



Predicting Consumers' Repurchase Intention of Ready-to-Drink Coffee: A Supply Chain from Thai Producers to Retailers*

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Received: March 23, 2022. Revised: April 05, 2022. Accepted: May 05, 2022.

Abstract

Purpose: This research investigates ready-to-drink (RTD) coffee. Although the RTD coffee market is growing competitively, few studies have examined behavioral re-intention or repurchase intention in the context of this industry. Therefore, the objective of this study was to explore factors affecting the behavioral re-intention to purchase RTD coffee. **Research design, data and methodology:** Using the theory of planned behavior (TPB) as the underpinning theoretical framework, this study hypothesized that behavioral re-intention to purchase RTD coffee is influenced by the variables of the TPB and additional variables. A mixed-method research design was applied, starting with qualitative in-depth interviews and followed by a quantitative method. Data were collected using an online survey of coffee lovers. Multiple linear regression (MLR) was used to assess the hypothesized relationships in the proposed conceptual framework. **Results:** The results reveal that content sensory attribute beliefs are the strongest positive predictor of behavioral re-intention in Thailand, followed by perceived utilitarian value. In contrast, price signaling was negatively related to behavioral re-intention. **Conclusions:** The findings can help food and beverage companies to develop new coffee product lines to gain more market share, create integrated marketing communications to build brand awareness, and manage distribution channels and the supply chain.

Keywords: Theory of Planned Behavior, Content Sensory Attribute Beliefs, Perceived Utilitarian Value, Price Signaling, Behavioral Re-intention, Ready-to-Drink Coffee, Coffee Chains, Distribution Channels, Retail Stores, Coffee Shops

JEL Classification Code: M10, M11, M30, L66

1. Introduction

Soft drink sales have grown continually in recent years in line with expanding urban and rural demographics, as well as in line with the increasingly active, hectic, and

speed-prioritizing lifestyles of urban residents. The living patterns and lifestyles of office workers who rise in the morning, perform their duties, wait in traffic, spend time with family, and eventually sleep are strongly conducive to the use of hygienic, practical, and ready-to-eat food and

* This research was supported by the Graduate School of Business and Advanced Technology Management, Assumption University.

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ready-to-drink (RTD) beverages. It is for this reason that the market for RTD beverages, particularly catering to the palette and desires of urban communities, has been enjoying a rapid increase in popularity. As such, the distribution of RTD beverages is one of the key strategies in the whole supply chains.

In 2018, the total sales of nutrition and weight loss drinks in the United States (US) alone amounted to 5.1 trillion USD, and sustainable growth has been forecasted (Vegro & Almeida, 2020). Bolstered by the rising trend for easy and convenient beverage consumption, the RTD beverages market-which consists of canned, bottled, and polyethylene terephthalate (PET) packaged drinks-had experienced steady growth worldwide (Shinozaki & Harada, 2014). Consumer research indicates that the main reasons why people use beverages are due to health and pleasure factors (Agrawal, Timperio, Zolla, Bansal, Shukla, & Rakwal, 2013).

Coffee is second only to water as one of the world's most popular beverages (Gaascht, Dicato, & Diederich, 2015). There is widespread social recognition that caffeine, one of the main compounds in coffee, is a stimulant that improves not only physical performance but also cognitive functions (Samoggia & Riedel, 2018). According to Manzo (2014), coffee consumption can be viewed as having passed through three historical phases: first, the mass market wave of the 1960s, during which coffee was bought and sold as a generic commodity using a traditional distribution channel by trucks to retailers; second, the coffeehouse wave of the 1990s, during which more discerning consumers demanding specialty coffee emerged; and third, the small producer wave of the 2000s and onward, during which small and independent coffee producers have gained prominence in promoting specific methods for drying, washing, or roasting coffee beans. As of 2021, coffee is viewed by many consumers in a manner similar to wine: namely, as a high-value artisanal drink.

The worldwide market for coffee was valued at 102.02 billion USD in 2020, and it is expected to hit a CAGR of 4.28% during the forecast period of 2021-2026 (Vegro & Almeida, 2020). For the food and beverage industry, the coffee market is a pivotal segment, and the consumption of coffee has been increasing globally (Jeon, Kim, Jeong, Hong, Oh, Yoon, Shim, Jeong, & Abd El-Aty, 2019). Alongside this, the manner in which coffee is consumed has also been changing, where consumers value not only the freshness and quality of coffee but also its ability to reflect their personal lifestyle and tastes (Smith, Suthitakon, Gulthawatvichai, & Karnjanakit, 2019). With the steady annual growth in worldwide coffee consumption and the rising competition that characterizes the coffee market (Vegro & Almeida, 2020), it is important to understand the consumption behavior of coffee consumers.

The coffee supply chain and production is a complex process. It comprises of a number of positions in the coffee production process including growers, processors, intermediaries, agents, exporters, suppliers, and retailers (Vegro & Almeida, 2020). The chains that distributes to consumers are retailers (e.g., canned coffee) and coffee shops (e.g., brewed coffee).

