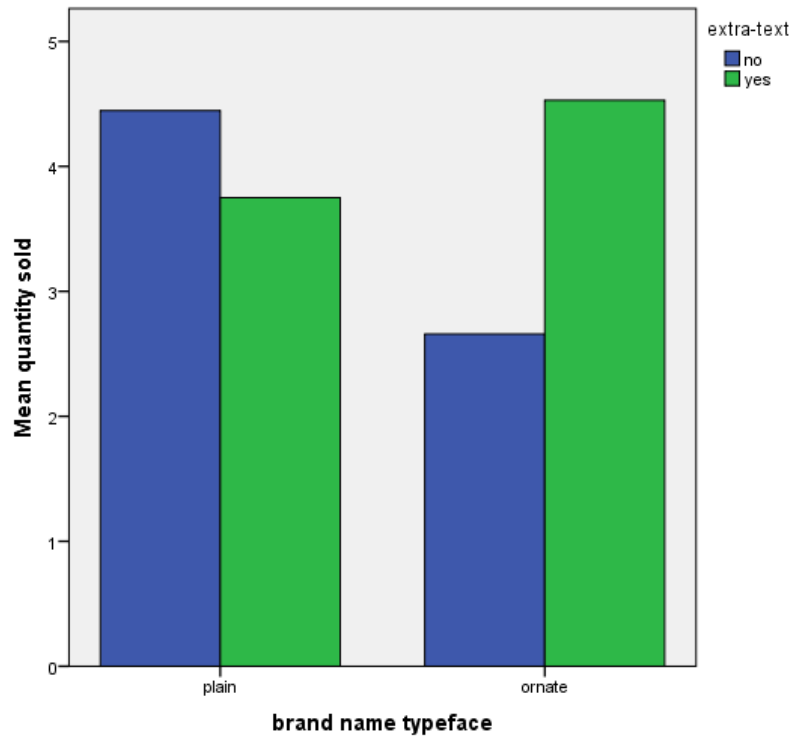
5) cases in which the store(s) sold products at (very) low (e.g. destock) or high prices, it does not make sense to use the mean of this price. Therefore, in some cases (n = 59), the blanks were manually¹⁰ filled in by using either the relevant price values (based on provided information or the data) or the RRP.

At the end of this process, the split option was turned off and the data was re-sorted back to the initial structure (i.e. by 1) store, 2) SKU Id, and 3) week) to enable subsequent analyses.

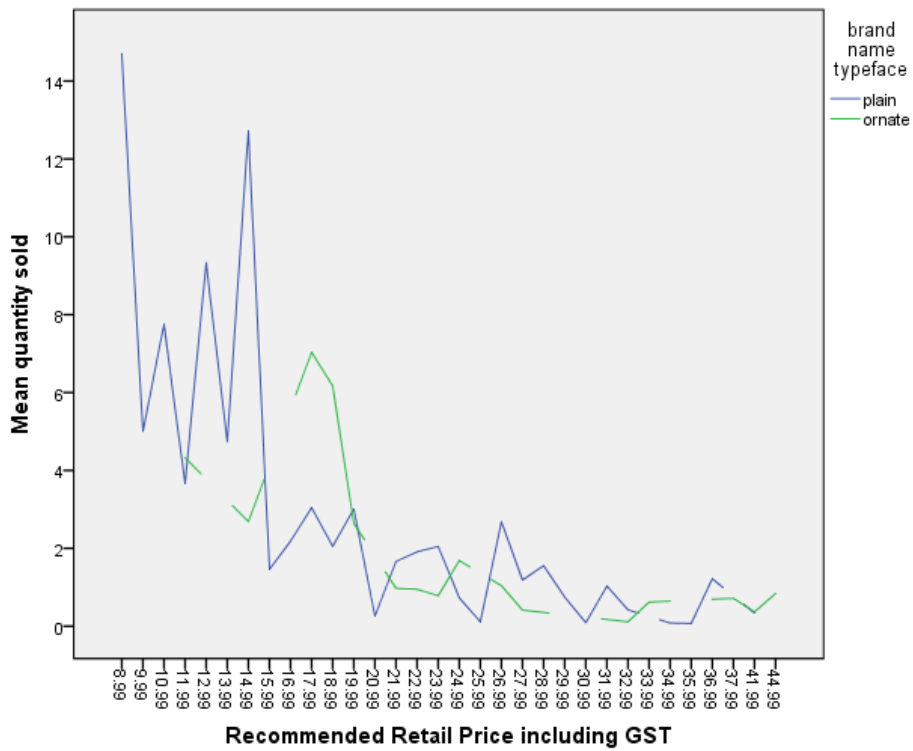
¹⁰ The appropriate values were written down into the corresponding SPSS syntax command.

Appendix 10: Model-free evidence**Model 1: Interaction between pictorial and extra-textual elements**

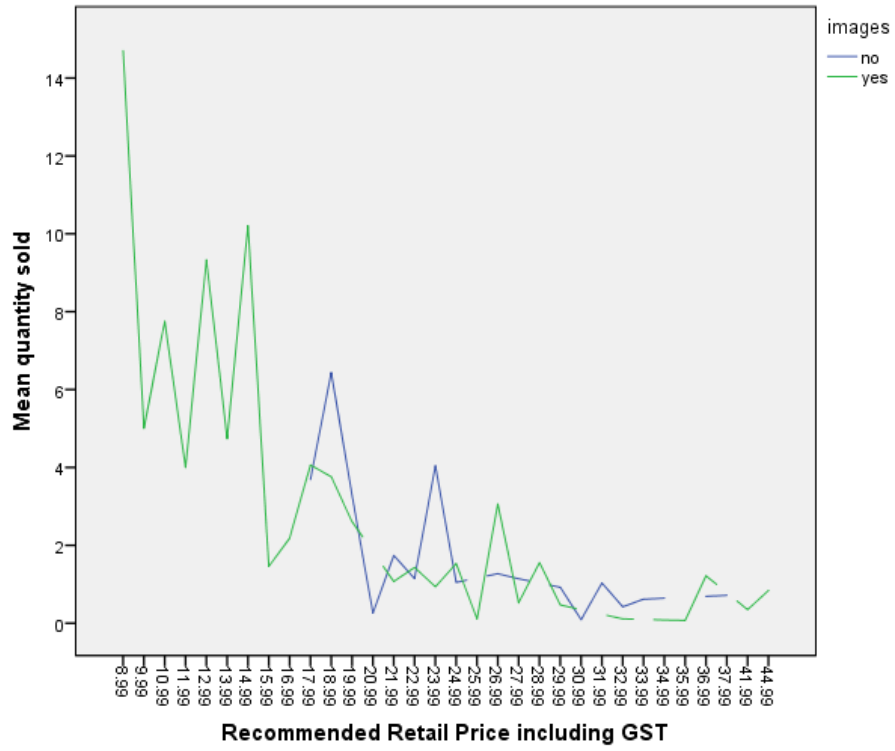
Model 2: Interaction between brand name typeface and extra-textual elements



Model 3: Interaction between brand name typeface and RRP



Model 4: Interaction between pictorial elements and RRP



Appendix 11: Multiple Regression Main-Effects Models

Predictors	<i>OLS Estimation Method (E.M)</i>						<i>GLS E.M Prais-Winsten</i>	
	Model 1		Model 2		Model 3		Model 4	
	B	SE	B	SE	B	SE	B	SE
DV = Sales in units N = 22,383								
Compound label: 0= no; 1 = yes	—	—	—	—	-2.01***	.13	-2.13***	.27
Brand name typeface:0=plain ;1=ornate	—	—	—	—	-.45***	.10	-.49*	.21
Images: 0=no;1 = yes	—	—	—	—	-.39**	.12	-.54*	.27
Extra-text: 0=no;1= yes	—	—	—	—	.26**	.09	.23 ^{N.S}	.20
Label colour backgr.: 0=else; 1=off-white	—	—	—	—	1.56***	.10	1.46***	.22
Label change: 0 =no; 1 = yes	—	—	—	—	.71***	.11	.77***	.23
Chardonnay: 0 = else; 1 =chard	-1.31***	.14	-1.30***	.14	-1.60***	.14	-1.36***	.28
Pinot Gris (PG): 0= else; 1= PG	-1.34***	.14	-1.32***	.14	-1.65***	.14	-1.58***	.29
Sauvignon Blanc (SB):0=else; 1= SB	1.51***	.13	1.52***	.13	1.32***	.13	1.43***	.28
RRP	-.27***	.01	-.27***	.01	-.26***	.01	-.26***	.02
Price Index	-.25***	.01	-.25**	.01	-.25***	.01	-.21***	.01
Awards: 0 =no;1=yes	—	—	—	—	1.10***	.12	1.06***	.26
Flyer_1st: 0=no, 1=yes	.14 ^{N.S}	.10	.11 ^{N.S}	.10	.11 ^{N.S}	.10	.06 ^{N.S}	.05
Flyer-based PPW ^a : 0 = no; 1 = yes	-.30**	.10	-.34**	.11	-.36***	.11	-.30***	.08
Flyer-based PPP ^b :0=no; 1=yes	2.04***	.17	2.02***	.17	2.21***	.17	2.07***	.15
Store: 0 =store 1; 1=store 2	3.40***	.08	3.22***	.57	3.18***	.09	3.14***	.20
Average high temperature	—	—	.02 ⁺	.01	.02 ⁺	.01	-.00 ^{N.S}	.02
Holiday: 0=else; 1 = holiday	—	—	-.29**	.11	-.29**	.10	-.28**	.09
Christmas: 0=else.; 1=Christmas period	—	—	.37*	.15	.38*	.15	.84***	.17
Roadwork: 0 = no;1 = yes	—	—	-.48***	.13	-.53***	.12	-.47*	.21
Constant	30.61***	.51	30.30***	.57	29.03***	.61	26.47***	.92
R ² (adj. R ²)	.257 (.257)		.258 (.258)		.283 (.282)		.132 (.131)	
F	860.08***		599.23***		440.92***		—	
Max. VIF	< 2		< 2		< 3		—	

⁺ p < .10 * p < .05 ** p < .01 *** p < .001 N.S (Not Significant) Notes: Unstandardised coefficients are presented with standard errors; ^a PPW = Price Promotion Weeks; ^b PPP = Product Price Promotion;

Appendix 12: Robustness checks Multiple Regression Full-Effects Models using

GLS estimation method.

