PURCHASING BEHAVIOR OF INDUSTRIAL EMPLOYEES FOR FRAGRANCE PRODUCTS IN OM NOI INDUSTRIAL ESTATE, SAMUT-SAKHON PROVINCE

PRACHYA SATHIENSAMRIT

MASTER OF SCIENCE
IN
COSMETIC SCIENCE

SCHOOL OF COSMETIC SCIENCE
MAE FAH LUANG UNIVERSITY

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ACKNOWLEDGEMENTS

This independent study was a product done with great help from my advisor and co-advisor, Lecturer Dr. Natthawut Thitipramote and Lecturer Dr. Nont Thitilertdecha. I would like to express my very great appreciation to them for giving guidance, suggestions, and patience throughout the project. I wish to thank also the Assoc. Prof. Dr. Panvipa Krisdaphong and Lecturer Dr. Phanuphong Chaiwut for the honor of being the chairperson and the examiner of my work. Their support and genuine feedbacks have assisted my study greatly.

I would also like to extend my thanks to the faculties and staffs of the School of Cosmetic Science at Mae Fah Luang University for valuable knowledge in the field of cosmetic science.

Finally, I wish to thank my parents for their support and encouragement throughout my study and research at Mae Fah Luang University.

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Independent Study Title	Purchasing Behavior of Industrial Employees for Fragrance Products in Om Noi Industrial Estate, Samut-Sakhon Province
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ABSTRACT

This independent study explored into the social and economical characteristics of a sampled population group of industrial employees in Om Noi Industrial Estate, Samut-Sakhon Province. They were a good representation of the labor forces in Thailand. Recent increased of minimum wage by the government increased the interests for market penetrators, because now the highest population number group has higher purchasing powers in their hands. Research aimed to analyze the purchasing behavior of this group for fragrance products. This included exploration into their usage behaviors of fragrance products and rated their preferences in terms of product properties and interests. Respondents were randomly selected from the area and were asked to answer a questionnaire. In total, 420 respondents answered and data collected were analyzed statistically by SPSS program. Respondents were mostly females (71.4%) aging from 21 to 25 years old (24.8%). Almost all of the respondents were employed (94.8%) as production workers (43.6%) in an industry. Food and beverages were the most popular industry in the area (32.9%), followed by textile and garments (18.1%). Respondents have decent education level as many of them graduated from a university or higher (36%). Half of the populations were single

(50.7%) and almost half were married (40.0%). Households monthly income ranges were around 10,001 to 13,000 (25.7%) and 13,001 to 15,000 (25.2%) baht. The results generated can be an instrument used by potential product developers to create a product specifically for the targeted group. In general, the fragrance product must consider the attractiveness and long lasting scents and packages design. It should invest in marketing costs of the product, rather than focus on the top quality raw materials. The sales locations must be clean, tidy, and have a range of product selections available for purchase. The promotion that worked best was giving out free samples of the product. Having a good sales representative also helps. Gender has less effect on the marketing factors. However, age groups were more important. Older and younger populations have different purchasing behavior. Product developer should use information from this study along with other related research in formulating their product, designing sales locations strategically, create promotions, and set the right price.

Keywords: Cosmetics/Fragrance product/Industrial employee/Om Noi/Purchasing behavior/Samut-Sakhon

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Our personality defines our character, and often does an attractive character justify an individual's opportunities in life. Human observe many things when judging a stranger, a new friend, or a new colleague. We observe their actions in different situations including the way they speak, the way they move, eat, walk and etc. Apart from these actions, their scent also represent them and is one of the main sensory that others use to judge their character. It gave an immediate representation of a person. Thus, the fragrance market existed with varieties of scents originated from the top, middle, and base notes combination to create a unique smell to fit every kind of personalities and characters. Fragrance products respond to human demand of individuality and gave good impression of the individual at an instance.

In the past, people who use fragrance were in the upper class income range. They demand to differentiate themselves from others and choose products and assessories that were expensive and tailored to them. Clothings, cars, and other assessories gave these upper class group that unique presence. Fragrance products in addition, gave them a special feeling of confidence. To smell differently from others and to have confidence during social gatherings is truly an amazing feeling to these upper class group. Thus, the prices of fragrance products were extremely expensive.

But presently, fragrance products were not as expensive as they were. They were widely use by all income range population. On April 1st, 2012, Thailand's minimum wage policy raised the minimum wage up by 40% to 300 baht per day, which also significantly increased the income of the lower class population and made

the lower income group a more interesting market to penetrate (Economic and Social Commission for Asia and the Pacific [ESCAP], 2013). The fragrance market is no doubt growing as market opportunity expands and consumers' purchasing power increases. Thus, this research aimed to study the purchasing behavior of the lower income group for perfumes and fragrances, specifically in workers working at factories in Om Noi, Krathumbaan District. Om Noi municipal, Krathumbaan district has a population of 52,234 (2011) and is one of the manufacturing zones in Thailand with factories from many industires.

Thailand is one of the major manufacturing countries in South East Asia with 2012's GDP of $3.65 billion USD and GDP growth rate of 6.4%. Thailand has a population of about 67 million people. Of which, 55.05 million aged 15 years and over, and of which 39.75 million were in the labor force or available for work (National Statistical Office, 2013). Labor forces were employed by multinational companies and small and medium enterprises (SMEs). They earn a minimum wage plus other incentives depending on their skill sets and work experiences. Given that they are the majority of the population with income, they represent a very large market for domestic products.

1.2 Objective

1.2.1 Study the social and economical characteristics of industrial employees in Om Noi Industrial Estate, Krathumbaan District – Samut-Sakhon Province.

1.2.2 Study industrial employees usage behavior of fragrance products.

1.2.3 Study factors affecting purchase decision of industrial employees when selecting fragrance products.

1.2.4 Study relationships between marketing mix factors affecting industrial employees' purchase decision of fragrance products.

1.2.5 Identify statistical relationships between marketing mix factors and the social characteristics of industrial employees and to provide a tool for potential product developers to create product with accurate properties for the targeted market.

1.2.6 Identify best marketing strategies to penetrate industrial employees' market.

1.3 Benefit

1.3.1 Provide general information about the social and economical characteristics of industrial employees in Samut-Sakhon for future researches.

1.3.2 Provide purchasing behaviors for fragrance products of the lower income market.

1.3.3 Pinpoint key factors affecting the purchasing decision of the target group.

1.3.4 Identify useful information for creating fragrance products aimed to target the industrial workers group.

1.3.5 Provide tools for product developers and investors to create products specifically for the industrial worker group.

1.4 Research Scope

1.4.1 Study purchasing behavior of industrial employees for fragrance products in Om Noi Industrial Estate, Krathumbaan District – Samut-Sakhon Province.

1.4.2 Randomly collect data from 420 populations in the area through questionnaires.

1.4.3 Analyze data collected using SPSS statistical program and study relationships between factors affecting purchase decision and characteristics of the population.

1.4.4 Conclude information and suggest future research possibilities.

1.5 Hypothesis

Industrial Employees differ in age, gender, occupation, and income. Thus, their preferences when choosing their preferred fragrance products should differ significantly.

The independent variables expected to be most significant were age, gender, and occupation. The dependent variables would be product, price, place/location, promotion factors that affect the purchase decision of the industrial employees. Thus, we should conclude different choices between males and females and also between all age group, young and old populations.

CHAPTER 2

LITERATURE REVIEWS

This independent study examines the purchasing behavior of industrial employees for fragrance products in Om Noi Industrial Estate, Krathumbaan District – Samut-Sakhon Province. Previous literatures, studies, and useful statements were gathered here as tools for future analysis.

2.1 Perfumes, Fragrances and Scents

People's use of scents, aromas and fragrances has been used for many centuries, and when and why people started to prepare and use them seems lost to us. However, over the years, evidence has been found through archeological findings, as well as texts written by our ancestors, that has shown just how aromas were being used. In the very early civilizations, scented flowers and herbs were used by people to worship the Gods, and when burned, some of these plants would release strong aromas. Such scented fires became part of many religious rituals. In fact, you will find that many religions still use scented fires today.

Both the Assyrian's and Egyptians used scented oils. Because of this, the demand for the raw materials needed to produce both fragrances and remedies led to the discovering of new ways of extracting scents from the plants they used. Such techniques as pressing, decoction, pulverization and maceration were developed and mastered by both the Assyrian's and the Egyptians. They even made attempts at trying to produce essential oils by distillation.

Slowly, the use of perfumes spread to Greece, where not only were they used in religious ceremonies, but also for personal purposes as well. When the Romans saw

what the Greeks were doing, they began to use fragrances even more lavishly. There are many manuscripts around describing the herbs which they brought from all over the world to produce the fragrances they used.

Nonetheless, the role of fragrance in successful consumer products cannot be underestimated. Fragrances are instantly – and mostly unconsciously – connected to emotions, mood, and memory which subconsciously affect consumer purchase behavior. Since fragrance can be a powerful (and perhaps unconscious) motivator for sales, manufacturers of consumer product goods intentionally connect the product's fragrance with the brand's market position. (Wilkie, 1995)

However, as the Roman Empire fell, so the use of aromas for personal use began to decline. However, during the Middle Ages, perfumes again were being used only in churches in Europe for religious ceremonies and to cover the stench caused by the many diseases which abounded at this time.

Then when trade with the Orient was reestablished at the beginning of the 13th Century, exotic flowers, herbs and spices became more readily available around Europe. Venice quickly became the center of the perfume trade. It was not long before perfumery soon spread to other European countries. The perfume trade then developed even further, as those returning from the crusades reintroduced perfume for personal use.

However by the late 18th Century, synthetic material fragrances were being produced, and this was the beginning of perfumery in the modern age. Thus with the introduction of synthetics, perfumes would no longer be exclusively used by the rich and famous. Also, because synthetics were now being used to produce perfumes, they could now be made on a much larger scale, although naturals were still also being used to help soften the synthetics. (Tipnut, 2007)

2.2 Thai Labor Force Survey

The results of Labor Force Survey in July 2013 showed that there are population, aged 15 years and over, of about 55.05 million persons. Of these 39.75 million were in the labor force or available for work (39.36 million were employed,

0.36 million were unemployed and 0.03 million were seasonally inactive labor force), while 15.30 million were not in the labor force or not available for work, such as housewives, students or elderly. (National Statistical Office, 2013)

Samut-Sakorn has three main districts: Muang Samut-Sakorn, Krathumbaan, and Baan Plaew. It has 458,061 population that are 15 years and over. Out of this 371,930 were in the labor force. This means about 82% of the population aged 15 years and over were in the labor force (371,930 total labor forces per 458,061 population 15 years and over). Counting also, the unemployment rate at this province was only 0.65% (2,425 unemployed per 371,930 total labor forces). Meaning most of the population were employed and earn income. Looking at the poverty index, industrial employees in Om Noi industrial estate, a city within Samut-Sakorn province, had an average income close to the average income of workers of the province (National Statistical Office, 2013). Here, the proportion of people living in poverty was the lowest in Samut-Sakorn. Thus, observing the industrial workers in Om Noi should give a good representation of the lower-middle income class purchasing behavior for fragrance products.

2.3 Thailand Minimum Wage Increase Policy

The multi-year simulation exercise of ESCAP, based on the actual data for Thailand, models the impact of minimum wage increased on employment and real GDP growth for the period of 2012 to 2017. In Thailand, the previous province-level minimum wages has been successively replaced by a single minimum wage of THB300 per day for the entire nation in 2012 and 2013 – corresponding to nominal increases of 40% or more, depending on the province. According to the Government official figures, the labor supply grew by 1.4% in 2012, 0.5% faster than growth of the working-age population.

