Understanding Purchase Intention of Growing-Up Milk (GUM) for Children among Parents in Malaysia: A Stimulus-Response Approach

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Abstract

Due to the declining trend of children's growing up milk category in Malaysia, the overall market share and absolute value share for this category has been on a declining trend from year to year. This decline is predominantly driven by the lower birth rate, rising breast-feeding rate, low product penetration and change in consumers' product preference. The majority of the key players of growing up milk category manufactures are suffering to maximize their business profits. Hence, this conceptual paper aims to identify the relationship of key factors influencing purchase intention of growing-up milk (GUM) for children among parents in Malaysia. Specifically, this study will provide a framework to show parents' decision-making process by incorporating the key factors relevant to current purchase of Growing-Up Milk (GUM) in Malaysia from a Stimulus-Response theory perspective. An empirical study using online survey questionnaires approach is proposed which, will be beneficial for

both manufacturers and distributors in their sales and distribution strategy.

Keywords: Electric vehicles, Stimulus-Response Theory, Purchase Intention, Malaysia.

1. INTRODUCTION

Cow's milk is commonly known as a nutritious food that is rich in essential nutrients for bone mineralization and development. According to Asia Pacific Infant and Young Child Nutrition Association (APIYCNA), Growing-Up Milk (GUM) can contribute to balanced nutrition in young children, and it is important to provide optimal nutrition and valuable contribution towards the overall child's health (APIYCNA, 2020). Based on the marketing insights report, the global GUM category is forecasted to reach USD 52,150.9 million by end of 2024, which is more than 255% from USD 20,400.7 million in the year 2018 (Fast.MR & Consulting, 2020). This forecast is mainly contributed by the rising fertility rate across the globe and China is one of the leading consumers for GUM products, and the rising of women's labour force participation which they will find the best choice for their children when they are at their workplace (Euromonitor International, 2018).

Within the Malaysian market, the percentage of milk consumer is among children aged 1- 3 years (90.6%), 4-6 years (86.1%) and 73.7% of 7- 10 years respectively (Khor et al., 2014). Thus, these group of little consumers are big consumption for the milk market in Malaysia, which leads to formula children

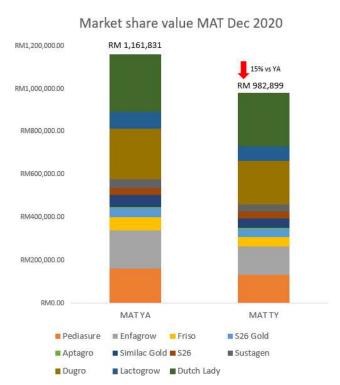
growing up milk (GUM) industry playing an important role as the source of the right nutrition for Malaysian children. Being parents, they strive to invest in countless efforts or resources to fulfil their children's needs which include the type of milk fed for their children since they are born. The food marketing system in also evolved significantly Malaysia has because industrialization, economic growth, trading evolvement and urbanization across Asian countries, which also has led to more wealthy consumers who are searching for better quality food products which the brand, label information with a wider variety to meet consumer's progressively various needs and preference.

According to Nielsen Insights (2019), parents are often willing to spend on quality for these little consumers and this provides a big market opportunity for the formula milk manufacturers. Besides, the storm of melamine in milk, lower protein milk index than the declared standard as well as counterfeit formula milk in recent years has raised the cautions when parents choose formula milk for their little children (Tuan et al., 2013). Nonetheless, the fierce battle for earning baby bucks becoming more challenging especially within the formula milk sales due to the midst of an evolving consumer landscape that all the GUM brands will go all-out with different marketing strategies to attract their target consumers to choose their brand over the other competition. Thus, the brands must stand out from the competition to be seen as a brand that can cater to parents' evolving lifestyle or needs to understand consumer behaviour and

decision-making characteristics of parents within the GUM category competition.

There are many different GUM product brands available in the Malaysian market which includes both local manufactured products as well as imported products and the key manufacturers for this category including Dutch Lady, Danone, Abbott, Mead Johnson, Nestle, and Wyeth which offer different products with different propositions to cater to the needs or preferences of the Malaysian parents.

Figure 1: Total GUM Market Share Malaysia MTD December 2020

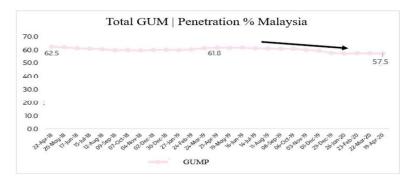


Source: Nielsen Answer Total GUM MTD December 2020 Market Retail

Audit Report

However, recent years has seen the GUM market value share on a declining trend between December 2019 to December 2020 with a 15% of drop in total market sales value (Nielsen Answer, 2020) as shown in Figure 1. Besides that, a similar trend of GUM category penetration also has been observed in the Malaysian GUM market where the penetration rate was at 62.5% in April 2018 which dropped to 57.5% in April 2020 (Kantar World Panel, 2020b) as shown in Figure 2.

