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The role of perceived risk in wine purchase decisions in restaurants

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Abstract

Purpose – The purpose of this paper is to examine the level of perceived risk and implementation of risk-reduction strategies (RRS) regarding the consumer wine purchase decision in the fine dining restaurant environment. The study seeks to evaluate the effectiveness of elements within the control, or influence of the restaurant (staff, reputation, previous visitation and previous consumption) on reducing the perceived risk of consumers.

Design/methodology/approach – Data are collected through the use of a self-administered, highly structured questionnaire in a well established fine dining restaurant in central Adelaide, South Australia over a three week period in April and May 2008. The sample consists of restaurant consumers who made a wine purchase decision at the restaurant during the collection period. A response rate of 85 per cent is achieved resulting in 105 useable questionnaires.

Findings – A low overall level of perceived risk is noted in the wine purchase decision-making process in the fine dining environment. The restaurant's reputation and advice from staff are found to be important RRS with a high incidence of utilisation. The reputation of the restaurant, incidence of previous visitation and previous consumption of the wine ordered in the restaurant, are all found to reduce the level of perceived consumer risk. A significant incidence of customers engaging in risk-seeking behaviour through selecting wines with which they are unfamiliar, is also noted.

Research limitations/implications – The findings of this research suggest that the overall level of risk associated with the consumer wine purchase decision may be lower than previously observed and can be reduced through measures within the restaurant management's control. Although tentative due to the exploratory nature of this study, these findings may provide useful insights to the wine and restaurant industries and would benefit from further investigation on a larger scale.

Originality/value – This study is of value to academic researchers, restaurant managers/sommeliers and the wine industry as it highlights important aspects of consumer behaviour with regard to wine purchases in a growing and lucrative sector of the on-premise trade.

Keywords Risk analysis, Consumer risk, Risk management, Wines, Restaurants, Australia

Paper type Research paper

Introduction

Consumer purchase decisions are affected by a variety of factors. One such notable influence is the level of uncertainty and anxiety consumers feel regarding the purchase decision, or what has more recently been identified as perceived risk. The complex and varied nature of wine as a product lends itself to creating a high level of perceived risk in consumer's minds which in turn leads to consumers utilising risk-reduction strategies (RRS) as a coping mechanism.

The aim of this study was to test the level of perceived risk and the utilisation and effectiveness of various RRS within the context of a fine dining restaurant environment in Adelaide, South Australia. The Australian on-premise trade currently accounts for 19 per cent of the total wine volume sales and its increases in both volume and value sales are currently exceeding growth in the off-premise trade (Euromonitor, 2008). Understanding how perceived risk influences consumers' wine choices and their preference of RRS in this lucrative market segment would therefore be of advantage to both the restaurant and wine industries alike.

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Literature review

Generic risk perception and RRS

The concepts of consumer risk perception and RRS are relatively new to marketing science. Many attribute its beginnings to Bauer in the early 1960s who first mentioned perceived risk in the consumer purchase decision process (Johnson and Bruwer 2004a; Mitchell and Greatorex, 1989). Dowling (1999) attributes its origin to a group of researchers from Harvard University working at approximately the same time as Bauer, who stated that perceived risk was:

> The uncertainty of the possible adverse consequences which a person thinks will attach to buying or using a product (Dowling, 1999, p. 420).

However, these pioneers of the perceived risk concept did not provide guidelines on how the concept could be tested or measured (Dowling, 1999). Other early studies on RRS (Locander and Hermann, 1979; Taylor, 1974) identified the concept of self confidence and self esteem as having an important role, with a lack of self confidence in a purchase decision increasing the consumer's perceived risk.

Although various models have been proposed to conceptualise the risk construct, there is no universally agreed upon and accepted theoretical or operational definition (Mitchell, 1999). To provide structure to the risk construct, Roselius (1971) identified four categories of loss (risk), namely time, hazard, ego and money. Schiffman and Kanuk (2006) have since extended these to the following six generic risk categories:

(1) Functional risk.

(2) Physical risk.

(3) Financial risk.

(4) Social risk.

(5) Psychological risk.

(6) Time risk.

Schiffman and Kanuk (2006) further noted that the categories and levels of perceived risk experienced depend not only on external factors but also on the individual consumer. Similarly, Dowling (1999) posited consumers' perceived risk to be affected by extrinsic (product/store characteristics) and intrinsic (involvement, past experiences) factors. Negative consumption emotions towards a product increase perceived risk (Chaudhari, 1997). On the other hand, perceived risk declines as consumers gain experience with a product (Sheth and Venkatesan, 1968). In addition, individual personality type and inherent disposition towards risk can determine a person's level of risk adversity (Dowling, 1999).

Likewise, risk seeking behaviour is influenced by personality and demonstrates a consumer's internal desire to seek variety and additional stimulation (Kahn, 1995). Along with personality types risk seeking behaviour is influenced by a variety of external factors and is used by consumers to reduce future uncertainty and risk by increasing their experience with unfamiliar products (Kahn, 1995). In this way risk seeking behaviour can also be considered a RRS in the same way as risk avoidance behaviour.