Moreover, minimum wages have many benefits apart from boosting workers' income. Increased incomes for workers boost consumption demand, while increased labour costs trigger new economic activities with higher value-added content. Minimum wages thus improve the competitiveness of an economy by raising

knowledge-based skill contents of workers in preparation for increased international labor competition. Such wage policies also contribute to reduction of income inequality by redistributing income towards low wage workers as well as lower labor market inequality. This, in turn, improves workers' morale and reduces the risk of industrial unrest, which ultimately increases productivity and reduces worker turnover, resulting in a lower cost of production and allowing firms to absorb the rise in unit labor cost. (ESCAP, 2013)

2.4 The Fragrance Wheel

The Fragrance Wheel allows you to uncover the true character of fragrances independent of brand and marketing campaigns. It also lets you see at a glance the relationship among different fragrances, thus instantly revealing preferences and market trends. We start our exploration of the wheel with the citrus family, which captures the zest, and vibrancy that we so often associate with citrus fruit. This family also permits a glimpse into perfume history, as the gradual addition of more complex citrus and herbal notes has elevated scents in this family beyond the realm of lightly scented waters and into real citrus fragrances.

Layer the structure of the citrus family with green notes reminiscent of crushed leaves and stems and you end up with fragrances from the green family. Their elegant form and spirited character make this family fascinating. Modern green accords lean a radiant and effervescent quality to the green family.

The water family is characterized by marine and aquatic notes. If the green family is marked by an assertive quality, the water family offers the lively freshness of air after a thunderstorm as well as the purity of sea air.

The most popular of all families, the floral family captures a wide range of fragrances, from crystalline etudes devoted to a single flower to complex symphonies capturing lush bouquets.

By adding the effervescent sparkle of aldehydes (aroma-materials naturally found in citrus and rose oils), as well as the velvety softness of iris or vanilla, the

Floral become Soft Floral. The freshness of the blooming flowers is now rendered more impressionistic and abstract, taking familiar scents into a new realm.

In turn, Soft Floral is transformed into floral oriental by the presence of weed spices and orange blossom. These notes make the compositions richer and deeper.

When the voluptuous warmth of amber and incense is added to floral oriental fragrances, we reach the soft oriental family. The fragrances in this family smolder rather than glitter. Their character is velvety and warm, deeper than that of floral oriental, although not as weed and heavy as that of oriental.

Exotic and evocative, the oriental family plays upon sensual oriental resins, sumptuously rich flowers, warm vanilla and plush musk. Dramatic and complex, the fragrances in this family have an unforgettable aura.

The marriage between the spicy and resinous notes of the oriental family with notes of sandalwood and patchouli produce the woody oriental family. Woods play the dominant role here, with the characteristic oriental notes lending an opulent touch.

The woods family brings the woody notes into the limelight. They are the divas that take the center stage in this family, with other notes serving merely as accents.

Oak moss and amber, along with citrus, floral, woody and musky notes make for one of the most complex fragrance families, mossy woods. The fragrances in this family have a character that is polished and undeniably sensual, dramatic and restrained, warm and cool. These juxtapositions make the mossy woods family quite striking.

Cedar, tobacco, burnt wood and leather give the mossy woods family a new form, that of dry woods. With the more assertive notes playing the important role, the family's character changes to become deeper, drier and more somber. The floral accent of lavender gives a special character to the vivid aromatic fougere family. A universal family, it also includes elements of the spicy sweetness of a Floral Oriental, the amber richness of an oriental, and the mossy wood notes of oak moss and sandalwood.

The addition of citrus motes is an important one, as the tartness lends a special radiance and effervescence. Increase the proportion of citrus notes dramatically, and

you end up in the citrus family, which concludes our journey around the Fragrance Wheel. (Michael, 2011)

2.5 Fragrances and Personalities

Floral are flirtaceous and sensual. They love a good romance, and strive to attract others who will give them this. They crave attention, power, and status, and will either achieve it for themselves or attach themselves to someone with such qualities. Floral tend to be fashionable, attractive, and fun-loving. They follow the trends, keep up with appearances, and thrive on being desirable. Although they can appear superficial, they are actually quite sensitive and soft-hearted. They are often the object of jealousy, and much misunderstood.

Fruities are self-aware and emotionally balanced. They are handworkers, striving to please those around them, and taking great pleasure in a job well done. Although industrious in work, fruities also have a very playful and benevolent side. Although fruities tend to have a small number of those they call true friends, this is because they devote so much to those in their inner circle. Fruities are the type who keeps friends for life. They are often the first to offer support and encouragement when needed.

Herbies are homebodies and proud of it. They love their family, and find fulfillment in taking care of those closest to them. Herbies are the salt of the earth. They work hard to bring out the best in everyone and everything around them. Solid and dependable, herbies are quick to offer a helping hand to neighbors. Herbies tend to live very calm and uneventful lives, and are happy to do so. However, they love hearing about the exploits of others, and thrive on knowing what's going on in other peoples' lives.

Leafies are the intellectuals of the world. They have a deep love for learning, and are most at home in a research lab, classroom, or library. Introspective, solitary, and detached, leafies can be idealistic and politically extremist. Leafies thrive on a good debate, and are constantly expanding their horizon. Often quick to see the broader perspective, leafies are good at stepping back and taking in the big picture,

making connections between seemingly unrelated events and facts. Leafies are innovative, whether their medium is ideas or inventions.

Resinies are moral stalwarts, and proud of it. They work hard to maintain a spiritual purity, and their highest goal is to a life according to principle. Resinies are very interested in the state of the world around them, and often feel like the world is on a moral decline. Resinies put their values to work, and either spend a lot of time volunteering, or donate a lot of money to charity – or both. Their principles tend to give resinies strong wills and sturdy foundations that carry them through any hardship with ease and faith. Deeply religious people are often resinies.

Rooties are very easy-going and laidback. They exude stability and serenity that makes others feel at ease around them. Rooties have a deep love of tradition and convention. They prefer to live quiet and modest lives, characterized by peacefulness and tranquility. Because they sometimes avoid tension by shying away from fights or glossing over problems, rooties are sometimes mistaken for being weak-willed. However, rooties tend to be very composed and controlled. They are firmly grounded and dedicated toward maintaining peace, and can make excellent mediators for conflicts.

Seedies are creative spirits who thrive on beauty. They are able to find wonder in the most mundane experiences, because they see beauty in the everyday world around them. This ability comes partially from seedies' keen observational powers and vivid memory—traits which also give them powerful intuition. Seedies tend to be very empathetic and tuned into the needs and motives of others—and in themselves. Seedies are dreamers and creators, and tend to reinvent themselves on a regular basis, trying on new styles, new jobs, new religions, etc to see what "fits" those best. Seedies tend to be very individualistic and self-assured.

Spicies are the hedonists of the world. They are joyous, exhilarating, and animated. Spicies thrive on excitement and adventure. They are dynamic go-getters, and can make excellent entrepreneurs. They love to live the high life, spending days at the stores and nights out on the town. However, they don't seek status out of these endeavors; rather, their love stems from the sheer joy of shopping and experience new things. Spicies tend to be socialites and trendsetters without even trying; people are naturally drawn to their vitality and debonair personalities.

Woodies are strong and independent. They are ethical, compassionate, and dedicated to their causes—and woodies tend to always be supporting a cause of some sort, because they are determined to have an impact on the world. They crave power, but not for the status of it. Rather, woodies want what power gives them—the ability to shape the world by seeking out injustice and generally making the world a better place to live. Woodies love being out in nature, and will find ways to experience the outdoors on a regular basis, be it camping, boating, or golfing. (Andriot, 2012)

CHAPTER 3

RESEARCH METHODOLOGY

This independent study aimed to study the purchasing behavior of fragrance products consumers in Om Noi Municipal, Krathumbaan District. Research began by randomly selecting a sample of factory workers in the area and uses questionnaires as data gathering tool. After collecting data, we analyzed and interpreted data to find factors that affect the purchasing decision of factory workers for fragrance products, their attitudes, and gave a summary of the results.

3.1 Target Respondents

The target respondents of this study were the industrial employees working at a factory in Om Noi Industrial Estate, Krathumbaan District – Samut-Sakhon Province. Previous consumers of fragrance products would be a direct target.

3.1.1 Sample Size

Sample size estimation was calculated using Taro Yumane equation. In this study, we assumed an equally distributed proportion of 0.50, a confidence level of 95%, and an allowable error of 5%. (Yamane, 1967)

$$n = \frac{N}{1 + Ne^2}$$

Where, n = sample size
N = known population size
e = allowable error (assumed 5%)

Om Noi Municipal has a total population of 52,234 people. Variables are: N = 52,234, e = 0.05. Entering the known variables into the equation yields the following.

$$n = \frac{52{,}234}{(1+(52{,}234)(0.05)(0.05)} = 396.96$$

Based on the above equation, the estimated sampling size was approximately 397, however, to prevent sampling bias or data collecting errors; this study will collect 420 questionnaires (approx. 5% more) from respondents.

3.2 Studied Location

Questionnaires were distributed to multiple locations within Om Noi, Krathumbaan areas using purposive sampling method. Locations selected considered the most likely areas our target respondents would make their purchasing of fragrance products. This includes the surrounding discounted department stores and local markets, as shown in table 3.1.

Table 3.1 Number of Questionnaires Distributed by Location

Locations	Sampling Number
1. Big C (Om Yai)*	60
2. Tesco Lotus (Krathumbaan)	60
3. Tesco Lotus Express (Klong Kae)	60

Table 3.1 (continued)

Locations	Sampling Number
4. 7-Eleven (Klong Kae)	60
5. Talad Gao San	60
6. Talad Klong Kae	60
7. Talad Krathumbaan	60
Total Questionnaires	**420**

Note. *Big C (Om Yai) is located at the border of Om Noi and Om Yai Municipal.

3.3 Data Collecting Tool

Questionnaires were the tools used to collect data from the 420 respondents. Respondents were acknowledged about the purpose of this study and were asked kindly for their time to answer the questions as accurately as possible. The questionnaires were divided into three parts.

Part 1: General Characteristics of the Respondents

Part 2: Usage Behavior of Fragrance Products

Part 3: Marketing Factors Affecting Purchase Decisions for Fragrance Products

Respondents were told that the information given will not be publicly disclosed or used in any way that would affect the respondents negatively. Information gathered would solely be used for the purpose of this independent study only. The respondents would check a box what best represent their answer for each question. Some questions have more than one answer and the respondents will check as many boxes that applied to them in those questions. For part 3, the respondents were asked to rate the factors that affect their purchasing decision according to the description given on table 3.2. The ratings were later averaged and ranked accordingly for further analysis.

Table 3.2 Descriptive Table – Purchasing Factor Importance Level

Points		Description
5	=	The Most Important Factor
4	=	Important Factor
3	=	Average
2	=	Less Important Factor
1	=	The Least Important Factor

3.4 Data Analysis

Data collected through questionnaires were entered into the SPSS for windows version 11.5 program for further analysis.

3.4.1 Check for the completion of data and questionnaires.

3.4.2 Key the data into a computer according to SPSS format.

3.4.3 Perform analysis and generate necessary information.

3.4.4 Use Descriptive Statistic to explain proportions in percentages for the social and economical characteristics.

3.4.5 Use Descriptive Statistic to find frequencies of data.

3.4.6 Use compare means function to do independent t-test to find differences between males and females attitudes toward each marketing factors. The null hypothesis (H_0) being that both males and females agreed at the same level of importance for the factor, or otherwise, rejecting the null and accept their differences (H_1) with statistical significant at 95% confidence level.