In Thailand, the RTD coffee market was first established in the 1990s. Leading companies in the food and beverage industry are focusing on new product development (NPD) and innovation. In 2018, coffee shops and the coffee distribution network as a whole experienced an expansion of 37.7% compared to the previous year. Additionally, by 2021, it is expected that away-from-home spending on coffee, such as coffee consumption in restaurants (Lamai, Thavorn, Klongthong, & Ngamkroekjoti, 2020) and bars, will account for 80.7% of the market share for coffee consumption, with at-home consumption only having a 19.3% share (Samoggia & Riedel, 2018). Thai beverage firms have a strong supply chains from upstream to downstream by implementing vertical integration strategy. Consistent with the worldwide trend, consumers in Thailand are joining the so-called 'third wave' in which specialty coffee is playing an increasingly significant role, with annual growth of 3% to 5% (Smith et al., 2019).

It was recently revealed that RTD coffee has continually been serving as another eye-catching segment, which has recorded impressive growth since 2008 until now. After 1995, one of the key success factors that rapidly helped the market succeed was the introduction of regulations by Thailand's government surrounding energy drink products. The regulation ensured that caffeine content in beverages could not exceed 50 milligrams per bottle. Unlike RTD coffee products, energy drinks can contain only up to 90 milligrams of caffeine per can (where a can is 180 milliliter). By contrast, RTD canned coffee - at 180 milliliters - offers approximately 130-150 milligrams of caffeine. As a result, many consumers have switched from drinking energy beverages to drinking RTD coffee due to its high caffeine content (Polsripradist, Tantayaporn, & Homchampa, 2016). As a consequence, RTD coffee has been distributed in all parts of Thailand. Consumers can easily purchase RTD coffee from local supermarket, stores, shops, and vending machine.

Behavioral re-intention, as a key part of the mix of motivational factors that influences consumers, is explained by the theory of planned behavior (TPB) (Ajzen, 1991). This study focuses on behavioral re-intention to drink RTD canned coffee in Thailand. In this context, behavioral re-intention is the perception where consumers in Thailand tend to experience the same coffee brand multiple times; it is also used to refer to the frequency of a

consumer selecting or repeatedly buying from the same brand many times (Woodside & Walser, 2007). Thus, behavioral re-intention is the result of customers' evaluations of product quality (Verhoef, 2003). Understanding behavioral re-intention can promote companies' knowledge of consumer shopping behaviors, which means that it provides essential information when analyzing the business plan, measuring customer loyalty, designing effective marketing strategies, and increasing sales volumes (Chelliah, Sulaiman, & Yusoff, 2010; Kwak & Cha, 2022).

In Thailand, a common behavior among consumers is to drink cold beverages. Given the country's hot climate, the growing trend in RTD coffee - which comprises bottled, canned, and other forms of packaging - has expanded steadily. Since the recent behaviors of the Thais have tended to involve moving quickly with busy and fast-changing lifestyles, RTD coffee has been another popular choice and can be brought in any convenience shops: namely, because it quickly quenches a consumer's thirst and gives a pleasant sensory experience at an affordable price (Mundel, Huddleston, & Vodermeier, 2017). As such, RTD coffee has been well accepted by Thai consumers since the product's first launch in 1993, as reflected in terms of the growth in sales.

Relatively few studies have been undertaken to investigate behavioral re-intention in the context of the RTD coffee industry (Gumilang, Yuliati, & Indrawa, 2021). In addition, the market for RTD coffee has been price competitive. Therefore, identifying why and how firms create and implement strategies to gain competitive advantages in the RTD coffee drinking market in Thailand could help to find out how to achieve a leading position in the market. Therefore, the research question for this study was established as follows: What factors affect a consumer's behavioral re-intention to use RTD coffee? Accordingly, the research objective was to determine factors influencing RTD coffee behavioral re-intention in Thailand.

As the RTD coffee market is experiencing competitive growth due to strong supply chains, this study is expected to be beneficial for executives, distributors, and marketers in food and beverages companies, as well as media agencies that plan to run integrated marketing communications for such products. In particular, the research findings can help brand owners to understand the factors that underpin the behavior of Thai consumers in Thailand. Therefore, food and beverages companies can use the outputs of this study to develop new strategic plans and improve their supply chains in order to gain more market share and consolidate their competitive advantages. The challenge in this business is not simply to help the brand appeal to new customers; alongside this, companies

must also retain existing customers, encouraging them to consume RTD canned coffee repeatedly.

2. Literature Review and Hypotheses Development

2.1. Behavioral Re-intention

Ajzen and Fishbein (1980) theory of planned behavior (TPB) identifies the constructs of subjective norms, attitude toward the behavior, perceived behavioral control, and behavioral intention as the core factors that influence individual behavior. In the case of behavioral intention, this construct is concerned with an individual's plan or their perceived likelihood of engaging in a specific behavior. By extension, behavioral re-intention, or BRI, is a construct that is concerned with the motivational factors that feed into an individual's behavior not only to engage in a particular behavior (e.g., purchasing a product or using a service) but also to re-purchase or re-use the product or service (Ajzen, 1991; Ajzen & Fishbein, 1980) and to pursue a career (Mokhlis, Nik, Nizam, Mohd, & Muslim, 2021).

As is of interest for the present research, the TPB is a viable and sensitive model that researchers can use to account for the reasons why consumers drink beverages, as well as the motivations that underpin this behavior (Kwon & Kwon, 2015; Lee, Jin, & Shin, 2018; Samoggia & Rezzaghi, 2021; Zoellner, Krzeski, Harden, Cook, Allen, & Estabrooks, 2012). As a case in point, one group of authors investigated consumer purchase behavior toward caffeinated products, reporting that behavioral intention was influenced principally by subjective norms and utilitarian drivers (Samoggia & Rezzaghi, 2021; Yu, Klongthong, Thavorn, & Ngamkroeckjoti, 2021). The research undertaken by Zoellner et al. (2012) used 11 TPB constructs to examine the consumption of beverages sweetened with sugar. The authors reported that behavioral intention was related most strongly to the consumption of such beverages.

