Reducing Single-Use Plastic in Indonesian Traditional Markets: An Application of the Extended Theory of Planned Behavior

Pengurangan Kantong Plastik Sekali Pakai di Pasar di Indonesia: Penerapan Extended Theory of Planned Behavior

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ARTICLE INFO	ABSTRACT
	Despite significantly adverse environmental and health effects, single-use plastic bags have been a popular choice in many retail stores and traditional markets for purchasing. Public awareness and participation primarily support the policy to reduce the use of single-use plastic bags. This study seeks to identify factors influencing consumers' intention to reduce their use of single-use plastic bags. This study surveyed 140 consumers in two traditional markets in the heart of Bandung, Indonesia, using the extended Theory of Planned Behavior (TPB). The majority of respondents have a strong intention to reduce the use of single-use plastic bags. Significant predictors of this intention are attitude toward behavior and perceived behavioral control, whereas subjective norms, environmental awareness, laws, and regulations do not significantly affect the intention to reduce single-use plastic bags among the consumers. We propose both demand-side and supply-side interventions to achieve greater reductions of single-use plastic bags in the traditional markets.

INFO ARTIKEL	ABSTRAK
	Meskipun terdapat dampak buruk terhadap lingkungan dan kesehatan, kantong plastik sekali pakai telah menjadi pilihan populer di beberapa toko ritel dan pasar tradisional. Kesadaran dan partisipasi masyarakat sangat penting dalam mendukung kebijakan pengurangan penggunaan kantong plastik sekali pakai. Penelitian ini berupaya mengidentifikasi faktor-faktor yang mempengaruhi niat konsumen untuk mengurangi penggunaan kantong plastik sekali pakai. Survei dilakukan kepada 140 konsumen di dua pasar tradisional di jantung kota Bandung, Indonesia, dengan menggunakan extended Theory of Planned Behavior (TPB). Mayoritas responden mempunyai niat yang kuat untuk mengurangi penggunaan kantong plastik sekali pakai. Prediktor yang signifikan terhadap niat ini adalah sikap terhadap perilaku dan kontrol perilaku yang dirasakan, sedangkan norma subjektif, kesadaran lingkungan, dan peraturan

perundang-undangan tidak secara signifikan mempengaruhi niat untuk mengurangi kantong plastik sekali pakai di kalangan konsumen. Penelitian ini mengusulkan intervensi pada sisi demand dan sisi supply untuk mencapai pengurangan kantong plastik sekali pakai yang lebih besar di pasar tradisional.

Introduction

Most modern plastic production has shifted from durable plastics to single-use plastic products (Giacovelli, 2018). Despite their advantages, single-use plastics have significant negative impacts on the environment. Their low prices encourage retail stores in many countries to offer free plastic bags to customers as part of their services, leading to an overuse of single-use plastic bags worldwide (Vassanadumrongdee et al., 2020). Single-use plastic bags contribute to global plastic waste; UNEP estimated that 79% of global plastic products end up in landfills, dumpsters, or the environment, and only 9% are recycled (Giacovelli, 2018). Plastic bag manufacturing releases carbon emissions into the atmosphere (Cabernard et al., 2022); the projected doubling of global plastic demand by 2050 will result in an almost equivalent increase in CO_2 emissions (Stegmann et al., 2022). Plastic waste blocks waterways and emits toxic gasses when heated (Kehinde et al., 2020). Single-use plastics can persist in landfills for hundreds of years; even after prolonged periods, they will only partially degrade rather than fully decompose (Alam et al., 2018). Large plastics break down into microplastics or nanoplastics (Yu & Flury, 2021), potentially affecting animal hormones, tissues, and organs through the food chains (Batooli et al., 2022). Furthermore, potential health hazards of plastics to humans include infertility, breast cancer, prostate cancer, and polycystic ovary syndrome (Schierow et al., 2008).