DV = Sales in units Independent variables	Model A: Store 1 N=11,573		Model A': Store 2 N=10,810	
	B	SE	B	SE
Compound label: 0= no; 1 = yes	-.81***	.16	-4.55***	.52
Brand name typeface:0=plain;1=ornate	-.60***	.15	-2.00***	.49
Images: 0=no; 1 = yes	.55*	.25	1.94**	.75
Extra-text: 0=no; 1 = yes	.68*	.28	4.22***	.81
Extra text × Images	-.91**	.29	-5.67***	.86
Brand name typeface × Extra text	1.37***	.25	1.53 ⁺	.84
Brand name typeface × RRP ^a	.08***	.02	.24***	.06
Images × RRP ^a	-.05 ⁺	.03	-.23**	.09
Label colour background: 0=else; 1=off-white	-.15 ^{N.S}	.13	2.85***	.43
Label change: 0 =no; 1 = yes	-.58***	.13	.86*	.44
Chardonnay: 0 = else; 1 =Chardonnay	-.13 ^{N.S}	.16	-2.80***	.52
Pinot Gris (PG): 0= else; 1= PG	-.45**	.16	-2.67***	.52
Sauvignon Blanc (SB):0=else; 1= SB	.71***	.16	2.59***	.50
RRP ^a	-.10***	.03	-.28***	.08
Price Index (actual price/ RRP)*100	-.13***	.00	-.32***	.10
Awards: 0 =no; 1 = yes	.48***	.14	1.91***	.51
Flyer_1st: 0=others, 1=1 st week of the PPW	-.04 ^{N.S}	.06	.18*	.08
Flyer-based PPW ^b : 0 = no; 1 = yes	-.04 ^{N.S}	.08	-.58***	.13
Flyer-based PPP ^c :0=no; 1=yes	.77***	.15	3.08***	.25
Store: 0 =store 1; 1=store 2	—	—	—	—
Average high temperature	-.02 ^{N.S}	.01	.00 ^{N.S}	.03
Holiday: 0=else; 1 = holiday	-.19*	.09	-.35*	.15
Christmas: 0=else.; 1=Christmas period	.69***	.15	.80**	.29
Roadwork: 0 = no; 1 = yes	-.66***	.10	—	—
Constant	14.73	.60	31.77***	1.45
R ² (adj. R ²) in %	13.3 (13.1)		19.2 (19.0)	
Durbin Watson	2.161		2.361	

⁺ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$ N.S (Not Significant)

Notes: Unstandardised coefficients (B) are presented with standard errors (SE); ^a RRP is the grand mean-centred around the RRP of the two stores as their respective mean are very close (Store 1 = 19.51; store 2 = 19.25); ^b PPW = Price Promotion Weeks; ^c PPP = Product Price Promotion


Appendix 13: Data collection details

Chapters and Studies	Data collection period
Chapter 2, Study 1	December 2014-March 2015
Chapter 2, Study 2	March 2015
Chapter 2, Study 3	June 2015
Chapter 2, Study 4	July 2016
Chapter 2, Study 5	January 2016
Chapter 3	

Appendix 14: Statements of contribution and submitted/published work

Contributions to the manuscript

DRC 16



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**STATEMENT OF CONTRIBUTION
TO DOCTORAL THESIS CONTAINING PUBLICATIONS**

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate's Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

Name of Candidate: David Jaud


Name/Title of Principal Supervisor: Professor Valentyna Melnyk

Name of Published Research Output and full reference:
Jaud, D. A., Melnyk, V., & Landwehr, J.R. (2017). Fantastic beasts and when to present them? The effect of fantasy labels on product evaluation and purchase behavior. *Journal of Consumer Psychology*: revise and resubmit.

In which Chapter is the Published Work: Chapter 2

Please indicate either:

- The percentage of the Published Work that was contributed by the candidate:
and / or
- Describe the contribution that the candidate has made to the Published Work:
David Jaud came up with the idea of this paper. David is responsible of the design and conduction of the two experiments, collection and cleaning of the retail data, analysis and interpretation of the data, as well as the writing up of the manuscript. Prof. Landwehr helped with the data collection of one of the studies. Prof. Melnyk and Prof. Landwehr supervised and guided David in each step of the process. Prof. Melnyk and Prof. Landwehr advised on the questionnaire design as well as the theorisation development. Prof. Melnyk and Prof. Landwehr helped for the data analysis and interpretation. For Study 3, Prof. Landwehr specified the final models and did the write up of the results and discussion parts. Prof. Melnyk and Prof. Landwehr commented and edited on previous versions of the manuscript.

<p>David JAUD <small>Digitally signed by David JAUD Date: 2018.02.16 16:40:31 +13'00'</small></p> <hr/> <p style="text-align: center;">Candidate's Signature</p>  <hr style="background-color: #e0e0ff; width: 100%;"/> <p style="text-align: center;">Principal Supervisor's signature</p>	<p>16/02/2018</p> <hr/> <p>Date</p> <p>16/02/2018</p> <hr/> <p>Date</p>
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GRS Version 3– 16 September 2011

**Fantastic Beasts and When to Present Them? The Effect of Fantasy
Labels on Product Evaluation and Purchase Behavior**

David A. Jaud^a

Valentyna Melnyk^a

Jan R. Landwehr^{b*}

^aMassey University Auckland
School of Communication, Journalism and Marketing
Te Pou Aro Korero
Massey Business School, Massey University
AUCKLAND, New Zealand
d.a.jaud@massey.ac.nz; v.melnyk@massey.ac.nz

^bGoethe University Frankfurt
Faculty of Economics and Business Administration
Theodor-W.-Adorno-Platz 4, D-60629 Frankfurt am Main, Germany
Phone: +49 69 798 34637, Fax: +49 69 798 35001
landwehr@wiwi.uni-frankfurt.de

*Corresponding author

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The Fantastic Beasts and When to Present Them? The Effect of Fantasy Labels on Product Evaluation and Purchase Behavior

Abstract

Although the use of fantasy themes (showing images from an unreal world) on product labelling and packaging is increasing across product categories, it is unclear how consumers react to fantasy labels. Across three studies (an online experiment, a field experiment, and an analysis of retail sales data), the results unite seemingly contradictory theories predicting the effects of labels with fantasy themes on product evaluation and purchasing behavior. Specifically, consistent with the principle of hedonic dominance, we uncover an important boundary condition—product quality signal—determining which of the theories applies. Particularly, the results suggest that for products below average quality, labels with fantasy themes backfire (consistent with the literature on meta-cognitive processing). For products average in quality, fantasy and non-fantasy labels do not differ in their performance. Yet, in the presence of an above average quality signal, fantasy labels increase purchase intentions, taste perceptions, and decrease consumers' price sensitivity. This positive effect of fantasy labels is sequentially driven by the evocation of the imaginary and positive affect (consistent with the literature on mental simulation).

Keywords: fantasy themes, product labels, packaging, hedonic dominance, taste

Introduction and Theoretical Background

In the US market alone, companies spend more than \$120 billion annually for packaging and labelling (Kerin, Hartley, & Rudelius, 2009) with particular emphasis on unusual visual designs that engage consumers' imagination (Nenkov & Scott, 2014; Zhao, Hoeffler, & Dahl, 2009). Consistently, packaging using fantasy themes is a fast-growing trend spreading among many product categories. For example, the Californian wine company Vintage Wine Estates and the television company HBO have released a range of *Game of Thrones* wines in March 2017 (Wine Industry Advisor, 2017). This set of 'fantasy wines' includes a red blend and a premium Cabernet Sauvignon sold at USD 19.99 and USD 49.99, respectively (<http://www.gameofthroneswines.com/>). Yet, although designs that stimulate imagination appear to be an increasingly popular choice for practitioners, consumers reactions to fantasy labels remain a mystery.

Fantasy is defined as a fiction or epic genre that contains imaginative or magical features such as mystical and mythological creatures or legendary heroes living in an unreal world (Campbell, 2016; Stableford, 2005). Fantasy themes thus stimulate imagination and daydreaming and elicit the freedom to mentally create a more pleasant and enjoyable alternative world (Belk & Costa, 1998; Kozinets, 2001; Kozinets et al., 2004; Martin, 2004) because the "fantastic imaginary" (Martin, 2004) enables people to freely construct their own thoughts (Kozinets et al., 2004; Schlosser, 2003). We define fantasy labels as those that engage imagination by including words or images of imaginative creatures, an unreal world, or other fantasy related legends or fairytales.

Currently, two streams of literature would allow making opposite predictions on whether fantasy labels help or hurt consumers' product evaluations and purchasing behavior. On the one hand, the literature on meta-cognitive processing suggests that unusual visuals are harder to process, which is a hedonically negative experience

(Reber, Schwarz, & Winkielman, 2004; Winkielman, Halberstadt, Fazendeiro, & Catty, 2006). Because people are unwilling to invest extensive cognitive efforts (Hyunjin & Schwarz, 2008), they prefer easier processing of familiar stimuli (Bloch, 1995; Veryzer & Hutchinson, 1998). This stream would therefore suggest that fantasy labels should decrease purchase intentions.

On the other hand, the literature on mental simulation suggests that fantasy themes stimulate imagination and elicit the freedom to construct an alternative world (Belk & Costa, 1998; Martin, 2004). Consumers enjoy constructing imagery (Zhao et al., 2009) because mental imagery allows people to ‘transport’ themselves from reality to an imaginary world (Green & Brock, 2000; Van Laer, De Ruyter, Visconti, & Martin, 2014). Therefore, consumers are likely to enjoy imagery-based product labels which enable them to have a positive emotional experience (Holbrook & Hirschman, 1982; Hung & Wyer, 2011; MacInnis & Price, 1987). Hence, this stream would suggest that fantasy labels should increase product evaluations and purchase intentions by activating positive affect (Escalas, 2004; Zhao, Hoeffler, & Zauberan, 2011).

Finally, the principle of hedonic dominance suggests an important boundary condition on when positive affect can influence product evaluation in the first place. Specifically, it predicts that the fulfillment of consumers’ functional requirements is a necessary prerequisite for hedonic product characteristics to enter and dominate consumers’ purchasing decisions (Chitturi, Raghunathan, & Mahajan, 2008; 2007). Hence, consumers are likely to rely on quality signals first, before they rely on their positive affective responses (Page & Herr, 2002). Therefore, if the quality cut-offs are not met, hedonic aspects of the label will not enter consumers’ decision making. However, the low fluency associated with the processing of fantasy labels may further decrease product evaluations (Wänke, Bohner, & Jurkowitsch, 1997). In contrast, once

the quality cut-offs are met, purchase intentions are likely to be enhanced by the hedonic evaluation of fantasy labels (Chitturi et al., 2008; 2007).

This framework unites seemingly contradictory theories and uncovers when, how and why fantasy labels impact product evaluations and subsequent purchase intentions. Across three studies (involving an online experiment, a field experiment, and a study using actual retail sales data), we uncover conditions when fantasy labels (versus non-fantasy labels) backfire, help, or make no difference. To the best of our knowledge, this is the first paper to examine the effects of fantasy labels.

Study 1: Online experiment

The goal of Study 1 is to shed light on when (i.e., test of moderation) and why (i.e., test of mediation) fantasy labels (versus non-fantasy labels) impact purchase intentions. Specifically, with respect to the moderator, we predict that fantasy labels will only positively influence purchase intentions when a quality signal is present (i.e., principle of hedonic dominance). With respect to the mediating process, we expect that any positive effects of fantasy labels are triggered by their potential to stimulate imaginary processing (e.g., via higher levels of transportation towards an imaginary world; Escalas, 2004) and the corresponding emotional reaction (e.g., happiness; Mogilner, Aaker, & Kamvar, 2012). This positive affective response should, in turn, increase product evaluations (Herr, Page, Pfeiffer, & Davis, 2012) and purchase intentions (Fuchs, Schreier, & van Osselaer, 2015; Norton, Mochon, & Ariely, 2012). Therefore, we expect that the effect of fantasy (vs. non-fantasy) labels on purchase intentions is serially mediated by i) the evocation of the imaginary and ii) positive affect.

Method

Study 1 had a 2 (label: fantasy vs. non-fantasy) x 3 (quality signal: not present vs. mediocre quality vs. high quality) between-subjects design (see Figure 1). *Fantasy* label was manipulated by an image of a fantasy animal (unicorn) and a fantasy brand name (Mystery Estate), while non-fantasy label displayed a real animal (horse) and a non-fantasy brand name (Mastery Estate). *Quality signal* was manipulated by ratings from the specialist wine magazine *Wine Advocate* (a 100-point scale commonly used in the US wine market) with 71 points as mediocre quality or 94 points as high quality (no ratings in the control groups).

INSERT FIGURE 1 HERE

A sample of 241 adults ($M_{age} = 33.46$; 38.6% female) from across the US, recruited through Mechanical Turk, agreed to participate (another 28 invited people cancelled the study) and were randomly assigned to one of the six conditions and completed the online questionnaire. Participants indicated their *purchase intentions* on a seven-point scale (1 = very unlikely to buy; 7 = very likely to buy, adapted from Landwehr, Wentzel, and Herrmann (2012)) and the *evocation of the imaginary* of the label (1 = not at all; 7 = very much, adapted from Martin (2004)). *Affect* was measured on a seven-point scale (“Looking at this wine label makes me happy,” 1 = strongly disagree; 7 = strongly agree; adapted from Mogilner et al. (2012)). We also measured alternative process variables and control scales that did not reveal any interesting insights and are therefore not further discussed (see Methodological Details Appendix for a complete disclosure of all measured variables).

