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# **How Differences in Herbal Beverage Consumer Decisions Based on Demographic Factors?**

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#### INFO ABSTRACT **Article History** For a long time, people have been consuming homemade herbal drinks, which are Received: processed traditionally. However, micro, small, medium, and large-scale 2024-01-09 businesses are now emerging in the production and marketing of ready-to-Revised: consume packaged herbal drinks. Research is needed on whether there are 2024-02-24 differences in consumer motivation in using homemade and industrial-made Accepted: herbal beverages in terms of the factors of age, gender, education, occupation, and 2024-04-30 marital status of consumers, as well as how the simultaneous influence of these five variables on the motivation to consume herbal drinks. This study used a sample of 327 people whose data was collected through a digital questionnaire. Data were analyzed using Mann Whitney, Kruskal Wallis, and multiple linear regression. The results showed differences in consumer decisions based on age, education, occupation, and marital status in the choice of herbal drinks, but not gender differences. Most consumers chose the non-packaged type. Simultaneous testing, age, and occupation factors significantly affected consumer decisions, while gender, education, and marital status were not necessary. The results have implications for the segmentation strategy, targeting, and market positioning of the herbal beverage processing industry and the herbal beverage raw material supply industry, better market understanding, more targeted product development, more effective promotional interventions, increased public awareness of the benefits of herbal drinks, and government policy support for the herbal beverage industry.

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**Keywords:** Consumers Behavior; Consumer Decisions; Demographic Factors; Herbal Drinks

# **INTRODUCTION**

The Ministry of Health of the Republic of Indonesia is now developing traditional medicine, an herbal drink, because this treatment has grown and developed from villages to cities from lower, middle, and upper economic classes (Kementerian Kesehatan RI, 2017). In Indonesia, herbal drinks have long been known as *jamu* and are familiar to everyone, regardless of strata and socio-cultural background. This drink, made from medicinal plant extracts, is consumed to maintain health and maintain fitness. It is the same with the people's customs in Azad Kashmir, Pakistan (Rashid et al., 2018). However, research Rashid et al. (2018) focuses on taxonomic diversity and traditional knowledge of medicinal plants as herbal drinks. For generations, people have traditionally processed herbal drinks. However,

various micro, small, medium, and large-scale industries have emerged, struggling in the production and marketing of modern packaged herbal drinks that are ready for consumption. The rapid development of herbal consumption has attracted the attention of the industrial world and the academic world with the opening of traditional medicine study programs in several universities (Kementerian Kesehatan RI, 2017).

Where to obtain traditional medications is correlated with Gender, Last Education, Occupation, and Monthly Expenditure (Bayan, 2023). There is a significant relationship between gender and income level in the buying behavior of herbal products (Rajasekaran & Marimuthu, 2018). Age, gender, annual income, education, and personality are related to the purchase of necessities, and non-needs attitude, social influence, and product safety significantly positively impact the purchase behavior of herbal products. Ismail et al. (2021), on the contrary, demographic factors, including gender, age, education, occupation, and income, have no significant effect on the level of people's preferences; demographic factors have a significant influence on consumer satisfaction and perceived risk of consuming traditional medicines (Ismail et al., 2021). Sociodemographic characteristics do not always drive consumer purchase decisions, and in the absence of significant sociodemographic influences, intrinsic consumer characteristics such as personality traits may better explain preferences (Ufer et al., 2019).

There is still a lack of research that highlights differences in herbal consumption decisions and differences in the tendency to choose the types of herbal drinks based on demographic factors, including gender, age, type of work, level of education, and marital status of consumers. , as well as the simultaneous relationship of these factors to the decision to consume herbal drinks. What previous research on this topic has done is to examine the simultaneous relationships between demographic variables, consumer satisfaction, place of purchase, and purchasing behavior. What is still missing from previous research is a specific examination of the influence of demographic variables on the type of herbal drink consumed, whether homemade, industrially made, packaged, or non-packaged. This study aims to determine whether there are differences in the decision to consume herbal drinks and the types of herbal drinks chosen in terms of demographic variables, as well as the simultaneous influence of these five variables.

