

The Influence of Department Stores' Price Promotion Strategy Toward Consumers' Repurchase Intentions: A Moderation Model of Perceived Risks

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ABSTRACT

Taiwan's retailing industry faces fierce competition, and there are practical gaps regarding price promotion and repurchase intention. Therefore, the purpose of this study is to examine the impact of department stores' price promotion strategies on consumers' repurchase intentions and what the moderation effect of perceived risks has on the relationship between price promotion and repurchase intention. The results show (1) the consistency, presentation, and information content of price promotion on the repurchase intentions have a positive and significant impact, and (2) the perceived risks would weaken the relationship of the price promotion and repurchase intention. Therefore, this study proposes related suggestions of business management strategy regarding the establishment of price consistency that customers can trust in when shopping at domestic department stores; to use different price promotion presentation methods to lock in the repurchase behavior of different customer groups; to fade the information contents of price promotions for price-oriented services; and to reduce customers' perceived risk.

KEYWORDS

Department Store, Moderation Effect, Perceived Risk, Price Promotion, Repurchase Intention

INTRODUCTION

According to the Statistics Bureau of the Ministry of Economy of Taiwan, the annual turnover of domestic integrated commodity retailing in 2021 was \$1,302 billion (NT\$, New Taiwanese Dollars), of which department stores were \$342.6 billion (26.3%), supermarkets were \$248 billion (19.1%), chain convenience stores at \$361 billion (27.8%), retail outlets were \$244 billion

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(18.7%), and other retail sales of \$106 billion (8.2%). As known in the above data, department stores play an important role in the domestic integrated commodity retailing industry. They also contribute considerably to the promotion of employment opportunities and national income. In 2021, although department stores' turnover declined by 1.0% compared to that of 2020, in recent years, the government has promoted market internationalization, economic liberalization, and other initiatives. Thus, foreign logistic operators also seize the Taiwanese market for its financial advantages and advanced business technology. Additionally, because of the rise of hypermarkets, hypermarkets now threaten domestic department stores with considerable price competition. In recent years, domestic department store operators were in fierce competition with Japanese systems. In addition, operating costs are rising as prices rise, and price competition has also become a problem in the operation of department stores.

Therefore, from a practical point of view, how to reinforce satisfaction, purchase intention, repurchase intention, loyalty, store atmosphere, product quality, price, service quality, and promotion activities, are all directions the department stores industry should pursue. Thus, many studies emphasized exploring how to enhance customers' satisfaction (Fredericks & Salter, 1995; Pizam, 2016; Leninkumar, 2017); how to enhance customers' purchase intention (Raghubir & Corfman, 1999; Mirabi, 2015; Hussian, 2015; Younus, 2015); how to enhance customers' repurchase intention (Zeithamal et al., 1996; Zboja & Volrhees, 2006; Lin, 2014; Suhaily, 2017); how to enhance customers' loyalty (Patrick & Beckman, 2002; Nuseir, 2015; Themba, 2019); how to reinforce service quality (Carman, 1990; Fisk et al., 1993; Themba, 2019); and how to conduct market positioning and marketing strategy (Erickson & Jonansson, 1985; Mitchell, 2001). However, there is little research to explore the impact of department stores' price promotions on repurchase intentions.

According to Baker et al. (2002), the customers' intention to repurchase is an important indicator of consumer behavior. Mitchell (2001) points out that there are many variables affecting consumers' purchase decisions, such as category, brand name, payment methods, service, purchase locations, store image, price, and promotion of products. Raghubir & Corfman (1999) also points out that price promotion allows consumers to pay with less money and for the replacement of equivalent products or services, which also stimulates consumers' buying amount. In addition, Della Bitta et al. (1981) also notes that retailers usually take advantage of lower prices and higher comparisons to facilitate positive benefits for customers' purchase decisions. Besides, promotion activities help stimulate communication between customers and companies and may provide certain incentives to attract customers to promote their repurchase intention (Raghubir & Corfman, 1999).

The above related studies show that it is important to explore the influence of price promotion on repurchase intention. However, perceived risks of customer shopping (e.g., financial, physical, psychological, and social risks) may affect their shopping decisions (Jacoby & Kaplan, 1972). In other words, when customers consider it uncertain or invisible in the course of their purchase, they become more aware of the risks which affects their repurchase intention at certain levels. This study also considers that it is important to explore the effect of perceived risk on the relationship between price guarantee and repurchase intention. Therefore, the relationship between price promotion activities and repurchase offers is examined and the moderation effect of perceived risk on price promotion and repurchase intention is an important subject which needs to be further studied. This paper intends to explore the following two issues: (a) What is the impact of the price promotion of the department stores on consumers' desire to repurchase? and (b) How does perceived risk affect the relationship between price guarantee and repurchase intention? Analysis of variance (ANOVA), correlation analysis, and multiple regression methods will be employed to examine the hypotheses developed regarding the above objectives.

LITERATURE REVIEW AND HYPOTHESIS INFERENCE

Perceived Risk

Perceived risk refers to a customer's decision to buy a product or service, while sensing the potential for uncertain or adverse outcomes (Dowling & Staelin, 1994). If perceived risk exists during the course of a customer's shopping activity, this perceived risk will have a certain impact on the customer's purchase decisions (Garbarino, 2004; Durif, 2012; Sheau-Fen, 2012; Cetinsöz, 2013; Tanadi, 2015; Pappus, 2016; Hur, 2020; Guru, 2020; Xu, 2020; Rankavat, 2020; Loh, 2021).

Regarding the structures of perceived risk, different scholars (such as Dowling, 1986; Jacoby & Kaplan, 1972; Kaplan et al., 1974; Mitchell, 1999; Stone & Gronhaug, 1993) have different points of view. The perceived risk could be roughly divided into the following categories, such as financial risk, psychological risk, physical risk, social risk, functional risk, and time risk. Jacoby & Kaplan (1972) and Mitchell (1999), define financial risk as the financial loss caused by the failure of the product to operate normally and therefore producing loss to the consumers; psychology risk refers to a customer being aware of the possibility of being harmed, through selecting and using products with serious failures; physical risk refers to the possibility that the product or service itself will cause injury to the consumer's body because of its malfunction; social risk refers to the possibility that the product purchased will lead to negative appraisal of a customer by his family, colleagues or friends; functional risk refers to the use of the purchased product, which cannot meet the expected interests of the customer; time risk means that the product purchased will waste the customer's time.

Among the above six perceived risks, financial risk and functional risk had a higher correlation against overall risk compared with the other four risks (psychology, physical, social, and time), and thus were used by the most studies (Mitchell, 1999). Therefore, in order to achieve the purpose of this study and consider the characteristics of department stores, this study adopts financial risk and functional risk as the basis for reasoning and measurement of subsequent hypotheses.

Price Promotion

The term "promotion" refers to the composition of a series of various tools, most of which are short-term in nature and mainly used to stimulate customers to buy a product in advance or buy more of it. Luo Z. (2002) proposes the purpose of various promotional tools such as a free sample, coupon, cash refund, premium package, gifts mailing, and prize drawing.

This study divides the promotion tools into two promotion categories: price promotion (i.e., discount, coupon, and cash refund) and non-price promotion (i.e., free samples, premium package, and awards). This study only explores issues related to price promotion, without discussion of non-price promotion.