Roselius (1971) identified 11 "risk relievers", with a consumer's preference to each based on the type of risk perceived. These eleven "risk relievers" have since been condensed into the following six generic RRS categories (Schiffman and Kanuk, 2006):

(1) Information search.
(2) Brand loyalty.
(3) Buying a well known brand.
(4) Buying from a reputable retailer.
(5) Price.
(6) Seeking reassurance.

Risk relating to an individual product has been found to be more significant than risk relating to the product category as it is an unacceptable level of product perceived risk which initiates the use of RRS by consumers (Dowling and Staelin, 1994). Two main approaches to RRS were noted in the literature: increasing the certainty a product would not fail and reducing the consequences in case of failure (Mitchell and McGoldrick, 1996). Mitchell and McGoldrick's (1996) review identified 37 most commonly used RRS, of which ten accounted for 60 per cent of all RRS utilisation in the examined literature. These top ten strategies can therefore be applied to the six generic categories of RRS as demonstrated in Table I.

The risk concept and wine

The concepts of risk-reduction and risk-reduction-strategies (RRS) were first applied to the consumer wine purchase decision by Gluckman (1986). His report on the UK wine market stated that the wine purchasing decision was dominated by fear and anxiety as consumers did not have enough knowledge to make informed decisions nor did they want to appear ignorant (Gluckman, 1986). In addition to this perceived social risk, Gluckman (1986) also acknowledged explicit and implicit considerations held by wine consumers (see Table II).

Further studies into the UK wine market suggested that consumers perceived four types of risk during the wine purchase decision in the following rank order (Mitchell and Greatorex, 1989):

(1) Functional (the wine will not taste good).
(2) Social (family and friends will not approve of the wine/choice).
(3) Financial (the wine price/quality ratio).
(4) Physical (hangover).

RRS category (Schiffman and Kanuk)	Top ten RRS (Mitchell and McGoldrick)
Information search	Ask friends/family (1); information from TV commercial (3); information from printed media (4); information from packaging (8); ask salesperson (10)
Brand loyalty	Brand loyalty (6)
Well known brand	Buy a well known brand (2)
Store reputation	
Price	Price information (7)
Reassurance	Private testing/consumer reports (5) Free sample/trial size (9)

Note: Ranking identified in parenthesis
Sources: Schiffman and Kanuk (2006) and Mitchell and McGoldrick (1996)

Table I.
Categorisation of top ten RRS

The Mitchell and Greatorex (1989) study tested aspects of the six generic RRS (Schiffman and Kanuk, 2006) of importance to wine consumers. The three most important RRS were (Mitchell and Greatorex, 1989):

(1) An opportunity to taste the wine (information seeking/reassurance).

(2) Personal recommendations (information seeking).

(3) Free samples (information seeking/reassurance).

Later research by Spawton (1991) contended that, with the exception of a small group of "connoisseurs", most wine consumers were highly sensitive to risk during the purchase decision. Johnson and Bruwer (2004a) also identified personality types as displaying different responses to risk. In their research into wine-related lifestyle segments, they identified the "Experimenting Highly Knowledgeable Wine Drinker" segment as displaying more risk seeking behaviour than the other groups who were generally risk avoiding (Johnson and Bruwer, 2004b). The same study also acknowledged that an individual's inherent tendency to risk seeking or risk avoidance behaviour would directly affect their utilisation of the generic RRS.

Whereas Mitchell and Greatorex (1989) identified four of the six types of generic perceived risk as being relevant to the wine purchase decision, Spawton (1991) identified only three, namely psychological (social) risk, functional risk and economic risk. Furthermore, Spawton (1991) recognised six unique RRS with regards to the wine purchase decision. These are contrasted below with the generic RRS categories of Schiffman and Kanuk (2006) identified in parenthesis:

(1) known brand (buying a known brand);

(2) learn from others (information seeking);

(3) retail assistants (information seeking);

(4) wine appreciation-formal and informal sources (information seeking/reassurance)

(5) pricing (price); and

(6) packaging and labelling (information seeking).

Comparison of the findings of Spawton (1991), Mitchell and Greatorex (1989), Mitchell and McGoldrick (1996) (Table I) and earlier work by Locander and Hermann (1979) suggests that information seeking plays a significant role in risk-reduction during the wine purchase decision. Price has also been identified as an important RRS particularly at lower price points (Batt and Dean, 2000; Johnson and Bruwer, 2004a; Lockshin *et al.*, 2006) and can exert significant influence on consumers regardless of other factors such as involvement or consumption situation (Quester and Smart, 1998).

Table II.
Effect of previous wine product consumption on perceived risk

Explicit considerations	Implicit considerations
Familiarity	Colour
Price	Packaging appearance
Quality/reliability	Country of origin
Taste	Size of container
Suitability for all tastes	

The risk concept in the on-premise wine trade

The majority of wine-related risk literature focused on the off-premise trade. There exists little information on how these concepts translate to the on-premise trade and whether there are differences with regards to the risk constructs between the two channel types.