#### LITERATURE REVIEW

Social differences can be used to monitor changes in consumer behavior, and demographic variables, including gender, age, place in the birth order, and marital status, are important predictors of consumer choices (Katundu & Gabagambi, 2014). Social norms affect the intention to purchase domestic products Jia et al. (2023). Demographic factors are age, gender, occupation, income level, and marital status affect consumer behavior and willingness to buy the product (Bayan, 2023; Di Crosta et al., 2021; Ma et al., 2022; Rajasekaran & Marimuthu, 2018; Sharma et al., 2020). Purchasing decisions are perceptions as a result of considerations and thoughts expressed in an individual action that is directly involved in taking something decision For do purchase to product offered by the seller (Kotler et al., 2008).

# Age difference and consumer purchasing decisions

There is a relationship between age and where to buy traditional medicines. The age of consumers has a significant positive effect on behavior consistency and consumer willingness to buy green agri-food products (Ma et al., 2022). Age significantly affects consumer satisfaction and the perceived risk of consuming traditional medicines (Zulfikar et al., 2020). Age is a reasonable factor in the tendency of impulsive buying behavior. Therefore, it was found that participants under 30 years were more likely to exhibit impulsive buying behavior compared to participants aged over 30 years (Sharma et al., 2020).

H1a: There is a difference in consumer decision to consume herbal drinks and the type of herbal drinks chosen based on consumer age.

H1b: Age has a positive and significant effect on consumer purchasing decisions.

### **Gender Differences and Consumer Purchase Decisions**

There is a relationship between gender and where to buy traditional medicines. One of the demographic factors is gender, and this factor has no significant effect on the level of people's preference; gender has a significant influence on consumer satisfaction and the perceived risk of consuming traditional medicine (Zulfikar et al., 2020). Gender is a factor that makes sense in the tendency toward impulsive buying behavior. Therefore, it was found that female participants were more likely to exhibit impulsive buying behavior than male participants (Sharma et al., 2020). Gender significantly affects behavior consistency and consumer willingness to buy green agri-food products (Ma et al., 2022). There is a significant relationship between gender and income level on product purchasing behavior (Rajasekaran & Marimuthu, 2018). The chi-square test shows a statistically significant difference in the intentional seeking of sustainable products between men and women ( $\chi$ 2 = 8.277, p <0.016). More women (17%) stated that they deliberately seek out sustainable food products than men (Lassoued et al., 2023).

H2a: There is a difference in consumer decision to consume herbal drinks and the type of herbal drinks chosen based on consumer gender.

H2b: Gender has a positive and significant effect on consumer purchasing decisions.

#### **Differences in Education Levels and Consumer Purchase Decisions**

There is a relationship between recent education and where to buy traditional medicines (Bayan, 2023). According to Zulfikar et al. (2020), one of the demographic factors, education, has a significant influence on consumer satisfaction and perceptions of the risk of consuming traditional medicine.

H3a: There is a difference in consumer decision to consume herbal drinks and the type of herbal drinks chosen based on consumer education level.

H3b: Education level has a positive and significant effect on consumer purchasing decisions.

# Differences in the type of work and consumer purchasing decisions

There is a relationship between work, the place, and purchasing traditional medicines (Bayan, 2023). One of the demographic factors is that work significantly influences consumer satisfaction and the perceived risk of consuming traditional medicines (Zulfikar et al., 2020).

H4a: There is a difference in consumer decision to consume herbal drinks and the type of herbal drinks chosen based on consumer occupation.