Raghubir and Corfman (1999) point out that price promotion refers to the reduction of prices and sales of certain products or services by a company, or offering customers more products or services at the same price. The structures of price promotion could be divided into five types: (a) promotion price consistency, (b) discount margin, (c) uniqueness, (d) presentation, and (e) information content, which this study uses as the basis for measuring the price promotion construct.

Repurchase Intention

Repurchase intention refers to whether customers will spend at the same rate as before and the likelihood they buy a same product repeatedly (Davidow, 2003). Hellier et al. (2003) redefines the repurchase intention as referring to the behavior of customers who buy products or services again from the same company after considering their purchasing ability. Based on this, repurchase intention can be said to be a customer's repeated purchase behavior.

It is found that the factors affecting repurchase intention are perceived value, quality, product reference price, advertisement, brand, price promotion, customer loyalty, the level of service recovery, customer satisfaction, and store image. However, for the purpose of this study, only the relationship between price promotion and repurchase intention is examined. Therefore, regarding the measurement constructs of repurchase intention, Zeithaml et al. (1996) proposes variables—loyalty, willingness to pay more, transfer of ideas, response to external problems, and response to internal problems—are to be used for measurement because of high internal consistency of these variables and better explained variance. Therefore, this study adopts Zeithaml et al.'s (1996) and Zboja and Voorhees's (2006) measurement items for subsequent data measurement.

Department Stores

A department store is a company that sells different types of goods to end consumers by branch, and the company is named after the organization of the goods. Most of the operation sites of the company are concentrated in the center of metropolitan areas with sales of clothing, household goods, electrical appliances, cosmetics, furniture, and other different types of goods. The trend of fashion refinement in shopping, entertainment, and leisure is a characteristic of consumer behavior (Stern & El-Ansary, 1992). Hsieh, M. (2004) point out that the environment of Taiwan's logistic industry has changed rapidly in the past 10 years. Convenience stores and shopping malls have jointed the market. However, in the long history of the retail industry in Taiwan, department stores are still the main players in the market and are concentrated in most of the metropolitan areas whose characteristics are open space, commodity diversification, and continuing to provide pop culture information to satisfy consumers' desire of one-stop shopping. Currently, the Japanese department stores have the highest percentage of domestic market shares and are moving towards a large-scale oligopoly, which has caused the sector of small and medium-sized department stores to wither.

Zheng S. (1993) concludes that there are six factors affecting the performance of service quality of department stores: (a) Commodity factors; (b) Operational factors; (c) Facility factors; (d) Institutional factors; (e) Activity type factors; and (f) Personnel factors.

Hypothesis Development

This study intends to explore the impact of price promotion on repurchase intention and the relationship between perceived risk and repurchase intention. Therefore, this study adopts price promotion consistency, discount margin, uniqueness, presentation, and information content to be used as the basis for measuring price promotion concept; financial risk and functional risk for measuring perceived risk; loyalty, willingness to pay more, transfer of ideas, response to external problems, and response to internal problems for measuring the structure of repurchase intention. The establishment of relevant hypotheses are described below.

Erickson and Johnansson (1985) considered that the role played by price when customers evaluate product solutions is not a single aspect, and they point out that the price customers paid for products would lead to a decrease in wealth. This point of view represents a restrictive role in price. The price awareness is the consumer's perception of the product as expensive or cheap (Erevells et al., 1999). According to Jain (2000), when a company uses the price promotion strategy, a customer regards it as a symbol of low price, and therefore, the price the customer knows will seem the cheapest. Therefore, the more attractive it is to customers, the more positive the relationship between price and quality is (Rao & Monroe, 1989). Accordingly, this study establishes hypothesis 1.

Hypothesis 1: Price promotion has a significant impact on repurchase intention.

Lichtenstein and Bearden (1989) point out that when the brand is in a fierce environment of price promotion, it means that the brand of the company and its competitor are in a fierce price promotion

battle. A company's continuously price promotion usually makes the customer have no reference to the external reference price, so they then act on the discount price. Furthermore, Raghurir (1998) also suggests that when the price of a brand is inconsistent before and after a sale event, consumers will give a lower rating on the brand.

Accordingly, this study considers that if a department store's price promotion is inconsistent, it should have a negative impact on the desire to repurchase. Therefore, hypothesis 1-1 is established.

Hypothesis 1-1: The price promotion consistency of department stores has a positive effect on the repurchase intention.

A discount margin is an indicator of how much money a customer can save if he/she buys a product. However, what is the impact of the discount margin on the customer's desire to repurchase? According to the study of Berkowitz and Walton (1980), the greater the range between the price of promotion and the price of the original product, the more positive the customer will respond to the perceived savings, perceived value, and price acceptability with an intention to purchase.

Overall, this study suggests the greater the discount, the more the discount would have a positive effect on customers' desire to repurchase, but the benefit depends on the degree of price guarantee provided by department stores. Therefore, hypothesis 1-2 was established.

Hypothesis 1-2: The price promotion margin of a department store has a positive and significant impact on repurchase intention.

According to Tversky (1977), customers' purchase preferences tend to focus more on specific information and less on general information. Based on this, Raghurir (1998) points out that when a company's price promotion behavior is different from that of different competitors, it is the unique information that attracts the attention of customers.

This study suggests the price promotion behavior of department stores is presented in a way that is different from the past or could be separated from those of competitors, which means that customers tend to focus their attention on the price promotion information of this uniqueness, and compare the margin between the price promotion of this uniqueness and the previous general price promotion. Thus, this study suggests that when the price promotion characteristics are more attractive to customers than one of the previous general price promotions, the desire of customers to repurchase will increase. Therefore, hypotheses 1-3 is established.

Hypothesis 1-3: The price promotion uniqueness of a department store has a positive and significant effect on repurchase intention.

According to Folkes (1995), some studies suggest that different promotion programs have been developed and conveyed to customers with different psychological feelings and influenced their perception, which make customers make different purchase decisions. This study suggests that different price promotion presentations (such as discount or coupon) will have different psychological effects on customers and will also affect the difference between their perceived interests and payment. These factors caused different effects on customers' repurchase intention. Accordingly, this study establishes hypotheses 1-4.

Hypothesis 1-4: The price promotion presentation of a department store has a significant difference in repurchase intention.

Zhang (1996) points out that the content of promotion information is a communication through mass media to convince consumers. Nijs et al. (2001) argues that different customer groups have different understandings or abilities to think about the content of price promotion messages. Generally, customers with higher knowledge have a higher ability to understand or associate with the content of promotional messages, meaning that the customer can achieve more positive benefits regarding value.

Thus, this study suggests that customers usually evaluate the quality and price of products or services with different promotional messages. When the content of the price promotion information is easier for customers to understand, the customers' attitude toward the information content of price promotion is more positive. Hypothesis 1-5 is thus established.

Hypothesis 1-5: The price promotion information content of a department store has a positive effect on repurchase intention.

According to Brown (1989), the amount of time a customer has directly affects their shopping decisions. Therefore, in terms of the impact of price promotion on customers' intention to purchase, this study suggests that if department stores provide customers with perceived benefits in terms of price promotion consistency, discount margin, uniqueness, presentation, and information content, the stores will help to improve repurchase intention.

In the process of shopping, customers' cognition forms a perceived risk, which may affect their intention to repurchase. As Beatty (1987) points out, customers will actively search for more information to reduce their own shopping risks when they are engaged in buying products with perceived high risk, such as products that are expensive or complicated. Therefore, hypothesis 2 and its related hypotheses are established as follows.