In the present study, behavioral re-intention was selected as the dependent variable for understanding the repurchase behavior surrounding RTD canned coffee among Thai consumers. This is expected to offer insights into important motivational factors that influence consumer behavior in Thailand and enable an analysis of how consumers exhibit their behavioral re-intention.

2.2. Content Sensory Attribute Beliefs

Food and beverage designers use sensory analysis to identify consumer preferences, which involves tailoring

product profiles according to knowledge about how the human brain perceives sense information (Lawless & Heymann, 2010). Content sensory attribute beliefs, or CASB, are related to sugariness, taste, and composition, along with key functional characteristics linked to thirst-quenching, nutritional data, and ingredients (Bernués, Olaizola, & Corcoran, 2003). Interest in recent years, especially the past decade, has grown toward coffee consumption and sensory attributes (Jaimes, Torres, & Pérez-Villarreal, 2015). One research group investigated the impact of sensory attributes and receiving health information on consumers' likelihood of upgrading and their willingness to pay for pasteurized milk (Bekele, Beuing, & Ruben, 2017). Consumers who received health information were reportedly willing to purchase pasteurized milk at a premium of 11% compared to 6% among those who did not receive the information. Another study considered the domain of coffee, investigating 18 well-known Columbian coffees (Barahona, Sanmiguel, & Yang, 2020). It was found that the sensory attribute of smell had a greater influence on purchase intention compared to taste, which stresses the importance of managing scent, price, and label-package features effectively given that they are aspects of a customer's initial experience. As noted by (Wang & Yu, 2016), it is possible to use taste attributes to predict consumer behavioral re-intention based on hedonic value perceptions.

In this study, several content sensory attribute beliefs of RTD canned coffee have been identified: namely, taste, sugariness, composition, and functional characteristics of the coffee related to ingredients and nutritional facts. This study explores how Thai consumers continuously have the behavior to make a judgment when drinking coffee. Based on the happiness value, the ingredients that coffee contains may affect a consumer's perceptions of a given coffee brand. As suggested by some researchers, a consumer's pleasure - or hedonic value - may be linked to how effectively the product offers a well-blended coffee taste with thirst-quenching and refreshing benefits (Eccles, Duplessis, Dommels, & Wilkinson, 2013). Therefore, this study investigates how the content sensory attribute beliefs associated with RTD canned coffee may have a dominant influence on the behavioral re-intention to use RTD canned coffee. The findings are expected to highlight the factors that improve Thai consumers' happiness, experience, and pleasure when drinking RTD canned coffee, particularly insofar as the identified factors contribute to behavioral re-intention to drink this coffee brand. Therefore, the following hypothesis was established:

H1: Content sensory attribute beliefs of RTD canned coffee influence behavioral re-intention.

2.3. Perceived Utilitarian Value

Perceived utilitarian value, also known as PUV, refers to the evaluation an individual makes that is based on reason, expected useful practice, and utility (Chaudhuri & Holbrook, 2001). It is defined as an overall evaluation of value, quality, convenience, and value-for-money characteristics (Chen & Hu, 2010). Perceived utilitarian value refers to the rational assessment of the functionality of any kind of food product, including the coffee business, and how it can match with the quality. The functional characteristics of coffee are the ingredients and other types of nutrition that have the ability to stimulate the body to wake up or quickly give an energy boost. As such, these characteristics depict the value of refreshment utility (Maehle, Iversen, Hem, & Otnes, 2015). In a study of consumer behavior and repurchase intention, Hamdan and Paijan (2020) investigated the significance of product attributes in influencing utilitarian values. The authors reported that utilitarian values and hedonic motivation played a key role in impacting repurchase intention. Therefore, it is suggested that perceived utilitarian value can also trigger consumer behavioral re-intention to drink coffee.

In this study, perceived utilitarian value is defined as the evaluation of RTD canned coffee that a consumer would make in terms of their reasons and usefulness perceptions regarding the value, quality, convenience, and value-for-money obtained after consuming the product. Therefore, perceived utilitarian value can facilitate an evaluation of how Thai consumers perceive the beneficial characteristics of RTD canned coffee, particularly by finding how the product's selling price matches its quality, how it helps to stimulate the body to wake up, and how it gives an energy boost very quickly. Finally, with its benefits, the findings will indicate the factors that motivate Thai consumers in Thailand to use their rational assessment of perceived utilitarian value when drinking RTD canned coffee and have behavioral re-intention to drink this coffee brand. In view of these considerations, the following hypothesis was established:

H2: Perceived utilitarian value of RTD canned coffee influences behavioral re-intention.