H0: male = female

H1: male ≠ female

3.4.7 Use ANOVA and Post Hoc Tukey test to find statistical significant relationships between all age groups and each marketing factors. The null hypothesis (H_0) being that all age group agreed at the same level of importance for the factor, or otherwise, rejecting the null and accepts H_1 that at least one age group thinks differently with statistical significance at 95% confidence level.

H0: age below 15 = 16-20 = 21-25 = 26-30 = 31-45 = 46-50 = over 50

H1: age below 15 ≠ 16-20 ≠ 21-25 ≠ 26-30 ≠ 31-45 ≠ 46-50 ≠ over 50

3.4.8 Generate tables with summary of data to make conclusions and discussions.

CHAPTER 4

RESULTS

Data collected from the respondents in Om Noi Industrial Estate, Samut-Sakhon Province were analyzed in three areas. In the first area, the general information and characteristics of the respondents were analyzed. Second, their fragrance product purchasing behaviors were examined. Third, each marketing factors that affect the respondents' purchasing decision were interpreted and analyzed statistically for significant relationships with the characteristics of the respondents.

4.1 General Information and Characteristics of the Respondents

Data collected from 420 respondents consisted of 120 males and 300 females' population in Om Noi Industrial Estate. The first part of the questionnaire explored into their social and economical status. Social characteristics include gender, age, and marital status. Economical characteristics include their income, expenses, occupation, and career path.

4.1.1 Social Characteristics

Table 4.1 illustrated the general information about the sampled population. Roughly 71.4 percent were female and 28.6 percent were male. The age of the respondents was mostly in between 21 and 25 years old (24.8%). Only few were in the age below 15 (3.8%) and over 50 (2.1%) years old. However, almost all of the respondents were employed as an industrial employee (94.8%). The remaining 5.2 percent not employed could represent the age group of below 15 and over 50 years old, as they were unlikely to be legal to work or simply retired. Respondents'

Education level varies with about one third having an undergraduate degree or higher (36.0%) and some completing middle school (18.8%), professional/certificate degree (16.9%), and primary school (10.7%). Only 6 percent of the sample group did not give information regarding their education level. About half of the respondents were single (50.6%). Very few were divorced (8.3%).

Table 4.1 Social Characteristics of Respondents

Characteristics	Number	Percentage (%)
Sex		
Female	300	71.4
Male	120	28.6
Total	**420**	**100.0**
Age		
Below 15	16	3.8
16 – 20	84	20.0
21 – 25	104	24.8
26 – 30	57	13.6
31 – 45	93	22.1
46 – 50	57	13.6
Over 50	9	2.1
Total	**420**	**100.0**
Employment		
Industrial Employee	398	94.8
Not Industrial Employee	8	1.9
N/A	14	3.3
Total	**420**	**100.0**

Table 4.1 (continued)

Characteristics	Number	Percentage (%)
Marital Status		
Single	213	50.7
Married	168	40.0
Divorced	35	8.3
N/A	4	1.0
Total	**420**	**100.0**
Education		
Primary School	45	10.7
Middle School	79	18.8
High School	49	11.7
Professional/Certification Degree	71	16.9
Undergraduate Degree or Higher	151	36.0
N/A	25	6.0
Total	**420**	**100.0**

4.1.2 Economical Characteristics

The top three industries in that the respondents worked in were food and beverages (32.9%), textile and garments (18.1%), and electronics/computer (12.9%) accordingly (Table 4.2). Respondents were mostly occupied as a production worker (43.6%) followed by an administrative/office clerk (26.7%) (Table 4.3) Average monthly income ranges of the respondents were in between 10,001 baht to 13,000 baht (25.7%) and in between 13,001 baht to 15,000 baht (25.2%) (Table 4.4) Most respondents stated that they have monthly expenses range in between 5,000 baht to 8,000 baht (37.9%) (Table 4.5)

Table 4.2 Economical Characteristics of Respondents by Industry

Economical Characteristics	Number	Percentage (%)
Industry		
Food and Beverages	138	32.9
Textile and Garments	76	18.1
Electronics and Computer	54	12.9
Logistics	39	9.3
Metals and Machineries	37	8.8
Plastic	17	4.0
Construction/Materials	14	3.3
Chemical and Laboratory Equip.	10	2.4
Rubber	5	1.2
Other	30	7.1
Total	**420**	**100.0**

Table 4.3 Economical Characteristics of Respondents by Occupation and Career

Economical Characteristics	Number	Percentage (%)
Occupation		
Production Worker	183	43.6
Administration/Office Clerk	112	26.7
Machine Operator	44	10.5
Technicians/General Mechanics	32	7.6
Management	18	4.3
Other	7	1.7
N/A	24	5.7
Total	**420**	**100.0**

Table 4.4 Economical Characteristics of Respondents by Monthly Income

Economical Characteristics	Number	Percentage (%)
Monthly Income		
Less than 5,000	5	1.2
5,000 – 8,000	43	10.2
8,001 – 10,000	62	14.8
10,001 – 13,000	108	25.7
13,001 – 15,000	106	25.2
15,001 – 18,000	49	11.7
More than 18,000	43	10.2
N/A	4	1.0
Total	**420**	**100.0**

Table 4.5 Economical Characteristics of Respondents by Monthly Expenses

Economical Characteristics	Number	Percentage (%)
Monthly Expenses		
Less than 5,000	147	35.0
5,000 – 8,000	159	37.9
8,001 – 10,000	43	10.2
10,001 – 13,000	34	8.1
13,001 – 15,000	17	4.0
15,001 – 18,000	6	1.4
More than 18,000	9	2.1
N/A	5	1.2
Total	**420**	**100.0**

4.2 Respondents Purchasing Behavior for Fragrance Products

4.2.1 Fragrance Products Usage Behaviors

It was demonstrated that the majority of the sampled population (96.4%) have encountered with at least one fragrance products before in table 4.6. Both male (98.4%) and female (95.7%) have at least once made a decision to purchase a fragrance product. A few have never experienced a fragrance product before (3.6%).

Table 4.6 Fragrance Products Experience

Use Fragrance Product	Male Number (%)	Female Number (%)	Total Number (%)
Yes	118 (98.4)	287 (95.7)	405 (96.4)
No	2 (1.6)	13 (4.3)	15 (3.6)
Total	**120 (100.0)**	**300 (100.0)**	**420 (100.0)**

Most males (73.3%) and females (62.7%) respondents use a fragrance product daily. That made up 65.8 percent of the sampled population. Some use fragrance product once every 1-2 days (19.5%) and very few people uses less often than once every 3-4 days, as shown in table 4.7

Table 4.7 Frequency Usage of Fragrance Products

Frequency	Male Number (%)	Female Number (%)	Total Number (%)
Daily	88 (73.3)	188 (62.7)	276 (65.8)
Once every 1-2 days	21 (17.5)	61 (20.3)	82 (19.5)
Once every 3-4 days	8 (6.7)	24 (8.0)	32 (7.6)

Table 4.7 (continued)

Frequency	Male Number (%)	Female Number (%)	Total Number (%)
Once every 5-6 days	0 (0.0)	5 (1.7)	5 (1.2)
Once every 7+ days	2 (1.7)	1 (0.3)	3 (0.7)
N/A	1 (0.8)	21 (7.0)	22 (5.2)
Total	**120 (100.0)**	**300 (100.0)**	**420 (100.0)**

4.2.2 Type of Fragrance Products

The most preferred type of fragrance product that the respondents chose was the spray type (56.4%). Both amongst males and females chose the spray type product as their preferred product. Roll-ons were also popular with both males and females choosing it to be their second preferred type of fragrance product (31.0%). The least popular type was lotion for men (1.7%) and cologne for women (3.3%), as shown in table 4.8.

Table 4.8 Type of Fragrance Products Preferred

Type	Male Number (%)	Female Number (%)	Total Number (%)
Spray	50 (41.7)	187 (62.4)	237 (56.4)
Roll-ons	49 (40.8)	81 (27.0)	130 (31.0)
Cologne	19 (15.8)	10 (3.3)	29 (6.9)
Lotion	2 (1.7)	13 (4.3)	15 (3.6)
Other	0 (0.0)	1 (0.3)	1 (0.2)
N/A	0 (0.0)	8 (2.7)	8 (1.9)
Total	**120 (100.0)**	**300 (100.0)**	**420 (100.0)**

4.2.3 Purchasing Location

Nearly half of our sampled population preferred to shop their fragrance products at a discounted super store like Big C and Tesco Lotus (40.7%). This applied especially for males as the majority of them make their purchase here (57.4%). Females however, shopped most at a discounted super store (31%) but also at a convenience store (27.7%) and a major department store (26.7%). Males make their purchase the least at a major department store (1.7%) and females at a local market (9.3%), as shown in table 4.9.

Table 4.9 Location to Make Purchase of Fragrance Products

Location	Male Number (%)	Female Number (%)	Total Number (%)
Discounted Super Store/ Big C/Lotus	69 (57.4)	102 (34.0)	171 (40.7)
Convenience Stores/ 7-Eleven	30 (25.0)	83 (27.7)	113 (27.0)
Major Department Stores	2 (1.7)	80 (26.7)	82 (19.5)
Local Markets	17 (14.2)	28 (9.3)	45 (10.7)
N/A	2 (1.7)	7 (2.3)	9 (2.1)
Total	**120 (100.0)**	**300 (100.0)**	**420 (100.0)**

4.2.4 Purchase Frequencies and Amount Spent

Most males purchased a fragrance product once every month (48.3%). Most females make their purchase once every 1 – 3 months (44%). About 43.3 percent of males make their purchase once every 1 – 3 months and very few make their purchase less often than that. Some females also make their purchase once a month (42.3%). Like the male respondents, very few females make their purchases less often than once every 4 – 6 months. Overall, the majority of both males and females

purchased a fragrance product once every month to no longer than once every 3 months (44% and 43.8% accordingly), as shown in table 4.10.

Table 4.10 Purchase Frequencies of Fragrance Products

Frequency	Male Number (%)	Female Number (%)	Total Number (%)
Every Month	58 (48.3)	127 (42.3)	185 (44)
Once every 1-3 months	52 (43.3)	132 (44)	184 (43.8)
Once every 4-6 months	5 (4.3)	16 (5.3)	21 (5.0)
Once every 7-9 months	1 (0.8)	8 (2.8)	9 (2.2)
Once every 10-12 months	1 (0.8)	7 (2.3)	8 (1.9)
Once every year or more	0 (0.0)	4 (1.3)	4 (1.0)
N/A	3 (2.5)	6 (2.0)	9 (2.1)
Total	**120 (100.0)**	**300 (100.0)**	**420 (100.0)**

Most male and female industrial workers spent around 101-200 baht on a fragrance product per purchase (43.3% for males and 34.3% for females). Second group of males spent less than 100 baht on fragrance product per purchase (20.0%) while the second group of females spent around 301-500 baht per purchase (21.0%). Very few respondents spent over 500 baht per purchase on a fragrance product (5.0% for males and 8.0% for females). Some respondents did spend over 800 baht per purchase, but that's only 3.3 percent of the sample population, as shown in table 4.11.