Hypothesis 2: Perceived risk has a significant moderation impact on the price promotion and repurchase intention.

Hypothesis 2-1: The relationship between price promotion and repurchase intention of a department store's customer will be weakened by financial risk.

Hypothesis 2-2: The relationship between price promotion and repurchasing intention of a department store's customer will be weakened by functional risk.

Research Framework

According to the above literature review on price promotion, perceived risks, and repurchase intentions, the framework of this study is shown in figure 1. This study is based on the hypotheses of the previous related research studies and uses customers' incomes and age as control variables.

RESEARCH DESIGN AND RESEARCH METHODS

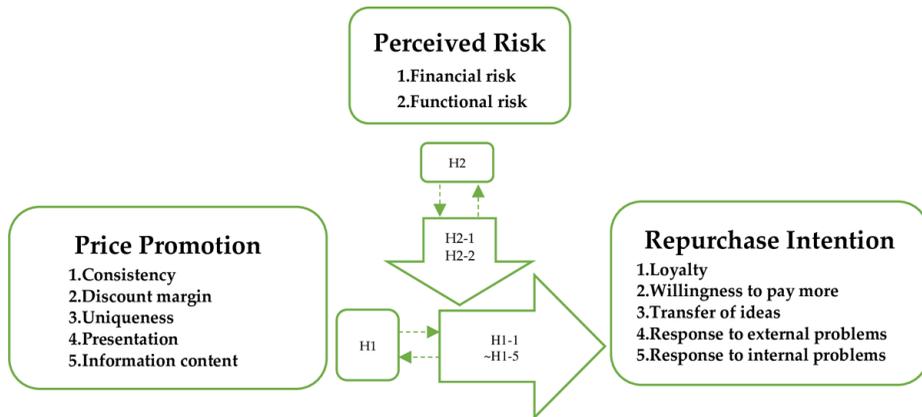
Data Collecting

The content of the questionnaire is based on the variables under each construct of the research framework, which is divided into four parts: (a) price promotion, (b) perceived risk, (c) repurchase intention, and (d) a consumer's basic information. Each variable is measured by using Likert's five-point scale.

This study adopts the convenience sampling method and acquires samples from the customer groups of the top five most popular department stores in Southern Taiwan.

During the July-August 2021 period, the researchers sent questionnaires at the doors of those five department stores in southern Taiwan, 100 copies each, for a total of 500 copies.

Figure 1. Study framework



Operational Definition and Measurement of Research Variables

In this study, the operational definition and measurement of three constructs—price promotion, perceived risk, repurchase intention, and their related variables—are described below. The five variables of price promotion are determined from the studies of Lichtenstein et al. (1989), Raghurir and Corfman (1999), and Michael and Sinha (2000). These variables are consistency, discount margin, uniqueness, presentation, and information content.

Perceived risk refers to the perceived likelihood of uncertainty or adverse consequences of a customer’s purchase of a product or service. The two main dimensions of measurement are modified with the related questionnaire proposed by Jacoby and Kaplan (1972) and Mitchell (1999). The dimensions are financial risk and functional risk.

Repurchase intention is measured in five dimensions: (a) loyalty, (b) willingness to pay more, (c) transfer of ideas, (d) response to external problems, and (e) response to internal problems.

Control Variables

Because the customers vary in age and income, this study suggests that customers at different age levels and income groups will have different perceptions of price promotion in department stores and their repurchase intention will also be impacted. Based on this, age and annual income are used as control variables.

Analysis Methods

SPSS25 statistical software was used to analyze the relevant data. This study also performed a factor analysis for each construct. The aim was to simplify the variables to see if the variables were a single factor structure (Kaiser, 1958).

In the reliability analysis, this study analyzes the three structural aspects of price promotion, perceived risk and repurchase intention by Wortzel’s (1979) method. On construct validity, the Bagozzi and Yi (1988) and Bagozzi et al.’s (1991) observations are adopted to conduct a **confirmatory factor analysis (CFA)** for the theoretical model constructed by this study. Correlation coefficient analysis is used, and multiple regression analysis is used to verify the hypotheses **H1-1, H1-2, H1-3, and H1-5** and the moderation effect of hypotheses **2, 2-1, and 2-2**.

One-way ANOVA is employed is by using it to examine whether the average value difference between price promotion, perceived risk, and repurchase intention variables of the participants have a significant difference. Furthermore, the **dependent variables** of hypothesis 1-4 are **analytical** and its

independent variables are **categorical variables**, so this study uses **ANOVA** analysis to verify whether price promotion presentation has a significant impact on repurchase intentions (hypothesis 1-4).

FINDINGS AND DISCUSSIONS

Analysis of Descriptive Statistics

A pilot test results show that the internal consistency of the design questionnaire is within an acceptable range. Furthermore, the study includes 500 valid questionnaires with the demographic statistics of the samples, sorted as shown in Table 1. The results can be broken down into these categories, with further breakdowns within each category:

1. **Gender:** There are slightly more male (52.6%) than female (47.4%) respondents.
2. **Age:** There are the most respondents who are 21-30 years old (50.4%), while there are the fewest respondents who are 50 years old (3.6%).
3. **Marital status:** There are more unmarried respondents (62.8%) than married (37.2%).
4. **Education:** More than half of the respondents (50.6%) are in a university, and there are the fewest respondents in primary school (1.4%).
5. **Career:** Military, public service, and education (20.8%) are the most respondents' careers, and students (17.6%) are the second most.
6. **Income:** Most of the respondents' income is between \$22,001-35,000 (39.8%), and the second most respondent incomes fall below \$22,000 (39.2%).
7. **Number of household members:** Four persons (33.6%) is the most, five persons (26%) is the second most.

Factor Analysis, Reliability, and Validity Verification

In this study, the variables of price promotion, perceived risk, and repurchase intention are analyzed by principal component analysis and maximum variation methods. After removing two measurement items, the new results are shown in Table 2. The absolute value of factor loading of each factor extracted is more than 0.5. There are also good cumulative explanations of variations, such as 66.8% in price promotion, 57.5% in perceived risk, and 71.6% in repurchasing intention.

The results of the reliability analysis of the structural factors of price promotion, perceived risk, and repurchase intention are shown in Table 2. The Cronbach's α coefficients of all variables ranged from 0.74 to 0.86.

This study analyzes the validity of three constructs (price promotion, perceived risk and repurchase intention) by using preliminary fit criteria for verifying the theoretical model. The results show that the estimated parameters are not too close to 1 (0.15-0.55), the factor loading of each variable is greater than 0.5, the residuals of each variable are positive, and the variation level of each residual is smaller than 0.05. For instance, the correlation between consistency and transfer of ideas is 0.38 ($p < 0.01$), the correlation between uniqueness and willingness to pay more is 0.42 ($p < 0.01$), and the correlation between financial risk and loyalty is 0.37 ($p < 0.01$).

In addition, by examining the **preliminary fit criteria (PFC)** of the model, the results show that the chi-square degree of freedom ratio of each model of consideration is **less than 2** (i.e., price promotion $X^2/df=1.852$, perceived risk $X^2/df=1.913$, and repurchase intention $X^2/df=1.877$). Moreover, each GFI index is greater than 0.9 (i.e., GFI=0.907 for price promotion, GFI=0.915 for perceived risk, and GFI=0.912 for repurchase). In the adjusted GFI index aspects, each GFI index is also higher than 0.9 (i.e., Such as price promotion AGFI=0.906, perceived risk AGFI=0.912, and repurchase intention AGFI=0.904). In addition, the residual variances are all positive and the RMSARs are all less than 0.05 (i.e., price promotion RMSAR=0.044, perceived risk RMSAR=0.047, and repurchase intention RMSAR=0.043).