H4b: Occupation has a positive and significant effect on consumer purchasing decisions

# Marital status factor and consumer purchasing decisions

Status is a reasonable factor in the tendency of impulsive buying behavior. Therefore, it was found that unmarried participants were more likely to exhibit impulsive buying behavior than married participants (Sharma et al., 2020). By using the chi-square test, it was found that there was no relationship between marital status and the frequency of buying luxury goods. By using the Kruskal-Wallis H test, there were no significant differences in perceptions of differences in the dimensions of luxury values based on marital Status (Srinivasan et al., 2015). Marital status has a minimal effect on behavioral characteristics of apparel e-shopping purchases. Comparatively, marital status has a more substantial influence, but overall, the influence of the two factors is minor and not statistically significant (Singh, 2020).

H5a: There is a difference in consumer decision to consume herbal drinks and the type of herbal drinks chosen based on marital status.

H5b: Marital Status has a positive and significant effect on consumer purchasing decisions

# RESEARCH METHOD

This research was conducted in Indonesia, using primary data collected through digital questionnaires (Google Form). The population was comprised of all the consumers in Indonesia. Samples were taken using a sample minimum based five times on the amount indicator. The sample is 327 respondents who filled out the questionnaire—dissemination of digital questionnaires via WhatsApp. The answer results were immediately submitted by the respondent and captured automatically by Google Drive. Then, the validity and reliability of the data were tested, and the data was analyzed using SPSS software. The data analysis was then discussed and concluded.

The conceptual framework used in this study is based on consumer behavior theory, which states that consumer decision processes are influenced by the environment (culture, social class, family, reference group), individual differences, and psychological processes. Demographic factors, which include age, gender, education, occupation, and marital status, are included in the indicators of social class and individual differences (Engel et al., 1995). However, in this study, researchers made it an independent variable, each of which has indicators supported by various previous research results, including that changes in consumer behavior can be measured based on differences in social factors and demographic factors such as gender, age, birth order, and marital status significantly predict consumer decisions (Katundu & Gabagambi, 2014). Social norms affect the intention to purchase domestic products (Bayan, 2023; Di Crosta et al., 2021; Jia et al., 2023; Ma et al., 2022). Moreover, Sharma et al. (2020) and demographic factors, namely age, gender, occupation, income level, and marital status, influence consumer behavior and willingness to buy products (Rajasekaran & Marimuthu, 2018). Schematically, the research concept framework is presented in Figure 1.

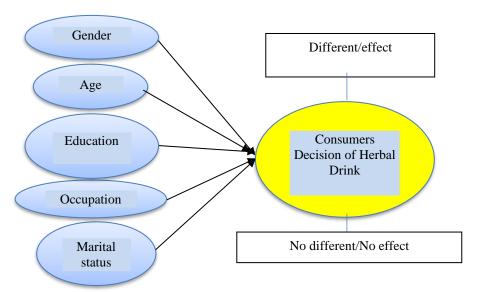


Figure 1. Herbs Consumption Decision Difference Framework based on demographic factors

The research variable consists of the first dependent variable, namely Consumption Decision (y), which is the consumer's decision to consume herbal drinks because they are considered a necessity; the indicators strongly agree, agree, disagree, disagree, and strongly disagree. The two independent variables consist of Age (X1), which is the age range of the respondents at the time of the research; the indicators are less than 17 years, 17-27 years, 28-38 years, 39-49 years, 50-60 years and above 60 years. Gender (X2) is the gender of the respondent, which consists of male and female. Education (X3) is the consumer's last level of education; indicators are Elementary, Middle School, High School, Undergraduate, Master, and Doctoral. Occupation (X4) is the type of work of the respondent; indicators are Civil Servants, private employees, entrepreneurs, professionals, homemakers, farmers, fishermen, and others. Marital Status (X5) is the respondent's marital status; the indicator is unmarried, unmarried without children, or married with children. The type of herbal drink consumed is the consumer's choice of the type commonly consumed, namely in industrial-made packaging, non-home-made packaging, and non-industrial-made packaging.

The Mann-Whitney and Kruskall Wallis test approach is used with SPSS software to predict whether there is a difference in this study. In contrast, multiple linear regression analysis is used to identify the simultaneous effect of the independent variable on the dependent variable. The variable measurement scale uses a Likert scale. Scale This design contains perception, starting with Which very agree until Which very No agree. In this study, the frequency level resulting from the respondent's perception will also be determined through the distance intervals between the alternative answer choices, starting from the highest in number 5 to the lowest in number 1. through the Likert scale, using a 5-digit range (Ghozali & Kusumadewi, 2016).