Studies into the on-premise trade have identified the restaurant environment as high risk with regards to the consumer wine purchase decision (Gultek *et al.*, 2006; Ritchie, 2007). One of these studies, into UK wine consumer attitudes, found that consumers considered the wine purchase decision more stressful in the on-premise than in the off-premise trade due to the public setting, lack of control over the situation and an elevated level of social risk (Ritchie, 2007). The level of social risk has also been found to be affected by the dining situation. A study suggested that the need to impress others with wine choice was disproportionately high for business-related dining, compared with other occasions where the prominent factors were taste then price (Hall *et al.*, 2001). The varied nature of wine as a product (number of brands, vintage, regional and individual bottle variation) has also been noted as contributing to the high risk associated with the wine purchase decision when compared with other alcoholic drink choices (beer, spirits) where repeat purchase almost always guarantees the same experience (Wansink *et al.*, 2006).

Variety or risk seeking behaviour is also significant within the social context of group dining. Ariely and Levav (2000) noted that restaurant consumers were inclined to choose unfamiliar wines, even against their personal preferences, so as to retain a level of uniqueness within the group and that this variety seeking behaviour served the purpose of information seeking or reducing risk for future consumption.

Ritchie (2007) identified various coping strategies employed in the on-premise trade and found consumers happy to seek advice if trust had been built between the restaurant and themselves but otherwise made choices based on familiar aspects of the wine such as brand, variety or producer. Although the importance of information seeking is acknowledged, other studies (Bruwer and Johnson, 2005; Gluckman, 1986; Hall, 1999) have shown reluctance by consumers to utilise the valuable resource of restaurant staff for this purpose. Bruwer and Johnson (2005) found that only 7 per cent of Australian diners asked for advice on wine purchases. Gluckman (1986) attributed this to consumers not wanting to appear ignorant. Other studies found higher incidences. A recent American study into the influence of sommeliers or wine professionals in restaurants noted a 38 per cent incidence of consumers asking for and a 42 per cent incidence of staff offering assistance (Dewald, 2008). This, however, still means a majority of consumers do not utilise the help of professionally trained staff which poses the question as to whether staff wine training remains a cost effective and productive initiative for restaurants to adopt.

Purpose of the study and hypotheses

The overall objective of this study was to determine how wine consumers in the fine dining sector of the on-premise wine trade behaved with regards to perceived risk and RRS and to therefore contribute to the small body of existing on-premise trade research.

With regards to the practical implications of this study, the main aim was to examine RRS and factors influencing perceived risk which could be controlled or influenced by restaurant management.

Trust has been identified as an important factor for reducing consumer perceived risk in the on-trade environment (Ritchie, 2007). Management can achieve a level of trust by building a strong reputation amongst its customer base. Therefore the following hypothesis was formulated to test this:

H1. The restaurant reputation is an important RRS utilised by customers in the restaurant fine dining environment with regard to the consumer wine-buying decision process.

The hiring, training and performance of staff was under the direct control and influence of restaurant management and the use or non-use of restaurant staff advice was therefore deemed an important RRS to investigate. As noted by previous research (Bruwer and Johnson, 2005; Dewald, 2008; Gluckman, 1986) customers were reluctant to ask for advice regarding wine purchases leading to the formulation of the second hypothesis:

H2. Restaurant staff are not utilised as an important RRS by customers in the restaurant fine dining environment with regard to the consumer wine-buying decision process.

Many commentators in the perceived risk field have identified consumers' uncertainty as a major influence on high levels of perceived risk. Increased familiarity with either a product or retail location should alleviate this uncertainty and therefore reduce perceived risk. The following two hypotheses were formulated to test this construct:

H3. The level of perceived risk with regards to the consumer wine-buying decision process decreases with an increase in the number of visits to the restaurant.

H4. The level of perceived risk with regards to the consumer wine-buying decision process decreases in consumers who have previously consumed the wines.

As previously stated, the staff and reputation of the restaurant were considered elements under the direct control of the restaurant management as training initiatives could be implemented and reputation built by satisfying customers through the successful operation of their business. Increased restaurant visitation could also be in part controlled by the restaurant through customer satisfaction and loyalty schemes. Previous consumption of wine could not be considered to be under the direct control of the establishment but could be influenced by allowing customers to taste wines before purchase.

Through the examination of these risk factors it was the aim of this study to provide useful insights to the restaurant and wine industries alike on how customers in the on-premise trade arrive at their wine choices and how factors under the industries' control could be used to influence these choices. Given the favourable mark-up and growth within the on-premise trade it was felt that this information would be of interest to all parties involved in the lucrative on-premise trade distribution channel.

Methodology

The sample population comprised the clientele of a medium-sized (60-80 covers) fine dining restaurant in central Adelaide, South Australia who were within the legal drinking age (above 18 years old). The definition of a "fine dining" restaurant was taken from a previous Australian on-premise trade study of restaurants as one with main courses at prices of AU$30 or above (Bruwer and Johnson, 2005). The restaurant offered a variety of cuisine at or above this price level. Data were collected through self-administered questionnaires with the researcher remaining within observational

distance all the time. This allowed multiple questionnaires to be completed simultaneously to capitalise on the short service periods and to adhere to the wishes of the management to cause as little intrusion on patrons' dining experience as possible. The self-administered nature of the questionnaire was a principal consideration during research design so as to give clear instructions and leave no ambiguity regarding the questions. The questionnaire was principally quantitative with a minor qualitative question component and utilised standard demographic and wine consumption measures. Adequate pre-testing was conducted before implementation.

