

Consumer Willingness to Pay Premiums for the Benefits of Organic Wine and the Expert Service of Wine Retailers

By

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Dedication

This doctoral research effort is dedicated to my late father, Anointed Elder Jacob Omoruyi Ogbeide, who paved the way for me to take hold of every opportunity that has come my way and to my family, who have endured sacrifice and hardship over time to ensure this successful outcome.

Acknowledgement

I thank my God and Lord, Jesus Christ from whom all good things come, for keeping me alive, giving me the wisdom and health to go through the PhD candidature. To God alone I ascribe all the glory.

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Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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Waite Campus, November 2013

Osadebamwen A. Ogbeide

Abstract

This thesis investigates two major topics independently with outcomes that stand alone but can have influence on each other. Australian consumers' interest in the consumption of organic products is increasing as they are receptive to the perceived health and environmental benefits that are linked to them. However, producers and consumers face challenges understanding the value of the health and environmental attributes. While consumers and producers express interest in organics, gaps exist in their common interest. Producers require premiums for their products to compensate for potential higher production costs or lower yields. Understanding how much consumers are willing to pay (WTP) for the benefits related to organic products is a challenge.

The role of expert service in wine retailing is important. Many studies document the value information provision creates in purchase situations. This service provision to consumers is a key factor encouraging purchase decisions and gaining interest and engagement. It can be important for retailers to provide an environment that extends this service to consumers. Training employees in wine knowledge is vital as they form the frontline between the wine purchase and the consumers. This service comes with a cost that is usually passed on to consumers and it is of interest to determine consumer willingness to absorb this cost.

The primary objectives of the study are twofold: (1) to determine which factors affect consumers' willingness to pay an additional 'premium' price for organic wines benefits, and (2) to determine which factors affect consumers' willingness to pay a premium for the expert services that retail wine stores provide in increasing consumer wine knowledge generally including the health and environmental considerations of organic wines. An online survey was carried out in all the states and territories of Australia. Respondents were obtained from

IMPACTLIST mailing list by random selection of list members that met the pre-requisite criteria. The potential respondents were emailed a questionnaire through the Adelaide Qualtrics online data collection software. The Stata 12 statistical software was used to analyse the sample and variable frequency statistics, factor analysis of the variables used for the regression model and the ordered probit regression and marginal effect analyses.

On average, the premiums or willingness to pay (WTP) respondents indicated were approximately 23% for both environmental (WTPe) and health (WTPh) benefits. The expert service provision is usually free or nonexistent in retail stores; therefore no price reference exists for the base price and was assumed to be \$0.00. For the expert service of the sales outlets (WTPs), respondents indicated WTP of \$0.60. The proposed hypotheses were tested using the ordered probit model and all except two were accepted. The social demographic variables presented a mixed outcome.

Overall for WTPe, consumers' knowledge of organic wine was found to be significant, and will determine the WTPe of organic wines. The marginal effect of knowledge indicated that the probability of paying \$0.00 premium for environmental benefit decreased as the knowledge of consumers about organic wine increased. For WTPh, the relationship between knowledge and WTP was similar in direction to WTPe but different in magnitude. The consumers' motive indicated negative significance to WTPe and was not significant but positive for WTPh.

The consumer attitude was positive and significant in WTPe and WTPh and an increase in the consumers' attitude decreases the unwillingness to pay premium for both environmental and health benefits. However, the consumer perceived risk was negative and significant in WTPe and WTPh. The consumers' perceived risk was not significant in determining WTPs. For WTPe, WTPh and WTPs, risk reduction strategy was positive and significant in determining WTP.

The study further shows that 66.0% of respondents had purchased organic wine prior to the survey. However, questions about their knowledge of the environmental and health considerations associated with organic wines indicated that most consumers were lacking in organic product knowledge. This implies that sensitisation and enlightenment programs that are geared toward these factors may be effective in helping consumers move toward more organic wine consumption.

From this study, it is of note that the environmental and health attributes weigh differently in the consumers' mind, and this influences their willingness and the amount of premium to be paid. The study acknowledges this and measured the WTP a premium for these attributes instead of the product itself. It was found that more consumers are willing to pay for the health attribute than an environmental one, and would pay somewhat higher premium for the former. It is the study recommendation that the distinctive attributes of the organic product should be used to measure consumer WTP rather than the present situation, in which organic wines are considered a commodity. Another contribution is the investigation of the WTP a premium for expert service provided by retail sale outlets. Previous studies emphasise the importance of service in differentiating retail sale outlets and creating customers' relationships. This study investigates and measures consumers' WTP for expert service provision in Australia and the factors that impact on consumers' need for expert service.

Keywords: Consumer; Environmental; Expert service; Health; Organic; Premium; Wine; WTP.

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List of Symbols and Abbreviations

ATTITUDE Summated score for attitude

PACIV_RK Summated score for perceived risk

RRS_A Summated score for risk reduction strategy

MOTI Summated score for motivation (three scale items)

MOTIV Summated score for motivation (four scale items)

KNOWOW Summated score for knowledge of organic wine

AUD, \$ Australian dollar

BFA Biological Farmers of Australia

Bach Bachelor degree

CSM Canonical structure matrix

CVM Contingent Valuation Method

DA Discriminant analysis

DAFF Department of Agriculture, Fisheries and Forestry

DC-CVM Dichotomous Choice Contingent Valuation Method

EU European Union

FSANZ Food Standards Australia New Zealand

GMO Genetically modified organism

HSC Higher school certificate

IFOAM International Federation of Organic Agriculture Movements

INC Importance of consequences of negative occurrence

ITR Item response theory

Mhl Million hectolitres

mhl Thousand hectolitres

MSA Measure of sample adequacy

Mast Master Degree

NOAA National Ocean and Atmospheric Association

NR Number right

OM Organic Movement

OIV International Organisation of Vine and Wine

PGd Post graduate diploma

PhD Doctor of philosophy

PR Potential respondents

PNC Probability of negative consequences occurrence

RRS Risk Reduction Strategy

SA South Australia

SI Situational Involvement

SS Summated scale or score

SLC School leaving certificate

TAFE Technical and further education

UK United Kingdom

USD United State dollar

USDA United State Department of Agriculture

USP unique selling proposition

WHO World Health Organisation

WTP Willingness to pay

WTPe Willingness to pay a premium for the environmental benefit

WTPh Willingness to pay a premium for the health benefit

WTPs Willingness to pay a premium for store (expert service provided by sales outlet)