Table 4.11 Amount Spent per Purchase of Fragrance Products

Amount	Male Number (%)	Female Number (%)	Total Number (%)
Less than 100	24 (20.0)	57 (19.0)	81 (19.3)
101 – 200	52 (43.3)	103 (34.3)	155 (36.9)
201 – 300	14 (11.7)	30 (10.0)	44 (10.6)
301 – 500	22 (18.3)	63 (21.0)	85 (20.2)
501 – 800	6 (5.0)	24 (8.0)	30 (7.1)
More than 800	0 (0.0)	14 (4.7)	14 (3.3)
N/A	2 (1.7)	9 (3.0)	11 (2.6)
Total	**120 (100.0)**	**300 (100.0)**	**420 (100.0)**

4.2.5 Purchasing Behavior, Brand Loyalty, and Influencer

Both male and female respondents have similar purchasing behaviors when considering their loyalty to the brand. Males tend to use fragrance products from the same brand (43.3 percent) but considered also recommendations for switching into another brand (40.8 percent). A new product or a new property of the product from another brand did not affect their purchasing decision as much. Females behave in similar manner, with 46.7 percent of them willing to switch into another brand of should they be given recommendations. About 33.3 percent of female respondents would use products from the same brand. New products or new properties of a product from another brand would not have much influence on the female respondents into breaking their brand loyalty. Interestingly, the least affecting factor to cause respondents to switch brands was the brand ambassador. Only 0.7 percent of females would use products from a brand that their favorite brand ambassador. And none of the male respondents would switch into the brand that their favorite brand ambassador was representing, as shown in table 4.12.

Table 4.12 Brand Loyalty and Purchasing Behavior

Purchasing Behavior	Male Number (%)	Female Number (%)	Total Number (%)
Buy according to recommendations or trend	49 (40.8)	140 (46.7)	189 (45.0)
Choose products from the same brand	52 (43.3)	100 (33.3)	152 (36.2)
Buy products according to properties	11 (9.3)	28 (9.3)	39 (9.3)
Buy latest/newest product	6 (5.0)	19 (6.3)	25 (6.0)
Don’t have brand loyalty	1 (0.8)	5 (1.7)	6 (1.4)
Buy products with a brand ambassador I like	0 (0.0)	2 (0.7)	2 (0.5)
N/A	1 (0.8)	6 (2.0)	7 (1.6)
Total	**120 (100.0)**	**300 (100.0)**	**420 (100.0)**

Table 4.13 displayed the person with most influential to the respondents when making their purchase decisions. Male and female would mostly listen to themselves (54.2% of males, 44.7% of females), followed by listening to their friends (37.5% of males, 35.7% of females). Relatives have no significant influences on the respondents purchasing decisions. The least influential person was online review comments under the product review page (0.9 percent).

Table 4.13 Influencer of Purchasing Decision on Fragrance Products

Influencer	Male Number (%)	Female Number (%)	Total Number (%)
Yourself	65 (54.2)	134 (44.7)	199 (47.4)
Friend	45 (37.5)	107 (35.7)	152 (36.2)
Relatives	3 (2.5)	28 (9.3)	31 (7.4)
Parents	5 (4.2)	22 (7.3)	27 (6.4)
Online Reviews	1 (0.8)	3 (1.0)	4 (0.9)
N/A	1 (0.8)	6 (2.0)	7 (1.7)
Total	**120 (100.0)**	**300 (100.0)**	**420 (100.0)**

4.2.6 Fragrance Product Properties

The top three fragrance product properties that respondents chose were product safety/non-irritation (297 numbers), affordable price (193 numbers), and long lasting scent (184 numbers) features. Women gave more importance to the long lasting scent feature more than the affordable price (130 versus 137 numbers). Eye-catching package was also one of the significant properties demanded (88 numbers). However, only females (59 people) paid attention to the products' brand awareness feature (only 9 males). Color of the product received the least attention (16 females and 0 male), as shown in table 4.14.

Table 4.14 Ranking the Most Important Fragrance Product Properties

Product Properties	Male Number (%)	Female Number (%)	Total Number (%)
1. Safety and Non-irritation	87 (35.5)	210 (31.1)	297 (32.2)
2. Affordable Price	63 (25.7)	130 (19.2)	193 (20.9)

Table 4.14 (continued)

Product Properties	Male Number (%)	Female Number (%)	Total Number (%)
3. Long Lasting Scent	47 (19.2)	137 (20.3)	184 (19.9)
4. Attractive Packaging	26 (10.6)	62 (9.2)	88 (9.6)
5. Well-known Brand	9 (3.7)	59 (8.7)	68 (7.4)
6. Manufacturing Standard	9 (3.7)	43 (6.4)	52 (5.6)
7. Manufacturer Integrity	3 (1.2)	19 (2.8)	22 (2.4)
8. Color of the Product	0 (0.0)	16 (2.4)	16 (1.7)
9. N/A	1 (0.4)	0 (0.0)	1 (0.1)
Total	**245 (100.0)**	**676 (100.0)**	**921 (100.0)**

4.2.7 Preferred Scents Rankings (Top, Middle and Base Notes)

To rank the most desirable scents in the three segments of top, middle, and base notes, the sampled population selected more than one choice of scents they preferred within each category. Each scent received a total number based on the count of how many times it was selected throughout the questionnaire. One check mark counted as one number.

According to table 4.15, the top five preferred scents in top note were orange, berries, grapefruit, rosemary, and pineapple. The least preferred scent was basil. The top five scents for middle note were jasmine, rose, lavender, cinnamon, and chamomile. The least preferred middle note scent was black pepper, as shown in table 4.16. Lastly, table 4.17 showed the top five scents for base note were rose, vanilla, berries, jasmine, and cedar wood. The least preferred scent was ginger.

Table 4.15 Most Preferred Scent – Top Note

Top Note Scents	Number (%)
1. Orange	106 (22.3)
2. Berries	87 (18.3)
3. Grapefruit	82 (17.3)
4. Rosemary	53 (11.2)
5. Pineapple	47 (9.9)
6. Lime	38 (8.0)
7. Bergamot	28 (5.9)
8. Eucalyptus	19 (4.0)
9. Sage	8 (1.7)
10. Basil	7 (1.5)
Total	**475 (100.0)**

Table 4.16 Most Preferred Scent – Middle Note

Middle Note Scents	Number (%)
1. Jasmine	111 (23.4)
2. Rose	91 (19.2)
3. Lavender	70 (14.7)
4. Cinnamon	47 (9.9)
5. Chamomile	44 (9.3)
6. Clove	41 (8.6)

Table 4.16 (continued)

Middle Note Scents	Number (%)
7. Lily	31 (6.5)
8. Chrysanthemum	28 (5.9)
9. Black Pepper	12 (2.5)
Total	**475 (100.0)**

Table 4.17 Most Preferred Scent – Base Note

Base Note Scents	Number (%)
1. Rose	146 (31.6)
2. Vanilla	81 (17.5)
3. Berries	68 (14.7)
4. Jasmine	59 (12.8)
5. Sandal Wood	53 (11.5)
6. Oak Wood	28 (6.0)
7. Cedar Wood	18 (3.9)
8. Ginger	9 (1.9)
Total	**462 (100.0)**

4.3 Marketing Factors Affecting Purchase Decision of Respondents

Exploring marketing fundamental yields the ranking of most significant factors that affect fragrance product purchasing decision. Respondents were asked to score a number from 1 (the least important) to 5 (the most important) to a list of various marketing factors including products, price, place, and promotion categories. Each factor score was summed and averaged to get a mean score with their standard deviations. Two factors with an equal average score; the one with lower standard deviation will be ranked higher importance because lower standard deviation indicates a less skewed data set.

4.3.1 Product Factor

Table 4.18 ranked in order the importance of each product factor. The most important product factor for fragrance product was the attractiveness of scents (mean = 3.66, S.D. = 0.929). It must be catchy and draws attention to the wearer of the fragrance. Second, the scent should last for a very long time (mean = 3.61, S.D. = 1.047). Third, the product should have an interesting packaging design (mean = 3.57, S.D. = 1.003). An interesting packaging design can make the product stand out from other products on the same shelves. Not only for marketing purposes, but also for protection feature that prevents the product from contaminations and oxidations. Surprisingly, the least important product feature was the quality of raw materials used to produce them.

Table 4.18 Importance Level of Product Factors Affecting Purchasing Decision

Product Factors	Mean	S.D.	Level
1. Attractive/Charismatic Scent	3.66	0.929	Important
2. Long-lasting Scent	3.61	1.047	Important
3. Interesting Packaging/Protective	3.57	1.003	Important

Table 4.18 (continued)

Product Factors	Mean	S.D.	Level
4. Color of the Product	3.50	1.043	Important
5. Variety Choices of Scents Available	3.47	0.975	Average
6. Integrity of Brand	3.39	1.123	Average
7. Quality of Raw Materials	3.37	1.009	Average

4.3.2 Price Factors

Table 4.19 ranked the price factors that affected the purchasing decision of respondents. Most respondents believed that the price of a fragrance product mainly reflected its marketing costs and not the costs of producing the product (mean = 3.52, S.D. = 0.978). Thus, the product should focus on marketing over innovative production processes or raw materials. Secondly, respondents gave weight for the price of the product must be reasonable considering its quality (mean = 3.52, S.D. = 0.996). Although, the second factor has the same average mean with the first factor, its standard deviation was higher, thus we ranked it second. Thirdly, respondents believed that a high pricing of a product could mean that the product used high quality raw materials in production (mean = 3.28, S.D. = 1.07). Lastly, respondents believed an expensive product meant the product was highly demanded on the market (mean = 3.27, S.D. = 1.03). The last two price factors have considerably high standard deviation. This means the opinion of respondents were two-sided. It is not simple to conclude their significances.

Table 4.19 Importance Level of Price Factors Affecting Purchasing Decision

Price Factors	Mean	S.D.	Level
1. Price Reflect Marketing Cost	3.52	0.978	Important
2. Price Reasonable to Quality	3.52	0.996	Important
3. High Price equal High Quality Raw Material	3.28	1.07	Average
4. High Price equal High Demand	3.27	1.03	Average

4.3.3 Location (Place) Factor

Table 4.20 displayed list of location factors that affect the purchase decision of the sampled population. It showed that respondents paid attention the cleanness and tidiness of the sales location the most (mean = 3.69, S.D. = 0.935). Followed by sales location having varieties and availabilities of products (mean = 3.5, S.D. 0.982), sales location having integrity, be trustable and be reliable (mean = 3.49, S.D. = 1.033), and sales location having good accessibilities and conveniences (mean = 3.34, S.D. = 1.064).

Table 4.20 Importance Level of Place Factors Affecting Purchasing Decision

Place/Location Factors	Mean	S.D.	Level
1. Cleanness and Tidiness	3.69	0.935	Important
2. Variety and Availability of Products	3.50	0.982	Important
3. Integrity	3.49	1.033	Average
4. Accessible/Convenience	3.34	1.064	Average

4.3.4 Promotion Factor

Table 4.21 showed that the most affecting promotion to purchasing decision of respondents was free product samples (mean = 3.81, S.D. = 1.026). Followed by the attitude and persuasiveness skills of the sales representatives at the store (mean = 3.57, S.D. = 0.982), to have an actor or actress as a product presenter to promote the product (mean = 3.56, S.D. = 1.083), having free gifts (mean = 3.46, S.D. 0.993), lucky draws (mean = 3.28, S.D. = 1.055), and member cards (mean = 3.26, S.D. = 1.084).

Table 4.21 Importance Level of Promotion Factors Affecting Purchasing Decision

Promotion Factors	Mean	S.D.	Level
1. Free Sample of the Product	3.81	1.026	Important
2. Good Sales Representative	3.57	0.982	Important
3. Actor/Actress as Product Presenter	3.56	1.083	Important
4. Gifts After Reaching Sales Target	3.46	0.993	Average
5. Occasional Lucky Draws	3.28	1.055	Average
6. Member Card/Discounts	3.26	1.084	Average

4.4 Gender Influences on Fragrance Products Purchasing Behaviors

4.4.1 Gender Towards Product Factors

After executing two samples hypothesis test (t-test) on the respondents' gender and each product factors, the integrity of brand was the only factor that affected male and female purchasing decision differently with statistical significance (p-value = 0.037). The mean difference showed that male generally paid more attention to brand integrity on average of 0.22 points (or 6.6%) more than females. Other product factor showed no statistical significances, thus male and female generally behave in the same manner toward those factors, as shown in table 4.22.