Due to the nature of the study, only patrons who had made an actual wine purchase decision on that day were asked to participate. This was ascertained through the test question "who made the decision about the wine today?" If the wine choice was a joint decision then one respondent was selected at random. In addition, customers drinking wine by the glass at the same table were each given the opportunity to complete a questionnaire if they had made their own wine choice.

The data were collected over a three week period and 105 useable questionnaires were obtained. An assumption was made that the clientele who visited the restaurant over the three week period were a fair representation of the restaurant's regular clientele and that they formed a fair representation of fine dining consumers in the Adelaide Metropolitan area. Nineteen potential respondents declined or failed to adequately complete a questionnaire giving an 85 per cent response rate. The data were analysed using the SPSS 16.0 software package.

A sample size of 105 was deemed adequate for the exploratory nature of the study and the challenging environment created from data collection in an operating restaurant. Other on-premise trade studies have produced broadly similar sample sizes of 152 (Gultek *et al.*, 2006), 64 (Thorsen and Hall, 2001) and 250 (Dewald, 2008), although these studies were conducted via distance methods such as mail/phone which posed different data collection problems to face-to-face, in-restaurant sampling.

Results and discussion

Demographics and wine consumption characteristics

Table III provides an overview of the demographic and wine consumption characteristics of the respondents to set the context of the results that follow.

The respondents were weighted towards males, highly educated and from high income earning households with 79 per cent having some form of tertiary education compared to the national average of 21 per cent (Australian Bureau of Statistics, 2007a) and 67 per cent or more earning over the gross national annual average household income of AU$67,860 (Australian Bureau of Statistics, 2007b). These findings could be attributed to the type of restaurant (fine dining) and also the higher age profile of the sample population (74 per cent of 41 years+ old). This is supported by the findings of a previous national study (Bruwer and Johnson, 2005) which found fine dining restaurants to have a larger percentage of high income earners (AU$100,000-AU$200,000+ per annum) than other on-premise trade sectors and that they were predominantly patronised by the older demographic groups.

The total on-premise trade purchase volume of 21 per cent is only slightly above the national Australian averages of 17 per cent reported in Bruwer and Johnson (2005) and 19 per cent in Euromonitor (2008). The winery cellar door purchase figure of 12 per cent is higher than previous research by Bruwer and Johnson (2005) who found the figure for fine dining patrons to be 8 per cent, suggesting that this sample perhaps had moderate to high levels of involvement with wine and restaurants. The respondents are

Demographic variable	Percentages
Gender	
Male	58.3
Female	41.7
Age group	
18-24 years	9.8
25-28 years	6.9
29-34 years	4.9
35-40 years	3.9
41-45 years	10.8
46-54 years	18.6
55-65 years	25.5
65+ years	19.6
Gross household income (annual)	
<AU$25,000	2.1
AU$25,001-AU$50,000	13.7
AU$50,001-AU$75,000	16.8
AU$75,001-AU$100,000	16.8
AU$100,001-AU$150,000	18.9
AU$150,001-AU$200,000	8.4
AU$200,000+	23.3
Educational status (highest level)	
Bachelor's degree or above	74.8
TAFE diploma	4.9
HSC	6.8
School leavers certificate (15 yrs+)	13.5
Consumption variable	**Percentages/means**
Consumption total (monthly)	
0-5 bottles	46.9
6-10 bottles	27.6
10+ bottles	25.5
Mean (bottles per person)	8.19
Household spend on wine (monthly)	
AU$100 or less	40.7
AU$101 to AU$200	22.0
AU$201 to AU$300	22.0
More than AU$300	15.3
Mean (per household)	AU$200.60
Wine consumption frequency	
Everyday	47.5
A few times a week	34.7
Once a week	9.8
Once a fortnight	5.0
Once a month	1.0
Once every two months	2.0
Wine purchase channel	
Large nationally owned retailers	39.2
Independently owned specialist stores	16.9
Restaurants	14.1
Cellar doors at wineries	12.3
Other (mail order/wine club, etc.)	7.6
Bars or pubs	7.3
Internet direct	2.6

Table III.
Demographic and consumption characteristics of restaurant customers

regular wine drinkers with 48 per cent drinking wine on a daily basis and 82 per cent at least once per week. They consume around eight bottles of wine on average per month in a household spending AU$200 per month on wine. Assuming that the vast majority are from households consisting of two or more persons (Bruwer and Johnson, 2005), the average per bottle price is therefore within the AU$10-15 price range.

The fine dining restaurant as a low risk environment

The level of a respondent's perceived risk was measured for five of the generic risk categories. Psychological risk was not included as an assumption was made that any psychological risk arising from wine purchase decisions in a restaurant would more than likely fall into the social risk category. Due to the importance of food and wine pairing, it was included as a second functional risk measure. It was assumed that all the risk elements were of equal importance and a simple average was used as the respondent's overall level of perceived risk (the Cronbach coefficient alpha was 0.67 indicating reasonable reliability given the sample size).