As the second largest plastic producer after China, Indonesia produces 3.2 million tons of plastic annually, where 1.29 million tons end up in the sea (Jambeck et al., 2015). Public awareness and active participation are prominent in supporting the single-use plastic bag reduction policy. Effective policy resulting in long-term behavior change requires understanding the psychosocial and contextual factors that underlie plastic consumption (Merican et al., 2022). Therefore, this study aims to identify factors affecting consumers' behavioral intention to reduce single-use plastic bags. Using the extended Theory of Planned Behavior (TPB), this study selected two traditional markets in the center of Bandung City. Bandung was chosen as the study site due to its status as one of Indonesia's most densely populated urban centers and a city that has actively promoted environmental initiatives, including local regulations on plastic bag reduction. Moreover, consumers have shown increasing awareness and intention to reduce single-use plastic consumption (for example, see Vina & Mayangsari, 2020). These studies highlight a growing public support for environmental behavior, making Bandung an appropriate and relevant case for exploring behavioral determinants in the context of plastic reduction efforts. The results of this study will be advantageous in informing Bandung's traditional markets' plastic bag reduction policies. Why was Bandung chosen? Furthermore, mention the citation that states Bandung/Indonesia's consumers intend to reduce single-use plastic bags.

Extended Theory of Planned Behavior

Evolved from the Theory of Reasoned Action (TRA), the Theory of Planned Behavior (TPB) is widely used to systematically study factors that influence human behavior (Ajzen, 1991; Volva & Djamaludin, 2018). TPB has now been the most influential framework applied in pro-environmental behaviors, e.g., waste prevention (Pakpour et al., 2014) and green purchasing behavior (Liobikienė et al., 2016). For example, in Thailand, TPB was proven effective in explaining consumer behavior in reducing single-use plastic bags (Gulid & Yansomboon, 2022).

TPB explains that intention (I) is considered the direct precursor to behavior (Bosnjak et al., 2020), which is influenced by attitudes, subjective norms, and perceived behavioral control (Ramdhani,

2011; Volva & Djamaludin, 2018). According to TPB (Ajzen, 1991), I measure the extent of a person's belief in performing a behavior and how much effort will be used to do it (Ajzen, 1991). The stronger a person's intention, the greater the possibility of this behavior appearing (Ajzen, 1991). Attitude towards the behavior (ATB) is determined by beliefs about the consequences of a behavior. Beliefs are formed by linking particular behaviors with various rewards or losses that may be acquired if the individual does or does not perform them. Subjective Norms (SN) are individual perceptions of the expectations of influential people in their lives regarding whether certain behaviors are performed or not performed and are a function of personal beliefs obtained from other people's views towards the object of the attitude related to individuals. Meanwhile, perceived behavioral control (PBC) is an individual's perception of how easy or difficult it is to conduct a specific behavior based on the availability of resources (Wallston, 2001). The stronger the belief in the availability of resources and opportunities that an individual has related to specific behaviors and the more significant the role of these resources, the stronger the individual's PBC.

TPB and a variety of its extensions have been used for predicting the behavioral intention to reduce single-use plastic bags (for example, see Batooli et al., 2022; Gulid & Yansomboon, 2022; Linh et al., 2019; Van et al., 2021; Vassanadumrongdee et al., 2020). TPB also allows additional predictors to increase flexibility when applied to various target behaviors (So et al., 2021). Van et al. (2021) extended TPB by adding environmental awareness and law and regulation variables in studies on reducing single-use plastic bags. Environmental Awareness (EA) involves understanding environmental issues and recognizing the relationship between human action, development, and ecological sustainability. EA also consists of the awareness that humans and ecosystems live in a shared environment. Previous research indicates that EA stimulates pro-environmental attitudes and behaviors (Yang et al., 2021). With ATB, EA also predicts the behavior to purchase 'green products' (Arı & Yılmaz, 2017). Meanwhile, Law and Regulation (LR), as social institutions' pillars, influence behavior through coercion. Lavergne et al. (2010) suggest that government control directly and positively affects controlled motivation, representing the external motives in driving behavior. Pavalache-Ilie & Unianu (2012) indicate that LR, technology, and advertising availability influence environmental attitudes. People's behavior changes when a penalty system accompanies policy enforcement, e.g., fees imposed on single-use plastics (Dauvergne, 2018).

Method

This study was conducted in Bandung City, the capital of West Java Province and home to 2.45 million people. Bandung City uses 150 tons of plastic bags per day. Daily plastic waste generation in Bandung City accounts for 111.5 tons of plastic wraps and 89.2 tons of single-use plastic bags (Environmental Protection Agency of Bandung City, 2021; Ministry of Environment and Forestry, 2021). In addition, the limited landfill in Bandung City highlights the urgency of solving these plastic waste problems.