Results

Given our theorizing based on the principle of hedonic dominance, we predict that a positive effect of fantasy labels will only occur when a high-quality cue is present. No effect is expected for a mediocre quality cue or when no cue is present. Figure 2 shows the means of purchase intentions for the six experimental conditions and, indeed, suggests an effect of fantasy for the high-quality condition only. An ANOVA on *purchase intentions* reveals a marginally significant effect of fantasy label ($F(1, 235) = 2.81, p = .095$) and a significant effect of quality ($F(2, 235) = 7.60, p < .001$), while their interaction is not significant ($p = .12$). We further examined planned simple effects of fantasy (vs. non-fantasy) for each level of the quality signal. As expected, only in the high-quality condition participants were more willing to buy Mystery (vs. Mastery) Estate ($M_{\text{fantasy} \times \text{high rating}} = 5.05, SD = 1.15$ vs. $M_{\text{non fantasy} \times \text{high rating}} = 4.16, SD = 1.50; F(1, 235) = 6.75, p < .01$). The following mediation analysis hence focuses on the high-quality conditions ($N = 78$).

INSERT FIGURE 2 HERE

To provide process evidence for the positive effect of fantasy label (vs. non-fantasy) on purchase intentions, we test the following sequence: fantasy → evocation of the imaginary → positive affect → purchase intentions (we employ SPSS PROCESS model 6 using a bias-corrected bootstrap method with 5,000 resamples (Hayes, 2013)). As expected, the results (see Figure 3) indicate a positive and significant serial indirect effect from fantasy label to the evocation of the imaginary to positive affect to purchase intentions ($CI_{95\%} = .05, .41$).

INSERT FIGURE 3 HERE

Discussion

The results of Study 1 are consistent with prior research on mental simulation, however, qualified by the principle of hedonic dominance: Showing fantasy (versus non-fantasy) labels increases purchase intentions but only in the presence of quality signals. Moreover, this positive effect of fantasy labels is driven by consumer's evocation of the imaginary and positive affect. Yet, although the difference in purchase intentions between fantasy and non-fantasy labels did not differ for conditions with ambiguity (no rating) or with a mediocre rating (i.e., 71 out of 100 points), we cannot rule out that for products with really low quality the fantasy label effect would reverse. We test this possibility in Study 3 by investigating the effect of fantasy labels across a wider range of quality signals.

Study 2: Field experiment in a retail environment

In Study 2, we aim to replicate the findings of Study 1 for the high-quality condition in a real store with regular consumers and investigate the effects of fantasy versus non-fantasy labels on product evaluation and taste perception.

Method

Study 2 had a within-subjects design (label design: fantasy versus non-fantasy). We used two bottles of the same Australian red wine (ensuring they were the same by mixing up the wine and replacing it in the bottles) across the two conditions but with different labels (same as in Study 1; see Figure 4). *Fantasy* was manipulated in the same way as in Study 1. We used a real sticker with a gold medal (that is common in our field

setting) as a high quality signal for both conditions. A sample of 40 regular shoppers (18 years old or above; $Mod_{age} = 45\text{--}54$; 35% female) of a wine retail store volunteered to participate in a free wine tasting (another two participants were excluded due to incomplete questionnaires and one participant due to boozing the wine). Participants were informed that an Australian wine producer was launching two new brands of Cabernet Sauvignon, Mastery Estate and Mystery Estate. Next, participants saw the two bottles, tasted the wine from each of the bottles and described the taste of the wine in a few words. The tasting order of the two wines was counterbalanced between participants to control for any effects of order. Then, participants rated the *taste* of the wine (1 = very poor taste; 7 = very good taste, adapted from Elder and Krishna (2010)) and their *purchase intentions* (measured in the same way as in Study 1). Finally, participants indicated on a seven-point scale the *perceived quality* of the wine (1 = very poor; 7 = very good, adapted from Elder and Krishna (2010)).

INSERT FIGURE 4 HERE

Results

Two independent coders assessed whether the open-ended taste descriptions included any positive comments (0 = no; 1 = yes) across the conditions. The results of a non-parametric McNemar test indicate that Mystery Estate was associated with positive taste marginally more often (34 times, 85%) than Mastery Estate (26 times, 65%; $p = .057$; note that participants tasted exactly the same wine).

Next, we estimate three mixed-factorial ANOVAs with label design (fantasy vs. non-fantasy) as the within-subjects factor, tasting order as a between-subjects factor, age as a covariate (to account for any dispositional heterogeneity in consumers' fantasy

affinity), and respectively *taste*, *purchase intentions*, and *perceived quality* as the dependent variables (for descriptives see Figure 5).

INSERT FIGURE 5 HERE

Taste. Despite tasting the same wine, participants indicated that Mystery Estate tasted marginally better than Mastery Estate ($M_{\text{fantasy}} = 5.09$, $SD = 1.01$ vs. $M_{\text{non fantasy}} = 4.84$, $SD = 1.28$, $(F(1, 37) = 3.90, p = .056)$. All other effects are insignificant ($ps > .10$). These results are consistent with the open-ended coded responses of perceived taste and again suggest that in the presence of a quality cue, fantasy labels enhance taste perceptions.

Purchase intentions. As expected, participants indicated a significantly higher willingness to buy fantasy than non-fantasy label ($M_{\text{fantasy}} = 4.71$, $SD = 1.55$ vs. $M_{\text{non fantasy}} = 4.41$, $SD = 1.64$, $(F(1, 37) = 11.39, p < .01)$. The interaction between fantasy and age is also significant ($F(1, 37) = 8.45, p < .01$). Unsurprisingly, younger participants were more willing to buy wines with fantasy labels than older participants. All other effects are insignificant ($ps > .23$).

Quality. To rule out an alternative explanation that product quality was established not only via the gold medal, but that fantasy labels also influenced perceived quality, we estimate an additional ANOVA with quality as the dependent variable. As expected, the results show that neither the main effect of fantasy on perceived quality nor any other effect is significant ($ps > .16$), confirming that quality perceptions were only triggered by the external quality cue (i.e., the gold medal) and not by the manipulated label designs.

Discussion

Overall, the findings of Study 2 replicate the findings of Study 1 in a real retail setting, confirming that in the presence of quality signals (i.e., Gold Medal) fantasy labels (versus non-fantasy labels) increase purchase intentions. Further, the results indicate that although consumers tasted exactly the same product, they tend to prefer the taste of a bottle with a fantasy label (consistently across an open-ended description and a rating scale).

Study 3: Analysis of actual retail sales data

While the controlled experimental designs of Studies 1 and 2 allowed addressing causality by manipulating fictitious fantasy versus non-fantasy labels, they did not allow investigating the effects of the labels across a continuous range of quality signals. Hence, we cannot rule out the possibility that for products with below average quality signals, fantasy labels may backfire (as consistent with the stream of literature on meta-cognitive processing). The goal of Study 3 is to investigate the effects of fantasy versus non-fantasy labels across a wider range of quality signals. Moreover, we aim to address the generalizability and external validity of the findings by examining real purchasing data (rather than purchase intentions; see Chandon, Morwitz, & Reinartz, 2005; Morwitz, Johnson, & Schmittlein, 1993), while using an omnipresent heuristic quality signal: the price (because consumers perceive price as an indicator of product quality, e.g., Dawar & Parker, 1994; Dodds, Monroe, & Grewal, 1991).

Data description and method

We obtained weekly transactional data from two liquor stores located in New Zealand for 750ml bottles of wine. The data covered a 105-weeks period (from January 2014 to January 2016). We selected all the Stock Keeping Units (SKUs) that fit our

definition of fantasy labels ($n=7$; containing words or images related to unreal creatures, legends, or a fantasy world). Next, for each of the fantasy labels two coders selected a non-fantasy label that matched it in terms of (1) price (as closely as possible), (2) wine type and region, (3) producing company (when possible), and (4) visual appearance (as closely as possible). The dataset across all 14 (7 fantasy and 7 non-fantasy) labels (SKU), 2 stores, and 105 weeks contains a total of 2,322 observations (the number of observations per SKU varied due to occasional stock-out situations).

The dependent variable, *quantity sold*, is measured in number of SKUs (750 ml bottles) sold per week per store. *Fantasy* is an effect-coded variable indicating whether the wine label contains fantasy (=1) or non-fantasy themes (= -1). *Actual price* (in NZ-\$) includes 15 % GST (Good and Services Tax) and is z-transformed for all subsequent analyses.

We also included two control variables. *Christmas period* captures whether the given week fell within the five-weeks Christmas period (=1) or not (= -1). The effect-coded variable *flyer-based product price promotion* captures whether the wines were on price promotion (1 = yes; -1 = no) for a given week.

Results

The general structure of the data is a three-level nested structure where 105 weekly observations are nested within wine bottles which are nested within stores. To account for the nested structure of the data, we follow the modeling approach of Landwehr, Wentzel, and Herrmann (2013). In particular, we use a Linear Mixed Model (LMM) that estimates fixed and random effects and that specifies an autoregressive correlation pattern for the variance-covariance matrix of the error terms. To analyze the data, we use the `lme()`-function of the `nlme` library of the software R (Pinheiro et al., 2015). The final model to predict sales for a temporal measurement t nested within a

wine SKU i nested within a store j has the following form where b indicates the fixed effects, u indicates the random effects, and e_{tij} indicates the residuals that are multivariate normally distributed with mean 0 and a 105×105 variance-covariance-matrix R_{ij} that follows an AR(1) structure:

$$\begin{aligned} \text{SALES}_{tij} = & b_0 + b_1 * \text{FANTASY}_i + b_2 * \text{PRICE}_{tij} + b_3 * \text{FANTASY}_i * \text{PRICE}_{tij} + \\ & b_4 * \text{PRICE}_{tij}^2 + b_5 * \text{FANTASY}_i * \text{PRICE}_{tij}^2 + b_6 * \text{CHRISTMAS}_t + \\ & b_7 * \text{FLYER}_{ti} + u_{0j} + u_{0ij} + e_{tij} \end{aligned}$$

To check the robustness of the model, we estimate a total of four models that differ in the number of included fixed effects (see Table). The first model is a pure linear model without the two control variables (i.e., omitting b_4 - b_7 from the model formula). The second model is a pure linear model including the two control variables (i.e., omitting b_4 and b_5 from the model formula). The third model is a quadratic model that includes price squared and the interaction between price squared and fantasy but omits the control variables (i.e., omitting b_6 and b_7 from the model formula). The fourth model is the full model including the quadratic effects and the control variables which is represented by the model formula.

The general pattern of results with respect to direction and significance of effects does not change across the model specifications, confirming the robustness of the modeling approach. Comparing the predictive strength of the four models penalized for the number of estimated parameters, the fourth model should be selected due to the lowest AIC and BIC. Hence, we will only report the results of Model 4 in more detail.

INSERT TABLE HERE

The results of Model 4 (see Table) reveal a non-significant main effect for fantasy ($b_1 = -.42, p = .53$) but significant effects for price ($b_2 = -2.42, p < .001$), the interaction of fantasy*price ($b_3 = 2.19, p < .001$), the quadratic effect of price ($b_4 = 1.03, p < .001$), and the interaction of fantasy*price² ($b_5 = -.66, p < .001$). The effects of the control variables Christmas period ($b_6 = .95, p < .001$) and flyer promotion ($b_7 = 1.52, p < .001$) are also significant. To illustrate the pattern of the results, Figure 6 depicts the estimated relationship between fantasy, price, and sales (the control variables of the model are effect-coded and set to zero to pool the estimates across the specific levels of the control variables). As indicated by the negative main effect of price and the positive quadratic effect of price, sales of non-fantasy labels drop quickly with increasing prices and reach a constant but low level of sales once they pass the average price (i.e., the value 0 on the z-standardized x-axis of Figure 6). In contrast, fantasy labels start off at a considerably lower level of sales, show a slight decrease until the average price is reached, and start to increase slightly for prices above the average.