Table IV lists the perceived level of the various risk elements. The overall risk element index of 2.82 measured on a seven-point scale can be regarded as low. As with Mitchell and Greatorex's (1989) study the most significant risk perceived by customers was the taste of the wine. Both from the wine industry and on-premise trade's viewpoints, there can clearly never be any compromise on this aspect. Somewhat surprising, the second most significant factor was the physical risk from alcohol consumption which was found to rank last in Mitchell and Greatorex's (1989) study. This, however, could be due to the older demographic makeup of the restaurant's clientele and to the strict drink-drive laws in Australia.

The relatively low level of perceived risk identified among the respondents of this study is contrary to the findings of many previous on-premise and off-premise trade studies. Several aspects of the respondents' consumption behaviour could provide some insights to this low level of perceived risk. As mentioned with regards to the respondent group's cellar door and on-premise trade consumption figures, it appears that the group has a high level of wine involvement with nearly half the respondents drinking wine everyday, a relatively high monthly consumption with at least 56 per cent above the national monthly average (3.1 bottles) (Australian Bureau of Statistics, 2007c) and at least 60 per cent of respondents' households spending above the national monthly average of AU$27.43 (Australian Bureau of Statistics, 2007c). However, these aspects currently remain somewhat speculative with further research between wine involvement level and risk perception required.

Perceived risk element	Mean
Wine would not taste good (functional)	3.74
Amount of alcohol (physical)	3.32
Wine not good value (financial)	2.72
Wine would not compliment food (functional)	2.64
Other diners not enjoy wine (social)	2.36
Wasting time (time)	2.02
Overall risk element index	2.82

Notes: Perceived risk elements measured using a seven-point Likert scale (1 = low perceived risk, 7 = high perceived risk)

Table IV.
Mean values of perceived risk elements

RRS in the fine dining restaurant environment

To test the incidence of RRS utilised by the restaurant customers two measures were implemented. First, 12 common RRS were identified from previous literature and respondents were asked to indicate which ones they had used when making their wine purchase decision. For positive answers respondents were asked to indicate how important they rated each factor on a seven-point scale.

In Table V, regionality and grape variety featured most strongly as RRS utilised by consumers, in the process underlining the importance of wine type (therefore taste) and its origin from an authenticity viewpoint. The restaurant staff and reputation ranked 4th and 5th with 38 per cent and 36 per cent of respondents utilising them respectively which within the context of the RRS measured (ranging from 66 per cent to 11 per cent) showed a moderate to high level of utilisation. With reference to a previous study conducted on the Australian on-premise trade where only a 7 per cent incidence of staff utilisation was noted (Bruwer and Johnson, 2005), this finding indicates a substantially higher level of customer/staff interaction. It should be noted that the study mentioned above focused on all sectors of the on-premise trade from fine dining to "casual" cafes where staff advice might not be so readily sought. The level of staff utilisation noted in this study of 38 per cent exactly matches the level in Dewald's (2008) study, which may be considered a better source of comparison as it primarily focused on higher end restaurants.

An unexpected finding from this research was the high level (47 per cent) of consumers purposely engaging in risk-seeking behaviour by ordering an unfamiliar wine (ranked 3rd). As previously mentioned, this could be due to the inherent personalities of respondents, the influence of the social group or it simply being used as an RRS as a result of inherent consumer characteristics, such as personality.

The RRS importance ratings in Table V show that the tangible product attributes (grape variety, favourite brand, wine region, producer and familiar brand) supersede all other elements. The composition of the wine list, being predominately made up of local (South Australian) wines, may indicate why product or brand factors were of such high importance. Given the respondents' seemingly high level of involvement it could be

RRS type	Incidence of utilisation Respondents (%)	Rank	Importance ratings Mean	Rank
Familiar grape variety	66.0	1	5.42	1
Familiar region	53.8	2	5.19	3
Bought unfamiliar wine	47.1	3	4.60	9
Advice from staff	37.5	4	4.89	6
Restaurant's reputation	35.6	5	4.62	8
Familiar producer	34.6	6	5.06	4
Favourite brand	29.8	7	5.30	2
Bought based on price	26.0	8	4.00	10
Familiar brand	24.0	9	4.96	5
Personally recommended	20.2	10	4.77	7
Tasted wine in restaurant	17.3	11	3.69	11
Heard about it in media	10.6	12	2.20	12

Table V.
RRS in fine dining restaurant

Notes: RRS mean values based on seven-point Likert scale (1 = not important, 7 = very important)

inferred that they were familiar with at least some of the product attributes therefore they utilised these factors as RRS.

Although ranked below the wine product attributes, the restaurant's reputation and advice from staff can still be considered as being important RRS given the relatively high mean values of 4.62 and 4.89, respectively, especially when considered within the overall context of the measured RRS with the highest ranked attribute of grape variety acquiring a mean value of 5.42.