Study Area

The city government issued two regulations to reduce single-use plastic bags (Regulation 17 of 2012 and Mayor Regulation 37 of 2019), identifying traditional markets as high single-use plastic bag users. As a result, the Movement of Plastic-Free and Environmentally Friendly Markets (PFEFM Movement), a cooperation between the City Government and the Regional Public Company (Perumda) Pasar Juara and the Indonesian Diet Plastic Bag Movement, was established in 2021. The PFEFM movement aims to trigger behavior change in single-use plastic bag reductions. The regulations mandate that business owners or traders gradually reduce their use of single-use plastic bags within five years, from 10% in the first year to entirely avoiding them in the fifth year. In addition, consumers must also play an active role in reducing single-use plastic bags by at least bringing their shopping bags and reminding the traders not to provide them.

This study focuses on two traditional markets: Kosambi and Cihapit. These markets were selected since they were chosen as the pilot area of the PFEFM Movement. With an area of 11,715 m², Kosambi

provides fashion, necessities, groceries, meat, and other typical traditional market commodities. Meanwhile, famous for its culinary vendors, Cihapit is smaller than Kosambi, with an area of only 1,484 m². Several activities have been commenced in these two markets: kick-off activities, baseline research, stakeholder focus group discussions, a campaign for traders and consumers, and training for market vendors. The baseline research conducted in February 2021 (GIDPK, 2021b) suggests that the single-use plastic bags used daily in Cihapit and Kosambi are at least 2,568 and 11,271, respectively.

Moreover, the traders in Cihapit and Kosambi spend 74,000 IDR per month and 251,000 IDR monthly, respectively, for single-use plastic bags. Most traders (84.25%) expressed their willingness to reduce the use of single-use plastic bags, but they were worried about losing consumers if they did not offer them for free. The PFEFM Movement managed to reduce single-use plastic bags in Cihapit and Kosambi by 11% and 19%, respectively. Unfortunately, these initiatives were halted due to rising COVID-19 cases in Bandung City.

1. The unit is not equal. 2.45 million units for the first sentence. Nevertheless, the following sentences do not use "million."
2. "Indonesian uses" refers to Indonesian in Bandung or Indonesian in Indonesia? You should state it clearly and focus on the Bandung area of research interest.

Survey

This research interviewed 140 consumers in Kosambi and Cihapit using validated questionnaires in August 2022 (see Table I).

Table I Respondents' Characteristics

Attributes	Percentage (n=140)
Female	86.40%
Age	
39-45	17.90%
46-52	20.70%
53-59	18.60%
Education	
High school	44.30%
College/university	29.30%
Monthly income	
< 3,500,000 IDR	22.90%
3,500,000 IDR to 7,500,000 IDR	34.30%
> 7,500,000 IDR	42.80%

There are five sections in the questionnaire used in this study: (1) Demographic information of respondents; (2) The behavioral intention (I) to reduce single-use plastic bags (Misgana & Tucho, 2022); (3) Environmental Awareness (EA) (Van et al., 2021); (4) Perceptions on governmental law and regulation (LR) on the non-eco-friendly plastic bag reduction program (Van et al., 2021); and (5) TPB elements related to single-use plastic bags (ATB, SN, PBC) (So et al., 2021; Van et al., 2021). Using the Cochran formula (Chaokromthong & Sintao, 2021), the minimum number of samples drawn for this study was 70 for each market (α=90%, e=10%, p=0.5). In total, 140 consumers who participated in the survey were intercepted while shopping (Bush & Hair, 1985; Miller et al., 1997). Participation was voluntary, and the respondents could withdraw anytime without consequences. This study has been approved by the Ethics

Committee of Institut Teknologi Bandung (Ethical Clearance Number KEP/II/2022/X/M040822ENT/PMTK).

Almost half of the respondents (43.6%) visit the market once a month, followed by 27.2% that visit the market once a week. They also estimate that for each visit to the market, the majority use five to ten single-use plastic bags (70.7%), while 24.3% use fewer than five. Half of the respondents (47.9%) also testify that the traders sometimes encourage them to reduce single-use plastic bags by bringing their bags.

Data Analysis

A descriptive analysis was conducted to describe the variables in this research. The variable consists of five items on a five-point Likert scale (1 to 5). The low I score ranges from 5 to 11.67, the medium I score ranges from 11.68 to 18.35, and the high I score ranges from 18.36 to 25. In addition, a regression analysis was conducted to understand the effect of Environmental Awareness (X1), Law and Regulation (X2), Attitude toward Behavior (X3), Subjective Norm (X4), and Perceived Behavioral Control (X5) in predicting intention (Y) (see Equation 1).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$$
.... Eq. (1)

Results and Discussion

The results and discussion section outlines the findings of the research or analysis. This section further elaborates on various essential facts and phenomena. Next, a thorough discussion will highlight the findings and the novelty of ideas, along with their significance. The format of tables used only horizontal lines, as in the Table I example below. Table II describes the reasons for using single-use plastic bags among respondents, while Tables III and IV represent the responses based on elements of the extended TPB and behavioral intentions. Responses were expressed on a Likert Scale for all the items, from Strongly Disagree (1) to Strongly Agree (5).