Table 4.22 Gender Towards Product Factors

Product Factors	Gender	Mean	Mean Difference	p-value	Result
Attractive/Charismatic Scent	Male	3.65	-0.10	0.942	No Sig
	Female	3.66			
Long-lasting Scent	Male	3.64	0.04	0.663	No Sig
	Female	3.60			
Interesting Packaging/Protective	Male	3.58	0.02	0.843	No Sig
	Female	3.56			
Color of the Product	Male	3.62	0.16	0.121	No Sig
	Female	3.46			
Variety Choices of Scents Available	Male	3.54	0.10	0.280	No Sig
	Female	3.44			
Integrity of Brand	Male	3.55	0.22	0.037	Sig
	Female	3.33			
Quality of Raw Materials	Male	3.29	-0.10	0.314	No Sig
	Female	3.40			

4.4.2 Gender Towards Price Factors

Table 4.23, demonstrated mean scores of price factors that male and female respondents gave. But none of price factor averaged score differences were of statistical significance at confidence level of 95%. Male and female respondents agreed in the same direction for each price factors.

Table 4.23 Gender Towards Price Factors

Price Factors	Gender	Mean	Mean Difference	p-value	Result
Price Reflect Marketing Cost	Male	3.55	0.04	0.699	No Sig
	Female	3.51			
Price Reasonable to Quality	Male	3.51	-0.01	0.932	No Sig
	Female	3.52			
High Price equals High Quality	Male	3.34	0.10	0.335	No Sig
	Female	3.25			
High Price equals High Demand	Male	3.25	-0.02	0.831	No Sig
	Female	3.27			

4.4.3 Gender Towards Place/Location Factors

There was no statistically significant (significant level of 0.05) differences between male and female's opinion on location factors. Cleanness and tidiness factor has a p-value of 0.188. Variety of selections and availability of products has a p-value of 0.918. The integrity of the store has a p-value of 0.273. And the accessibility and convenience of the store received a p-value of 0.75. Both male and female have the same purchasing behaviors towards each location factors, as shown in table 4.24.

Table 4.24 Gender Towards Place/Location Factors

Place/Location Factors	Gender	Mean	Mean Difference	p-value	Result
Cleanness and Tidiness	Male	3.78	0.13	0.188	No Sig
	Female	3.65			
Variety and Availability	Male	3.51	0.01	0.918	No Sig
of Products	Female	3.50			
Integrity of Store	Male	3.41	-0.11	0.273	No Sig
	Female	3.52			
Accessible/Convenience	Male	3.36	0.03	0.754	No Sig
	Female	3.33			

4.4.4 Gender Towards Promotion Factors

Giving out free samples of the product was the factor that male and female have statistically significant differences (p-value = 0.017). The mean difference was 0.24, which means male respondents have higher average interest in these factor more than female respondents. Having an actor or an actress as a presenter of the product was another factor that male and female have statistically significant differences (p-value = 0.029). The mean difference for this factor was 0.24 higher for male than female respondents. Other promotion factors had no statistically significances between male and female gender. They both agreed in the same way that sales representatives, gifts for reaching purchase targets, occasional lucky draws, and member cards/discounts helps to persuade their purchasing decision, as shown in table 4.25.

Table 4.25 Gender Towards Promotion Factors

Promotion Factors	Gender	Mean	Mean Difference	p-value	Result
Free Samples	Male	3.98	0.24	0.017	Sig
	Female	3.74			
Sales Representative	Male	3.62	0.08	0.424	No Sig
	Female	3.55			
Actor/Actress as Product Presenter	Male	3.73	0.24	0.029	Sig
	Female	3.49			
Gifts After Reaching Sales Target	Male	3.51	0.08	0.427	No Sig
	Female	3.43			
Lucky Draws	Male	3.24	-0.06	0.561	No Sig
	Female	3.30			
Member Card	Male	3.21	-0.07	0.515	No Sig
	Female	3.28			

4.5 Age Group Influences on Fragrance Products Purchasing Behaviors

To explore the influences age has on marketing mix factors, multi samples hypothesis (> 3 populations), or ANOVA was used as an instrument. To differentiate an age group that's different with statistically significance from others, post hoc test was performed.

4.5.1 Age Group Towards the Product Factors

There were statistical significances across all product factors within the age group except for the variety choice of scents factor. The younger and older

population had different product characteristics in mind. An attractiveness of scents, long lasting scents, color of the product, integrity of brand, and quality of raw materials all had p-value of 0.00. Interesting packaging and protective feature had p-value 0.025. Only the variety choice of scent available was the factor in which all age groups agreed similarly with p-value 0.056, as shown in table 4.26.

Table 4.26 Age Group Towards Product Factors

Product Factors	Age (years)	Mean	p-value	Result
Attractive/Charismatic	Below 15	2.94	0.00	Sig
Scents	16 – 20	3.43		
	21 – 25	3.55		
	26 – 30	3.74		
	31 – 45	3.90		
	46 – 50	3.84		
	Over 50	4.11		
Long lasting Scents	Below 15	2.56	0.00	Sig
	16 – 20	3.38		
	21 – 25	3.51		
	26 – 30	3.70		
	31 – 45	3.88		
	46 – 50	4.11		
	Over 50	3.61		
Interesting	Below 15	3.06	0.025	Sig
Packaging/Protective	16 – 20	3.40		
	21 – 25	3.52		
	26 – 30	3.63		
	31 – 45	3.57		
	46 – 50	3.89		
	Over 50	4.00		

Table 4.26 (continued)

Product Factors	Age (years)	Mean	p-value	Result
Color of Product	Below 15	2.69	0.00	Sig
	16 – 20	3.12		
	21 – 25	3.47		
	26 – 30	3.89		
	31 – 45	3.60		
	46 – 50	3.84		
	Over 50	3.56		
Variety Choices of Scents	Below 15	2.81	0.056	No Sig
	16 – 20	3.30		
	21 – 25	3.48		
	26 – 30	3.65		
	31 – 45	3.61		
	46 – 50	3.48		
	Over 50	3.44		
Integrity of Brand	Below 15	2.44	0.00	Sig
	16 – 20	3.01		
	21 – 25	3.52		
	26 – 30	3.61		
	31 – 45	3.60		
	46 – 50	3.43		
	Over 50	3.33		
Quality of Raw Materials	Below 15	2.50	0.00	Sig
	16 – 20	3.01		
	21 – 25	3.49		
	26 – 30	3.72		
	31 – 45	3.60		
	46 – 50	3.23		
	Over 50	3.11		

After performing post hoc test on age group towards the product factors with statistically significant differences, Table 4.27 was elicited. The age group of population below 15 years old was differentiated from other age groups regarding their opinion towards these product factors. On average, they give lower scores to these product factors than other age group with statistically significances.

Table 4.27 Post Hoc Tukey Test for Age Group Towards Product Factors

Product Factor	Age Group	Average Low
Attractive/Charismatic Scents	Below 15	2.94
Interesting Packaging/Protective	Below 15	2.69
Long lasting Scents	Below 15	2.56
Quality of Raw Materials	Below 15	2.50
Integrity of Brand	Below 15	2.44

4.5.2 Age Group Towards the Price Factors

Examining the relationship between age group and price factors, result showed statistically significance across all the factors. This means the young and the old age groups had different opinion on the price of fragrance products. Price reflects marketing costs factor had p-value of 0.031. Quality of the product led to its price had p-value of 0.02. High price equals high quality of the product had p-value of 0.003. High price equals high demand of the product had p-value of 0.00. All factors were statistically significant, as shown in table 4.28.

Table 4.28 Age Group Towards Price Factors

Price Factors	Age (years)	Mean	p-value	Result
Price Reflect Marketing	Below 15	3.00	0.031	Sig
Cost	16 – 20	3.34		
	21 – 25	3.54		
	26 – 30	3.44		
	31 – 45	3.62		
	46 – 50	3.79		
	Over 50	3.67		
Price Reasonable to	Below 15	2.81	0.02	Sig
Quality	16 – 20	3.35		
	21 – 25	3.58		
	26 – 30	3.58		
	31 – 45	3.64		
	46 – 50	3.55		
	Over 50	3.89		
High Price equals High	Below 15	2.69	0.003	Sig
Quality	16 – 20	3.00		
	21 – 25	3.30		
	26 – 30	3.30		
	31 – 45	3.34		
	46 – 50	3.63		
	Over 50	3.67		
High Price equals High	Below 15	2.50	0.00	Sig
Demand	16 – 20	2.92		
	21 – 25	3.28		
	26 – 30	3.28		
	31 – 45	3.39		
	46 – 50	3.61		
	Over 50	4.33		

Performing post hoc Tukey test for age groups on price factors yielded table 4.29. The population age group of below 15 years old differentiated from all other age group with statistical significances on all price factors. They gave lower importance levels on average to every price factors. The population age group of 46-50 years old gave higher importance level with statistical significance from other age groups for the factor of price reflect marketing costs (Average High 3.79). The population age group of over 50 years old also gave higher importance level with statistical significance in the factor high price equals high demand (Average High 4.33).

Table 4.29 Post Hoc Tukey Test for Age Group Towards Price Factors

Price Factor	Age Group	Average Low	Average High
Price Reflect Marketing Costs	Below 15	3.00	3.79
	46-50		
Price Reasonable to Quality	Below 15	2.81	
High Price equals High Quality	Below 15	2.69	
High Price equals High Demand	Below 15	2.50	4.33
	Over 50		

4.5.3 Age Group Towards the Place/Location Factors

Relationship between age group and location factors proved all factors to be statistically significant. All age groups had different purchasing behaviors on the location factors. Cleanness and tidiness of the location and variety and availability of products had p-value of 0.00. Integrity of the store had p-value 0.001. And accessibility and convenience of the store had p-value 0.019. All of which were statistically significant and concluded all age group behaves differently on the place/location factors, as shown in table 4.30.

Table 4.30 Age Group Towards Place/Location Factors

Place/Location Factors	Age (years)	Mean	p-value	Result
Cleanness and Tidiness	Below 15	2.88	0.00	Sig
	16 – 20	3.07		
	21 – 25	3.36		
	26 – 30	3.32		
	31 – 45	3.46		
	46 – 50	3.64		
	Over 50	3.75		
Variety and Availability of	Below 15	2.63	0.00	Sig
Products	16 – 20	3.26		
	21 – 25	3.53		
	26 – 30	3.61		
	31 – 45	3.65		
	46 – 50	3.70		
	Over 50	3.67		
Integrity of Store	Below 15	2.69	0.001	Sig
	16 – 20	3.23		
	21 – 25	3.57		
	26 – 30	3.53		
	31 – 45	3.59		
	46 – 50	3.71		
	Over 50	3.89		
Accessibility and	Below 15	2.88	0.019	Sig
Convenience	16 – 20	3.07		
	21 – 25	3.36		
	26 – 30	3.32		
	31 – 45	3.46		
	46 – 50	3.64		
	Over 50	3.75		

Post hoc Tukey test yielded table 4.31. The population age group below 15 years old behaves differently on all place factors. They averaged score on these factors lower when compared to all other age group. For Accessibility and convenience and cleanness and tidiness factors, the age group of over 50 years old

scored its importance above all other age group (Average High 3.75 and 4.22 accordingly).