Restaurant reputation as RRS

To investigate the importance of restaurant reputation as a RRS (H_1) respondents were asked to indicate how strongly they agreed with the statement "all wines on the wine list will be of high quality as they have been carefully selected by the staff" and support their responses in their own words. The mean average response to the proposed opinion indicated agreement with an overall mean of 4.75 on a seven-point Likert scale (1 = completely disagree, 7 = completely agree). The reasons given by the respondents were summarised in Table VI.

In Table VI, the most commonly stated reason for agreeing or disagreeing with the statement "all wines on the wine list will be of high quality as they have been carefully selected by the staff" was overwhelmingly the reputation of the restaurant with 52 per cent of responses. This high level suggests that the restaurant's reputation was an important RRS and could have been a contributing factor to the low overall level of perceived risk noted in Table IV.

To further test the influence of the restaurant's reputation on the level of perceived risk, a Spearman correlation analysis between customers' responses to the statement discussed in Table VI and the various risk elements shown in Table IV was conducted and the results are shown in Table VII.

The Spearman correlation analysis (Table VII) detected negative correlations between three of the measured risk elements and the overall risk element index, indicating a relationship between positive customer opinions of the restaurant's reputation and a reduction in levels of perceived risk. Although the correlations were low they had a high level of statistical significance and due to restaurant reputation

Reason	Percentage
Reputation of restaurant	52.4
Uncertain of/staff lack knowledge	11.9
Wines could be selected for profit/price point of restaurant	8.5
Experienced with establishment	5.1
Good selection chosen by a professional	5.1
Did not ask staff	3.4
Chose wine based on personal preference	3.4
Did not look at wine list	1.7
Do not know the restaurant	1.7
Experienced in the wine industry	1.7
Not familiar with the wines	1.7
South Australian wine producing state	1.7
Wines do not always match the food	1.7
Total	100.0

Table VI. Respondents' reasons for agreement/disagreement with "all wines on the wine list will be of high quality as they have been carefully selected by the staff"

being only one of many factors which can influence perceived risk, this finding was considered meaningful and hypothesis *H1* was therefore *accepted*.

Restaurant staff as RRS

Respondents were asked to indicate how strongly they agreed with the statement "the staff can be used as a reliable source of information to reduce uncertainty regarding the wines offered on the list" and to support their responses in their own words. The average response of 4.64 on a seven-point Likert scale to the proposed opinion indicated overall agreement. The reasons given by the respondents were summarised in Table VIII.

In Table VIII, nearly 52 per cent of respondents stated that the level of training and the perception that the staff had tasted the wines on offer influenced their answers. This demonstrated a level of trust and faith in the staff's ability which as noted by Ritchie (2007) could lead to a higher incidence of customers utilising staff as a RRS. Controllable factors such as the intensity and quality of training provided to staff either through or by the restaurant's management are therefore clearly aspects that the wine industry should focus on in their customer relationship marketing strategies to the on-premise trade.

Personal communication with the restaurant manager revealed that staff were indeed trained on the wine offering by being encouraged to taste unfamiliar and new wines at both structured monthly meetings and on an *ad hoc* basis. Staff were also occasionally given the opportunity to speak to winery and distributor representatives at monthly meetings and were trained on food and wine pairing during menu tasting

Table VII.
Correlation between overall risk element index and "all wines on the wine list will be of high quality as they have been carefully selected by the staff"

Perceived risk element	Spearman's rho	Significance (two-tailed)
Wine would not taste good	−0.276*	0.005**
Wine would not compliment food	−0.093	0.349
Wine not good value	−0.203*	0.040***
Other diners not enjoy wine	0.021	0.833
Wasting time	−0.120	0.228
Amount of alcohol	−0.253*	0.010**
Overall risk element index	−0.289*	0.003**

Notes: *Spearman's rho correlation indicates a weak relationship between variables; **correlation is significant at the 0.01 level (two-tailed); ***correlation is significant at the 0.05 level (two-tailed)

Table VIII.
Respondents' reasons for agreement/disagreement with "the staff can be used as a reliable source of information to reduce uncertainty regarding the wines offered on the list"

Reason	Percentage
Staff trained/tasted wine	51.5
Depends on staff member	14.1
Uncertain of/staff lack knowledge	14.1
Know what they want	7.8
Did not ask staff	4.7
Experience with establishment	3.1
Never ask staff	3.1
Kickbacks from suppliers/wineries	1.6
Total	100.0

sessions. As the results show, evidence of this training was indeed perceived by the restaurant clientele.

A Spearman correlation analysis was then conducted to test the effect of customers' opinions of the staff against their perceived risk. As indicated in Table IX, less evidence of correlation was found for the restaurant staff than in the case of restaurant reputation, with only one statistically significant but weak correlation being found for financial risk (wine not good value). The overall evidence suggested the *rejection* of hypothesis *H2*.

In summary, both restaurant reputation (*H1*) and advice from staff (*H2*) were utilised as important RRS and as such hypothesis *H1* was *accepted* and hypothesis *H2* was *rejected*. Both RRS indicated a moderate to high level of utilisation, were of importance to customers, and their influence and presence was noted by the restaurant clientele. Although the correlation analysis found favourable attitudes towards the reliability of staff yet did not necessarily reduce the customers' levels of perceived risk, the previous findings nonetheless indicate that staff were utilised as an important RRS.