2.4. Price Signaling

Price signaling is when firms use high prices to signal high quality to consumers, and consumers often respond to such positive price signaling (Kalita, Jagpal, & Lehmann, 2004). Consumers tend to have beliefs and judgments about product prices that influence their quality perceptions, and many consumers purchase expensive products due to their

economic status (Belk, 1988). In this study, price signaling of RTD canned coffee is based on consumer beliefs and judgments about the price that help them to draw conclusions about product qualities and demonstrate a willingness to re-consume the product. Price signaling demonstrates how consumers have beliefs and judgments about product prices. This characteristic also tends to lead to the belief that higher prices will correspond to higher levels of quality. Consumers often embrace such positive price signaling and believe that well-known brand names can offer higher quality (Kalita et al., 2004). As applied to shopping, price signaling can significantly change shopping behaviors (Nicholls, 1997). As a result, shoppers will make judgments about whether a product has a reasonable price based upon their satisfaction with its quality. Therefore, price signaling can trigger consumer behavioral re-intentions to drink RTD coffee.

In this study, price signaling of RTD canned coffee is based on consumer beliefs and judgments about price and its connection to product quality. Therefore, the research examines the question of whether the current market price is seen by consumers as representing an inexpensive brand. In addition, if RTD canned coffee can achieve higher brand positioning by increasing the price, the study would illuminate whether it could affect the purchase behavior of Thai consumers. The findings will lead to the identification of the factors that make consumers evaluate the selling price of RTD canned coffee after experiencing drinking it and may have behavioral re-intention to drink the brand's products again. Therefore, the following hypothesis was established:

H3: Price signaling of RTD canned coffee influences behavioral re-intention.

Figure 1 illustrates this study's conceptual framework for investigating the behavioral re-intention to use RTD canned coffee. The core components of the conceptual framework are content sensory attribute beliefs, perceived utilitarian value, and price signaling.

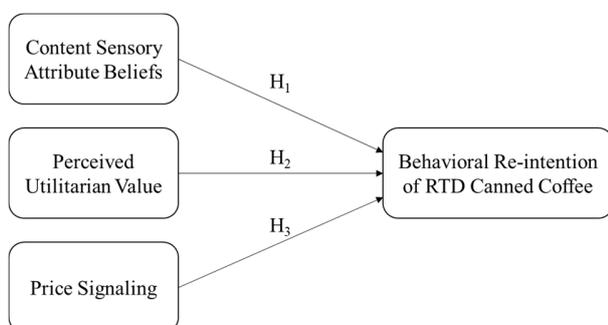


Figure 1: Conceptual Framework

3. Research Methodology

3.1. Methods

The researcher used exploratory research and a pilot study to collect data (Creswell & Clark, 2017). The purpose of the exploratory research process is to progressively narrow the scope of the research topic into a well-defined one (Zikmund, Carr, Babin, & Griffin, 2013). The main purpose of the exploratory design is to generalize qualitative research results obtained in the early stages of the investigation (i.e., an initial phase) to a larger sample gathered during a second phase. Therefore, this research integrates both qualitative and quantitative methods and, as such, can be considered a piece of mixed methods research. This is a strength because various techniques, methods, approaches, and concepts are used to answer the research question more comprehensively (Johnson & Onwuegbuzie, 2004). This type of design is especially valuable as a way to define research problems (Wesely, 2011).

The exploratory processes of mixed methods research are divided into two phases. In this research, for phase 1, in-depth qualitative interviews were undertaken using semi-structured interview guidelines based on Belk (1988); Bernués et al. (2003); Chen and Hu (2010). This enabled the researcher to understand the concept and explore independent variables affecting the behavioral re-intention of RTD canned coffee. In turn, the concepts identified in phase 1 were summarized in order to specify the independent variables for the next phase. For phase 2, a quantitative method was applied to generalize the chosen variables to test whether they were significantly related to behavioral re-intention.

For phase 1, we first defined the research questions and objectives. We designed the semi-structured interviews to determine the concept of each variable in the conceptual framework, drawing on the following researchers: Ajzen (1991), Bernués et al. (2003), Chaudhuri and Holbrook (2001), Chen and Hu (2010), Belk (1988), and Kalita et al. (2004). The target interviewees consisted of individuals who often drink RTD coffee. We coded the key factors that encourage consumers in Thailand to purchase RTD coffee. In turn, some answers were used as questions in the survey for phase 2.

For phase 2, we designed the questionnaire based on the results of the interviews and the literature review. Validity and reliability testing were conducted with 30 respondents to ensure that the findings were well interpreted. Inferential statistical analysis was performed, including correlation and linear regression, to test the hypotheses.

3.2. Sampling Design

According to Zikmund et al. (2013), a target population is a clearly defined group of individuals or communities that are experiencing a problem or need. In this study, the target population is the group of consumers in Thailand who have experience with drinking RTD canned coffee.

The considered sample size was a specific group. A screening question was established to focus on the group of consumers in Thailand with experience in drinking RTD canned coffee. The sample was classified as a non-probability sample because it was created using a convenience sampling and judgment sampling approach. The survey answers were sent to a link via Google Forms where data were stored in a password-protected electronic format and kept confidential. Therefore, all responses remained anonymous and no one could identify answers from specific respondents. An online questionnaire was also completed fully by 140 respondents.

The study's sample was distributed and evaluated by Thai people who had recently tasted RTD canned coffee. As noted before, convenience sampling and judgment sampling were used. For phase 1, we used purposive sampling to identify coffee-lovers and interview them to obtain in-depth information. For phase 2, both judgment sampling and convenience sampling with screening questions were used to distribute the questionnaire to members of the target population.