Table 4.31 Post Hoc Tukey Test for Age Group Towards Place/Location Factors

Place Factor	Age Group	Average Low	Average High
Accessibility and Convenience	Below 15 Over 50	2.88	3.75
Cleanness and Tidiness	Below 15	2.81	4.22
Integrity of Store	Below 15	2.69	
Variety and Availability	Below 15	2.63	

4.5.4 Age Group Towards the Promotion Factors

All promotion factors were statistically significant with the age group. Free sample of the products had p-value 0.013. Sales representative factor had p-value 0.00. Actor or actress as product presenter had p-value 0.008. Gifts after reaching sales target had p-vlue 0.001. Occasional lucky draws had p-value 0.00. And member card/discount had p-value 0.002. All age group behave differently on the promotion factors with statistically significances. Younger population will receive different effect from the promotion factors compared to the older population. (Table 4.32)

Table 4.32 Age Group Towards Promotion Factors

Promotion Factors	Age (years)	Mean	p-value	Result
Free Samples	Below 15	3.06	0.013	Sig
	16 – 20	3.61		
	21 – 25	3.80		
	26 – 30	3.96		
	31 – 45	3.90		
	46 – 50	4.00		
	Over 50	4.00		
Sales Representatives	Below 15	2.75	0.00	Sig
	16 – 20	3.35		
	21 – 25	3.49		
	26 – 30	3.63		
	31 – 45	3.80		
	46 – 50	3.79		
	Over 50	3.89		
Actor/Actress as Product	Below 15	3.00	0.008	Sig
Presenter	16 – 20	3.50		
	21 – 25	3.59		
	26 – 30	3.51		
	31 – 45	3.43		
	46 – 50	3.96		
	Over 50	4.00		
Gifts After Reaching Sales	Below 15	2.63	0.001	Sig
Target	16 – 20	3.35		
	21 – 25	3.42		
	26 – 30	3.46		
	31 – 45	3.49		
	46 – 50	3.80		
	Over 50	3.89		

Table 4.32 (continued)

Promotion Factors	Age (years)	Mean	p-value	Result
Lucky Draws	Below 15	2.63	0.00	Sig
	16 – 20	3.14		
	21 – 25	3.33		
	26 – 30	3.14		
	31 – 45	3.22		
	46 – 50	3.68		
	Over 50	4.11		
Member Card/Discount	Below 15	2.56	0.002	Sig
	16 – 20	3.04		
	21 – 25	3.29		
	26 – 30	3.16		
	31 – 45	3.31		
	46 – 50	3.70		
	Over 50	3.63		

Post hoc Tukey test of the age groups towards each promotion factors generated table 4.33. The age group of below 15 years old scored an average lower than all other age groups in every factor. The age group of over 50 years old scored an average score higher than all other age group on the lucky draws factor (average high of 4.11).

Table 4.33 Post Hoc Tukey Test for Age Group Towards Promotion Factors

Promotion Factor	Age Group	Average Low	Average High
Free Samples	Below 15	3.06	
Actor/Actress as Product Presenter	Below 15	3.00	
Sales Representative	Below 15	2.75	

Table 4.33 (continued)

Promotion Factor	Age Group	Average Low	Average High
Lucky Draws	Below 15 Over 50	2.63	4.11
Gifts After Reaching Sales Target	Below 15	2.63	
Member Card/Discount	Below 15	2.56	

4.6 Summary of Relationships between Characteristics and Factors Affecting Purchase Decision of the Sampled Population

Table 4.34 illustrated a summary of the statistical significances relationship between social characteristics (gender and age group) of the marketing factors that affect the respondents purchase decision for fragrance products. It was clear that in terms of the product, males and females do have similar characteristics in mind except for the integrity of brand, in which males gave more importance on average than females. Regarding the price, male and female behaved similarly for every factor. In term of place/location, there was no statistically significance between the genders. Both male and female had similar store/location characteristics in mind. For promotion, male and female mostly had no statistically significant differences of the affecting factors. Males agreed more to have free sample of the product giveaways as an important promotion factor. They also believed that having an actor or actress as product presenter will helps to promote the product's awareness more than females. Both genders agreed that a good sales representative, giving free gifts after customer reached certain sales target, having lucky draws event occasionally, and having member card/discounts were helpful promotion factors for fragrance products.

Considering the age group relationships with marketing factors, it seemed that all age group behaves differently on the marketing factors. However, post hoc Tukey test demonstrated that mainly the age group of below 15 years old was the one causing the statistically significant differences. It showed that on average, the age group of below 15 years old scored each marketing factor lower with statistically significances from other age groups. Only the product factor and variety choices of scents available in the location factor yields no statistically significant differences between age groups. This means all age group would respond similarly to having the variety choice of scents selection available. Other than that, the potential fragrance product must choose product characteristics, price, distributing location, and promotion specifically to the targeted age group preferred; the below 15 years old group, or all other specified age groups.

Table 4.34 Summary of Relationships between Social Characteristics of Industrial Employees and the Factors Affecting Purchase Decision.

Factor	Product							Price				Place					Promotion				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Gender						*										*		*			
Age	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Number	Product	Number	Price	Number	Place	Number	Promotion
1	Attractive/Charismatic Scent	8	Price Reflect Marketing Cost	12	Cleanness and Tidiness	16	Free Sample of Product
2	Long-lasting Scent	9	Quality Led to Price	13	Variety and Availability	17	Sales Representatives
3	Packaging Design/Protective	10	High Price High Quality	14	Integrity of Vendor	18	Actor/Actress as Presenter
4	Color of the Product	11	High Price High Demand	15	Accessibility	19	Sales Target Gifts
5	Variety Choices of Scents					20	Lucky Draws
6	Integrity of Brand					21	Member Card/Discounts
7	Quality of Raw Material						

Notes. * = Statistical Significant, see Table 4.35 for description of numerical labeling.

4.7 Prototype Product

In Figure 4.2, demonstrated a simulated situation in which potential product developer could use the result from this independent study as a tool to pinpoint targeted market and create a prototype product specifications for the target group. A prototype product was created to elicit an idea in Figure 4.1 as well. Start by identifying the target market, which was chosen here to be female industry employee, 21-25 years of age, single, graduated with a university degree, and earned a monthly income of 10,001-13,000 baht. This target group was the majority social characteristics from the data collected. Examine further, within the female group, majority uses fragrance products daily. They use mainly a spray-type fragrance product. Thus, the size of our bottle chosen was 50 ml. Package should use glass material for protection and prevents oxidation as our actives were easily evaporated. They shopped a fragrance product roughly around once every month or once every 1-3 months. The amount of money spent per purchase was 101-200 baht. Product properties they can't live without were safety and long-lasting. This group of people purchase fragrance product from mostly at a discounted super store or at a convenience store. The store must be clean and tidy for them to shop at ease.

Explore further into the marketing factors (4Ps) that were important to the target group. Product properties must include long-lasting scent and safety. Sales location must be clean and tidy. The store should have enough storage to keep stocks. The price must be affordable. Advertising and product awareness must be clear. Free samples have to be given out to promote the product and build awareness.

The ingredient should contain the most favorite scents; which were orange for top note, jasmine for middle note, and rose for base note. Additional suggestions for product developers were to consider the purchasing factors carefully as the specifications of a product for different age group will statistically be significant. Each age group have their own purchasing factors in which they favor.

Brand:	NS Brand
Product name:	Nature Scents
Active ingredients:	Alcohol, aqua, orange oil, fragrance, jasmine oil, rose oil, lemonene
Properties:	Freshness, long lasting, unique
Price:	199 baht
Size:	50 ml.
Date of Manufacture:	25 July 2014

Figure 4.1 Prototype Product

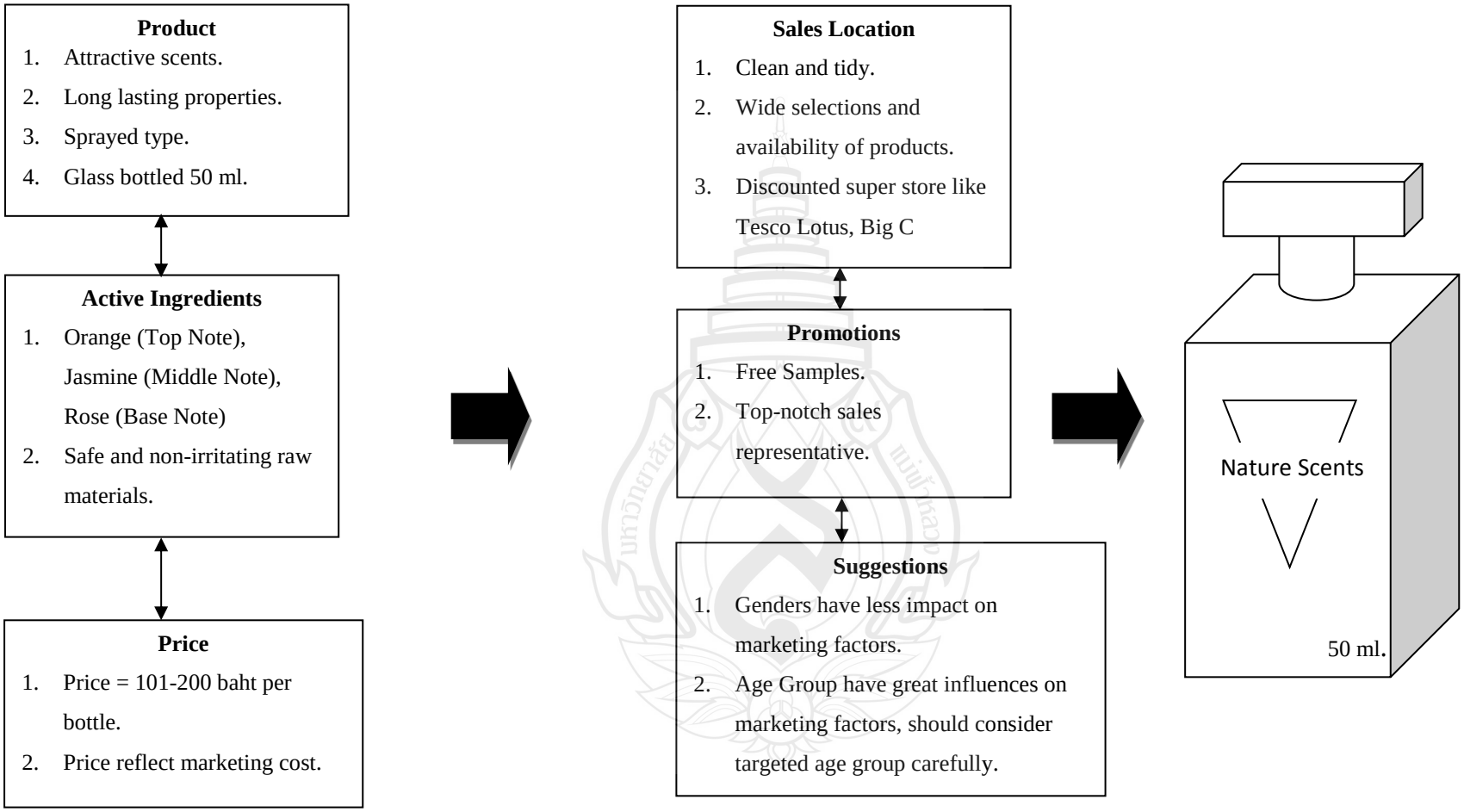

Figure 4.2 Flow Chart Diagram

CHAPTER 5

CONCLUSION AND DISCUSSION

This independent study explored the purchasing behaviors of industrial employees for fragrance products in Om Noi Industrial Estate, Samut-Sakhon Province. Research began by observing the sampled population's social and economical characteristics, identifying the factors that were most important to them, and provide relevant information for potential product developers to penetrate this market. Data was gathered from 420 respondents through questionnaires and analyzed using SPSS statistical program. The results were discussed and concluded in this chapter.