The influence of familiarity on perceived risk

Two aspects of familiarity (repeat restaurant visitation and previous consumption of the wine) were measured and tested to ascertain their influence on the level of perceived risk. It was thought that both of these aspects would reduce the consumer's level of perceived risk during the purchase decision due to the level of anxiety being relieved through increased experience with both the product and retail location.

Previous restaurant visitation and perceived risk

Respondents were divided into first-time and repeat visitors with repeat visitors being defined as those who had visited the restaurant at least once before in the last 12 months. The period of 12 months was used as a cut-off point as it was assumed that customers who last visited more than 12 months ago would no longer be familiar with the establishment or the effect of familiarity would have been negated considerably. A series of *t*-tests were run to test for difference between the two groups' levels of perceived risk with regard to the six perceived risk elements and overall risk element index (Table X).

The respondents who had not previously visited the restaurant perceived a higher level of risk in each category, although only very marginally in the case of "wasting time". The difference was statistically significant for physical risk from alcohol and the overall risk element index. The functional risk element (wine would not taste good) was

Perceived risk element	Spearman's rho	Significance (two-tailed)
Wine would not taste good	−0.161	0.106
Wine would not compliment food	−0.042	0.675
Wine not good value	−0.291*	0.003**
Other diners not enjoy wine	−0.042	0.677
Wasting time	−0.045	0.659
Amount of alcohol	0.068	0.500
Overall risk element index	−0.124	0.213

Notes: *Spearman's rho correlation indicates a weak relationship between variables; **correlation is significant at the 0.01 level (two-tailed)

Table IX.
Correlation between overall risk element index and "the staff can be used as a reliable source of information to reduce uncertainty regarding the wines offered on the list"

Perceived risk element	Previously visited	Mean	Significance
Wine would not taste good	Yes (first-time)	3.46	0.0750
	No (repeat)	4.31	
Wine would not compliment food	Yes	2.48	0.305
	No	2.86	
Wine not good value	Yes	2.63	0.307
	No	3.00	
Other diners not enjoy wine	Yes	2.26	0.937
	No	2.23	
Wasting time	Yes	1.97	0.918
	No	2.00	
Amount of alcohol	Yes	2.71	0.001*
	No	4.23	
Overall risk element index	Yes	2.59	0.021**
	No	3.15	

Notes: *Significant at the 0.01 level (two-tailed); **significant at the 0.05 level (two-tailed)

Table X.
Effect of previous visitation of the restaurant on perceived risk

only marginally above the significance threshold. The overall risk element index was considered to be of most importance as it indicated that the general level of perceived risk was reduced in customers who had previously visited the establishment.

The *t*-test findings only tested for differences between those who had and those who had not previously visited in the last 12 months. However, large variations existed within the repeat visit category with some consumers only having visited once previously and others returning as often as on a weekly basis to the restaurant. A Pearson correlation analysis was conducted to examine the relationship between the number of visits and the levels of perceived risk.

As Table XI demonstrates, the functional risk element (wine would not taste good) and the overall risk element index showed significant but weak negative relationships suggesting that these elements were affected by the actual number of visits. These results strengthened the previous *t*-test findings as reflected in Table X.

Once again it is clear that familiarity and hence trust in the place of consumption, namely the restaurant, are very important factors in terms of shaping the perceived risk levels of the customers and therefore regular patronage is key to the restaurant's success.

Perceived risk element	Pearson correlation	Significance (two-tailed)
Wine would not taste good	−0.253*	0.011**
Wine would not compliment food	−0.165	0.102
Wine not good value	−0.102	0.314
Other diners not enjoy wine	−0.114	0.264
Wasting time	−0.124	0.223
Amount of alcohol	−0.133	0.188
Overall risk element index	−0.249*	0.013**

Notes: *Pearson correlation indicates a weak relationship between total risk and number of visits; **correlation is significant at the 0.05 level (two-tailed)

Table XI.
Correlation between number of restaurant visits and overall risk element index

Previous wine product consumption and perceived risk

Similar *t*-tests as were used earlier for restaurant visitation were conducted to analyse the effect of previous consumption of the wine product on perceived risk (Table XII).

In Table XII, with the exception of "wasting time", all other risk factors demonstrated a higher mean level of risk for those who had not previously consumed the wine. Three of the elements indicated statistically significant differences, including the overall risk element index. This provided further support for the notion that a connection existed between previous consumption and a decrease in the level of perceived risk.

To test whether the influence of the two aspects of familiarity had an increased effect when utilised together, a cross-tabulation was run to ascertain how many respondents had utilised one, both, or neither of these aspects. This was then cross-referenced with each group's overall risk element index mean in Table XIII. The mean averages of the overall risk element index were determined by creating new variables using an "if" function to isolate each group.