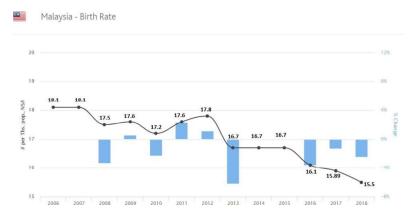
Figure 2: Total GUM Penetration % in Malaysia Moving Annual Turnover (MAT) April 2020



Source: Kantar World Panel, Total GUM 1+ Penetration% Malaysia MAT April 2020b

From the market segment data, the declining category business market share and penetration predominantly are attributed by both continuously declining trend of birth rate and significant increase on breastfeeding rate, which increased from 65.9% in 2019 to 73.2% in 2020 where the age of the child is 13 months to 24 months (Kantar World Panel, 2020a). As can be seen in Figure 3, the crude birth rate in Malaysia is on a declining trend from 2006 to 2018, albeit the slight increase from 2010-2012. The number of births in the year 2019 was reported as the lowest in a decade which declined from 15.5 (2018) to 15.0 (2019) birth per thousand population (DOSM, 2020).

Figure 3: Malaysian Birth Rate Trend 2006- 2018



Moody's Analytics, Malaysia- Birth Rate 2006 – 2018 Source from Department of Statistics Malaysia, 2019

Besides that, the food marketing system in Malaysia has also evolved significantly because of industrialization, economic growth, trading evolvement and urbanization across Asian countries, which also led to more affluent consumers who are looking for better quality food products which the brand, label information with a wider variety to meet consumer's progressively various needs and preference (Boniface & Umberger, 2012). This may also have an impact to change parents' demand when it comes to GUM product benefits.

From the market segment information and data mentioned earlier, there are either parents choosing an alternative solution to feed their children or the attributes of parents who are looking for when they are purchasing GUM products might be different from the previous generation due to the external and internal environment factors changed. The resilience of brands in today's fragile and competitive business situation has underlined the importance of effective marketing strategies from the marketer to market the right products to the right customer at the right time

that can trigger the consumer purchase intention towards the brands or products. All these are important elements which will affect the market directly for all the GUM product manufacturer to design their marketing strategy and attract then acquire new parent that never tries any GUM product or 'steal' existing GUM user from a competitor brand to purchase their brand by having the right marketing strategy to trigger parents' consumer purchase intention (CPI).

Parents' CPI is crucial for the GUM manufacture business because it is a type of decision-making that an individual evaluates the reason to purchase particular brands or products and it is also known as a situation where the individual tends to purchase a certain product in a certain situation (Mirabi et al., 2015). Eventually, it will directly impact the business sales performance as an indicator of the willingness of the consumer to purchase the products (Akroush et al., 2019). In this category, parents are known as the elements which will be affected directly because they are the ones who will decide on the best GUM that they want to feed their children (Tuan et al., 2013). However, parents especially of a new-born tend to be less experienced and less familiar with this product category and some of them highly rely on the price and quality of products, or word- of-mouth from their family members, close friends and experts when they are deciding which GUM brands for their children (Chang, 2018).

Following the aforementioned, the GUM category marketers must understand how their target consumer parents make their purchase decisions before the marketers identify which is the best marketing campaign to be used as their 'weapon' to market their products and trigger the purchase intention that can fulfil the needs of the parents who are looking for GUM products for their children. Therefore, this conceptual paper discusses the key factors that influence Malaysian Parents' CPI when they consider GUM products for their children from one to seven years old in Malaysia.

2 LITERATURE REVIEW

2.1 Consumer Purchase intention (CPI)

Consumer purchase intention (CPI) is defined as a type of decision-making that an individual evaluates the reason to purchase a particular brand or product by a consumer and it is also known as a situation where the individual tends to purchase a certain product in a certain situation (Mirabi et al., 2015). Previous studies show that intention is a significant relevant dimension in marketing literature and understanding CPI is a piece of effective and useful information that marketers use for new products' sales prediction or returned consumer for repeat purchase as well as the consumer purchase pattern of the products or services too (Curvelo et al., 2019; Sagheb et al., 2020). Besides that, CPI is also used as an effective tool to measure or anticipate consumers' response behaviour such as consumers' future purchase behaviour and a consumer that has greater (positive) response experience will have stronger purchase intention

towards the products (Watson et al., 2020). According to a previous study, CPI is highly associated with the attitudes of the consumer, where marketers need to promote the product brand image to the consumer to have a positive attitude and ultimately help increase the CPI for the products (Chang & Jai, 2015). Very little research has been done in the Malaysian GUM context. Hence, this paper will focus on the relevant factors identified by the past studies to understand the factors that influence the CPI towards GUM products in Malaysia.