INSERT FIGURE 6 HERE

Discussion

The results of the Study 3 reveal that sales of wines with non-fantasy labels follow the usual negative price-sales function. That is, the higher the price, the lower the sales. This effect is non-linear and levels off once the price of the wine is above the average price. In contrast, the effect for wines with fantasy labels seems to reflect two opposing forces. On the one hand, fantasy labels used for cheap wines (i.e., price below the average) do not attract many consumers, consistent with the idea that fantasy labels are harder to process (while the positive affective reaction to fantasy is not enabled by a

quality cue as required by the principle of hedonic dominance). On the other hand, fantasy labels used for expensive wines (i.e., price above the average) become inherently attractive for consumers because the price serves as a quality signal and allows positive affect to enter the decision process. Thus, these products become attractive to consumers but may be above the final willingness-to-pay for some consumers (see e.g., Dodds et al., 1991). Therefore, the sales of high-priced wines with fantasy labels increase only slightly. Importantly, expensive wines with fantasy labels outperform expensive wines with non-fantasy labels.

General Discussion

Across three studies (involving an online experiment, a field experiment, and an analysis of retail sales data), the results unite seemingly contradicting theories predicting the effects of labels with fantasy themes on product evaluation and purchasing behavior. Specifically, we uncover as an important boundary condition the presence of a product quality signal determining which of the theories applies. In particular, the results of Study 3 suggest that for products *below average quality* (e.g., with below average price), labels with fantasy themes are likely to backfire. This finding is consistent with the literature on meta-cognitive processing, suggesting that unusual visuals are harder to process, which is a hedonically negative experience (Reber et al., 2004; Winkielman, et al., 2006). Next, when products are perceived as *average* in quality (Study 1 and Study 3), fantasy and non-fantasy labels do not seem to differ much in their performance. Yet, only in the presence of an *above average* quality signal (Studies 1-3), fantasy labels increase purchase intentions (Study 1, 2), taste perceptions (Study 2), and decrease consumers' price sensitivity (Study 3). Study 1 further demonstrates that this effect is driven by the underlying processes of the evocation of

the imaginary and positive affect, which is consistent with the literature on mental simulation (Belk & Costa, 1998; Martin, 2004).

This research makes two theoretical contributions. First, we contribute to the debate in the literature on the effects of unusual designs that stimulate imagination (Labroo, Dhar, & Schwarz, 2008; Landwehr et al., 2013; Nenkov & Scott, 2014; Winkielman et al., 2006) by uncovering a boundary condition determining when these designs are likely to decrease or increase consumers' product perceptions and subsequent purchases. In particular, in accordance with the principle of hedonic dominance (Chitturi et al., 2007; Landwehr et al., 2012) the presence of a high-quality cue is required to enable any positive effects of unusual designs that evoke imagination (e.g., fantasy labels). Second, this research also speaks to the literature on sensory perception (Krishna, 2012; Krishna & Schwartz, 2014) by demonstrating that visuals using fantasy themes can enhance taste perceptions (in the presence of quality signals) by enhancing consumer imagination.

Overall, the findings suggest that unusual designs such as fantasy labels should be used with care and only in the presence of quality signals. Conversely, the results of Study 3 suggest that the use of distinctive packaging can be a way to justify a premium (or above average) price and to differentiate a product from others within the same product category (Steenkamp, Van Heerde, & Geyskens, 2010). Therefore, fantasy labels may play an important role in consumers' price sensitivity for products that are sold above the average price point of the product category.

This paper is, to the best of our knowledge, the first series of studies on product labels with fantasy themes and opens interesting avenues for future research. For example, future research should replicate and extend these findings by using other (e.g., utilitarian) product categories. Further, while our studies investigated different types of quality cues (expert ratings, gold medal, and price), we expect the same pattern of

results to appear for other quality signals such as perceived brand strengths (Dawar & Parker, 1994), or country of origin (Melnyk, Klein, & Völckner, 2012). We hope this research sparks further interest in investigations of “fantasy effects” in consumer behavior.

References

- Belk, R. W., & Costa, J. A. (1998). The mountain man myth: A contemporary consuming fantasy. *Journal of Consumer Research*, 25(3), 218-240.
- Bloch, P. H. (1995). Seeking the ideal form: Product design and consumer response. *Journal of Marketing*, 59(3), 16-29.
- Campbell, J. (2016). Fantasy. In *Salem Press Encyclopedia of Literature*. Retrieved 5 December 2016, from Research Starters, EBSCOhost database.
- Chandon, P., Morwitz, V. G., & Reinartz, W. J. (2005). Do intentions really predict behavior? Self-generated validity effects in survey research. *Journal of Marketing*, 69(2), 1-14.
- Chitturi, R., Raghunathan, R., & Mahajan, V. (2007). Form versus function: How the intensities of specific emotions evoked in functional versus hedonic trade-offs mediate product preferences. *Journal of Marketing Research*, 44(4), 702-714.
- Chitturi, R., Raghunathan, R., & Mahajan, V. (2008). Delight by design: The role of hedonic versus utilitarian Benefits. *Journal of Marketing*, 72(3), 48-63.
- Dawar, N., & Parker, P. (1994). Marketing universals: Consumers' use of brand name, price, physical appearance, and retailer. *Journal of Marketing*, 58(2), 81-95.
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307-319.

- Elder, R. S., & Krishna, A. (2010). The effects of advertising copy on sensory thoughts and perceived taste. *Journal of Consumer Research*, 36(5), 748-756.
- Escalas, J. E. (2004). Imagine yourself in the product: Mental simulation, narrative transportation, and persuasion. *Journal of Advertising*, 33(2), 37-48.
- Fuchs, C., Schreier, M., & van Osselaer, S. M. J. (2015). The handmade effect: What's love got to do with it? *Journal of Marketing*, 79(2), 98-110.
- Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, 79(5), 701-721.
- Hayes, A. F. (2013). *Introduction to mediation, moderation and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Herr, P. M., Page, C. M., Pfeiffer, B. E., & Davis, D. F. (2012). Affective influences on evaluative processing. *Journal of Consumer Research*, 38(5), 833-845.
- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132-140.
- Hung, I. W., & Wyer, R. S. (2011). Shaping consumer imaginations: The role of self-focused attention in product evaluations. *Journal of Marketing Research*, 48(2), 381-392.
- Hyunjin, S., & Schwarz, N. (2008). If it's hard to read, it's hard to do: Processing fluency affects effort prediction and motivation. *Psychological Science*, 19(10), 986-988.
- Kerin, R. A., Hartley, S. W., & Rudelius, W. (2009). *Marketing* (9th ed.). Boston: McGraw-Hill/IRWIN.
- Kozinets, R. V. (2001). Utopian enterprise: Articulating the meanings of Star Trek's culture of consumption. *Journal of Consumer Research*, 28(1), 67-88.

- Kozinets, R. V., Sherry, J. F., Storm, D., Duhachek, A., Nuttavuthisit, K., & DeBerry-Spence, B. (2004). Ludic agency and retail spectacle. *Journal of Consumer Research, 31*(3), 658-672.
- Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology, 22*(3), 332-351.
- Krishna, A., & Schwarz, N. (2014). Sensory marketing, embodiment, and grounded cognition: A review and introduction. *Journal of Consumer Psychology, 24*(2), 159-168.
- Labroo, A. A., Dhar, R., & Schwarz, N. (2008). Of frog wines and frowning watches: Semantic priming, perceptual fluency, and brand evaluation. *Journal of Consumer Research, 34*(6), 819-831.
- Landwehr, J. R., Wentzel, D., & Herrmann, A. (2012). The tipping point of design: How product design and brands interact to affect consumers' preferences. *Psychology & Marketing, 29*(6), 422-433.
- Landwehr, J. R., Wentzel, D., & Herrmann, A. (2013). Product design for the long run: Consumer responses to typical and atypical designs at different stages of exposure. *Journal of Marketing, 77*(5), 92-107.
- MacInnis, D. J., & Price, L. L. (1987). The role of imagery in information processing: Review and extensions. *Journal of Consumer Research, 13*(4), 473-491.
- Martin, B. A. S. (2004). Using the imagination: Consumer evoking and thematizing of the fantastic imaginary. *Journal of Consumer Research, 31*(1), 136-149.
- Melnyk, V., Klein, K., & Völckner, F. (2012). The double-edged sword of foreign brand names for companies from emerging countries. *Journal of Marketing, 76*(6), 21-37.

- Mogilner, C., Aaker, J., & Kamvar, S. D. (2012). How happiness affects choice. *Journal of Consumer Research*, 39(2), 429-443.
- Morwitz, V. G., Johnson, E., & Schmittlein, D. (1993). Does measuring intent change behavior? *Journal of Consumer Research*, 20(1), 46-61.
- Nenkov, G. Y., & Scott, M. L. (2014). "So cute I could eat it up": Priming effects of cute products on indulgent consumption. *Journal of Consumer Research*, 41(2), 326-341.
- Norton, M. I., Mochon, D., & Ariely, D. (2012). The IKEA effect: When labor leads to love. *Journal of Consumer Psychology*, 22(3), 453-460.
- Page, C., & Herr, P. M. (2002). An investigation of the processes by which product design and brand strength interact to determine initial affect and quality judgments. *Journal of Consumer Psychology*, 12(2), 133-147.
- Pinheiro, J., Bates, D., DebRoy, S., Sarkar, D., & R Core Team (2015). nlme: Linear and Nonlinear Mixed Effects Models R package version 3.1-120. <http://CRAN.R-project.org/package=nlme>
- Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience? *Personality and Social Psychology Review*, 8(4), 364-382.
- Schlosser, A. E. (2003). Experiencing products in the virtual world: The role of goal and imagery in influencing attitudes versus purchase intentions. *Journal of Consumer Research*, 30(2), 184-198.
- Stableford, B. M. (Ed.) (2005) *Historical dictionary of fantasy literature*. Scarecrow Press.
- Stenkamp, J.-B. E. M., Van Heerde, H. J., & Geyskens, I. (2010). What makes consumers willing to pay a price premium for national brands over private labels. *Journal of Marketing Research*, 47(6), 1011-1024.

- Van Laer, T., De Ruyter, K., Visconti, L. M., & Wetzels, M. (2014). The extended transportation-imagery model: A meta-analysis of the antecedents and consequences of consumers' narrative transportation. *Journal of Consumer Research, 40*(5), 797-817.
- Veryzer, R. W., & Hutchinson, J. W. (1998). The influence of unity and prototypicality on aesthetic responses to new product designs. *Journal of Consumer Research, 24*(4), 374-394.
- Wänke, M., Bohner, G., & Jurkowitsch, A. (1997). There are many reasons to drive a BMW: does imagined ease of argument generation influence attitudes? *Journal of Consumer Research, 24*(2), 170-177.
- Wine Industry Advisor (2017). Game of Thrones Wines Debut with Chardonnay, Red Blend & Cabernet Sauvignon. Retrieved May 8, 2017 from <http://www.wineindustryadvisor.com/2017/03/14/game-of-thrones-wine-debut>
- Winkielman, P., Halberstadt, J., Fazendeiro, T., & Catty, S. (2006). Prototypes are attractive because they are easy on the mind. *Psychological Science, 17*(9), 799-806.
- Zhao, M., Hoeffler, S., & Dahl, D. W. (2009). The role of imagination-focused visualization on new product evaluation. *Journal of Marketing Research, 46*(1), 46-55.
- Zhao, M., Hoeffler, S., & Zauberman, G. (2011). Mental simulation and product evaluation: The affective and cognitive dimensions of process versus outcome simulation. *Journal of Marketing Research, 48*(5), 827-839.

Table and Figures

Table

Results of Study 3.