Table 1. Demographic statistics of customers

Variable	Classification	Number of persons	Percentage (%)
Gender	Male	263	52.6
	Female	237	47.4
Age	Below 20 years (yrs) old	63	12.6
	21-30 yrs old	252	50.4
	31-40 yrs old	128	25.6
	41-50 yrs old	39	7.8
	50+ yrs old	18	3.6
Marital	Married	186	37.2
	Unmarried	314	62.8
Education	Primary School	7	1.4
	Junior High School	30	6.0
	Senior High School	187	37.4
	University	253	50.6
	Graduate School	23	4.6
Number of household members	1 person	7	1.4
	2 persons	23	4.6
	3 persons	122	24.4
	4 persons	168	33.6
	5 persons	130	26.0
	6+ persons	50	10.0
Career	Military, Public Service, Education	104	20.8
	Students	88	17.6
	Manufacturing	44	8.8
	Financial services	30	6.0
	Technology	23	4.6
	Service industry	70	14.0
	Information	12	2.4
	Mass Communications	11	2.2
	Business	42	8.4
	Doctors, Accountants, Lawyers	11	2.2
	Self-employed	21	4.2
	Family management	33	6.6
	others	11	2.2
	Income (Average monthly income, NT\$) ¹	Below \$22,000	196
\$22,001-35,000		199	39.8
\$35,001-50,000		77	15.4
\$50,001-65,000		17	3.4
\$65,001-80,000		7	1.4
\$80,001-100,000		1	0.2
Above \$100,000		3	0.6

Note¹: 1US Dollar =29.6 NT\$

Table 2. Results of factor analysis and reliability analysis of constructs

Construct	Variable	Measurement item	Factor Loading	Eigen-value	Cumulative Explanation Variation	Correlation Coefficient of Item vs Overall Items	Cronbach's α
PP ¹	PP1	MI1	0.783	8.265	25.26%	0.682	0.831
		MI2	0.834			0.582	
		MI3	0.818			0.726	
		MI4	0.658			0.686	
	PP2	MI5	0.827	5.562	39.72%	0.574	0.789
		MI6	0.838			0.682	
		MI7	0.764			0.591	
	PP3	MI8	0.661	3.244	48.27%	0.561	0.761
		MI9	0.628			0.692	
	PP4	MI10	0.768	2.553	56.27%	0.554	0.827
		MI11	0.677			0.667	
		MI12	0.741			0.590	
		MI13	0.686			0.640	
	PP5	MI14	0.819	1.286	66.76%	0.575	0.860
		MI15	0.725			0.669	
PR	PR1	MI16	0.785	3.785	28.72%	0.683	0.848
		MI17	0.818			0.702	
	PR2	MI18	0.782	2.120	57.53%	0.730	0.813
		MI19	0.690			0.569	
		MI20	0.733			0.657	
RI	RI1	MI21	0.782	5.266	28.27%	0.673	0.843
		MI22	0.816			0.719	
		MI23	0.747			0.663	
		MI24	0.768			0.648	
	RI2	MI25	0.761	4.335	39.83%	0.576	0.753
		MI26	0.668			0.581	
		MI27	0.725			0.628	
	RI3	MI28	0.818	3.614	47.26%	0.572	0.738
		MI29	0.833			0.630	
	RI4	MI30	0.829	2.575	58.27%	0.688	0.829
		MI31	0.840			0.663	
	RI5	MI32	0.686	1.287	71.64%	0.685	0.802
		MI33	0.761			0.618	

Note¹: PP: price promotion PP1: presentation, PP2: information content, PP3: discount margin, PP4: uniqueness, PP5: consistency; PR: perceived risk, PR1: financial risk, PR2: functional risk; RI: repurchase intention, RI1: loyalty, RI2: response to external problems, RI3: response to internal problem, RI4: willingness to pay more, RI5: transfer of ideas.

This study examines the used three constructs by PFC and found X^2/df was 1.865, GFI is 0.914, AGFI is 0.912, and RMSAR is 0.045, and all factor loading of all observed variables are all larger than 0.5 and achieve a significant level of 0.05. Furthermore, the test of discriminant validity is to set the correlation coefficient value of three latent variables on the two dimensions of the variable to 1, and the degree of freedom will increase by 1. When the chi-square difference between the set model and the unset model is greater than 3.84, it means that the two constructs cannot be regarded as the same construct, that is, they represent the discriminant validity between the two constructs. The results show that the variance of chi-square difference between set model and unset model is more than 3.84, $p < 0.01$, indicating the latent variables had discriminant validity, which conform to the findings of Jap and Ganesan (2000).

One-way ANOVA is used to determine whether there is significant difference in the **mean values** between the **variables** of price promotion, perceived risk, and repurchase intention. The findings are as follows:

- **Price promotion:** (1) Consistency: there are no significant differences between the department stores. (2) Discount margin, uniqueness, presentation, and information content: there are significant differences among the department stores.
- **Perceived risk:** Financial risk and functional risk: there are significant differences among the department stores.
- **Repurchase intention:** (1) Loyalty, willingness to pay more, and transfer of ideas: there are significant differences between the department stores. (2) Response to external problems and response to internal problems: there are no significant differences among the department stores.

The results in Table 3, in control variables, show that there is a significant positive correlation between age and income, and there is no direct relationship between age and the variables. In addition, there is a significant positive correlation between customers' incomes and their willingness to pay, and there is a negative correlation with discount margin and financial risk. There is a significant positive correlation between price promotion variables (including consistency, discount margin, uniqueness, presentation, and message content) and loyalty, (willingness to pay more and transfer of ideas), but there is a significant negative correlation between financial risk. In addition, there is a significantly negative correlation between financial risk and loyalty and between functional risk and loyalty. There is a significantly negative correlation with willingness to pay more, transfer of ideas, and response to external problems, but a positive correlation between the response to internal problems exists.

Although the correlation analysis could **mostly** summarize the results of this study, **multiple regression** is used to further examine **proposed hypotheses**, and the issues of **multicollinearity** of variables are also studied using the findings of Allenby (2001), where a tolerance value of less than 0.1 or a **variance inflation factor (VIF)** larger than 10 indicates having high multicollinearity, which further affects the judgement of individual contribution of variables.