Table II The Reasons for Using Single-Use Plastic Bags Among Respondents

Statements	Kosambi	Cihapit	Total
	mean (SD)	mean (SD)	mean (SD)
AL1: I use single-use plastic bags when shopping because they are cheap.	3.04 (1.356)	3.17 (1.329)	3.11 (1.339)
AL2: I use single-use plastic bags when shopping because they are readily available.	3.46 (1.247)	3.59 (1.136)	3.52 (1.190)
AL3: I use single-use plastic bags when shopping because I lack alternatives.	3.37 (1.132)	3.29 (1.206)	3.33 (1.166)
AL4: I use single-use plastic bags when shopping because they are light and comfortable.	3.43 (1.137)	3.46 (1.212)	3.44 (1.171)
AL5: If the traders at Kosambi/Cihapit urge me to reduce single-use plastic bags, I will reduce the use.	4.10 (1.024)	4.26 (0.829)	4.18 (0.931)
AL6: I will bring my own shopping bag if the traders at Kosambi/Cihapit do not provide plastic bags.	4.33 (0.896)	4.36 (0.743)	4.34 (0.820)

Table III Descriptive Statistics of EA, LG, ATB, SN, and PBC Regarding the Reduction of Single-Use Plastic Bags

Statements	Kosambi	Cihapit	Total
	mean (SD)	mean (SD)	mean (SD)
Environmental Awareness (EA)			
EA1: Reducing single-use plastic bags is critical to preventing marine pollution.	4.49 (0.608)	4.39 (0.666)	4.44 (0.637)
EA2: Reducing single-use plastic bags plays a vital role in conserving natural resources.	4.44 (0.651)	4.54 (0.582)	4.49 (0.617)
EA3: The high use of single-use plastic bags can upset the balance of nature.	4.40 (0.730)	4.44 (0.715)	4.42 (0.720)
EA4: Reducing single-use plastic bags will improve the quality of the ecosystem environment.	4.31 (0.826)	4.44 (0.715)	4.38 (0.772)
EA5: Reducing single-use plastic bags helps build a comfortable and healthy community environment.	4.50 (0.654)	4.50 (0.608)	4.50 (0.629)
Law & Regulation (LR)			
LR1: Determination of paid single-use plastic bags will have an impact on reducing the use of single-use plastic bags	4.09 (0.812)	3.90 (0.995)	3.99 (0.910)
LR2: The Bandung City Government has made a regulation that requires the public to reduce the use of single-use plastic bags.	4.16 (0.673)	4.39 (0.572)	4.27 (0.633)
LR3: The existing plastic bag reduction regulations can force me to reduce the use of single-use plastic bags.	4.04 (0.842)	4.06 (0.946)	4.05 (0.892)
LR4: If formulated in the Bandung City Regional Regulation, I will comply with the laws and regulations related to reducing the use of single-use plastic bags.	4.37 (0.618)	4.31 (0.713)	4.34 (0.665)
LR5: I am being affected by the implementation of Bandung City's policy in reducing single-use plastic bags	4.16 (0.862)	4.13 (0.883)	4.14 (0.870)
Attitude toward behavior (A)			
A1: I am interested in the idea of reducing single-use plastic bags.	4.33 (0.717)	4.44 (0.581)	4.39 (0.652)
A2: I believe that reducing single-use plastic bags will reduce the severity of plastic waste pollution on land.	4.40 (0.522)	4.54 (0.557)	4.47 (0.542)
A3: I feel comfortable when using eco-friendly products (cloth bags, canvas, parachute shopping bags, woven bags, etc.) to replace single-use plastic bags in my daily life.	4.40 (0.623)	4.39 (0.687)	4.39 (0.654)
A4: I am responsible for reducing the volume of plastic bag waste generated.	4.24 (0.690)	4.40 (0.689)	4.32 (0.692)
A5: I agree with reducing single-use plastic bags in Bandung traditional markets.	4.27 (0.658)	4.50 (0.532)	4.39 (0.607)
Subjective Norms			
SN1: If my family reduces single-use plastic bags, I am also willing to reduce the use.	4.36 (0.512)	4.46 (0.502)	4.41 (0.507)
SN2: If my role model/role model reduces the use of single-use plastic bags, I am also willing to reduce the use of single-use plastic bags.	4.07 (0.804)	4.27 (0.760)	4.17 (0.786)
SN3: If my friend reduces single-use plastic bags, I am also willing to reduce the use.	4.10 (0.887)	4.34 (0.700)	4.22 (0.805)
SN4: The social behavior of community members has changed my habit of using single-use plastic bags.	4.16 (0.735)	4.30 (0.645)	4.23 (0.693)