#### **RESULTS AND DISCUSSION**

#### **Characteristics of Respondents**

Respondent characteristics refer to the characteristics of respondents that are relevant to the indicators of the research variables being studied, such as gender, age in six ranges,

work, education, marital status, type of herbal drink consumed, and the decision always consume herbal drinks, which are expressed on a five-point scale ranging from strongly agree to disagree strongly (Table 1).

Table 1. Characteristics of Respondents based on gender, age, education, occupation, marital status, types of herbal drinks, and consumption decisions

No.	Characteristics	Number of people	Percentage (%)	No.	Characteristics	Number of people	Percentage (%)
1.	Gender			5	Marital Status		
	- Man	113	34.6		<ul> <li>Not Married</li> </ul>	183	56.0
	- Woman	214	65.4		<ul> <li>Married has no</li> </ul>	19	5.8
					children		
					<ul> <li>Married have</li> </ul>	125	38.2
					children		
.2.	Age (years)			6	Type of herbal drink		
	- < 17	1	0.3		consumed		
	- 17 - 27	183	56.0		- In industrial	106	32.4
	- 28 - 38	50	15.3		packaging		
	- 39 -4 9	59	18.0		- Homemade	108	33.0
	- 50-60	32	9.8		- Nonindustrial	113	34.6
	- > 60	2	0.6		packaging		
3.	Work			7	The Decision Always		
	- Government	52	15.9		Consume Herbal		
	employees				Drinks		
	- Private sector	22	6.7		- Strongly agree	92	28.1
	employee				- Agree	183	56.0
	- Businessman	20	6.1		- Disagree	40	12.2
	- Professional	35	10.7		- Disagree	10	3.1
	- Housewife	25	7.6		<ul> <li>Strongly disagree</li> </ul>	2	0.6
	- Farmer	4	1.2				
	- Fisherman	1	0.3				
	<ul> <li>Not yet working</li> </ul>	168	51.4				
4.	Education						
	- Elementary School	2	0.6				
	<ul> <li>Junior High School</li> </ul>	3	0.9				
	- Senior High School	187	57.2				
	- Diploma	6	22.3				
	- S1	73	13.5				
	- S2	44	3.7				
	- S3	12	1.8				

# **Gender in consumption decisions**

Based on the study results, the number of female respondents was more (65.4%) than the male respondents (34.6%). The difference test using Mann-Whitney shows no significant difference between men and women in consumption decisions because of the Asymp. The sig value is > 0.05, meaning the hypothesis is rejected. However, there are significant differences in the type of herbal drink chosen, as illustrated in Table 2.

Table 2. Test Results of Consumption Decision Difference and Types of Herbal Drinks Consumed based on Gender (X1)

Test Statistics	Herbal consumption decisions	Type of herbal drink consumed		
Mann-Whitney U	11844500	10523500		
Wilcoxon W	34849500	16964500		
Z	340	-2.045		
Symp. Sig. (2-tailed)	.734	.041		

# **Age with Herbal Consumption Decisions**

According to the study results, more than half of the respondents (56.0%) were aged 17-27, but some were over 60, around 0.6%. The rest are between 28 and 60 years old. According to the Kruskal Wallis test, there is a significant difference between the age levels of the respondents in the decision to consume herbal drinks and the types of herbal drinks chosen (Asymp. Sig <0.05), as in Table 4. Thus, the hypothesis is accepted.

# **Occupation with Consumption Decisions**

According to the study results, more than half of the respondents were not yet working (51%, 4%), and most were still students. The rest are civil servants, private and professional employees, and homemakers. The results of the different tests using Kruskal Wallis (Table 4) showed that there was a significant difference between the type of work the respondents used to make decisions and the types of herbal drinks they usually consumed, with (Asymp. Sig <0.05). Thus, the hypothesis is accepted.