3.3. Instrument Design

A questionnaire was used as one of the research instruments for collecting the data required to analyze the dependent and independent variables. The data were collected from individuals who had recently consumed RTD canned coffee. The development of the questionnaire sought to identify relationships between content sensory attribute beliefs, perceived utilitarian value, and price signaling, thereby illuminating the determining factors that influence behavioral re-intention. The questionnaire design consisted of three parts: first, screening questions to identify whether the respondents had experience drinking RTD canned coffee; second, general questions to collect demographic information; and third, questions to measure the dependent and independent variables.

For part 1 of the questionnaire, three screening questions were used to find suitable respondents. The questions were designed to determine whether a given respondent had previously consumed an RTD canned coffee product. If a respondent had experienced drinking coffee, they could continue with the questionnaire; otherwise, the questionnaire would end. For part 2, the questionnaire was designed to collect information relating

to each respondent's demographic variables and the nature of the RTD coffee respondents. The demographic information obtained from this questionnaire related to the participants' gender, age, income per month, occupation, and experience in RTD canned coffee drinking.

For part 3 of the questionnaire, 17 items were developed based on the conceptual framework, where each item was measured on a four-point Likert scale (ranging from 1: strongly disagree to 4: strongly agree). There are four different formative structures and content for the questions as follows: behavioral re-intention (BRI) - 4 items based on Ajzen (1991); content sensory attribute beliefs (CSAB) - 7 items based on Bernués et al. (2003); perceived utilitarian value (PUV) - 3 items based on Chaudhuri and Holbrook (2001); Chen and Hu (2010); and price signaling (PS) - 3 items based on Belk (1988); Kalita et al. (2004). A pilot panel of 30 respondents was adopted to test the validity and reliability of the questionnaire.

In this study, Cronbach's alpha was applied to test the questions for each variable - namely, BRI, CSAB, PUV, and PS - for reliability testing. The alpha test is expected to yield a value that is greater than equal to 0.6, which means that the variables are reliable and consistent (Bizarrias, Cucato, Strehlau, Ferreira, & Silva, 2019). In such cases, the questionnaires are considered viable as data collection instruments (Sekaran & Bougie, 2016). After the alpha test, minor improvements and revisions were made to the questionnaires to ensure that the constructs were well-understood, clearly stated, and captured the key factors. As shown in Table 1, the results of Cronbach's alpha test for every question and every variable were greater than 0.6. Therefore, the questions can be regarded as reliable to apply because the tool for collecting research data is acceptable.

Table 1: Summary of Reliability Scores using Cronbach's Alpha Test

Variables	No. of Items	Cronbach's Alpha
Behavioral re-intention (BRI)	4	0.773
Content sensory attribute beliefs (CSAB)	7	0.724
Perceived utilitarian value (PUV)	3	0.675
Price signaling (PS)	3	0.721

3.4. Data Analysis

A parametric test was used to analyze the relationship between the dependent and independent variables because of the distribution of the data collected. In particular, data were obtained using a questionnaire that contained a variety of information related to the research. The Statistical Analysis System (SAS) was used to analyze the

relationships between the variables and test and interpret the hypotheses. Before further analysis, the means and the standard deviations (SD) were calculated and summarized for each question and each variable Table 2. Following this, Pearson's correlation coefficient and multiple linear regression (MLR) were used.

Pearson's correlation coefficient is also referred to as the linear product-moment correlation. To measure correlation, it is preferable to use the linear product-moment correlation coefficient, which identifies the strength of the relationship (expressed as *r*). The coefficient *r* lies between -1 and 1, and if the dependent variable increases while the independent variable increases, it can be concluded that there is a positive relationship between the variables. Otherwise, if the dependent variable increases while the independent variable decreases, the researcher should conclude that there is a negative relationship between the variables (Hauke & Kossowski, 2011).

A simple linear regression line has an equation of the following form: $Y = a + bX$. In this equation, X is the explanatory variable, Y is the dependent variable, b is the slope of the line, and a is the intercept (i.e., the value of y when x = 0). Multiple linear regression (MLR) uses several X-variables and attempts to model the relationship between variables by fitting a linear equation to the observed data (Serra, Lemos, & Matins, 2021). One variable is considered to be an explanatory variable and the other is considered a dependent variable. Before attempting to fit a linear model to the observed data, a modeler should first determine whether there is a relationship between the variables of interest. This does not necessarily imply that one variable causes the other, but that there is some significant association between the two variables. For instance, scatterplots are useful when determining the strength of the relationship between two variables. If there is no association between the proposed explanatory and dependent variables (i.e., the scatterplot does not indicate any increasing or decreasing trends), then fitting a linear regression model to the data probably will not provide a useful model.

A valuable numerical measure of association between two variables is the correlation coefficient. The correlation coefficient is a value between -1 and 1, which indicates the strength of the association of the two variables in the observed data.