	Kosambi mean (SD)	Cihapit mean (SD)	Total mean (SD)
SN5: Social media has influenced me to cultivate the behavior of reducing the use of single-use plastic bags.	3.90 (0.935)	4.13 (0.741)	4.01 (0.848)
Perceived behavioral control (PBC)			
PBC1: Reducing the use of single-use plastic bags depends on my own will.	4.17 (0.851)	4.39 (0.708)	4.28 (0.787)
PBC2: I have time to look for alternatives to single-use plastic bags that can be used when shopping at the market.	3.99 (0.893)	4.10 (0.854)	4.04 (0.872)
PBC3: I have enough money to buy alternatives to single-use plastic bags that can be used when shopping at the market.	4.00 (0.851)	3.89 (1.015)	3.94 (0.935)
PBC4: I use environmentally friendly products, such as recycled bags to minimize the use of single-use plastic when shopping at the market.	4.17 (0.742)	4.30 (0.787)	4.24 (0.764)
PBC5: Reducing single-use plastic bags when shopping at the market is easy for me.	4.03 (0.761)	4.13 (0.815)	4.08 (0.787)

Table IV Descriptive Analysis of Behavioral Intention (I) in Reducing Single-Use Plastic Bags

Statements	Kosambi mean (SD)	Cihapit mean (SD)	Total mean (SD)
IN1: I am willing to participate in the "Plastic Free and Environmentally Friendly Market Movement" organized by the Bandung City government.	4.29 (0.663)	4.31 (0.692)	4.30 (0.675)
IN2: I intend to look for alternatives to single-use plastic bags when shopping at traditional markets.	4.09 (0.737)	4.19 (0.767)	4.14 (0.751)
IN3: I am willing to switch to using reusable shopping bags.	4.24 (0.523)	4.36 (0.566)	4.30 (0.546)
IN4: I am willing to invite others to reduce the use of single-use plastic bags when shopping at traditional markets.	4.07 (0.709)	4.17 (0.780)	4.12 (0.744)
IN5: I intend to educate my family on how to reduce single-use plastic bags.	4.17 (0.613)	4.29 (0.663)	4.23 (0.639)

Most of the respondents (89.3%) have high behavioral intentions to reduce single-use plastic bags when shopping; only a small proportion of the respondents have moderate (10%) and low (0.7%) intentions. We then performed a multiple regression analysis to understand the effect of EA, LR, ATB, SN, and PBC as independent variables on I as a dependent variable (see Table V and Equation 2). $R^2=0.653$ suggested that the variations of five independent variables explained 65.3% of I, while other variables outside this model explained the remaining 34.7%. This suggests that the extended TPB variables are essential in predicting intentions to participate in the single-use plastic bag reduction program.

Table V Multiple Regression Analysis to Understand the Effect of EA, LR, ATB, SN, PBC Towards I in Regard to the Reduction of Single-Use Plastic Bags

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.*
	B	Std. Error	Beta		
(Constant)	-0.072	0.278		-0.258	0.797
EA	0.003	0.069	0.003	0.041	0.967
LR	0.064	0.075	0.062	0.858	0.392
ATB	0.698	0.095	0.61	7.369	0

SN	-0.157	0.089	-0.156	-1.768	0.079
PBC	0.39	0.072	0.399	5.432	0

*Significant at <0.05

$$I = -0.072 + 0.003EA + 0.064LR + 0.698ATB - 0.157SN + 0.390PBC \dots\dots\dots Eq. (1)$$

The negative constant coefficient indicated that, assuming the absence of all other variables, people's behavioral intentions to reduce single-use plastic bags (I) tend to decrease. The positive EA coefficient indicated that, assuming the absence or constant value of other independent variables, I also tend to increase if EA increases. This trend also applies to LR, ATB, and PBC. Meanwhile, the negative SN coefficient indicates that, assuming the absence or constant value of other independent variables, if SN increases, I will decrease. ATB correlates significantly with I, while EA affects I the least.