# **Education with Consumption Decisions**

According to the study results, more than half of the respondents had completed high school education (57.2%); some were still students, and the others did not continue their studies. However, many respondents have higher education in S1, S2, and S3. The results of the different tests (Table 4) using Kruskal Wallis showed that there was a significant difference between the education level of the respondents and the type of herbal drink they usually consumed, with (Asymp. Sig <0.05). Thus, the hypothesis is accepted.

# **Marital Status with Consumption Decisions**

Based on the results of the study, the number of respondents who were married was 44%, consisting of those who were married without children and those who had children. Meanwhile, 56% are not married. The results of the Kruskal-Wallis test show that there is a significant difference between married and unmarried respondents in making consumption decisions (Asymp. Sig <0.05), as shown in Table 3.

Table 3. Test Results of Consumption Decision Difference and Type of Selected Herbal Drink based on the Age, Occupation, Education, and Marital Status of Respondents

<b>Test Statistics</b>	Herbal consumption decisions Based on				Types of herbal drinks consumed, based on			
	Age	Work 1	Education	Marital Status	Age	Work	Education	Marital Status
Chi-Square	25.516	26.226	17.938	15.040	28.965	32.945	27.302	15.323
Df	5	7	5	2	5	7	5	2
Symp. Sig.	.000	.000	003	0.001	.000	.000	.000	0.000

# **Results of Multiple Linear Regression Analysis**

The simultaneous test results (Table 4) show that age, occupation, and marital status significantly influence the decision to consume herbal drinks, which means the hypothesis is accepted. While the variables of gender and education have no significant effect, the hypothesis is rejected. The close relationship between demographic variables and consumption decisions is 76.4% with a correlation coefficient (R) of 0.764, and the selected

demographic variables determine 55.0% of the variation in consumer decisions as indicated by the coefficient of determination (r2) of 0.550.

Table 4. Results of multiple regression analysis

Variable	Unstandardized Coefficients		Standardized Coefficients			
	В	std. Error	Betas	Q	Sig.	
(Constant)	3,949	.315		12,520	.000	
Gender	.053	.099	.030	.534	.593	
Age *	.075	.034	.149	1.605	.045	
Occupation *	.085	.022	.153	2.013	.035	
Education	.020	.056	.024	.357	.721	
Marital status *	.065	.080	.175	1.810	.049	

Note: \* has a significant effect on the 95% confidence level,  $\alpha = 0.05$ 

The results of this study indicate simultaneously that not all demographic variables have a significant effect, only age. Occupation and marital status significantly positively affect the decision to consume herbal drinks. In contrast to previous research, it was concluded that consumer and lifestyle values partially or simultaneously significantly affect the intention of herbal medicine (Purwoko & Wijaya, 2019). Although in this study, there were two hypotheses rejected, three hypotheses were accepted or proven. In contrast to other studies that found sociodemographic characteristics do not drive consumer purchase decisions and, without significant sociodemographic influences, intrinsic consumer characteristics such as personality traits may better explain preferences (Ufer et al., 2019).

The habit of consuming herbs, both in the form of drinks and food or non-food drinks, with the aim of treatment and or health care in Indonesian society, generally starts at home and is introduced by both parents or other families. Both boys and girls have been exposed to this habit since childhood. So, it is natural that gender does not significantly influence herbal consumption decisions. The motivation for consuming herbal drinks for both men and women is almost the same. However, there are different types of herbal drinks consumed, whereas men prefer packaged herbal drink products for practical reasons. The results of this study show differences with research in Tiruppur District, India, which found a significant relationship between gender and income level in the buying behavior of herbal products (Singh, 2020). It is also different from research in China, which found a significant positive effect of gender on behavior consistency and consumer willingness to buy green agri-food products (Ma et al., 2022).