Before proceeding to the multiple regression analysis, the issue of **multicollinearity** between variables is examined. From the results in Table 4, the **VIF** is less than 10 (**VIF=1.859**), which indicates no multicollinearity between variables. This study adopts the point of view of Gujarati (2003) to test the independence of deviations in order to determine whether the occurrence of auto-correlation might reduce the explanatory power of not acquiring effective estimated parameters. When the **Durbin-Watson (DW)** value is between 1.5 and 2.5, it indicates the **deviations** are **inter-independent**, and there **does not exist** an auto-correlation situation. From Table 4, it can be seen that the DW value is between 1.667 and 2.2162, indicating **no auto-correlation**. The Kolmogorov-Smirnov (K-S) test (Xue, 2017) is used for testing the normality of samples. The results included in Table 4, show that samples do not violate the normality assumption. The model significant tests are revealed from F-values, which are also included in Table 4 and indicate suitable model fitness. Heteroscedasticity is

Table 3. Correlation analysis of variables

Variable	MV	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
CV ²																
Age	2.84	0.73														
Income	2.93	1.21	0.40**													
PP-IV																
PP1	4.26	0.63	0.19	-0.16	(0.86)											
PP2	4.28	0.55	-0.08	-0.18*	0.27**	(0.76)										
PP3	4.05	0.72	-0.05	-0.04	0.43**	0.38**	(0.83)									
PP4	4.18	0.67	-0.21	-0.11	0.27**	0.40**	0.37**	(0.83)								
PP5	4.22	0.71	-0.16	-0.08	0.41**	0.22**	0.28**	0.35**	(0.79)							
PR-MV																
PR1	4.21	0.75	-0.22	-0.16*	-0.27**	-0.54**	-0.16**	-0.21**	-0.24**	(0.85)						
PR2	4.16	0.86	-0.28	-0.13	0.07	0.16	0.40**	-0.18	-0.34**	0.56**	(0.81)					
RPI-DV																
RPI1	4.27	0.66	-0.16	-0.08	0.46**	0.38**	0.31**	0.22**	0.37**	-0.36**	-0.38**	(0.84)				
RPI2	4.12	0.77	0.17	0.20*	0.37**	0.36**	0.26**	0.37**	0.45**	-0.38**	-0.43**	0.31**	(0.83)			
RPI3	4.15	0.60	0.14	0.16	0.39**	0.42**	0.40**	0.28**	0.36**	-0.41**	-0.35**	0.56**	0.44**	(0.80)		
RPI4	4.10	0.78	0.13	0.06	0.25*	0.09	0.15	0.07	0.28**	0.37**	0.34**	0.38**	0.30**	0.27**	(0.76)	
RPI5	4.02	0.83	0.19	0.19	0.27*	0.12	0.05	0.06	0.22**	0.39**	0.38**	0.40**	0.35**	0.30**	0.34**	(0.74)

Note!: n=500, **p<0.01; *p<0.05; the numbers in () is a Cronbach's α value; average age 2.84 is 28 years old; average income 2.93 is \$33,000 (currency unit: New Taiwanese Dollar (NT\$; 29.6 NT\$= 1US\$)

Note2: Abbreviation & symbols: CV: control variable, MV: mean value, SD: standard deviation; PP-IV: price promotion (independent variable), PP1: consistency, PP2: discount margin, PP3: uniqueness, PP4: presentation, PP5: information content; PR-MV: perceived risk (moderation variable), PR1: financial risk, PR2: functional risk; RPI-DV: repurchase intention (dependent variable), RPI1: loyalty; RPI2: willingness to pay more, RPI3: transfer of ideas, RPI4: response of external problems, RPI5: response of internal problems.

examined by Spearman rank order correlation coefficients (Xue, 2017), indicating heteroscedasticity is not significant (see Table 4). The hypothesis tests are described as follows.

The results of the analysis of hypothesis 1-1 through 1-3 and 1-5 are summarized in Table 4. First, from the models 1 to 5 in Table 4, it can be seen that each model has good explanatory power (R^2 was 27.5-46.2%), and the variation of ΔR^2 value is 26.6-45.1%, which indicates that the regression model has the ability to explain variation. Table 4 also shows that the control variable age has no significant effect on the variables of repurchase intention. While the control variable income has no significant effect on loyalty, transfer of ideas, response to external problems, or response to internal problems, it has a significantly positive effect on willingness to pay more. This means that the higher the customers' income, even with an increase in the price of products, the higher the possibility of customers' intention to repurchase.

After controlling the effect of income variable and according to the results in Table 4, it can be found in the regression model of price promotion to repurchase intention that consistency has positive and significant effects on loyalty, willingness to pay more, transfer of ideas, response to external problems, and response to internal problems. Hypothesis 1-1 is **supported**.

After controlling the effect of income variable, and according to the results in Table 4, it can be found in the regression model of price promotion to repurchase intention that discount margin has positive and significant effects on loyalty, willingness to pay more, and transfer of ideas. Relatively, there is no significant effect on response to external problems and response to internal problems, which means that a price promotion discount margin should have no significant effect on customers' reaction to problems in store service. Therefore, hypothesis 1-2 is **not supported**.

Table 4. The test of main effect on price promotion to repurchase intention

Repurchase intention (dependent variable)					
	Loyalty	Willingness to pay more	Transfer of ideas	Response to external problems	Response to internal problems
	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept (β)	2.635	1.735	2.268	1.183	1.205
Control variable					
Age	-0.157	0.178	0.146	0.132	0.195
Income	-0.075	0.168*	0.203	0.072	0.198
Price promotion (independent variable)					
Consistency	0.452**	0.385**	0.377**	0.256*	0.273*
Discount margin	0.383**	0.436**	0.351**	0.103	0.125
Uniqueness	0.326**	0.416**	0.269**	0.155	0.062
Presentation	0.231**	0.366**	0.285**	0.075	0.061
Information content	0.365**	0.371**	0.447**	0.270**	0.244*
F value	38.637**	37.241**	32.856**	26.737**	24.261**
R ²	0.462	0.338	0.416	0.275	0.283
Δ F value	58.255**	53.784**	46.196**	38.391**	36.309**
Δ R ²	0.451	0.326	0.391	0.266	0.274
Max VIF	1.859	1.511	1.712	1.379	1.395
DW value	1.667	1.783	1.993	2.036	2.162
K-S test	0.312	0.326	0.342	0.318	0.335
Spearman	0.135	0.141	0.147	0.165	0.159

Note¹: except F value, R², Δ F value, and Δ R², VIF: variance inflation factor, DW: Durbin-Watson, K-S: Kolmogorov-Smirnov, all numbers represent the regression coefficient values.

After controlling the influence of income variable, and according to the results in Table 4, it can be found in the regression model of price promotion to repurchase intention that uniqueness has positive and significant effects on loyalty, willingness to pay more, and transfer of ideas. There is no significant effect on response to external problems and response to internal problems, which means that price promotion uniqueness should have no significant effect on customers' reaction to problems in store service. Therefore, **hypothesis 1-3 is not supported**.

After controlling the income influence of the sample, the results are shown in the analysis results of Table 4. Information content has positive and significant effects on loyalty, willingness to pay more, transfer of ideas, response to external problems, and response to internal problems. Therefore, **hypothesis 1-5 is supported**.

The **one-way ANOVA** is used for verifying **hypothesis 1-4**. The results in Table 5 indicate that there are four variables (a) discount, (b) direct price reduction, (c) discount coupon, and (d) two-piece joint purchase in price promotion presentation that has a significant effect on **all variables** of repurchase intention. For instance, as shown in Table 5, discount (F=7.288) has a larger effect on loyalty than the effect of direct price reduction (F=6.562), two-piece joint purchase (F=4.256), and

discount coupons ($F=3.712$). Table 5 also shows that direct price reduction has a larger effect on willingness to pay more than that of discount ($F=6.041$), discount coupons ($F=4.723$), and two-piece joint purchase ($F=2.271$). Therefore, hypotheses **1-4 are supported**. In summary, hypotheses 1-1, 1-4, and 1-5 **are supported**, and hypotheses 1-2 and 1-3 **are not supported**. Therefore, *hypothesis 1* is **partially** supported.