2.2 Word of Mouth (WOM)

Word of mouth is defined as an evaluation of brands, products, service or an organization by an individual being made without commercial intention. This information is diffused through human face-to-face interaction or other channels of communication such as the social network (Kuo et al., 2013). Previous study has shown that WOM and CPI have a significant positive relationship in the textile industry context that WOM will eventually influence consumer's decision-making process through six factors like trustworthiness, source similarity, source attractiveness, social tie strength, source expertise and information usefulness (Khan et al., 2015). Additionally, the study that was done on private label food products and hospital services in Indonesia also identified that WOM has a positive relationship with consumer purchase behaviour which includes CPI as well (Nguyen & Gizaw, 2014; Solang et al., 2017). Research shows that marketers use positive WOM as an effective marketing strategy to increase their profit.

2.3 Country-of-origin

Country-of-origin (COO) was first studied by Schooler in 1965 where he defined it as the concept of product "Made-In". In previous empirical studies, a significant positive relationship between COO and CPI was observed in different industries such as imported fruits, clothing and GUM products in Korea, Thailand and Vietnam markets. Studies by Brenda & Adjnu (2018) found that consumers will have higher CPI if the product's COO was from more developed countries such as Japan compared to Vietnam. Research also shows that marketers should take advantage to enjoy the strong influence of COO if the products or brand that they are managing have a strong and positive COO image from a developing country (Yunus & Rashid, 2016).

2.4 Product Information Labelling

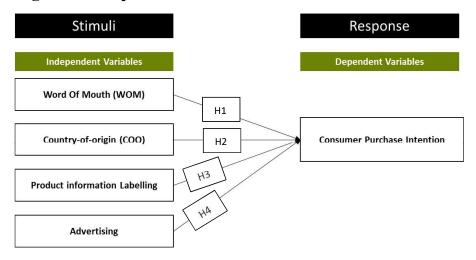
Product labelling is defined as a part of the packaging of products that contain written information that is important information that needs to be communicated to a consumer (Jadapalli & Somvarapu, 2018). Food products label information also includes any tag, brand, mark, pictures or descriptions that are written, printed embossed or even impressed on that is attaching or belonging to the product. Product labels are usually known as a tool for brands to convey information about the product category and assortment of product-specific attributes that will lead to incremental buying behaviour. According to past studies for food-related industries such as dairy or milk products and wine products, the product labelling information has a significant positive relationship with CPI (Hoque et al., 2018).

Researchers mentioned that it is key for marketers to nail the right product labelling information on their product packaging because the information that was declared on the products will reduce consumer's uncertainty towards the quality and also meeting their needs at the same time (Jadapalli & Somvarapu, 2018).

2.5 Advertising

Advertising is defined as the information via mass media communications that can influence consumers to buy the product (Wijesinghe et al., 2020). Advertising is also a marketing tool to persuade the consumer to purchase the products by notifying the target audience of the existence and benefits of the products or services. Several studies have been done in different context and market such as GUM product in Sri Lanka (Wijesinghe et al., 2020), GUM in Vietnam (Tuan et al., 2013), as well as green products (Sarkar et al., 2019) in Pakistan, the results showed that advertising has a positive relationship with CPI. Advertising is proven as a marketing tool that is commonly used as an information clue to attract the attention of the consumer and facilitate their purchase decision.

Figure 4: Proposed model



3. THEORY OF STIMULUS-RESPONSE (S-R)

According to Kolter and Keller (2006) Stimulus-Response Model Buyer Behaviour, consumer behaviour could be stimulated by the marketing stimuli and other stimuli. It is significantly important for marketers to figure out consumer psychology and characteristic and how to make the stimuli turn into responses. In order to achieve the response, the marketers are required to have access to the data concerning consumers' purchase behaviours and the right media in consumers' favour then only can design a convincing communication program (Jisana, 2014).