	Model 1)	Model 2)	Model 3)	Model 4)
Parameter	Linear w/o controls	Linear with controls	Quadratic w/o controls	Quadratic with controls
b ₁ : fantasy	b ₁ = -.98	b ₁ = -1.19	b ₁ = -.08	b ₁ = -.42
b ₂ : price	b ₂ = -4.08***	b ₂ = -2.86***	b ₂ = -3.32***	b ₂ = -2.42***
b ₃ : fantasy * price	b ₃ = 3.04***	b ₃ = 2.92***	b ₃ = 2.18***	b ₃ = 2.19***
b ₄ : price ²			b ₄ = 1.12***	b ₄ = 1.03***
b ₅ : fantasy * price ²			b ₅ = -.85***	b ₅ = -.66***
b ₆ : Christmas		b ₆ = .99***		b ₆ = .95***
b ₇ : Flyer promotion		b ₇ = 1.77***		b ₇ = 1.52***
AIC	13250.4	13149.88	13161.71	13081.31
BIC	13296.38	13207.36	13219.18	13150.27

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$.

Fig. 1. Study 1 stimuli.

Fig. 2. Purchase intentions of fantasy and non-fantasy labels across conditions of Study 1.

Fig. 3. Sequential mediation model of fantasy on purchase intentions (Study 1).

Fig. 4. Study 2 stimuli.

Fig. 5. The effect of fantasy label on taste and purchase intentions (PI) for Study 2.

Fig. 6. Visualization of the estimates of Model 4 for Study 3.

Control groups

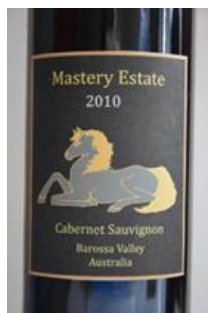
Non-fantasy labels



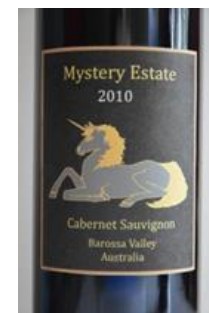
Fantasy labels



Mediocre quality

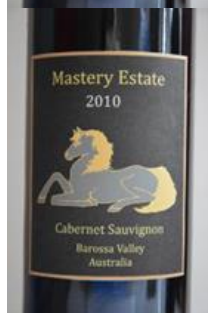


96-100: An extraordinary wine worth a special effort to find, purchase, and consume.
 90-95: An outstanding wine of exceptional complexity and character.
 80-89: A barely above average to very good wine with no noticeable flaws.
 70-79: An average wine with little distinction except that it is soundly made.
 60-69: A below average wine containing noticeable deficiencies.

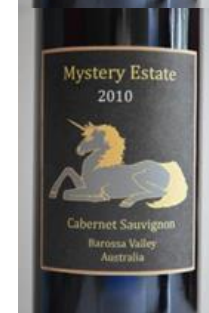


96-100: An extraordinary wine worth a special effort to find, purchase, and consume.
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 60-69: A below average wine containing noticeable deficiencies.

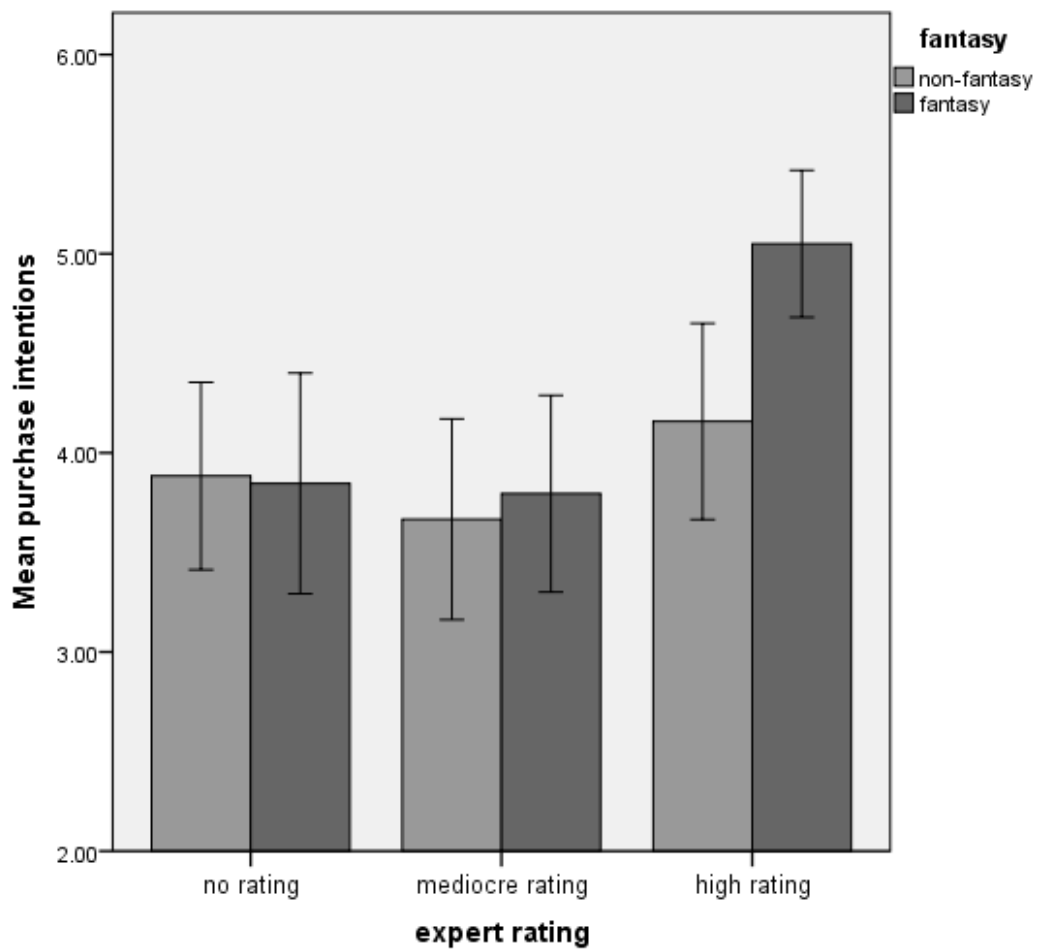
High quality



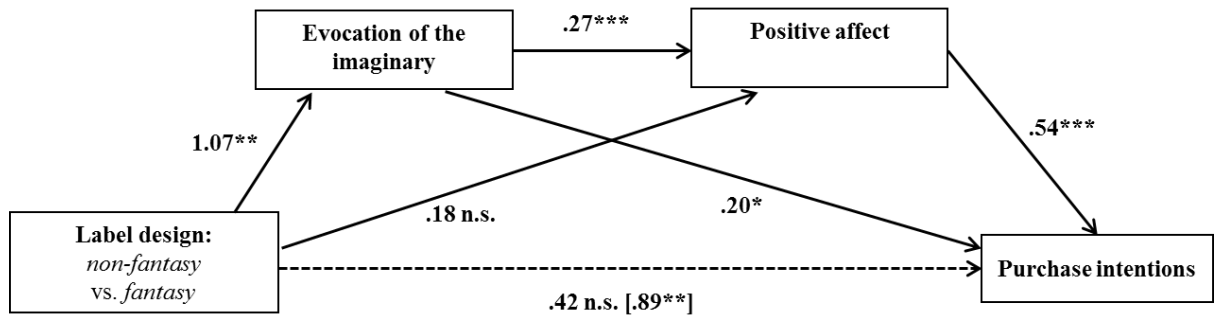
96-100: An extraordinary wine worth a special effort to find, purchase, and consume.
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 70-79: An average wine with little distinction except that it is soundly made.
 60-69: A below average wine containing noticeable deficiencies.



Note. Error bars indicate 95% CIs.



n.s. (not significant)

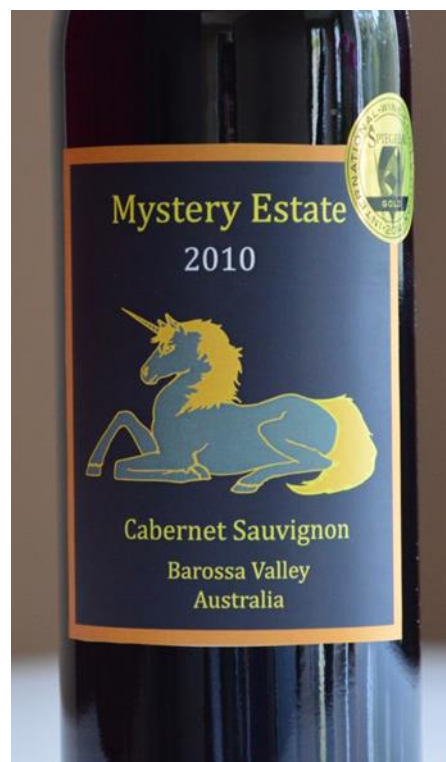
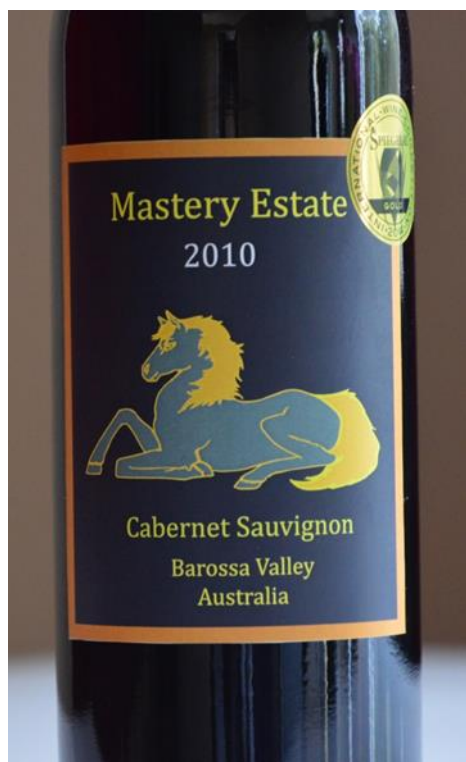
* $p < .05$