5.1 Summary of Respondents General Characteristics

Respondents were mostly females (71.4%) aging from 21 to 25 years old (24.8%). Almost all of the respondents were employed (94.8%) as production workers (43.6%) in an industry. Food and beverages were the most popular industry in the area (32.9%), followed by textile and garments (18.1%). Respondents have decent education level as many of them graduated from a university or higher (36%). Half of the populations were single (50.7%) and almost half were married (40.0%). Households monthly income ranges were around 10,001 to 13,000 (25.7%) and 13,001 to 15,000 (25.2%) baht. Considering that households expenses was between 5,000 to 8,000 (37.9%) baht, the majority of households would still have excess income to spend on luxurious goods or savings.

5.2 Summary of Respondents Purchasing Behavior for Fragrance Products

Both genders have at least once encountered with a fragrance products usage (96.4%). Many of the respondents used fragrance product daily (65.8%) or at least once every 1-2 days (19.5%). They make their purchases of fragrance product once every month (44.0%) at a discounted super store like Big C or Tesco Lotus (40.7%). Considering the lower priced commodities at such location, factory workers were more likely to be making their household purchases there over a major department store. Thus, making their purchase of a fragrance product there was reasonable. Their favorite type of fragrance products were spray type (56.4%), followed by roll-ons (31.0%). The amount of money spent per purchase was around 101 to 200 baht (36.9%). Majority of the respondents would make their purchase according to recommendations they received (45.0%), but males particularly choose to buy fragrance products from the same brand they're familiar with (43.3% of males). Person with most influences on their purchasing decision were themselves (47.4%), followed by their friends (36.2%). The fragrance product properties that respondents liked were its safety and non-irritating (32.2%) and an affordable price (20.9%) features. The scent they liked most from the three categories top, middle, and base notes, were orange (22.3%), jasmine (23.4%), and rose (31.6%).

5.3 Summary of Marketing Factors Importance to Respondents

Respondents gave score to each marketing factors of product, price, place, and promotion for fragrance products. This study was able to identify the most relevant factors that are crucial in product developing process. In terms of product, the ideal properties that respondents favored were the attractiveness of the overall scent (mean = 3.66) and long lasting scents (mean = 3.61). The quality of raw materials were not very important to the respondents (mean = 3.37) as other product factors.

Respondents believed that the price of a fragrance product included mostly its marketing costs (mean = 3.52). Yet they still want the price to be reasonable to the overall quality of the product (mean = 3.52). Market demands for the product did not set the price of the product as much (mean = 3.27).

The sales location of fragrance products should give priority to the cleanness and tidiness, as respondents gave the highest importance level to this factor (mean = 3.69). The sales location must also have a range of product selections and to keep them available for purchase as well (mean = 3.50). Accessibilities and convenience of access to the store was not very important as the averaged score was only 3.34.

The most helpful promotion factor was giving out free samples of the product (mean = 3.81). To assisted the selling process, a good sales representative can be significant as well, since the factor received an average score of 3.57. Have an actor or an actress as product presenter was one of the important promotion factors following the first two (mean = 3.56). But having a member card may not be a feasible investment as its importance level came last at average score of 3.26.

5.4 Gender Influences on Marketing Factors

Studies showed that gender does not have statistically significances towards the marketing factors, except for some within the product and the promotion factors. For product factors, male and female scored on average differently on each factors but with no statistically significances. Only on the integrity of brand factor in which male respondents gave more importance over the female respondents (p-value = 0.037). In the price factors, male and females think similarly on each factor with no statistical significances. In terms of sales location, both male and female respondents did not score each factors differently with statistical significances. Gender did not played an important role in the purchasing decisions of this factor. For the promotion factors, gender have statistical significances for the free samples and the actor/actress as product presenter factors only (p-value = 0.017 and 0.029, mean difference = 0.24 and 0.24 accordingly). In conclusion, gender did not much affect the marketing mix

factors as hypothesized initially. Only in the brand loyalty and some promotion factors does gender proved important to these factors.

5.5 Age Group Influences on Marketing Factors

Results from ANOVA test demonstrated statistical differences across all age group for each marketing factors except for the variety of scents within the product factors. Initial interpretation concluded all age group scored each marketing factors differently with statistical significances. However, running further analysis using post hoc Tukey test yields a better interpretations. Only the population age group of below 15 years old was the cause of these statistical differences in scores. They generally scored lower on average in each product, price, place, promotion factors with statistical differences. All other age groups from 16 to 50 years old agreed in the same direction for each marketing factors. However, the population age group of over 50 years old gave more importance to the sales location factor above all other age group. They gave accessibilities and convenience (average high = 3.75) and cleanness and tidiness (average high = 4.22) a higher importance with statistical significances. The over 50 years old age group also like the luck draws promotion factor over all other age group (average high = 4.11) with statistical significance. In conclusion, age group was an important variable to the marketing mix factors. The initial hypothesis was correct and potential product developers should consider their targeted age group carefully.

5.6 Suggestions

Information in this study provided a scope of the social and economical characteristics of industrial employees in Om Noi Industrial Estate, Samut-Sakhon Province. The sampled population can be a good representation of the industrial employees in the area, or possibly the whole labor forces in Thailand. Not many research have focused their observation on these group of people, due to their social status were considered in the lower triangle of the population. However, they were the

group of people benefited most from the government increased minimum wage policy and has became a market with higher purchasing power. There's no doubt that future products would aimed their targets to these lower income class. Thus, fragrance products, what used to be considered luxurious goods, were no exception to seek opportunities with the industrial employees.

Also, there was not enough time to produce a prototype product for the sampled population to tests. In order to product the actual product, further examinations regarding the right quantity per product, the type of packaging, the name of the product and its brand, and the compatibility of active ingredients within. Feedbacks from actual product sampling would be more accurate in terms of preferences.

The sampled population, although a good representation of the worker group, Thailand still has many industrial estates worth examining. Perhaps, population from another location could yield similar outcomes with this study and conclude more information regarding the industrial employees.

In terms of the most favorable scents, males and females could favor differently and yield different ideal ranking of the preferred scents. This could lead to the actual formulation of a fragrance product specifically targeted for men and women working in the factory. However, potential developer should be aware of the different tastes between age groups. The younger consumers and the older consumers gave importance to each marketing factors differently with statistical significances. Product should be designed to penetrate specifically for each age group, especially when formulating a product for the population aged below 15 or above 50 years old.

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APPENDICES

APPENDIX A

QUESTIONNAIRE SAMPLE

แบบสอบถาม

เรื่อง พฤติกรรมการเลือกซื้อผลิตภัณฑ์น้ำหอมของพนักงานโรงงานในเขตอุตสาหกรรม ตำบลอ้อมน้อย จังหวัดสมุทรสาคร

เรียน ผู้ตอบแบบสอบถาม

แบบสอบถามชุดนี้เป็นส่วนหนึ่งของการศึกษาระดับปริญญาโท สาขาวิชาวิทยาศาสตร์เครื่องสำอาง มหาวิทยาลัยแม่ฟ้าหลวงมิได้มีเจตนาในการจะนำข้อมูลใดๆไปทำเพื่อการอื่นนอกเหนือจากการศึกษาเพียงเท่านั้น รายละเอียดของแบบสอบถามมีจำนวนทั้งสิ้น 4 แผ่น ประกอบด้วย 3 ส่วนคือ

ส่วนที่ 1 : ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม

ส่วนที่ 2 : พฤติกรรมการเลือกซื้อผลิตภัณฑ์น้ำหอม

ส่วนที่ 3 : ปัจจัยที่ใช้ในการตัดสินใจเลือกซื้อผลิตภัณฑ์น้ำหอม

โดยข้อมูลการตอบแบบสอบถามจะไม่นำไปเปิดเผยเป็นกรณีส่วนตัวใดๆทั้งสิ้นและจะไม่มผลต่อท่านในทางลบ ข้อมูลที่ได้จะนำไปเป็นประโยชน์ในการศึกษาวิจัย คำตอบของท่านทุกข้อมีค่าอย่างยิ่งต่อการวิจัยครั้งนี้ ดังนั้นจึงใคร่ขอความร่วมมือในการตอบแบบสอบถามโดยพิจารณาคำตอบตามความเป็นจริงของท่านมากที่สุด ผู้วิจัยหวังเป็นอย่างยิ่งว่าจะได้รับความกรุณาจากท่านในการตอบแบบสอบถาม และขอขอบพระคุณเป็นอย่างสูง

ปรัชญา เสถียรสัมฤทธิ์
นักศึกษาปริญญาโท สำนักวิชาวิทยาศาสตร์เครื่องสำอาง
มหาวิทยาลัยแม่ฟ้าหลวง

แบบสอบถามนี้จัดทำขึ้นเพื่อศึกษาปัจจัยและพฤติกรรมการเลือกซื้อผลิตภัณฑ์น้ำหอมของพนักงานโรงงานใน เขตอุตสาหกรรมตำบลอ้อมน้อย อำเภอกระทุ่มแบน จังหวัดสมุทรสาคร ซึ่งเป็นส่วนหนึ่งของวิชาการศึกษาโครงร่างการศึกษาโดยอิสระของนักศึกษาหลักสูตรวิทยาศาสตร์เครื่องสำอาง มหาวิทยาลัยแม่ฟ้าหลวง ผู้จัดทำหวังเป็นอย่างยิ่งว่าจะได้รับความกรุณาจากท่านตอบแบบสอบถาม และขอขอบพระคุณมา ณ โอกาสนี้

ส่วนที่ 1. ข้อมูลของผู้ตอบแบบสอบถาม

1. เพศ ☐ชาย ☐หญิง
2. อายุ ☐ต่ำกว่า 15 ☐16 – 20 ☐21 – 25 ☐26 – 30 ☐31 – 45 ☐46 – 50 ☐มากกว่า 50
3. สถานภาพ ☐ โสด ☐สมรส ☐หย่า จำนวนบุตร_____
4. การศึกษา ☐ประถมศึกษา ☐มัธยมศึกษาตอนต้น ☐มัธยมศึกษาตอนปลาย ☐ป.ว.ช./ป.ว.ส. ☐ปริญญาตรี ขึ้นไป
5. ทำงานโรงงานหรือไม่? ☐ทำ ☐ไม่ทำ
6. อุตสาหกรรม ☐สิ่งทอและเครื่องนุ่งห่ม ☐อาหารและเครื่องดื่ม ☐โลหะและเครื่องจักรกล ☐อุปกรณ์อิเล็กทรอนิกส์/คอมพิวเตอร์ ☐พลาสติก ☐ยาง ☐โลจิสติกและขนส่ง ☐เคมีภัณฑ์และอุปกรณ์ห้องแลบ ☐ก่อสร้าง/วัสดุ ☐อื่นๆ ระบุ: _____
7. อาชีพ ☐ภาคอุตสาหกรรม ☐ภาคบริษัท ☐ภาคอื่นๆ:_____
8. ตำแหน่งในโรงงาน ☐พนักงานฝ่ายผลิต ☐ผู้ควบคุมเครื่องจักร ☐ช่างเทคนิค/ช่างทั่วไป ☐เจ้าหน้าที่สำนักงาน ☐ผู้บริหาร ☐อื่นๆ ระบุ: _____
9. รายได้ต่อเดือน ☐น้อยกว่า 5,000 ☐5,001 – 8,000 ☐8,001 – 10,000 ☐10,001 – 13,000 ☐13,001 – 15,000 ☐15,001 – 18,000 ☐มากกว่า 18,000
10. รายจ่ายต่อเดือน ☐น้อยกว่า 5,000 ☐5,001 – 8,000 ☐8,001 – 10,000 ☐10,001 – 13,000 ☐13,001 – 15,000 ☐15,001 – 18,000 ☐ มากกว่า 18,000