The Stimulus-Response model-based theoretical framework of the relationship between the independent variables and CPI is shown in Figure 4. Based on the above discussion, this research framework is proposed to investigate the relationship between the independent variables namely WOM, COO, product labelling information and advertising as a stimulus towards the consumer purchase intention in the GUM category in the

Malaysia market. Previous research demonstrates theoretical correctness and the ability of the S-R theory to predict consumer behavior, which can be effective to explain and predict the purchasing intention for GUM. Past researcher has applied this theory to study buyers' behavior (Oke et al., 2015; Liu et al., 2018, Murshid & Mohaidin, 2017). However, little studies have used the theory of S-R to analyze purchasing intention of GUM as a theoretical framework.

4. CONCLUSION

The aim of this paper is to discuss and understand the purchase intention of growing-up milk (GUM) for children among parents in Malaysia via a stimulus-response perspective. Four main factors discussed include word of mouth (WOM), country-of-origin (COO), product information labelling, and advertising. These factors are aligned to the Malaysian markets to understand the factors which significantly affect the choices and purchase of GUM by Malaysian parents, helping marketers to truly understand the factors that drive parents in buying GUM. It is proposed that a quantitative study approach to obtain primary data should be conducted. By using an online survey form (i.e., Google Form) and purposive sampling technique, a sample of parents under Gen Y and Gen Z related communication channel should be conducted. The empirical study should look into Malaysian urban parents between 25 to 40 years old with children 1 to 7 years who purchase GUM products. Such approach would gain better insight for marketers on consumer purchase intention among parents in the GUM context (Ong et al. 2018, Ong et al.,

2015). The findings will also contribute to empirical evidence of the relationships between variables proposed in the GUM context.

REFERENCES

- Akroush, M. N., Zuriekat, M. I., Al Jabali, H. I., & Asfour, N. A. (2019). Determinants of purchasing intentions of energy-efficient products. *International Journal of Energy Sector Management*, 13(1), 128-148.
- APIYCNA. (2020, February). *Role and necessity of growing-up milk*. Asia Pacific Infant and Young Child Nutrition Association. https://apiycna.org/our-positions/role-and-necessity-of-growing-up-milk/
- Boniface, B., & Umberger, W. (2012). Factors influencing Malaysian consumers' consumption of dairy products.

 Australian Agricultural & Resource Economics Society, 1, 1-30.
- Brenda S., & Ajun D. (2018). Country-of-Origin effects on consumer buying behaviours. A case of mobile phones. *Studies in Business and Economics*, 13(2), 179-201.
- Chang, H. (2018, February 9). *How parents decide on baby milk purchases*. The Straits Times.

 https://www.straitstimes.com/opinion/how-parents-decide-on-baby-milk-purchases

- Chang, H. J., & Jai, T. (. (2015). Is fast fashion sustainable? The effect of positioning strategies on consumers' attitudes and purchase intentions. *Social Responsibility Journal*, 11(4), 853-867.
- Curvelo, I. C., Watanabe, E. A., & Alfinito, S. (2019). Purchase intention of organic food under the influence of attributes, consumer trust and perceived value. *Revista de Gestão*, 26(3), 198-211.
- DOSM. (2020). Malaysia Birth Rate Trending 2006- 2018.

 Department of statistics Malaysia official Portal:

 https://www.dosm.gov.my/v1/index.php?r=column/cthe

 meByCat&cat=165&bul_id=T3Q0SENtcWxWdTFJa05

 QcHJiN0t1UT09&menu_id=L0pheU43NWJwRWVSZk

 lWdzQ4TlhUUT09
- Euromonitor International. (2018). Baby food: Unveiling global growth drivers and Premiumisation strategies.

 Euromonitor International | Strategic Market Research,

 Data & Analysis. https://www.euromonitor.com/baby-food-unveiling-global-growth-drivers-and-premiumisation-strategies/report
- Fast.MR & Consulting. (2018, November 5). *Growing-up milk market growth CAGR 20.1% by 2024 Fast.MR*. Latest Market Research & Industry Insights | Fast.MR. Link: https://www.fastmr.com/report/1/growing-up-milk-market

- Hoque, M. Z., Xie, J., & Nazneen, S. (2018). Effect of labelled information and sensory attributes on consumers' intention to purchase milk. *South Asian Journal of Business Studies*, 7(3), 265-286.
- Jadapalli, M., & Somvarapu, S. (2018). A Survey on Perception of Food Labels Among the Population of Nellore District.