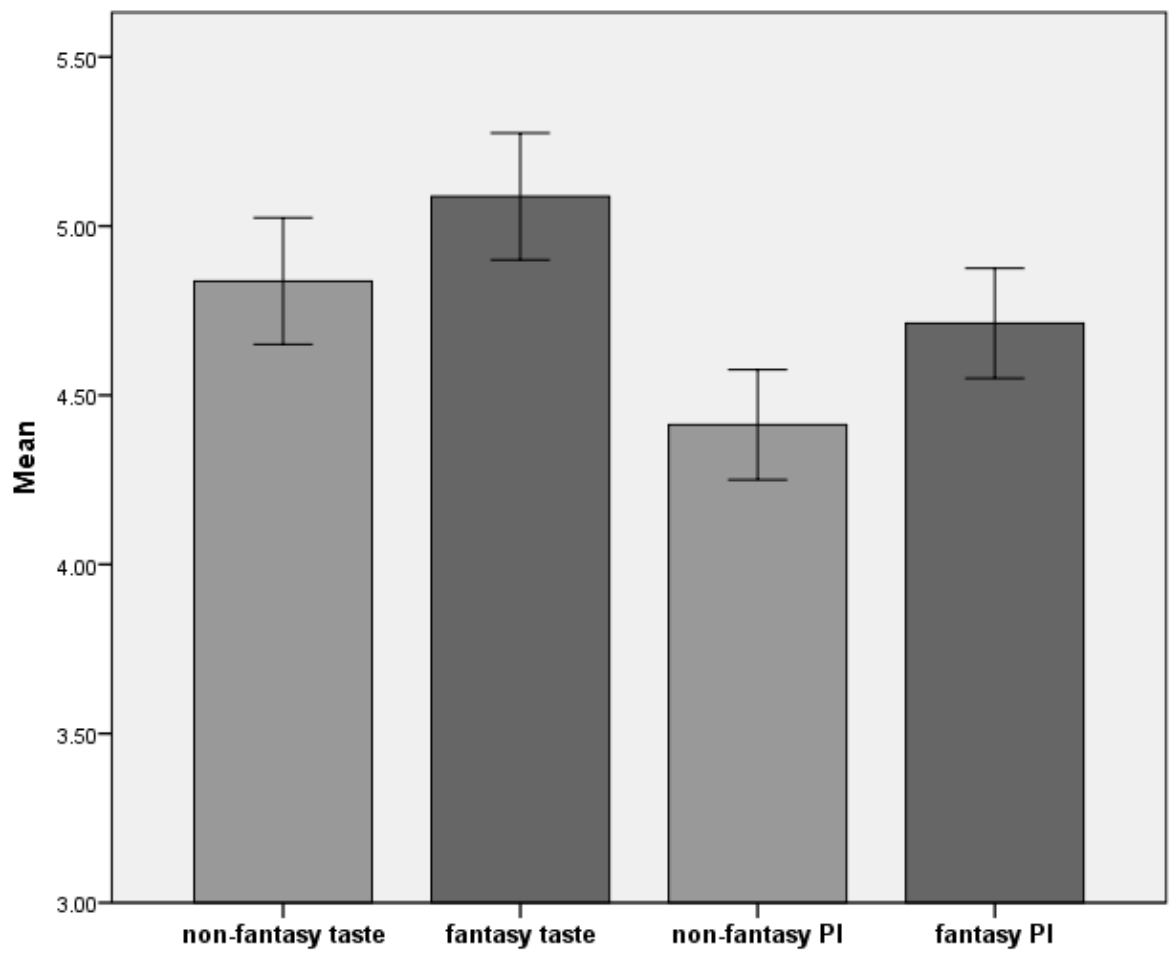
** $p < .01$

*** $p < .001$

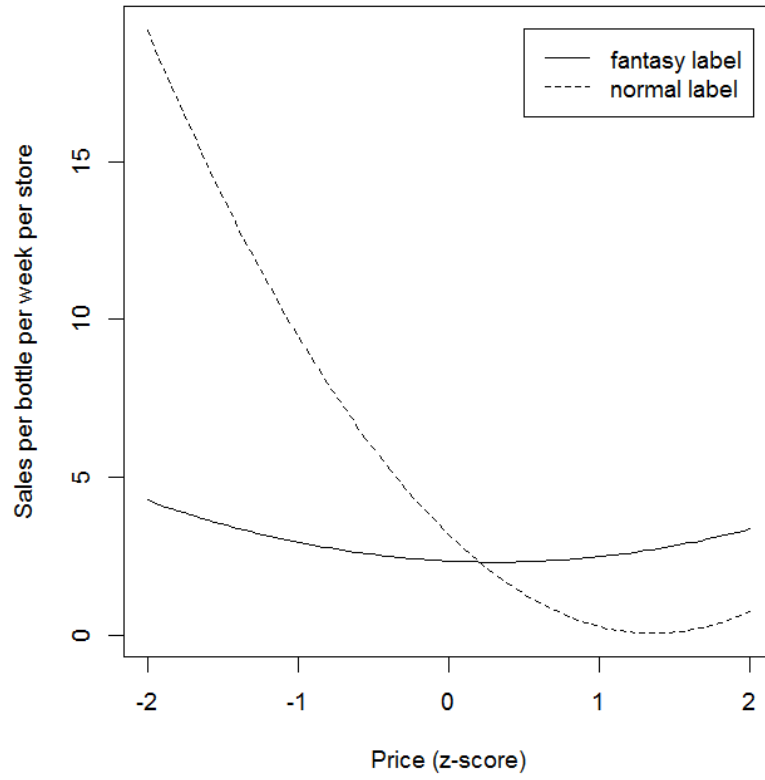
Notes: Numbers indicate unstandardized coefficients.

The non-fantasy condition is the baseline condition (non-fantasy = 0; fantasy = 1).





Note. Error bars indicate 95% CIs without accounting for the covariate age.



Contributions to the EMAC conference paper

DRC 16



MASSEY UNIVERSITY
GRADUATE RESEARCH SCHOOL

**STATEMENT OF CONTRIBUTION
TO DOCTORAL THESIS CONTAINING PUBLICATIONS**

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate's Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

Name of Candidate: David Jaud

Name/Title of Principal Supervisor: Professor Valentyna Melnyk

Name of Published Research Output and full reference:

Jaud, D. A., Melnyk, V., & Landwehr, J.R. (2016). Dragon wine: Effects of fantasy themes on food label processing and marketing outcomes, in: Proceedings of the 45th Annual Conference of the European Marketing Academy (EMAC), Oslo, Norway.

In which Chapter is the Published Work: Chapter 2

Please indicate either:

- The percentage of the Published Work that was contributed by the candidate:
and / or
- Describe the contribution that the candidate has made to the Published Work:

David Jaud came up with the idea of this paper. David is responsible of the design and conduction of the experiments, analysis and interpretation of the data, as well as the writing up of the paper for review. Prof. Landwehr helped with the data collection of one of the studies. Prof. Melnyk and Prof. Landwehr supervised and guided David in each step of the process. Prof. Melnyk and Prof. Landwehr advised on the questionnaire design as well as the theorisation development. Prof. Melnyk and Prof. Landwehr helped for the data analysis and interpretation. Prof. Melnyk and Prof. Landwehr commented and edited on previous versions of the paper.

David JAUD Digitally signed by David JAUD
Date: 2018.02.16 16:39:45
+13'00'

Candidate's Signature

Principal Supervisor's signature

16/02/2018

Date

16/02/2018

Date

“Dragon Wine: Effects of Fantasy Themes on Food Label Processing and Marketing Outcomes”

David A. Jaud*, Massey University
Valentyna Melnyk, Massey University
Jan R. Landwehr, Goethe University Frankfurt

Abstract

Companies spend billions annually for packaging and labelling, yet little is known about the specific features of a package design that influence consumers’ responses. Meanwhile, the use of fantasy themes (i.e., a fiction genre using imaginative elements and unreal creatures) is increasing among broad product categories, however it is unclear how consumers actually react to fantasy labels. In this research, we present a systematic set of studies including a pilot study and four experiments which investigate whether, when and why fantasy labels affect purchase intentions. Building on the principle of hedonic dominance (Chitturi et al., 2007), the results suggest that fantasy labels (1) enhance purchase intentions, but only when trust in the product/brand is established, and (2) is sequentially driven by the evocation of the imaginary and positive affective reactions. Our findings have important managerial implications for brand managers and practitioners dealing with package designs.

Key words: product labels, fantasy themes, principle of hedonic dominance
Track: Consumer behavior

Contributions to the AWBR conference paper

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**STATEMENT OF CONTRIBUTION
TO DOCTORAL THESIS CONTAINING PUBLICATIONS**

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate's Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

Name of Candidate: David Jaud

Name/Title of Principal Supervisor: Professor Valentyna Melnyk

Name of Published Research Output and full reference:

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David Jaud came up with the idea of this paper. David is responsible of the design and conduction of the experiments, analysis and interpretation of the data, as well as the writing up of the paper for review. Prof. Landwehr helped with the data collection of one of the studies. Prof. Melnyk and Prof. Landwehr supervised and guided David in each step of the process. Prof. Melnyk and Prof. Landwehr advised on the questionnaire design as well as the theorisation development. Prof. Melnyk and Prof. Landwehr helped for the data analysis and interpretation. Prof. Melnyk and Prof. Landwehr commented and edited on previous versions of the paper.

David JAUD Digitally signed by David JAUD
Date: 2018.02.16 16:40:05
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Candidate's Signature

Principal Supervisor's signature

16/02/2018

Date

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Date

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Fantasy themes on wine labels: A good idea for practitioners?

David A. Jaud

Massey University, New Zealand
(d.a.jaud@massey.ac.nz)

Associate Professor Valentyna Melnyk

Massey University, New Zealand
(v.melnyk@massey.ac.nz)

Professor Jan R. Landwehr

Goethe University Frankfurt, Germany
(landwehr@wiwi.uni-frankfurt.de)

Abstract

Purpose:

This paper investigates the effects of fantasy wine labels on purchase intentions. While the use of fantasy themes (i.e., a fiction genre using imaginative elements and unreal creatures) is increasing in many product categories, yet it is unclear how consumers actually react to fantasy themes on wine labels.

Design/methodology:

Two on-line experiments were designed (using between-subjects design), and samples from New Zealand (Study 1: 237 participants) and USA (Study 2: 241 participants) were collected.

Findings:

This research builds on the principle of hedonic dominance (Chitturi et al., 2007). The results of this research suggest that fantasy (vs. no-fantasy) labels enhance purchase intentions, but only when brand trust is well-established.

Practical implications:

Wine companies could consider using fantasy themes on wine labels but only when trust in their wines is well-established. Our results suggest that (1) established brands (brand strength is a cue of brand trust) and (2) new brands that already hold quality recognitions for their wines (e.g., medals, awards, expert ratings) could use fantasy themes on wine labels to differentiate themselves in the marketplace.

Keywords: wine labels, fantasy themes, trust, principle of hedonic dominance

1. INTRODUCTION

To what extent can our visual imagination determine what we taste? In an informative study, 54 wine experts tasted two glasses of identical white wine (one of which was red-colored with taste neutral food coloring). Surprisingly, none of the 54 experts were able to recognise that the 'red-colored wine' was, in fact, white wine (Brochet, 2001). Hence, people (even experts) struggle to differentiate accurately by taste; as other senses, in particular vision, interfere with their perception. Managers are well aware of that and invest heavily into product labels, providing visual and/or semantic information to influence taste perception. For example, in the US market alone, companies spend more than \$120 billion annually for packaging and labelling (Kerin et al., 2009) with particular emphasis on unique visual designs that engage consumers imagination (Hagtvedt and Patrick, 2008).

Fantasy themes are a current, fast-growing trend that is spreading out among product categories beyond movie business. For example, a selection of 12 Australian wines called the Wines of Westeros (inspired by the fantasy series *Games of Thrones*) is forthcoming (Common Ventures, 2015). This anecdotic evidence emphasises the current popularity of using fantasy themes to market products. Although visual designs that stimulate imagination (e.g., fantasy themes) seem to be an increasingly popular choice for marketing managers (Nenkov and Scott, 2014), it is still unclear whether these designs enhance or hurt consumers' product perception and purchase responses.

The principle of hedonic dominance suggests that people tend to make more affective evaluations than cognitive ones, once the functional requirements of consumers are met (Chitturi et al., 2007, 2008). This suggests that unusual package designs (such as fantasy) are only affectively processed and enjoyed when consumers first established trust in the product/brand. In this study, we aim to assess the effect of fantasy wine labels on purchase intentions. This current research makes two important contributions. First, to the best of our knowledge, this is the first study to examine the effects of visual designs that use fantasy themes. Therefore, this research contributes to the literature on visual designs that stimulate elaboration (Labroo et al., 2008; Landwehr et al., 2013; Nenkov and Scott, 2014). Second, we apply the principle of hedonic dominance and shed light on when visual designs stimulating elaboration such as fantasy wine labels are likely to have an effect on purchase intentions. On this basis, we derive important implications for marketing and brand managers involved in the wine industry.

2. THEORETICAL BACKGROUND

In this research, we define fantasy as a fiction genre that includes imaginative elements such as magical or mystical creatures: e.g., dragons and unicorns (Campbell, 2015; St. James et al., 2011). Because fantasy themes stimulate imagination (Belk and Costa, 1998; Kozinets, 2001; Martin, 2004), they also facilitate information processing by increasing the amount of visualisation and the generation of mental images (Zhao et al., 2009). Moreover, the literature suggests that fantasy themes allow the creation of a more pleasant world (Belk and Costa, 1998; Kozinets, 2001; Kozinets et al., 2004; Martin, 2004) because the "fantastic imaginary" (Martin, 2004) enables people to construct their own thoughts of a limitless world of possibilities (Kozinets, 2001; Schlosser, 2003; St. James et al., 2011), either visually or semantically (Wyer et al., 2008).

The principle of hedonic dominance suggests that people tend to make more affective evaluations once functional requirements are met (Chitturi et al., 2007, 2008).