Hypotheses 2-1 and 2-2 are tested by **multiple regression analysis** and the results are shown in Table 6. The test results of VIF, DW values, K-S (Kolmogorov-Smirnov) test, and Spearman rank order coefficients are also included in Table 6, which indicate all values are within the acceptable ranges. From model 1 to model 9, it can be found that the explanation power of each model is high (R^2 was within 27.5-53.1%), and the variation of ΔR^2 is between 0.266~0.527. The explanation power achieves significance, indicating regression models have the explanation power of variance. In addition, from **model 2, 7, and 12** it can be found the control variable income has a positive and significant impact on willingness to pay more, which indicates that the control variable (income) has a **partially** positive and significant impact on repurchase intention. The test of hypotheses 2, 2-1, and 2-2 is described in detail as follows.

The analysis of models six to 10 shows that after controlling the influence of variable income, the price promotion consistency and information content has a positive and significant effect on all variables of repurchase intention. However, the variables of price promotion (including discount margin, uniqueness, and presentation) have positive and significant effects on the loyalty, willingness to pay more, and the transfer of ideas but have no significant effects on the response to external problems and response to internal problems. In addition, financial risk has negative and significant effects on all the variables of repurchase intention.

Furthermore, the effect of adding all price promotion variables on repurchase intention after interacting with financial risk, from models six to 10, it can be found that discount margin, uniqueness, and presentation of price promotion have positive and significant effects only on loyalty, willingness to pay more, and transfer of ideas, but have no positive and significant effect on response to external problems and response to internal problems. In addition, price promotion consistency and information content has positive and significant effects on all variables of repurchase intention, but the β value is low. As shown in model 6, consistency has a positive and significant effect on loyalty ($\beta=0.527$, $p<0.01$); after adding interaction of consistency and financial risk, consistency still has a positive and significant effect on loyalty ($\beta=0.371$, $p<0.05$), but the β value drops from 0.527 to 0.371. This means that the relationship between price promotion consistency and loyalty would be **weakened** by financial risk. This situation indicates that even if the products or services of a department store provided were the same in the past, the current price promotion would have a positive and significant impact on the loyalty of customers. However, when customers recognize the existence of financial risks, this realization would **weaken** the relationship between price promotion consistency and loyalty, and also reduce customer loyalty.

Table 5. Variance analysis of repurchase intention in different price promotion presentation

Repurchase intention Price promotion presentation	Loyalty	Willingness to pay more	Transfer of ideas	Response to external problems	Response to internal problems
	F value	F value	F value	F value	F value
Discount	7.288**	6.041**	4.107**	6.072**	5.892**
Direct price discount	6.562**	6.425**	2.445**	2.275**	2.108**
Discount coupon	3.712**	4.723**	4.889**	4.524**	4.383**
2-piece joint purchase	4.256**	2.271**	6.474**	2.578**	2.337**

Note: ** represents $p<0.01$ and has significant effect, * represents $p<0.05$ & has significant effect.

Table 6. Tests of the moderation effect of perceived risk on price promotion and repurchase intention

Model	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15
RPI-DV ³	RPI1	RPI2	RPI3	RPI4	RPI5	RPI1	RPI2	RPI3	RP4	RPI5	RP11	RP12	RP13	RP14	RP15
INT (β)	2.635	1.735	2.268	1.183	1.205	1.532	0.735	0.962	1.342	2.534	1.073	1.755	1.263	0.634	2.197
CV															
Age	-0.157	0.178	0.146	0.132	0.195	-0.128	0.182	0.124	0.127	0.205	-0.138	0.191	0.177	0.186	0.138
Income	-0.075	0.168*	0.203	0.072	0.198	-0.098	0.216*	0.211	0.052	0.183	-0.083	0.204*	0.217	0.088	0.204
PP-IND															
PP1	0.452**	0.385**	0.377**	0.256*	0.273*	0.527**	0.429**	0.436**	0.527*	0.518*	0.515**	0.410**	0.422**	0.301*	0.308*
PP2	0.383**	0.436**	0.351**	0.103	0.125	0.417**	0.495**	0.419**	0.119	0.215	0.404**	0.463**	0.390*	0.112	0.206
PP3	0.326**	0.416**	0.269**	0.155	0.062	0.392**	0.467**	0.302**	0.207	0.103	0.353**	0.429**	0.289**	0.197	0.097
PP4	0.231**	0.366**	0.285**	0.075	0.061	0.292**	0.410**	0.338**	0.116	0.095	0.275**	0.402**	0.317**	0.102	0.090
PP5	0.365**	0.371**	0.447**	0.270**	0.224**	0.418**	0.424**	0.496**	0.318**	0.280**	0.402**	0.404**	0.448**	0.307**	0.259**
PR-MV															
PR1						-0.369**	-0.381**	-0.417**	-0.372**	-0.390**					
PR2											-0.327**	-0.336**	-0.398**	-0.348**	-0.352**
IPPPR1															
PP1-PR1						0.371**	0.372**	0.367**	0.275*	0.267*					
PP2-PR1						0.310**	0.358**	0.346**	0.112	0.187					
PP3-PR1						0.275**	0.375**	0.237**	0.175	0.092					
PP4-PR1						0.253**	0.336**	0.265**	0.110	0.067					
PP5-PR1						0.339**	0.347**	0.372**	0.274**	0.250**					
IPPPR2															
PP1-PR2											0.389**	0.397**	0.388**	0.295**	0.280**
PP2-PR2											0.352**	0.376**	0.360**	0.115	0.194
PP3-PR2											0.296**	0.398**	0.266**	0.188	0.102
PP4-PR2											0.276*	0.351**	0.228**	0.116	0.084
PP5-PR2											0.365**	0.381*	0.391**	0.293**	0.285**
F value ¹	38.637**	37.241**	32.856**	26.737**	24.261**	41.277**	44.382**	38.012**	30.726**	28.731**	42.276**	41.927**	35.028**	32.357**	27.722**
R ²	0.462	0.338	0.416	0.275	0.283	0.531	0.462	0.434	0.375	0.364	0.507	0.442	0.410	0.351	0.329
△F value	58.255**	53.784**	46.196**	38.391**	36.309**	67.275**	61.373**	55.927**	48.390**	46.027**	60.276**	60.251**	51.823**	45.927**	44.826**
△R ²	0.451	0.326	0.391	0.266	0.274	0.527	0.441	0.418	0.364	0.355	0.501	0.436	0.402	0.337	0.315
Max VIF	1.859	1.511	1.712	1.379	1.395	2.132	1.859	1.767	1.600	1.572	2.028	1.792	1.695	1.541	1.490
DW value	1.667	1.783	1.993	2.036	2.162	2.227	2.299	2.342	2.468	2.485	2.211	2.273	2.316	2.493	2.397
K-S test	0.312	0.326	0.342	0.318	0.335	0.357	0.374	0.369	0.351	0.361	0.354	0.363	0.381	0.324	0.337
Spearman	0.135	0.141	0.147	0.165	0.159	0.146	0.151	0.172	0.181	0.193	0.143	0.162	0.170	0.182	0.194

Note 1: except F value, R², △F value, and △R², VIF: variance inflation factor, DW: Durbin-Watson, K-S: Kolmogorov-Smirnov, all numbers represent the regression coefficient values.