 American Journal of Food Science and Nutrition, 5(1), 1-16.
- Jisana, T. K. (2014). Consumer Behaviour Models: An Overview. Sai Om Journal of Commerce & Management, 1(5), 34-43.
- Kantar World Panel. (2020a). Breast Feeding Rate in Malaysia MAT April 2020. Malaysia: Kantar World Panel.
- Kantar World Panel. (2020b). Total GUMP 1+ Penetration Data MAT April 2020. Malaysia: Kantar World Panel.
- Khan, S. A., Ramzan, N., Shoaib, M., & Mahyuddin, A. (2015). Impact of Word of Mouth on Consumer Purchase Intention. *Sci Int (Lahore)*, 27(1), 479-482.
- Khor, G., Shariff, Z., Huang, S., Mohamad, M., Chan, Y., Chin,
 Y., & Yusof, B. (2014). Milk Drinking Patterns among
 Malaysian Urban Children of Different Household
 Income Status. *Journal of Nutrition and Health Sciences*,
 2(1), 1-7.

- Kotler, P., & Keller, K. L. (2016). *Marketing management*. Prentice Hall.
- Kuo, Y., Hu, T., & Yang, S. (2013). Effects of inertia and satisfaction in female online shoppers on repeat-purchase intention. *Managing Service Quality: An International Journal*, 23(3), 168-187.
- Liu, Y., Luo, X., & Cao, Y. (2018). Investigating the influence of online interpersonal interaction on purchase intention based on stimulus-organism-reaction model. *Human-centric Computing and Information Sciences*, 8(1). doi:10.1186/s13673-018-0159-0
- Mirabi, V., Akbariyeh, H., & Tahmasebifard, H. (2015). A Study of Factors Affecting on Customers Purchase Intention. *Journals of Multidisciplinary Engineering Science and Technology*, 2(1), 267-273.
- Murshid A., M., & Mohaidin, Z. (2017). Models and theories of prescribing decisions: A review and suggested a new model. *Pharmacy Practice*, 15(2), 990-990.
- Nguyen, T., & Gizaw, A. (2014). Factors that influence consumer purchasing decisions of Private Label Food Products.
- Nielsen Answer. (2020). Nielsen Answer Total Children Growing Up Milk Market Share December 2020. Malaysia: Nielsen Answer.

- Nielsen Insights. (2019). Consumer Industry report: Growing

 Pains, Growing Gains. Link:

 https://www.nielsen.com/apac/en/insights/article/2019/gr
 owing-pains-growing-gains/
- Oke, A. O., Kamolshotiros, P., Popoola, O. Y., Ajagbe, M. A., & Olujobi, O. J. (2015, December 5). Consumer Behavior towards Decision Making and Loyalty to Particular Brands. *International Review of Management and Marketing* 6(4):43-52
- Ong, C. H., Lee, H.W., & Ramayah T. (2018). Impact of brand experience on loyalty. *Journal of Hospitality Marketing & Management*, 27(7), 755-774.
- Ong, C. H., Salleh, S. M., & Yusoff, R. Z. (2015). The Role of Emotional and Rational Trust in Explaining Attitudinal and Behavioral Loyalty: An Insight into SME Brands. *Gadjah Mada International Journal of Business 18* (1), 1-19.
- Sagheb Z., M., Ghasemi, B., & Nourbakhsh, S. K. (2020). Factors affecting purchase intention of foreign food products. *British Food Journal*, 122(5), 1485-1504.
- Sarkar G., Sarkar J., & Yadav, R. (2019). Brand it green: young consumers' brand attitudes and purchase intentions toward green brand advertising appeals. *Young Consumers*, 20(3), 190-207.

- Solang, J. P., Pangemanan, S., & Tielung, M. (2017). Analyzing The Effect of Word of Mouth and Consumer Attitude on Purchase Intentnion at Siloam Hospital Manado. *Jurnal Berkala Ilmiah Efisiensi*, 17(1), 53-63.
- Tuan, L. T., Phuong, N. T., Ngoc, L. T., & Mai, L. H. (2012).

 Powdered milk consumers' buying behavior.

 International Journal of Business and Management, 8(2).
- Watson, A., Alexander, B., & Salavati, L. (2020). The impact of experiential augmented reality applications on fashion purchase intention. *International Journal of Retail & Distribution Management*, 48(5), 433-451.
- Wijesinghe, A., Abeyanayake, N., & Priyadarshani, R. (2020). Factors Influencing Milk Powder Brand Preference: A Case from Kegalle District of Sri Lanka. *Sri Lanka Journal of Marketing*, 6(2), 1-24.
- Yunus, N. S. N. M., & Rashid, W. E. W. (2016). The Influence of Country-of-origin on Consumer Purchase Intention: The Mobile Phones Brand from China. *Procedia Economics and Finance*, *37*, 343-349.