Table 2: Summary of Questionnaire

Variables	Questions	Mean	SD
Content sensory attribute beliefs (CSAB)	1. RTD canned coffee has a real strong coffee taste.	2.17	0.667
	2. RTD canned coffee has a well-blended taste.	2.58	0.759

	3. RTD canned coffee has proportionately mixed milk and coffee.	2.44	0.702
	4. The sugariness of RTD canned coffee is fairness.	2.80	0.875
	5. The taste of RTD canned coffee is consistent.	2.31	0.635
	6. RTD canned coffee has a coffee aroma.	2.37	0.661
	7. RTD canned coffee's color appears the same as freshly brewed coffee.	2.61	0.723
Perceived utilitarian value (PUV)	1. RTD canned coffee offers a suitable price relative to its quality.	2.10	0.610
	2. RTD canned coffee stimulates the body to wake up.	2.16	0.745
	3. RTD canned coffee gives a benefit of an energy boost very quickly.	2.36	0.761
Price signaling (PS)	1. RTD canned coffee, at THB 10-20 a can, is seen as an inexpensive brand.	2.99	0.963
	2. Buying RTD canned coffee at a higher price (above 20 THB) is still worth it for me.	2.10	0.660
	3. Buying RTD canned coffee makes my image represent strength and energy.	2.82	0.722
Behavioral re-intention (BRI)	1. I definitely intend to drink RTD canned coffee again.	2.58	0.669
	2. I would absolutely consider re-drinking RTD canned coffee.	2.55	0.615
	3. I definitely expect my behavioral re-intention to drink RTD canned coffee again in the very near future to be high.	2.71	0.789
	4. I would absolutely plan to find and use RTD canned coffee again.	2.86	0.883

4. Results

4.1. Interview Results

This section reports on the qualitative findings from the in-depth interviews held with participants, the purpose of which was to identify independent variables for the later quantitative study. Table 3 shows examples of interview quotes and the summarized abstract concept for further exploration in the quantitative analysis.

Table 3: Interview Results

Semi-structured Interview Questions	Examples of Interview Quotes	Abstract Concept
1. What do you like about RTD canned coffee? Why?	<ul style="list-style-type: none"> Well-blended taste and strong Good, strong smell of coffee and the taste is well-blended in terms of milk and coffee. 	Taste, smell, aroma, coffee beans, portion of milk, and sugar in coffee.
2. What factors would cause you to re-drink RTD canned coffee?	<ul style="list-style-type: none"> Fresh, up, and awake body during rush hour. Drinking canned coffee boosts my energy. The price is inexpensive. Can be found everywhere, even in remote areas. 	Taste, utilitarian value, price signaling, and distribution.
3. Do you drink RTD canned coffee and will you drink it again?	<ul style="list-style-type: none"> Yes, and I will drink it again. 	Re-intention.

4.2. Demographic Information

Table 4 summarizes the respondents' demographic profiles. Out of the 140 respondents, 67 women (52.14%) answered the questionnaires. The highest age level of the respondents was 31-35 years old ($n = 44$, 31.43%). Regarding income level, 45 respondents (32.14%) who earned more than 50,000 THB per month represented the largest group. Lastly, most respondents worked in private companies ($n = 74$, 52.86%).

Table 4: Summary of Respondents' Demographic Profiles

Parameter	Frequency	Percentage (%)
Gender		
Male	67	47.89
Female	73	52.14
Age		
20-25 years	8	5.71
26-30 years	33	23.57
31-35 years	44	31.43
36-40 years	15	10.71
41-45 years	29	20.71
46-50 years	8	5.71
Over 50 years	3	2.14
Income (in Thai Baht)		
Less than 15,000 THB	11	7.86
15,001-25,000 THB	23	16.43
25,001-35,000 THB	19	13.57
35,001-50,000 THB	42	30.00
More than 50,000 THB	45	32.14

Occupation		
Civil officer	27	19.29
State enterprise officer	8	5.71
Private company employee	74	52.86
Business owner	31	22.14

4.3. Hypothesis Testing

The summary of hypothesis test results in Table 5 shows the following significant values: first, between content sensory attribute beliefs (CSAB) and behavioral re-intention (BRI); second, between perceived utilitarian value (PUV) and BRI; and third, between price signaling (PS) and BRI. In each case, the p-values were less than 0.0001, which is less than the significance level of 0.01. This indicates a positive and statistically significant relationship between each independent variable (CSAB, PUV, and PS) and BRI at the 0.01 significance level. As a result, all null hypotheses are rejected, which implies that CSAB, PUV, and PS can positively affect BRI with respect to RTD canned coffee.

The correlation coefficient r measures the strength and direction of the linear relationship between two variables. The correlation coefficient can range from -1 to $+1$, with -1 indicating a perfect negative correlation, $+1$ indicating a perfect positive correlation, and 0 indicating no correlation at all. Table 5 also shows the correlation coefficients for each set of variables.

Table 5: The Summary of Hypothesis Testing

Hypothesis	Correlation (r)	p-value	Statistical Result	Explanation
$H_{10}: r = 0$ $H_{1a}: r \neq 0$	0.621	< .0001	Rejected H_{10}	There is a moderate and positive relationship (38.61%) between CSAB and BRI.
$H_{20}: r = 0$ $H_{2a}: r \neq 0$	0.459	< .0001	Rejected H_{20}	There is a moderate and positive relationship (21.12%) between PUV and BRI.
$H_{30}: r = 0$ $H_{3a}: r \neq 0$	0.327	< .0001	Rejected H_{30}	There is a moderate and positive relationship (10.66%) between PS and BRI.

Note: p-value at 0.05 significance level.

4.4. Multiple Linear Regression

Multiple linear regression is a statistical technique in which many variables are used to determine which of two or more predictor variables are highly related. The variance inflation (VIF) level, tolerance, and eigenvalue are described as the factors that researchers should focus on (O'brien, 2007).

4.4.1. Multicollinearity Analysis

Multicollinearity analysis is based on the idea that two or more predictor variables in a multiple regression model are highly correlated. In particular, multicollinearity analysis reveals whether there is one predictor variable that can be linearly forecasted from the others (Farrar & Glauber, 2005).