Specifically, consumers give greater weight to hedonic attributes when they take the functional attributes for granted (Chitturi et al., 2007). People tend to avoid losses (e.g., poor product quality), and trust in products/brands minimises these losses (Landwehr et al., 2012). Thus, an acceptable level of functionality is necessary to establish this trust relationship. Several strategies can help to establish trust in the product: e.g., brand strength and expertise cues (Dawar and Parker, 1994; Landwehr et al., 2012). We expect that fantasy labels increase purchase intentions when trust is well-established.

Recent research suggests that unique and atypical product design lead to positive affective responses when consumers engage in effortful cognitive processing (Bloch, 1995; Landwehr et al., 2013). Visual designs that use fantasy themes enable people to enjoy constructing imagery (Zhao et al., 2009). The creation of such an unreal world is a way of escaping from reality (Belk and Costa, 1998; Hirschman, 1983; Kozinets et al., 2004) and generating positive emotions from processing fantasy related-information (Holbrook and Hirschman, 1982). That is because the imagery is a sensory process (MacInnis and Price, 1987) which triggers positive affective reactions (Petrova and Cialdini, 2005; Schlosser, 2003). As a result, such elaboration enables consumers to enjoy processing the products' benefits (Nenkov and Scott, 2014). Thus, pleasing aesthetics increases affective reactions, yet consumers are likely to also consider indicators of functionality (e.g., brand information) that influence quality judgments of the product (Page and Herr, 2002). Hence, once the cut-offs for utilitarian benefits are met, and people establish trust in the product/brand, positive affective reactions are likely to be enhanced (Chitturi et al., 2007, 2008), resulting in the increased purchase intentions (Chaudhuri and Holbrook, 2001).

3. STUDY 1

Design. The experiment is a 2 (wine label design: fantasy vs. no-fantasy) x 3 (mode of information: picture-brand name congruence vs. picture-brand name incongruence vs. text only) between-subjects design. Two fictitious wine labels were designed. *Fantasy* was manipulated by a picture of a fantasy animal (dragon or pegasus) and/or a fantasy animal-evoked brand name (Dragon Estate) while no-fantasy labels had a real animal (falcon or heron) and/or evoked brand name (Falcon Estate). To cover the whole spectrum of how fantasy themes could realistically appear on the label, we also manipulated the mode of information and used it as a control variable. That is because the picture-brand name congruence (vs. incongruence) is easier to process by being meaningful (McCracken and Macklin, 1998). However, some individuals find it easier to comprehend semantic information than visual information (Wyer et al., 2008), that is why text only conditions were also used in this study.

Sample and Procedure. 237 adults over 18 years old (69% female) were contacted online via snowball sampling in New Zealand. Participants were randomly assigned to one of the six conditions. After respondents saw the wine label, they indicated their trust in taste of the assigned wine in an open-ended question "What would you expect this wine to taste like?"

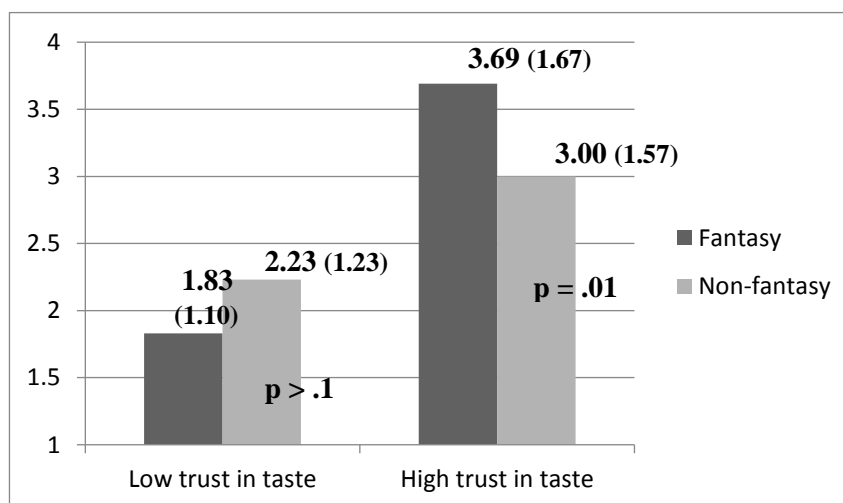
Purchase intentions were measured on a 7-point scale (1 = very unlikely to buy; 7 = very likely to buy, adapted from Landwehr et al. 2012). Next, to be able to include *trust in taste* as a moderator, we had to code the open-ended question "What would you

expect this wine to taste like?" The open-ended question was coded by two independent judges to reflect the participants' *trust in taste*. Participants' responses were coded into "0" when they used negative words and into "1" when they used neutral or positive words to describe their taste perception of the assigned wine label.

Fantasy manipulation check: Results confirmed that participants perceived the amount of fantasy (measured by "How much fantasy does this label contain?") to be higher in the fantasy conditions ($M_{\text{fantasy}} = 4.02$, $SD = 1.97$) than in the no-fantasy conditions ($M_{\text{no fantasy}} = 2.88$, $SD = 1.78$, $t(235) = -4.62$, $p < .001$).

We estimated a 2 (wine label design: fantasy vs. no-fantasy) \times 2 (trust in taste: low vs. high) ANOVA with *purchase intentions* as the dependent variable and mode of information as a covariate. The main effect of fantasy on *purchase intentions* is insignificant ($p > .10$), while the effect of *trust in taste* is significant ($p < .001$). The main effect of the mode of information was significant ($F(2, 231) = 6.73$, $p < .002$). As expected (see Fig. 1), there was a significant interaction between fantasy and *trust in taste* on *purchase intentions* ($F(1, 231) = 8.85$, $p < .01$). To interpret this significant interaction effect, the follow-up results revealed that within the group of high *trust in taste*, participants were less willing to buy a bottle of wine with a no-fantasy label ($M_{\text{no fantasy}} = 3.00$, $SD = 1.57$) than with a fantasy label ($M_{\text{fantasy}} = 3.69$, $SD = 1.67$; $t(147) = -2.60$, $p = .01$). In contrast, within the group of low trust in taste, although the means suggest that participants were less willing to buy a bottle of wine with a fantasy label ($M_{\text{fantasy}} = 1.83$, $SD = 1.10$) than with a no-fantasy label, the difference is insignificant ($M_{\text{no fantasy}} = 2.23$, $SD = 1.23$; $t(86) = 1.58$, $p > .10$).

Fig. 1: Purchase intentions of fantasy labels in the presence of trust in taste (Study 1; standard deviation in brackets)



Discussion. The findings of Study 1 suggest that people are less likely to buy a bottle of wine with a no-fantasy label rather than with a fantasy label when their taste expectations are met or exceeded. Thus, trust in taste seems to be an important determinant of purchase intentions. In Study 2, we directly manipulated trust with using objective criteria (i.e., Parker rating points) to reflect the level of expertise of the wine producer and wine quality.

4. STUDY 2

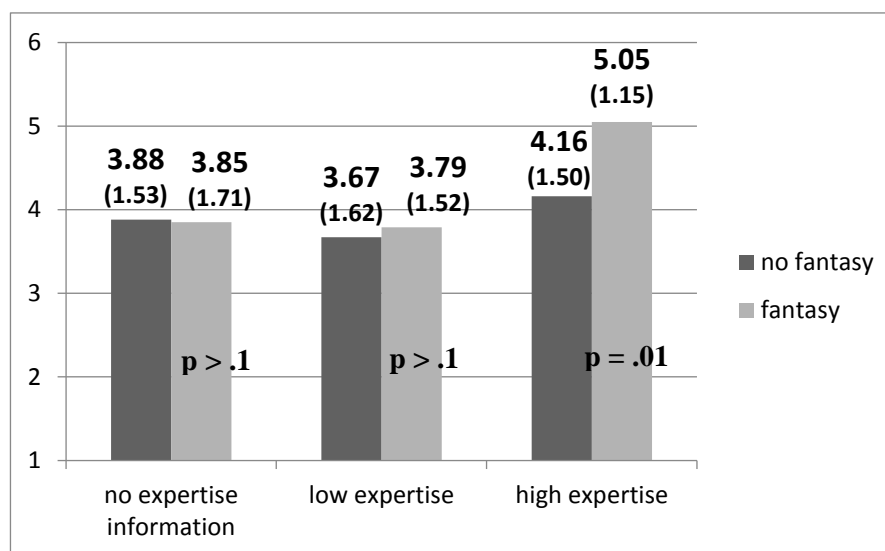
Stimulus development. The experiment is a 2 (wine label design: fantasy vs. no-fantasy) x 3 (perceived expertise: low expert rating vs. high expert rating vs. control: no expert rating) between-subjects design. Two fictitious wine labels were designed. *Fantasy* was manipulated by showing a picture of a fantasy animal (unicorn) and a fantasy-evoked brand name (Mystery Estate) while no-fantasy labels had a real animal (horse) and a no-fantasy evoked brand name (Mastery Estate). *Perceived expertise* was manipulated by using a 100-point scale from the wine specialist magazine Wine Advocate (established by the worldwide wine expert Robert Parker and commonly used in US wine market) and showing either no rating as no indication of perceived expertise or 71 points as low expertise or 94 points as high expertise. Below the wine rating indications, the Wine Advocate Rating System was provided (including the range of relevant values). This rating point scale, as an indicator of wine quality, is one of the practical examples of how wine companies that use fantasy labels could establish consumers' trust in their wines.

Sample and procedure. A sample of 241 adults (39% female) from across the United States was recruited through Mechanical Turk to participate in this online experiment in exchange for 40 cents. Participants were randomly assigned to one of the six conditions. *Purchase intentions* were measured in the same way as in Study 1.

Fantasy Manipulation Checks were conducted following the same procedure as in study 1. As intended, participants perceived the amount of fantasy to be higher in the fantasy conditions ($M_{\text{fantasy}} = 5.51, SD = 1.39$) than in the no-fantasy conditions ($M_{\text{no fantasy}} = 3.92, SD = 1.81, t(228.52) = -7.66, p < .001$). *Perceived Expertise Manipulation Checks.* Participants answered a 2-item index of competence ($\alpha = .94$) "To what extent do you believe this wine producer is", using two items "credible" and "competent" (1 = not at all; 7 = very much, adapted from Aaker et al., 2010). As intended, results revealed that participants perceived the level of the wine producer's expertise to be higher in the high expert rating conditions ($M_{\text{high}} = 5.47, SD = .94$) than in the low expert rating conditions ($M_{\text{low}} = 4.65, SD = 1.07, t(157) = -5.09, p < .001$).

We estimated a 2 (wine label design: fantasy vs. no-fantasy) x 3 (perceived expertise: no vs. low vs. high expert ratings) ANOVA with *purchase intentions* as the dependent variable. Results revealed a marginally significant effect of fantasy labels ($F(1, 235) = 2.81, p < .10$) and a significant effect of perceived expertise ($F(2, 235) = 7.60, p = .001$). The interaction between fantasy and perceived expertise was not significant ($p = .12$). However, planned contrasts (see Fig. 2) showed that participants were more willing to buy a bottle of wine with a fantasy label (Mystery Estate) than with a no-fantasy label (Mastery Estate), but only in the high expertise conditions ($M_{\text{fantasy} \times \text{high rating}} = 5.05, SD = 1.15$ vs. $M_{\text{no fantasy} \times \text{high rating}} = 4.16, SD = 1.50; F(1, 235) = 6.75, p = .01$). Within the no and low expertise conditions, the difference between fantasy and no fantasy labels was not significant ($P_s > .10$).

Fig. 2: Purchase intentions of fantasy labels in the presence of perceived expertise (Study 2; standard deviation in brackets)



Discussion. The results of Study 2 are consistent with findings of Study 1 and further reveal that even a subtle manipulation of the brand name (Mystery vs. Mastery) and using a unicorn versus horse can significantly increase purchase intentions for the wine labels, but only if consumers trust the producer's expertise. For wine companies that consider using fantasy labels, this study suggests that high rating points on the Parker scale are one of the ways of establishing trust in wines (by reflecting a high producer's expertise and wine quality) and increasing consumers' purchase intentions.