Note 2: ** represents p<0.01 & has significant effect, * represents p<0.05 & has significant effect.

Note 3: abbreviations & symbols: RPI-DV: repurchase intention (dependent variable), RPI1: loyalty, RPI2: willingness to pay more, RPI3: transfer of ideas, RPI4: response of external problems, RPI5: response of internal problems. INT: intercept, CV: control variable, PP-IND: price promotion (independent variable), PP1: consistency, PP2: discount margin, PP3: uniqueness, PP4: presentation, PP5: information content; PR-MV: perceived risk (moderation variable), PR1: financial risk, PR2: functional risk. IPPPR1: interaction between price promotion and financial risk, PP1-PR1: interaction between consistency and financial risk, PP2-PR1: interaction between discount margin and financial risk, PP3-PR1: interaction between uniqueness and financial risk, PP4-PR1: interaction between presentation and financial risk, PP5-PR1: interaction between consistency and financial risk; IPPPR2: interaction between price promotion and functional risk, PP1-PR2: interaction between consistency and functional risk, PP2-PR2: interaction between discount margin and functional risk, PP3-PR2: interaction between uniqueness and functional risk, PP4-PR2: interaction between presentation and functional risk, PP5-PR2: interaction between consistency and functional risk.

As shown in model 7, the information content has a positive and significant impact on willingness to pay more, but after adding the interaction of information content and financial risk, the information content still has a positive and significant impact on willingness to pay more, but the beta value drops from 0.424 to 0.347. This means that the relationship between price promotion information content and willingness to pay more would be weakened by financial risk. Although the information provided by a department store to customers on price promotion would have a positive and significant impact on customers' willingness to pay more; when customers perceive financial risks, this realization would weaken the relationship between the information content and willingness to pay more. Eventually, it would reduce the willingness of customers to pay more. Therefore, the relationship between price promotion and repurchase intention would be weakened by financial risk. Hypothesis 2-1 is, thus, **partially** supported.

From the analyses of models 10 to 15 in Table 6, the results show that after controlling the influence of variable income, the price promotion consistency and information content have positive and significant impacts on all the variables of repurchase intention. But the discount margin, uniqueness, and presentation of price promotion only has positive and significant impacts on loyalty, willingness to pay more, and transfer of ideas, and has no significant impact on response to external problems and response to internal problems. In addition, functional risk has a negative and significant impact on all the variables of repurchase intention.

Furthermore, the effect of adding the interactions between all variables of price promotion and financial risk on repurchase intention, in models 6 to 10, shows that discount margin, uniqueness, and presentation of price promotion had positive and significant impacts only on loyalty, willingness to pay more, and transfer of ideas of repurchasing intention, but has no significant impact on response to external problems and response to internal problems. In addition, the price promotion consistency and information content have positive and significant impacts on all variables of repurchase intention, but the β value has decreased greatly. As shown in model 12, the discount margin has a positive and significant impact ($p < 0.01$) on willingness to pay more before and after adding the interaction between discount margin and functional risk, but β value drops from 0.463 to 0.376. This result shows that the relationship between discount range of price promotion and willingness to pay more would be **weakened** by functional risk.

Model 13 show that uniqueness has a positive and significant impact on transfer of ideas ($\beta = 0.289$, $p < 0.01$), and after adding the interaction effect between discount margin and functional risk, still has a positive and significant impact on transfer of ideas. But the beta value drops from 0.289 to 0.228. This result shows that the relationship between price promotion uniqueness and transfer of ideas would be weakened by functional risk. Thus, hypothesis 2-2 was partially supported. In summary, since hypotheses 2-1 and 2-2 are **all partially supported**, then **hypothesis 2** is **partially** supported. The above hypothesis test results are summarized in Table 7.

POLICY RECOMMENDATIONS, PRACTICAL IMPLICATIONS, AND FUTURE RESEARCH

Policy Recommendations

According to the results of this study, this section proposes several suggestions on the management strategies of domestic department stores.

In order to establish price promotion consistency, which is worthy of customer trust, and to enhance customer repurchase intention, department stores should continue to implement the same price promotion practices as those in the past. In this way, it would improve the relationship between customers and department stores, and the possibility of multiple purchases. Especially in recent years, with the rise of hypermarkets, domestic department stores have encountered a threat of price competition. If the department stores' continuous price promotion is not consistent, customers will

Table 7. The summary of research problems and hypothesis test results

Hypothesis (H)	Statement	Test result	Method used
H1	Price promotion has a significant impact on repurchase intention.	Partially supported	Multiple regression & ANOVA
H1-1	The price promotion consistency of department stores has a positive effect on the repurchase intention.	Supported	Multiple regression
H1-2	The price promotion margin of a department store has a positive and significant impact on repurchase intention.	Not supported	Multiple regression
H1-3	The price promotion uniqueness of a department store has a positive and significant effect on repurchase intention.	Not supported	Multiple regression
H1-4	The price promotion presentation of a department store has a significant difference in repurchase intention.	Supported	AVOVA
H1-5	The price promotion information content of a department store has a positive effect on repurchase intention.	Supported	Multiple regression
H2	Perceived risk has a significant moderation impact on the price promotion and repurchase intention.	Partially supported	Multiple regression
H2-1	The relationship between price promotion and repurchase intention of a department store's customer will be weakened by financial risk.	Partially supported	Multiple regression
H2-2	The relationship between price promotion and repurchasing intention of a department store's customer will be weakened by functional risk	Partially supported	Multiple regression

not have a sense of trust in the previous and subsequent price promotions, and thus have a lower desire to repurchase. It is worth mentioning that when the content of price promotion information is lacking, and when the previous and subsequent price promotion of department stores is inconsistent, customers will be more likely to have a negative appraisal of the price promotion policy of the department stores, and thus, have a lesser desire to repurchase.

This study also reveals that the use of different prices promotion presentation (including discounts, direct price reductions, discount coupons, and two-piece purchase offers) would have a significant influence on customer repurchase intention, which means that different price promotion practices would make customers feel differently about fairness. For example, the presentation of discount and direct price reduction is more directly related to price, but it is unlikely to enhance the desire to repurchase by customers who attached importance to quality and brand reputation. In contrast, the presentation of discount coupons and two-piece joint purchase offers is based on the increase in the original price and quantity of the product to enable customers to enjoy the price advantage. Usually, customers do not have any doubts about the quality of the product, nor would they reduce their internal reference price. Therefore, a discount or direct price reduction would produce higher customer perceived value, which would help to increase the customer's desire to purchase again. Therefore, department stores could use different presentation styles of price promotion, such as jointed price reduction, adding quantity and price reduction, adding quantity and no-price addition, and high-quality product promotion, to gain positive recognition from different customer levels (i.e.,

different income or age groups), thus, increasing the perceived value by customers and increasing their intention to purchase again.

For service-oriented department stores, whether they provide customers with precise and clear price promotion information would be an important antecedent to increasing customer repurchase intention. As Zhang and Gelb (1996) point out, the information content of price promotion is a kind of communication through mass media to convince consumers to purchase. The use of different language cues of price promotion by department stores has different effects on customers' cognitive savings (Della Bitta et al., 1981). This study suggests that if the price promotion content is to be communicated to customers by a department store is not clear, has varying font sizes with the information content text, is difficult to see at a glance, and /or does not match the actual price of the discount product, it will be difficult to increase a customer's desire to repurchase. Further, this study suggests that information about product quality, quantity, and brand reputation should be presented using clear context. If the information content presented more information about product quality, quantity, and brand name, and relatively less information or smaller font in terms of price reduction, it is easier to transfer the value of money in the customer's mind to quality or increase the value of quantity and also enhance the customer's repurchase intention.