Table XIII demonstrates that 72 per cent of the respondents had either previously visited the restaurant, previously consumed the wine product that was ordered there, or both, leaving 28 per cent who had done neither. It was also noted that customers who had done both experienced the lowest average perceived risk and those who had done neither the highest. An ANOVA analysis between consumers who had neither previously consumed nor visited and the other three groups found the differences to be

Perceived risk factor	Previously consumed	Mean	Significance
Wine would not taste good	Yes	2.59	0.0005*
	No	4.25	
Wine would not compliment food	Yes	2.19	0.082
	No	2.84	
Wine not good value	Yes	2.06	0.006*
	No	3.01	
Other diners not enjoy wine	Yes	2.13	0.362
	No	2.46	
Wasting time	Yes	2.13	0.634
	No	1.97	
Amount of alcohol	Yes	2.94	0.248
	No	3.49	
Overall risk element index	Yes	2.34	0.005*
	No	3.03	

Note: *Significant at the 0.01 level (two-tailed)

Table XII.
Effect of previous wine product consumption on perceived risk

Previously visited		Previously consumed		
		No	Yes	Total percentage
No	Percentage	28	8	36
	Mean	3.35	2.46	
Yes	Percentage	42	22	64
	Mean	2.75	2.26	
Total percentage		70	30	100

Table XIII.
Cross-tabulation of respondent's previous restaurant visitation and wine product consumption with overall risk element index

of high statistical significance, indicating that when both aspects of familiarity were present they did have an increased effect on reducing the level of perceived risk. This, along with the previous findings which indicated significant reduced levels of perceived risk for the individual aspects of familiarity, *confirmed* both hypotheses *H3* and *H4*. This confirms that regular patronage of a restaurant combined with familiarity with the wines ordered there by the patrons decrease the level of perceived risk experienced by them in the wine buying and consumption situation.

Conclusions and managerial implications

This study found that restaurant reputation, staff and increased familiarity through previous visitation and consumption all had a significant effect on perceived risk in the fine dining restaurant environment chosen for the study. Contrary to findings in other studies, the consumer wine purchase decision was found to be a low risk proposition. Both the restaurant reputation and staff were important RRS utilised by consumers and a link between positive perceptions of the restaurant's reputation and a reduced level of perceived risk was found. However, favourable attitudes towards the reliability of staff could not necessarily be associated with a lowered level of perceived risk. Similarly, repeat visitation and previous consumption also demonstrated a direct influence on reducing perceived risk and had a compounded effect when both were utilised. The low overall level of perceived risk noted could be attributed to the combined effects of these factors. It could also be surmised that the personal attributes of the clientele, who were believed to be of a moderate to high level of involvement with regard to wine and restaurants, had an influence on the low overall level of perceived risk.

From a restaurant industry perspective this study provided evidence that the level of risk associated with the consumer wine purchase decision can be reduced through measures within the restaurant management's control. Specifically, building a strong reputation, effective staff training in wine knowledge, and an increase in repeat visitation through loyalty schemes can positively influence customers' wine choices through the reduction of their anxiety and perceived risk levels. By enabling and empowering customers to make informed and suitable wine choices this could have benefits for restaurant management through an increase in customer satisfaction with the overall dining experience and, combined with a well trained and knowledgeable staff, provide opportunities to up sell higher priced wines. The finding of significant incidences of customers engaging in risk-seeking behaviour through selecting unfamiliar wines also have implications on the types and number of wines to be offered.

From the wine industry perspective these findings highlight a potential increased opportunity for reaching consumers through the on-premise trade distribution channel. As well as perceiving low levels of risk the clientele were generally moderately to highly involved with wine, earned high incomes and even displayed an inclination towards risk-seeking behaviour through purposely choosing unfamiliar wines. With the growing volume and value of the on-premise trade sector, fine dining restaurants, where the complex product of wine has been "demystified" and an inclination towards trying new products is prevalent, would be an ideal platform for launching new brands and varietals into the market with the hope that on-premise trade sales would eventually drive sales in the off-premise trade as well.

By identifying and directly working with similar highly regarded, fine dining restaurants the wine industry could enter into mutually beneficial arrangements such

as joint training programs which better inform the consumer through the restaurant staff about the products on offer and enable the correct brand messages to reach the consumer in an unadulterated manner.

Limitations and directions for further research

The main limitations of this study were the difficulty faced in collecting data from an operational restaurant and the number of potential respondents being exhausted within the permitted three week collection period due to fluctuating levels of business and the high incidence of repeat visitation. Due to the unpredictable nature of the restaurant business with varying customer levels, data collection was found to be highly labour intensive which was an issue due to limited financial resources.

This study was specific to the Australian on-premise environment and had the research been conducted in a different culture, for example with individuals higher or lower in uncertainty or avoidance behaviour, the results may have been different. Therefore, future research may find it worthwhile to examine interrelations between culture and individuals who differ in their level of risk perception and involvement with wine as a product.

This study was of an exploratory nature and it is recommended that a similar study be conducted on a larger or national scale, involving a number of on-premise trade outlets from different market sectors to check if any correlation exists between consumer risk perception and behaviour in these sectors. The demographic and other attributes of restaurant clientele, their involvement level with wine as a product and the influence thereof on the overall level of perceived risk currently remain somewhat speculative with further research between wine involvement level and risk perception required. Further studies should also aim to determine whether all risk elements are of equal weight and importance to consumers and the influence of personality types on perceived risk especially with regards to risk seeking and risk avoiding behaviour.

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