As shown in Table 6, the tolerance levels of CSAB, PUV, and PS are equal to 0.666, 0.669, and 0.728, respectively, all of which are greater than 0.1. In addition, the respective VIF values for these variables are 1.502, 1.493, and 1.374, all of which are well below 5.0. In this study, the results of tolerance and VIF indicate that there is no multicollinearity effect with the data, which means that the predictor variables are not highly correlated. In addition, eigenvalues that are close to zero, as well as large corresponding condition numbers, suggest multicollinearity (Douglas, Elizabeth, & Vining, 2012), which is notable because no eigenvalues or condition index associations in this research match this description.

Table 6: Analysis of Collinearity Statistics

Variable	DF	Parameter Estimate	Standard Error	t-value	Pr > t	Tolerance	VIF
Intercept	1	0.607	0.242	2.51	0.013	-	-
CSAB	1	0.661	0.102	6.48	<.0001	0.666	1.502
PUV	1	0.204	0.092	2.22	0.028	0.669	1.493
PS	1	-0.005	0.085	-0.06	0.952	0.728	1.374

Note: The dependent variable is behavioral re-intention (BRI). DF refers to degrees of freedom.

4.4.2. Regression Analysis

Table 7 shows the results of the predictor variables in the simultaneous backward multiple regression analysis. The adjusted R-square (R^2) value explains 39.13% of the variance in the predictor variables. The predictor variables - namely, CSAB, PUV, and PS - reliably predict the dependent variable of BRI, as shown in the model.

The R-square value in a multiple regression represents the explained variance that can be contributed to all the predictors in a progression. As such, R-square reflects explanatory power. In Table 7, the model summary shows

an R-square value of 0.4045, which means that it explains 40.45% of the variance in BRI, the dependent variable. It is the root mean square error (RMSE) divided by the mean of the dependent variable and multiplied by 100. Coefficient variance in this study is $(0.502/2.677) \times 100 = 18.756$.

Table 7: Summary of Overall Model Fit

Parameter	Value
RMSE	0.502
Dependent mean	2.677
Coefficient variable	18.756
R-square	0.405
Adjusted R-square	0.393

5. Discussion

In this section, a discussion of the results is presented together with an analysis of the implications for practitioners. In particular, these implications can be used as a guideline for new product development regarding RTD canned coffee.

First, many consumers in Thailand have responded positively to the sugar portion mixed into coffee, which is a key factor that has encouraged them to re-drink the beverage. However, in this research, the mean value for content sensory attribute beliefs was 2.80 out of 4.00, which suggests that most of the respondents agreed rather than disagreed that the sugariness of RTD canned coffee is fair. They may use coffee for drinking and mainly consume it for its taste. Moreover, the coefficient from the multiple linear regression (0.661, see Table 6) revealed that content sensory attribute beliefs constituted the strongest factor influencing behavioral re-intention. Regarding Wang and Yu (2016) findings, content sensory attribute beliefs were identified as one of the most significant determinants of repurchase intention. In other words, consumer perceptions are strongly influenced by beliefs concerning the ingredients used in RTD canned coffee. Therefore, to appeal to consumers, companies that specialize in RTD canned coffee should prioritize the use of high-quality ingredients and list them clearly on the product label, thereby promoting the economic and functional benefits of using their products. Specifically, in this study of the intentional relationship between content sensory attribute beliefs and RTD canned coffee behavioral re-intention, it has been found that the factor of sugariness does not encourage many respondents to find coffee for re-drinking.

Second, most respondents feel that the value of RTD canned coffee is that it gives a quick energy boost, which encouraged them to re-drink it. However, the mean for perceived utilitarian value was 2.36 out of 4.00, and the coefficient from the multiple linear regression was 0.204.

These results imply that most respondents agreed that RTD canned coffee gives a benefit of an energy boost very quickly. As such, they drink the product because it helps to boost energy for work. In Wang and Yu (2016) research, the authors showed that perceived utilitarian value is a positive and significant determinant of repurchase intention. Hence, to apply the finding in relation to the current study of the intentional relationship between perceived utilitarian value and behavioral re-intention, it was found that many respondents perceived that RTD canned coffee does give a benefit of energy boost very quickly, which influenced the respondents to find RTD canned coffee and reuse it.

Lastly, most respondents feel the price of RTD canned coffee is cheap. The mean value for price signaling was 2.99, which indicates that most respondents viewed the price of RTD canned coffee as cheap (i.e., the offering of an inexpensive brand). However, the result from the multiple linear regression revealed that the coefficient was negative (-0.005), meaning that increasing the price may influence the decision to repurchase RTD canned coffee. Specifically, the value of the coefficient is small compared to other factors. This implies that it is possible to increase the price by re-positioning RTD canned coffee as a premium product, which would influence consumer perceptions according to the effects of price signaling. The research of Shannon and Mandhachitara (2008) showed that price signaling and innovativeness have negative relationships with shopping behavior. Hence, in relation to this study of the intentional relationship between price signaling and behavioral re-intention, it is found that price has a negative and small effect on repurchase intention.