This study also finds that perceived risk (financial risk and functional risk) reduces the relationship between price promotion (including consistency and information content) and repurchase intention. Thus, this study suggests that department stores should seek to establish a consistent price promotion mechanism that consumers could trust and desalinate price-oriented price promotion content. This could reduce the possibility of uncertainty or adverse consequences that a consumer perceives they might encounter if they decide to purchase a product or service. This might increase the customer's desire to repurchase.

Practical Implications

According to the results in Tables 4 to 5, price promotion, presentation, and information content has positive and significant effects on all variables of repurchase intention. This finding is similar to those of Das (1992), Folkes and Wheat (1995), Koen et al. (2002), and Nijs (2001). As Koen et al. (2002) points out, when sale promotion behavior is inconsistent, it could easily cause customers to have a negative perception of the brand, and therefore would influence customers' desire to repurchase. Folkes and Wheat (1995) resolve that some studies have proven different marketing programs would create different psychological feelings for customers and influence their perception, which would cause customers to make different purchase and repurchase decisions. Furthermore, Das (1992) argues that semantic content in the claim transaction affects consumers' purchase evaluation, and there is an interaction between semantic style and commodity price. In summary, this study finds that the higher the consistency of price promotion, and the better the presentation and information content, the higher the desire of customers to purchase again. Based on this, this study concludes the extended management implications as follows.

The consistency of price promotion has a positive and significant effect on repurchase intention (hypothesis 1-1 verification). This means that department stores' operators should focus on the products or services they sold, and the past and present price promotion practices should be the same. In this way, the relationship between customers and department stores would be enhanced, with the likelihood of customers making multiple purchases. This study suggests that when a department store produce inconsistencies before and after promotions, it has a negative influence on repurchase intentions. As Raghurir and Corfman (1999) point out, when price promotion before and after a sale event is inconsistent, it causes consumers to have a lower appraisal of the brand and external reference prices.

In terms of how price promotions are presented, discounts, direct price reductions, discount coupons, and two-piece joint purchase have significant differences in how they influence repurchase intentions (hypothesis 1-4 verification). This result indicates that customers feel different fairness by using different price promotion methods. For example, when coupons are presented in a way that give

customers a price preference at the original price of the product. Usually, customers do not have doubts about the quality of the product, nor do they reduce the reference price in their minds. Therefore, coupons would directly reduce prices to produce higher customer repurchase intention. In addition, the presentation of direct price reduction is more likely to cause customers to reduce the perceived quality of the promoted products, and customers might think the reference price of promotional products was not a real price, which increases with the distrust of product quality in discount rates. The direct price reduction would not effectively enhance the customer's desire to purchase again.

The information content of price promotion has a positive and significant effect on repurchase intention (hypothesis 1-5 verification). It is easier for customers to have a positive influence on their desire to repurchase because of the higher product and service characteristics or the association with quality and brand reputation. The department stores should focus on the content of their price promotion messages. Furthermore, this study suggests that customers usually evaluate the quality of products or services and the recognition of prices with different promotion information. When the content of price promotion information is easier for customers to understand, customers have a more positive perception of this price promotion information content and more easily remember it. In other words, clear price promotion information makes it easier for customers to think positively about quality production. The information should inform customers that the benefits of their perception would be greater than the cost, which then produces a positive repurchase intention.

According to the results of the analysis in Table 6, perceived risk (financial risk and functional risk) reduces the relationship between price promotion (loyalty, willingness to pay more, transfer of ideas, response of external problems, and response of internal problems). The result of this study is similar to the findings by Beatty and Smith (1987), Dowling and Staelin (1994), Teas and Agarwal (2000), and Wood and Scheer (1996). As Beatty and Smith (1987) point out, customers actively search for relevant information to reduce the purchase risk when buying products with high perceived risk, such as high value or complicated products. Therefore, Teas and Agarwal (2000) and Wood and Scheer (1996) argue that financial risk and functional risk are the spiritual costs that consumers must bear when buying goods. Not only does it directly affect the intention to purchase, but it also indirectly affects the intention to purchase again through perceived value. In summary, the management implications of this study are described as follows.

Financial risk weakens the relationship between price promotion (including consistency and information content) and repurchase intention (hypothesis 2-1 test). It means that although department stores provide some price promotion activities (such as consistency and information content), when customers engage in purchasing the relevant products, they may consider that the value of the product does not conform to the price they paid, or that the low-priced product they purchased on promotion might be a product that was almost expired. In this way, the level of financial risk generated by customers' awareness would increase, and consumers may want to reduce the uncertainty or adverse consequences of their purchase decisions, which might include reducing their repurchase intention. Therefore, department stores should focus on how to reduce customers' perceived financial risks in order to enhance repurchase intention when conducting price promotion.

Functional risk weakens the relationship between price promotion (including consistency and information content) and repurchase intention (hypothesis 2-2 test). This implies that customers are engaged in purchasing the relevant products of a department store, even when the department store provides some price promotion activities. However, the customer's perception that the purchased product or service may not be used, normally or otherwise, results in the customer's purchase of the product or service not achieving the desired interests or purposes of the individual. Thus, in this way, the degree of functional risk generated by customer awareness would increase, and in order to reduce the loss caused by uncertainty or adverse results in repurchase decisions, repurchase intention is reduced. Therefore, when carrying out price promotion, department stores should focus on how to reduce the customers' perceived functional risk and improve their intention to repurchase.

Study Limitations and Future Research

This study explores the effect of price promotion on repurchase intention and the interference effect of perceived risk. In terms of perceived risk, this study only explores financial risk and functional risk, while psychological risk, physical risk, social risk, time risk (proposed by Dowling, 1986; Mitchell, 1999; Stone & Gronhaug, 1993) have not been explored yet. Based on this, it is suggested that future research may consider including psychological risk, physical risk, social risk, time risk and other aspects, so as to further understand the different interference effects of perceived risk on price promotion and repurchase intention, so as to make greater contributions to theory and practice.

In this study, a cross section method is employed to analyze the impact of price promotion on repurchase intention in domestic department stores and how perceived risk interfered with the relationship between price promotion and repurchase intention. However, it has not yet explored the longitudinal analysis in a specific period. It is also expected that future studies can use time series analysis to explore whether the research results have the same or different results over time (such as half a year, one year, and many years), so as to better improve the correctness of the interpretation of the research results.

AUTHOR NOTE

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CONTRIBUTIONS

Conceptualization: C. Chen, H. Lei, & L. Pao; methodology: C. Chen, H. Lei, Y. Lu, & L. Pao; formal analysis: C. Chen, H. Lei, Y. Lu, & L. Pao; writing/original draft preparation: C. Chen, H. Lei, Y. Lu & L. Pao; writing/review and editing: H. Lei, C. Chen, Y. Lu & L. Pao. All authors have read and agreed to the published version of the manuscript. H. Lei & C. Chen contributed equally and are co-first authors. C. Chen & Y. Lu are co-corresponding authors.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

ETHICAL APPROVAL

Ethical approval was granted by the author's institution.

CONSENT

Informed consent was obtained from all participants or their legal guardians.

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