The results showed that the age variable proved to have a significant positive effect on respondents' decisions regarding herbal consumption. The older a person is, the more solid the decision to consume herbal drinks is; conversely, the younger the age, the less interested in consuming herbal drinks. This study's results differ from previous research that age has a minimal effect on the characteristics of buying behavior related to e-shopping. The age factor's influence is minor and insignificant (Singh, 2020). The distribution of scores did not differ statistically between age groups toward purchasing sustainable food products (H = 9.389, p = 0.153) (Lassoued et al., 2023).

As people get older, they have more and more considerations when choosing healthy foods and drinks. People aged 40 years and over, especially those 60 years and over, are more selective in their consumption because, at this age, their health conditions begin to decline, and various kinds of diseases have the potential to arise. Based on the results, using

traditional herbal health care in the long term is believed to be safer and has minimal side effects. Along with increasing age, experience also increases in terms of consumption of drugs and health care, thus influencing attitudes toward herbal medicine. Attitude, social influence, and product safety significantly positively impact the purchase behavior of herbal products (Ismail et al., 2021). According to contemporary tastes, young respondents tend to like sweet drinks; of course, they are less interested in consuming herbal drinks or herbs that taste bitter. However, the lifestyle of those who like to visit cafes to relax while ordering soft drinks is an opportunity for marketing herbal drinks, so the herbal beverage processing industry needs to adjust to the tastes and lifestyles of the millennial generation.

The type of work of the respondents also proved to have a significant positive effect on the decision to consume herbal drinks. Consumers with jobs will be motivated to consume herbal drinks because, in Indonesia, herbal drinks are used not only for treatment but also to maintain body fitness and vitality. It is important for people who work so they can carry out their activities. Different types of work show differences in the choice of types of herbal drinks; some choose homemade herbal drinks (homemakers, farmers, fishermen, and some who have not worked), some are made in factories (professionals, civil servants, private employees), and some are using the two interchangeably especially those that have not worked. This fact can be a valuable input for the herbal beverage business to develop segmentation, targeting, and positioning strategies based on the work of consumers. People busy with work certainly do not have time to shop for herbal drinks offline but will need to shop online. Moreover, herbal drinks include agricultural products in the Short Food Supply Chain (SFSC) product category, as the results of previous research show that based on the identified factors influencing buying behavior, sellers can provide information through social media to facilitate consumer buying decisions (Sadeli et al., 2023).

Even though the education variable has an influence, simultaneously, the effect is not significant on consumption decisions. The influence of education is too small, only 0.020. If viewed from the presence or absence of differences in the choice of types of herbal drinks between levels of education, the results of the different tests show differences. In contrast to previous studies, the distribution of scores did not differ statistically between levels of education on purchasing sustainable food products (H = 1.000, p = 0.606) (Lassoued et al., 2023). This study found that the types of herbal drinks chosen by highly educated respondents tended to be in the form of industrial-made packaging because they were considered more hygienic and according to the recommended dosage. The more people know about medicinal plants or herbal ingredients during a pandemic, the more enthusiastic they will be about consuming herbal medicine (Direktorat Produksi & Distribusi Kefarmasian, 2019).

Based on the study's results, the marital status of the respondents had a major impact on the decision to take herbs. A married consumer will have a big impact on the choice to spend on herbal drinks. It is common practice for mothers in Indonesia to provide herbal drinks to maintain their personal and family health and the choice of regular consumption of herbal drinks for postnatal health care and recovery. Those married and have children tend to choose the non-packaged herbal drink made at home because it is healthier and fresher, and a family member makes it. This study's results differ from the research Singh (2020)

where, as a whole, the influence of marital status and age of the participants is minor and not statistically significant to online buying behavior.

According to the Ministry of Health, herbal medicine or herbal drinks will remain the choice in maintaining and increasing the body's resistance of the Indonesian people; of the 50% of Indonesians who use herbal medicine, 96% of them feel the benefits of herbal medicine (Direktorat Produksi & Distribusi Kefarmasian, 2019). Compounds that have the potential to inhibit coronavirus infection include quercetin, myricetin, psoralen, caffeic acid, tryptanthrin, lycorine, scutellarein, stilbestrol, saikosaponin, isobavachalone, dan griffithsin (Kurniawan & Ikhsanudin, 2020).