ส่วนที่ 2. พฤติกรรมการเลือกซื้อผลิตภัณฑ์น้ำหอม

1. ท่านเคยใช้ผลิตภัณฑ์น้ำหอมหรือไม่ ☐เคย ☐ไม่เคย
2. ท่านใช้ผลิตภัณฑ์น้ำหอมบ่อยแค่ไหน ☐ทุกวัน ☐1 – 2 วัน/ครั้ง ☐3 – 4 วัน/ครั้ง ☐5 – 6 วัน/ครั้ง ☐มากกว่า 7 วัน/ครั้ง
3. ประเภทของผลิตภัณฑ์น้ำหอมที่ท่านเลือกใช้ ☐สเปรย์/ฉีด ☐โรลออน ☐โคโลญ ☐โลชั่น ☐อื่นๆ ระบุ: _____
4. ท่านซื้อผลิตภัณฑ์น้ำหอมจากที่ใดบ้าง ☐ห้างสรรพสินค้าชั้นนำ ☐ร้านสะดวกซื้อ เช่น 7-11 ☐ซุปเปอร์มาเก็ต เช่นโลตัส บิ๊กซี ☐ตลาดนัด ☐ออนไลน์ ☐ร้านขายยา ☐อื่นๆ ระบุ:_____
5. ท่านซื้อผลิตภัณฑ์น้ำหอมบ่อยแค่ไหน ☐ทุกเดือน ☐1–3 เดือน/ครั้ง ☐4–6 เดือน/ครั้ง ☐7–9 เดือน/ครั้ง ☐10–12 เดือน/ครั้ง ☐มากกว่า 1 ปี/ครั้ง
6. ใช้เงินจำนวนเท่าไหร่ต่อครั้ง? (บาท) ☐น้อยกว่า 100 ☐101 – 200 ☐201 – 300 ☐301 – 500 ☐501 – 800 ☐มากกว่า 800
7. ลักษณะโดยทั่วไปของท่านในการเลือกซื้อผลิตภัณฑ์เป็นอย่างไร

   ☐ใช้ตรงสินค้าเดิมตลอด ☐เปลี่ยนตราสินค้าใหม่ตามคนแนะนำ/มีการพูดถึง

   ☐เปลี่ยนตราสินค้าใหม่เมื่อมีสินค้าออกใหม่ ☐เปลี่ยนตราสินค้าใหม่ตามคุณสมบัติที่ต้องการ

   ☐ใช้ตราสินค้าที่มีพรีเซ้นเตอร์ที่ชอบ ☐ตราสินค้าไม่มีผล
8. ผู้มีอิทธิพลต่อท่านในการตัดสินใจเลือกซื้อผลิตภัณฑ์น้ำหอมที่สุด คือ

   ☐ตนเอง ☐บิดามารดา ☐เพื่อน ☐ญาติ ☐คอมเม้นออนไลน์ ☐อื่นๆ
9. ลักษณะของกลิ่นน้ำหอมที่ท่านชอบ หลังจากฉีด ภายใน 5 นาที คือ (เลือกได้มากกว่า 1 ข้อ)

   ☐มะนาว ☐ส้ม ☐ส้มโอ ☐มะกรูด ☐โรสแมรี่

   ☐โหระพา ☐สับปะรด ☐เบอร์รี่ ☐สาระแหน่ ☐ยูคาลิปตัส
10. ลักษณะของกลิ่นน้ำหอมที่ท่านชอบ หลังจากฉีด ภายใน 15-30 นาที คือ (เลือกได้มากกว่า 1 ข้อ)

    ☐กุหลาบ ☐มะลิ ☐ซินามอน ☐กานพลู ☐ดอกเก๊กฮวย

    ☐ลิลลี่ ☐ลาเวนเดอร์ ☐คาโมมายล์ ☐พริกไทยดำ
11. ลักษณะของกลิ่นน้ำหอมที่ท่านชอบ หลังจากฉีด ภายใน 2-3 ชั่วโมง คือ (เลือกได้มากกว่า 1 ข้อ)

    ☐ไม้ซีดาร์ ☐ไม้แซนดอลวูด ☐วนิลา ☐กุหลาบ ☐ มะลิ

    ☐ขิง ☐เบอร์รี่ ☐ต้นโอ๊ค

1. คุณสมบัติของผลิตภัณฑ์น้ำหอมที่ขาดไม่ได้ คือ (เลือกได้มากกว่า 1 ข้อ)

☐กลิ่นติดทนนาน ☐ปลอดภัย ไม่ระคายเคือง ☐ราคาไม่แพง

☐ ได้รับการรับรอง ☐บรรจุพรรณดูดี น่าใช้ ☐ตราสินค้ามีชื่อเสียง

☐มีสีสันสวยงาม น่าใช้ ☐แหล่งผลิตมีความน่าเชื่อถือ

<u>ส่วนที่ 3.</u> <u>ปัจจัยที่ใช้ในการตัดสินใจซื้อผลิตภัณฑ์น้ำหอม:</u>

1 หมายถึง มีความสำคัญน้อยที่สุด

2 หมายถึง มีความสำคัญน้อย

3 หมายถึง มีความสำคัญปานกลาง

4 หมายถึง มีความสำคัญมาก

5 หมายถึง มีความสำคัญมากที่สุด

ปัจจัยที่มีผลต่อการเลือกซื้อผลิตภัณฑ์น้ำหอม	ลำดับความสำคัญ				
	1	2	3	4	5
1. ปัจจัยด้านผลิตภัณฑ์					
1.1 ตราสินค้ามีความน่าเชื่อถือ					
1.2 ส่วนผสมของสินค้า มีคุณภาพ ปลอดภัย					
1.3 กลิ่นของผลิตภัณฑ์มีให้เลือกหลากหลาย ทันสมัย					
1.4 กลิ่นของผลิตภัณฑ์มีลักษณะหอมชวนดม					
1.5 กลิ่นของผลิตภัณฑ์ติดทนนาน					
1.6 สีของผลิตภัณฑ์					
1.7 บรรจุภัณฑ์แปลก สะดุดตา ปกป้องผลิตภัณฑ์ได้ดี					
2. ปัจจัยด้านราคา					
2.1 สินค้าราคาแพง คือสินค้าที่มีคุณภาพ วัตถุดิบคุณภาพสูง					
2.2 สินค้าราคาแพง คือสินค้าที่มีความต้องการมาก คนรู้จัก					
2.3 ราคาสินค้าต้องเหมาะสมกับคุณภาพ					
2.4 สินค้าราคาถูก/แพง ต่างกันแค่ต้นทุนการตลาด ไม่ใช่คุณภาพ					
3. ปัจจัยด้านสถานที่จัดจำหน่าย					
3.1 สถานที่ซื้อขายมีความสะดวกสบายในการซื้อ เช่นมีที่จอดรถ					
3.2 สถานที่ขายมีความน่าเชื่อถือ					
3.3 สถานที่ขายมีสินค้าครบทุกประเภท เลือกซื้อสะดวก					
3.4 สถานที่ขายสะอาด เป็นระเบียบ สบายตา					

4. ปัจจัยด้านการตลาดและโปรโมชั่น					
4.1 มีการทำบัตรสมาชิก เพื่อใช้เป็นส่วนลดในการซื้อผลิตภัณฑ์					
4.2 มีการชิงโชคในโอกาสต่างๆ					
4.3 มีของแถมเมื่อซื้อสินค้าตามยอดที่กำหนด					
4.4 พนักงานขายให้คำแนะนำ อัธยาศัยดี					
4.5 มีดารา คนดัง นางแบบ/นายแบบ เป็นพรีเซนเตอร์					
4.6 มีการแจกตัวอย่างผลิตภัณฑ์ให้กับลูกค้า					

APPENDIX B

PROCEEDING

PURCHASING BEHAVIOR OF INDUSTRIAL EMPLOYEES FOR FRAGRANCE PRODUCTS IN OM NOI INDUSTRIAL ESTATE, SAMUT-SAKHON PROVINCE

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Abstract

This independent study explored into the social and economical characteristics of a sampled population group of industrial employees in Om Noi Industrial Estate, Samut-Sakhon Province. They were a good representation of the labor forces in Thailand. Recent increased of minimum wage by the government increased the interests for market penetrators, because now the highest population number group has higher purchasing powers in their hands. Research aimed to analyze the purchasing behavior of this group for fragrance products. Exploration areas included the marketing mix factors such as product, price, place, and promotion. They give a good overview of general factors that could affect the purchasing decisions of a person. Product factors were the factors such as the characteristics and the properties of a product that would greatly attract our targeted consumers. The price factor gives a good idea of how to set the price. The place factors allowed for a creation of an ideal sales location with necessary features. The promotion factors point out the most effective promotions that would increase the sales of the product.

Introduction

Om Noi Industrial Estate is located within Samut-Sakhon province with population of around 52,234 people. It was considered one of the largest industrial estates in Thailand. Industrial employees work in a harsh environment, often outdoors and no air conditioners or air purifiers. Thailand's climate range around 30 to 40 degrees Celsius and a lot of bacteria were mixed in the air. Thus, the body perspiration of this labor class will happen quickly. Fragrance product was one of their solutions to keep their perspiration slower or less distracting. Using roll-ons or hydrophobic products can prevent body perspirations. Working in the production line can also be stressing. A fragrance product with fresh scents and essential oils smell can reduce the stress from working long stressful hours for these industrial employees.

Research Methodology

This independent study collected data from 420 respondents through the use of questionnaires. Questionnaires were distributed to discount super stores, local markets, convenience stores, and places around Om Noi Industrial Estate area. Data from all respondents were entered into a SPSS statistic software version 11.5 for windows. Analysis was made from tables generated through this program. Descriptive statistics and compare means independent t-test and ANOVA were used as the function within SPSS program to find social and economical characteristics of respondents and to see all relationships the marketing factors have on the variables.

Results

Most of the respondents were employed as an industrial employee (94.8%) working in various industries from food and beverages (32.9%), textile and garments (18.1), and electronics and computers (12.9%). Their monthly income ranges in between 10,001 to 13,000 (25.7%) baht and 13,001 to 15,000 (25.2%) baht. Their monthly expenses range from 5,000 to 8,000 (37.9%) baht. Subtracting expenses from income yields an excess income of around 5,000 – 10,000 baht per month to spend on

excess goods or bank savings. Respondents spend around 101 - 200 (36.9%) baht for a fragrance product every month (44.0%). Their favorite scents were orange, jasmine, and rose. They like their fragrance products to have attractive scents, long lasting smell, and have interesting packages. Store locations should be clean and tidy. Stores should have availability and variety of products. Promotion that is best suited for this target group was giving out free product samples. When creating marketing strategy, gender does not have influence on marketing factors, but age did. Marketing factors had different effect on the younger and older population.

Suggestions

Although, respondents were a good example of industrial employees in Thailand, they were mostly residences in Om Noi Industrial Estate areas only. There should be more studies about this topic with many other industrial estates in Thailand. Also, an actual product specifically designed to capture the industrial employee group has not yet existed. The actual effect of the marketing factors on this target group of population has not yet been tested. Only statistical method in this research yielded an educated guess and predictions as close to an actual effect as possible. Marketing factors, though not much effect on gender, were statistically significance between the age groups. Products should be alerted when designing a product for the population aged below 15 and for the population aged over 50 as they were the two groups with statistically differences on each marketing factors.

Acknowledgement

This independent study was accomplished with great help from my advisor Lecturer Dr. Natthawut Thitipramote and my co-advisor Lecturer Dr. Nont Thitilertdecha. They were instructors of the School of Cosmetic Science at Mae Fah Luang University. I sincerely appreciated their advices and suggestions, especially from Lecturer Dr. Natthawut Thitipramote, who patiently guided me throughout this research.

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