6. Implications and Conclusions

The statistical analysis undertaken in this research indicates that despite the fact that coffee consumers in Thailand have various choices for coffee, relatively few brands have sought to sell coffee in the country. However, it is notable that the demographic analysis in this study shows that more women completed the questionnaire and that most respondents were aged 31-35 years. The demographic analysis also found that most respondents were in the income range of earning more than 50,000 THB per month. Therefore, based on the economic situation in Thailand, this may imply that most of the respondents are not "blue-collar workers." Blue-collar workers are defined as workers who exert strength or use physical skills in their jobs (Azevedo, Chiavegato, Carvalho, Braz, Nunes, & Padula, 2021). This group, in general, earns THB 300-400 a day, whereas "white-collar workers" - which refers to the ranks of office and professional workers - undertake jobs that do not involve physical labor (Azevedo et al., 2021).

As a result, respondents agreed with the notion that sugariness is fair, that RTD canned coffee gives the benefit of an energy boost very quickly, and the price is seen as an inexpensive brand. However, white-collar workers may not directly like its taste or its wake-up benefits. Instead, they may find that RTD canned coffee has an acceptable taste but may prefer other coffee types such as made-to-order coffee. Furthermore, purchasing Birdy coffee at a current price is inexpensive because the respondents can afford the coffee price but may prefer higher-priced coffee that offers better quality. In addition, the distribution channels for RTD coffee should be prompted, including in rural areas, because the beverage is one of the favorites among residents of Thailand. The distribution of RTD coffee to mini supermarkets or local stores can penetrate such drinks and promote this market.

Regarding the above-mentioned points, the research and development (R&D) departments within RTD canned coffee companies can use this as an opportunity to develop recipes that accommodate new coffee tastes or new product lines, as well as develop RTD coffee to make it show a clear benefit in terms of energizing the body. Moreover, well-located distribution channels are the strategy to promote new coffee products in terms of distributing, marketing, and purchasing from consumers. With respect to this study's results, white-collar workers seem to expect more quality from RTD coffee without caring much if its price increases. However, although current RTD canned coffee is neutrally accepted in some respects, there are several improvements to discuss further.

First, based on the analysis of content sensory attribute beliefs, the statement that received the lowest mean score in the questionnaire was "RTD canned coffee has a real strong coffee taste." This may imply that most consumers in Thailand prefer a coffee portion with a stronger taste and that this is a factor that would influence their re-intention to use the product. Therefore, this result may prompt R&D departments to consider the genuine demand for strong coffee taste. At the same time, further research into content sensory beliefs in strong black RTD coffee can be conducted more thoroughly. Different demographic profiles of consumers such as locations and ages may have an effect on tastes, thus Thai food and beverage (F&B) firms should distribute and allocate the amount of various RTD coffee to match with the demand in each sector.

Second, the statement on the questionnaire that received the lowest mean score for perceived utilitarian value was "RTD canned coffee offers a suitable price relative to its quality." This result may imply that most consumers would like leading F&B companies to re-consider product quality and offer suitable prices, either to improve the product's standards or offer a lower price, in order to encourage them to re-purchase the product. However, a new trend of

luxurious or trendy coffee shops can target different types of consumers which is apart from RTD canned coffee. Owners of the shops should analyze and select the a suitable location by mapping the identity of the shop and the selling price.

Finally, the statement on the questionnaire that received the lowest mean score for price signaling was “Buying RTD canned coffee at a higher price above 20 THB is still worth it for me.” This result may indicate that most consumers believe that F&B companies should not consider increasing product prices because competitors are also offering the same price on the market. The cost and inventory management in terms of effective supply chains and distribution can help the firms to have lower costs, thereby higher margins for this competitive business.

In terms of academic contributions, using the theory of planned behavior (TPB) as the underpinning theoretical framework, this study hypothesized that behavioral re-intention to purchase RTD coffee is influenced by the variables of the TPB (i.e., attitude, intention, and behavior), as well as additional variables. Therefore, this study is a pioneering attempt to test the applicability of the TPB to predict behavioral re-intention in the RTD coffee market, specifically by exploring the variables of content sensory attribute beliefs, perceived utilitarian value, and price signaling. Furthermore, the findings are expected to serve as a basis for future work in exploring the details of the sub-variables in this field.

In terms of practical contribution, this study’s findings can help food and beverage companies to develop or launch new coffee product lines to gain more market share. Both marketing department and operations department (including supply chains) can utilize the findings to improve the operational excellence by exploring ways to distribute products effectively and targeting consumers in different locations. The findings can also help to create integrated marketing communications to build brand awareness.

7. Limitations and Future Research

Despite this study’s contributions, there are a few limitations to acknowledge. First, the research focuses specifically on Thai individuals who drink RTD canned coffee, so it is limited in not covering other types of coffee (e.g., made-to-order coffee). To verify consumer perceptions of other coffee beverages, it is suggested that future research can assess the proposed model by exploring other types of coffee. Second, owing to this study’s use of a cross-sectional time horizon for data collection, it has only generated results that illuminate the associations between variables.

Therefore, future studies should use an experimental or longitudinal design to investigate the causal relationships between variables over time. Third, since content sensory attribute beliefs show the strongest impact on behavioral re-intention, future researchers may investigate each RTD coffee taste more deeply. This factor could help to determine which RTD coffee’s stock-keeping unit (SKU) has the potential to become another flagship product in the coffee series. Finally, the statistical results of this study show an R-square value of 40.45%, and so future research can explore the remaining 60% of the variance by investigating other variables that could affect behavioral re-intention to use RTD canned coffee (e.g., packaging design, distribution channels, product image, product presenter, and subjective norms).

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