The results showed significant differences between the demographic factors studied and the types of herbal drinks chosen for consumption. Between men and women, between young and old consumers, between those with low and high education, between those who work and those who have not worked, and even between those who are married and those who are not married, there is a clear difference in choosing the type of herbal drink. Types of herbal drinks in packaging produced by the industry (32.4%), as well as non-packaged homemade (33.0%) or non-packaged made by the industry (34.6%), for example, those served in restaurants, cafes, and traveling herbal medicine sellers, meaning more consumers by 67.6%, consume non-packaged herbal drinks. Consumer behavior like this contributes to environmental cleanliness and reduces product packaging waste. The types of herbal beverage packaging materials are generally plastic in the form of refillable bottles and sachets. Research results related to this matter found that consumers have different behaviors in using refill products even at the end of their useful life, often recycling non-recyclable components that can be reused and sometimes disposing of recyclable items in residual waste (Tassell & Aurisicchio, 2023).

Due to the greater possibilities of connecting the use and EoL stages of the product lifecycle, consumers who are essential enablers of the CE are essential for establishing closed loops within the supply chain of consumer goods and promoting optimum utilization of the circularity potential (Shevchenko et al., 2023). According to the Food and Drug Supervisory Agency of the Republic of Indonesia, MSMEs dominate 786 production facilities for the Indonesian herbal industry/business. BPOM RI continuously assists in technical guidance and facilitation so that herbal medicine MSMEs can produce herbal medicine that meets the requirements and standards for safety, benefits, and quality and has competitiveness. Based on BPOM RI monitoring data, most herbal medicine MSMEs in Indonesia, which amount to 83% of the total traditional medicine production facilities, still need to meet the requirements for suitable methods of making traditional medicines. They have yet to be able to apply hygienic, sanitation, and documentation aspects in the production process. When Indonesian people use herbal drinks more and more, the pharmaceutical industry can also develop herbal ingredients using pharmaceutical technology for Better and more accurate doses (Elfahmi et al., 2014; Nur Hayati et al., 2019).

# **CONCLUSION**

Based on the results, the differences in the demographic factors of the respondents that influenced differences in the decision to consume herbal drinks were age, occupation, education, and marital status. At the same time, gender did not show any differences. Then,

choosing the type of herbal drink (homemade, industrially made, or a mixture of both) showed differences based on the demographic variables studied. This research implied that herbal drinks could become input for the MSME-scale business world engaged in upstream and downstream herbal drinks to develop marketing strategies with demographic segmentation (age, type of job, and consumer's marital status).

However, herbal products for the pharmaceutical industry must also care about environmental safety by using product packaging that is easily decomposed. So that consumers can increasingly contribute to reducing waste. Besides, the results proved good news for MSMEs serving the non-packaged herbal beverage market segment in fresh dosage form because the market share for these products is large.

Several important implications can be drawn from the findings of this research, including Enhanced market understanding: The research findings can aid herbal beverage industry stakeholders in gaining a deeper understanding of their target market, enabling them to develop more effective and targeted marketing strategies. The findings can inform the development of products that are more aligned with the needs and preferences of consumers from diverse demographic groups. For instance, herbal beverages could be formulated specifically for older adults, office workers, or students. The research can guide the design of more effective promotional interventions tailored to specific target markets based on factors such as age, occupation, education, and marital status. The research findings can be utilized to enhance public awareness about the health benefits of herbal beverages, particularly targeting demographic groups less familiar with these benefits. The research outcomes can serve as a foundation for policymakers to develop policies that support the herbal beverage industry. These policies could encompass incentives for small and mediumsized enterprises (SMEs), public health education initiatives, and regulations that promote herbal beverage consumption. Overall, the implications of this research are far-reaching and can potentially benefit various stakeholders, including the herbal beverage industry players, the government, and the general public.

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