Based on the regression analysis, only ATB and PBC are significantly associated with I, while EA, LR, and SN have no significant impact on it. The findings that ATB and PBC were significant predictors of pro-environmental choice among respondents agree with previous studies where attitude has the highest effect in predicting pro-environmental intentions (Gulid & Yansomboon, 2022; Van et al., 2021; Vassanadumrongdee et al., 2020). Attitude evaluates whether a person's behavior toward a target's behavior is beneficial or detrimental. When consumers feel that certain behaviors have beneficial results, these behaviors become more positive and enjoyable and make consumers willing to conduct these behaviors (Chen & Hung, 2016).

Meanwhile, PBC gauges respondents' perceptions regarding the ease or difficulty of reducing the use of plastic bags. When consumers feel that they have the resources, opportunities, and abilities to reduce their use of plastic bags, they tend to reduce their usage. Meanwhile, laws and regulations, environmental awareness, and subjective norms do not significantly affect the respondents' intention to reduce single-use plastic bags in this study. This result contrasts with previous research that found that SN is a significant predictor of I (Batooli et al., 2022; Linh et al., 2019). One of the reasons may be that the intention to reduce the use of plastic bags when shopping is based on intrinsic motivations rather than influenced by external factors. Meanwhile, although people know about environmental preservation, this information does not always translate into an intention to act (Mei et al., 2016). (Maichum et al. (2016) show that environmental awareness and knowledge are essential determinants of attitude, subjective norms, and perceived behavioral control when selecting environmentally friendly products. Laws and regulations are not significant predictors for behavioral intentions to reduce the use of single-use plastic bags. This phenomenon may be because respondents feel that existing regulations are ineffective and have no disincentives to reducing single-use plastic bags. However, in terms of law and regulations, we suggest a more supply-side intervention. Enforcing regulations requiring market sellers to stop providing single-use plastic bags can change consumers' sets of choices and may have a positive effect on reducing the use of these bags. Consumers are often influenced not only by their own intentions but also by the options available to them (Wagner & Toews, 2018). By restricting the availability of single-use plastic bags on the market, consumers may select alternatives such as bringing their own reusable bags or using paper bags (see Wagner (2017) as an example). Sun et al. (2017) suggest that when consumers lack access to single-use plastic bags, they will avoid using them. One thing to note is that a change in choice architecture must consider the potential for negative unintended consequences, as restricting one type of product may shift consumption to an environmentally less preferable product (Macintosh et al., 2020; Wagner, 2017).

The regression model revealed that variables other than EA, PBC, ATB, and LR explain 34.7% of I. Habits, which are automatic responses without conscious intention, can influence people's decisions to engage in a specific behavior (Blankenberg & Alhusen, 2019). For example, people's habit of using single-use plastic bags given by market sellers may cause them to forget to bring shopping bags whenever

they go to the market. Moreover, personal rewards of reducing single-use plastic bags may also affect their intention. The rewards are primarily psychological and involve a sense of satisfaction from actions with intrinsic motivation (Hohmann et al., 2016; Ryan & Deci, 2000).

Conclusion

Most consumers in two traditional markets have a high behavioral intention to participate in reducing single-use plastic bags (scoring 4.12-4.30 out of 5.00 in the intention to reduce disposable plastic bag use). This study finds that consumers' behavioral intention to reduce single-use plastic bags is primarily driven by personal attitude and perceived control over their actions. Meanwhile, there is no significant influence from social pressure, environmental awareness, or regulatory frameworks.

To shift public attitudes towards reducing single-use plastic bag usage, an educational campaign is proposed to emphasize the environmental impacts of plastic bags and promote the benefits of reusable alternatives. Moreover, limiting the availability of single-use plastic bags in the market is advised. This has been regulated in Bandung City's regulation, where market traders eventually must stop providing free single-use plastic bags for their consumers, despite their worry about losing their consumers. Therefore, enforcement is important so that all market traders comply with this policy. To effectively achieve a greater reduction in single-use plastic bags on the market, it is essential to consider both demand- and supply-side interventions. Further research can focus on the opportunities and barriers for sellers to stop providing free single-use plastic bags for consumers to discourage their use in traditional markets.

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