5. GENERAL DISCUSSION, LIMITATIONS AND FURTHER RESEARCH

Across two studies using different country samples and different ways of manipulating fantasy labels, we find a consistent pattern in the results. Namely, fantasy labels increase purchase intentions, but only when trust in the product is established. The findings demonstrate that unusual designs such as fantasy labels should be used with care and only when trust is well-established. Our findings have clear managerial implications for brand managers and practitioners dealing with wine labels. Strong brands could consider unusual wine labels because brand strength is a cue of brand trust (Dawar and Parker, 1994). Wine marketers should also ensure that consumers trust their existing products. For example, wine companies could use fantasy labels to differentiate themselves in the marketplace, but only when these companies already hold quality recognitions for their products such as medals, awards, and stickers with high expert ratings (e.g., from Robert Parker or James Halliday).

In line with previous studies (Chitturi et al., 2007; Melnyk et al., 2012), we focused on purchase intentions. That is because consumers' intentions are important to predict the direction of future purchases. In general, purchase intentions are positively linked to purchasing behaviour (Ajzen and Fishbein, 1980). However, they cannot always convert into purchasing behaviour (Chandon et al., 2005; Morwitz et al., 1993). Thus, further research should address this point by investigating purchasing behaviour. For example, further research should look at actual sales of existing wine brands using fantasy labels in order to find how fantasy labels drive sales in the marketplace. This current research investigated how consumers react to fantasy wine labels in artificial settings. Other research should further explore how fantasy labels affect consumers' responses by conducting field studies (e.g., in a liquor store, supermarket or winery). Furthermore, this paper focused on the effect of fantasy wine labels on consumers using samples from

“New World wine countries”. This effect may differently affect consumers from “Old World wine countries” because they are perceived to be more traditional and attached to heritage/ “terroir” values. For example, would including an ‘unreal’ animal on a French heritage-based label increase purchase responses for a bottle of wine? Finally, we used only one country of origin: Australia, future research should employ other countries of origin (e.g., “Old world wine countries”). That is because countries and regions of origin play an important role, as indicators of wine quality and reputation, in the consumer preference and consideration to purchase a bottle of wine (Ling and Lockshin, 2003; Orth et al., 2005). Therefore, these geographical cues may also affect consumers' reactions to wine fantasy labels.

REFERENCES

- Aaker, J., Vohs, K. D. and Mogilner, C. (2010), “Nonprofits Are Seen as Warm and For-Profits as Competent: Firm Stereotypes Matter”, *Journal of Consumer Research*, Vol. 37 No. 2, pp. 224-237.
- Ajzen, I. and Fishbein, M. (1980), *Understanding Attitude and Predicting Social Behavior*, Englewood Cliffs, NJ: Prentice Hall.
- Belk, R. W. and Costa, J. A. (1998), “The Mountain Man Myth: A Contemporary Consuming Fantasy”, *Journal of Consumer Research*, Vol. 25 No. 3, pp. 218-240.
- Bloch, P. H. (1995), “Seeking the ideal form: Product design and consumer response”, *Journal of Marketing*, Vol. 59 No. 3, pp. 16-29.
- Brochet, F. (2001), “Chemical object representation in the field of consciousness”, Application presented for the grand prix of the Académie Amorim following work carried out towards a doctorate from the Faculty of Oenology, General Oenology Laboratory, Talence.
- Campbell, J. (2015). *Fantasy Encyclopedia of Literature*: Salem Press.
- Chandon, P., Morwitz, V. G. and Reinartz, W. J. (2005), “Do Intentions Really Predict Behavior? Self-Generated Validity Effects in Survey Research”, *Journal of Marketing*, Vol. 69 No. 2, pp. 1-14.
- Chaudhuri, A. and Holbrook, M. B. (2001), “The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty”, *Journal of Marketing*, Vol. 65 No. 2, pp. 81-93.
- Chitturi, R., Raghunathan, R. and Mahajan, V. (2007), “Form Versus Function: How the Intensities of Specific Emotions Evoked in Functional Versus Hedonic Trade-Offs Mediate Product Preferences”, *Journal of Marketing Research*, Vol. 44 No. 4, pp. 702-714.
- Chitturi, R., Raghunathan, R. and Mahajan, V. (2008), “Delight by Design: The Role of Hedonic Versus Utilitarian Benefits”, *Journal of Marketing*, Vol. 72 No. 3, pp. 48-63.
- Common Ventures (2015). *The Wine of Westeros*. Retrieved from <http://commonv.com/the-wines-of-westeros/>. (Last accessed: November 16, 2015).
- Dawar, N. and Parker, P. (1994), “Marketing universals: Consumers' use of brand name, price, physical appearance, and retailer”, *Journal of Marketing*, Vol. 58 No. 2, pp. 81-95.

- Hagtvedt, H. and Patrick, V. M. (2008), "Art Infusion: The Influence of Visual Art on the Perception and Evaluation of Consumer Products", *Journal of Marketing Research*, Vol. 45 No. 3, pp. 379-389.
- Hirschman, E. C. (1983), "Predictors of self-projection, fantasy fulfillment, and escapism", *Journal of Social Psychology*, Vol. 120 No. 1, pp. 63-76.
- Holbrook, M. B. and Hirschman, E. C. (1982), "The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun", *Journal of Consumer Research*, Vol. 9 No. 2, pp. 132-140.
- Kerin, R. A., Hartley, S. W. and Rudelius, W. (2009), *Marketing* (9th ed.), McGraw-Hill/IRWIN, Boston.
- Kozinets, R. V. (2001), "Utopian Enterprise: Articulating the Meanings of Star Trek's Culture of Consumption", *Journal of Consumer Research*, Vol. 28 No. 1, pp. 67-88.
- Kozinets, R. V., Sherry Jr, J. F., Storm, D., Duhachek, A., Nuttavuthisit, K. and Deberry-Spence, B. (2004), "Ludic Agency and Retail Spectacle", *Journal of Consumer Research*, Vol. 31 No. 3, pp. 658-672.
- Labroo, A. A., Dhar, R. and Schwarz, N. (2008), "Of Frog Wines and Frowning Watches: Semantic Priming, Perceptual Fluency, and Brand Evaluation", *Journal of Consumer Research*, Vol. 34 No. 6, pp. 819-831.
- Landwehr, J. R., Wentzel, D. and Herrmann, A. (2012), "The Tipping Point of Design: How Product Design and Brands Interact to Affect Consumers' Preferences", *Psychology & Marketing*, Vol. 29 No. 6, pp. 422-433.
- Landwehr, J. R., Wentzel, D. and Herrmann, A. (2013), "Product Design for the Long Run: Consumer Responses to Typical and Atypical Designs at Different Stages of Exposure", *Journal of Marketing*, Vol. 77 No. 5, pp. 92-107.
- Ling, B. H., and Lockshin, L. (2003), "Components of wine prices for Australian wine: How winery reputation, wine quality, region, vintage, and winery size contribute to the price of varietal wines", *Australasian Marketing Journal*, Vol. 11 No. 3, pp. 19-32.
- MacInnis, D. J. and Price, L. L. (1987), "The Role of Imagery in Information Processing: Review and Extensions", *Journal of Consumer Research*, Vol. 13 No. 4, pp. 473-491.
- Martin, B. A. S. (2004), "Using the Imagination: Consumer Evoking and Thematizing of the Fantastic Imaginary", *Journal of Consumer Research*, Vol. 31 No. 1, pp. 136-149.
- McCracken, J. C. and Macklin, M. C. (1998), "The Role of Brand Names and Visual Cues in Enhancing Memory for Consumer Packaged Goods", *Marketing Letters*, Vol. 9 No. 2, pp. 209-226.
- Melnyk, V., Klein, K. and Volckner, F. (2012), "The Double-Edged Sword of Foreign Brand Names for Companies from Emerging Countries", *Journal of Marketing*, Vol. 76 No. 6, pp. 21-37.
- Morwitz, V.G., Johnson, E. and Schmittlein, D. (1993), "Does Measuring Intent Change Behavior?", *Journal of Consumer Research*, Vol. 20 No. 1, pp. 46-61.
- Nenkov, G. Y. and Scott, M. L. (2014), "So Cute I Could Eat It Up: Priming Effects of Cute Products on Indulgent Consumption", *Journal of Consumer Research*, Vol. 41 No. 2, pp. 326-341.
- Orth, U.R., Wolf, M.M. and Dodd, T. H. (2005), "Dimensions of wine region equity and their impact on consumer preferences", *Journal of Product and Brand Management*, Vol. 14 No. 2, pp. 88-97.

- Page, C. and Herr, P. M. (2002), "An Investigation of the Processes by Which Product Design and Brand Strength Interact to Determine Initial Affect and Quality Judgments", *Journal of Consumer Psychology*, Vol. 12 No. 2, pp. 133-147.
- Petrova, P. K. and Cialdini, R. B. (2005), "Fluency of Consumption Imagery and the Backfire Effects of Imagery Appeals", *Journal of Consumer Research*, Vol. 32 No. 3, pp. 442-452.
- Schlosser, A. E. (2003), "Experiencing Products in the Virtual World: The Role of Goal and Imagery in Influencing Attitudes versus Purchase Intentions", *Journal of Consumer Research*, Vol. 30 No. 2, pp. 184-198.
- St. James, Y., Handelman, J. M. and Taylor, S. F. (2011), "Magical Thinking and Consumer Coping", *Journal of Consumer Research*, Vol. 38 No. 4, pp. 632-649.
- Wyer, J. R. S., Hung, I. W. and Jiang, Y. (2008), "Visual and verbal processing strategies in comprehension and judgment", *Journal of Consumer Psychology*, Vol. 18 No. 4, pp. 244-257.
- Zhao, M., Hoeffler, S. and Dahl, D. W. (2009), "The Role of Imagination-Focused Visualization on New Product Evaluation", *Journal of Marketing Research*, Vol. 46 No. 1, pp. 46-55.

Contributions to the ANZMAC conference paper

DRC 16



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**STATEMENT OF CONTRIBUTION
TO DOCTORAL THESIS CONTAINING PUBLICATIONS**

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate's Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

Name of Candidate: David Jaud

Name/Title of Principal Supervisor: Professor Valentyna Melnyk

Name of Published Research Output and full reference:

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David Jaud came up with the idea of this paper. David is responsible of the design and conduction of the experiments, analysis and interpretation of the data, as well as the writing up of the paper for review. Prof. Landwehr helped with the data collection of one of the studies. Prof. Melnyk and Prof. Landwehr supervised and guided David in each step of the process. Prof. Melnyk and Prof. Landwehr advised on the questionnaire design as well as the theorisation development. Prof. Melnyk and Prof. Landwehr helped for the data analysis and interpretation. Prof. Melnyk and Prof. Landwehr commented and edited on previous versions of the paper.

David JAUD Digitally signed by David JAUD
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Candidate's Signature

16/02/2018

Date

Principal Supervisor's signature

16/02/2018

Date

The "Mystery Effect": The Effectiveness of Fantasy Themes on Food Labels

*David A. Jaud**, Massey University, *d.a.jaud@massey.ac.nz*
Associate Professor Valentyna Melnyk, Massey University, v.melnyk@massey.ac.nz
Professor Jan R. Landwehr, Goethe University Frankfurt, landwehr@wiwi.uni-frankfurt.de

Abstract

Although companies spend billions annually for packaging and labelling, little is known about the specific features of package design that influence consumers' responses. Meanwhile, the use of fantasy themes (i.e., a fiction genre using imaginative elements and unreal creatures) is increasing in many product categories, yet it is unclear how consumers actually react to fantasy themes on product labels. This research builds on the principle of hedonic dominance (Chitturi et al., 2007) and proposes that fantasy themes enhance purchase intentions, only when brand trust is established. Across two on-line experiments (using samples of different countries) we find a consistent pattern suggesting that product trust moderates consumers' responses to fantasy-themed labels.

Keywords: label design, fantasy, trust, hedonic dominance

Track: Buyer Behaviour