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DETERMINING CONSUMER INTENTION: UNCOVERING THE INFLUENTIAL FACTORS IN CUSTOMER SWITCHING FROM LPG TO INDUCTION STOVES IN INDONESIA

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ABSTRACT

The increasing electrification of lifestyles in Indonesia has prompted a shift in consumer preferences, particularly regarding kitchen appliances. Indonesia is currently facing an electricity oversupply issue, hence migrating consumers from traditional Liquified Petroleum Gas (LPG) stoves to induction stoves offers the potential to enhance electricity utilization and effectively address this predicament. This study aims to investigate the influential factors behind consumers' intentions to switch from traditional LPG stoves to induction stoves. The data were collected from 802 traditional LPG stoves consumers, who are Indonesian citizens, residing across various regions of Indonesia, and have not previously purchased an induction stove to achieve the objective. The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal the importance of Push, Pull, and Mooring factors in motivating consumers to switch from LPG stoves to induction stoves. This research contributes critical insights to academia, industry, and policymakers as well, offering a nuanced understanding of the dynamics influencing this transition in the Indonesian market and playing a pivotal role in addressing the electricity oversupply issue in Indonesia.

KEYWORDS *Induction stoves, LPG stoves, Push Pull Mooring Theory, Inertia, Indonesia.*

INTRODUCTION

The increasing trend of electrifying lifestyles has become a significant global phenomenon, including in Indonesia. This shift encompasses the use of electric vehicles, electric-based household appliances, and more. The transition to an electrifying lifestyle, particularly in the adoption of electric-based household appliances like induction stoves, holds significant implications for addressing global warming. One notable example of this trend shift in Indonesia is the transition of consumers from LPG stoves to induction stoves, which plays a crucial

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role in contributing to energy transition efforts (Niˇzeti´c et al., 2023). This transition is essential for reducing household emissions and achieving climate change mitigation targets (Paudel et al., 2023).

To understand the factors influencing this migration, a comprehensive analysis of both the positive and negative reasons behind consumers' decisions to switch from traditional energy sources to electricity is required. With a deeper understanding of these influencing factors, more effective strategies and policies can be developed to encourage the adoption of induction stoves as part of environmental conservation and global warming mitigation efforts. Furthermore, this research can serve as an information tool, where each increase in knowledge can potentially increase the average adoption rate of induction stove usage by 5% (Paudel et al., 2023).

Induction stoves are appliances that use electricity to generate cooking heat. However, unlike conventional electric stoves that heat metal heating elements, induction stoves produce heat by utilizing a magnetic field that moves cookware made of ferromagnetic metal. The magnetic field oscillation is caused by alternating current flowing through a coil beneath the stove's surface. Consequently, heat is generated in ferromagnetic-based cookware due to the formation of eddy currents at its base.

Speaking of the use of induction stoves in Indonesia, according to data from the Central Statistics Agency (2022), in 2021, there were an estimated 75.6 million households in Indonesia. Of this number, 0.76%, or approximately 574,000 households, had already started using induction stoves for daily cooking. This figure had increased from the previous year, which was only at 0.58%. According to the same source, in 2021, the highest percentage of induction stove users was in the Gorontalo region at 1.59%, followed by Jakarta, Banten, Bali, West Java, West Sumatra, and North Maluku, each with percentages ranging from 1% to 1.5%.

However, these numbers are still relatively low, presenting an opportunity for the government, particularly PLN (Perusahaan Listrik Negara), to find ways to increase the number of induction stove users in Indonesia, as a means to absorb excess electricity supply. Additionally, in recent years, PT Perusahaan Listrik Negara (Persero) has faced internal challenges due to surplus/oversupply of electricity. This surplus is not only the result of PLN's power plants but also from independent power producers (IPP). The reason why this electricity oversupply is considered a challenge by PLN is due to the contracted payment system with the "take or pay" clause. According to Regulation of the Minister of Energy and Mineral Resources No. 10 of 2017, the "take or pay" clause means that if PLN cannot absorb the electricity energy as per its contract with IPP due to PLN's fault, then PLN must pay penalties to the seller plus proportional penalties as agreed upon investment components.

To face the existing challenges, PLN must determine strategies to help the company avoid losses and sustain its business amidst the challenges. Considering the challenge of electricity oversupply, one approach PLN can take is to support people in transitioning to an electronic-based lifestyle in their daily lives. This includes using electric vehicles and induction stoves, which have been trending recently.

Strategies are generally defined as the broad approaches that organizations can employ to achieve their objectives, and companies typically use more than one strategy at a time (Cooper and Schlinder, 2014: 9). In this research, the focus will be on the government's efforts, specifically PLN, to encourage the adoption of an electronic-based lifestyle, particularly through the use of induction stoves. Encouraging consumers to migrate means increasing the consumption of electricity, which has an impact on utilizing the excess electricity supply.

In mid-2022, the Indonesian government had plans to convert 3kg LPG stoves to induction electric stoves. However, this plan was postponed, as communicated by the Coordinating Minister for Economic Affairs, Airlangga Hartanto, during a virtual press conference on the LPG Stove Conversion Program on September 23, 2022. The delay was attributed to the absence of discussions and approvals related to the budget for implementing the conversion program.

Considering the example above, PLN, as part of the Indonesian government, has made efforts to promote a shift in people's lifestyles, encouraging the use of induction stoves over conventional gas stoves. The success in instigating a consumer's intent to switch can be influenced by various factors, both internal and external, that act as drivers for the consumer to make the change. This aligns with what marketing researchers have identified as various factors that can influence consumer switching behavior (Hsieh et al., 2012 in Chang et al., 2017).

In this research, these factors are categorized into three as the working framework, namely Push, Pull, and Mooring (PPM), which has been applied to understand the decisions of migrants to move from one geographic area to another (Wang et al., 2019) and to understand consumer switching behavior over the past decade (Bansal et al., 2005). The PPM framework allows for the selection of relevant variables based on the research object and specific context, thereby providing more accurate predictions (Li and Ku, 2018; Nugroho and Wang, 2023).

Based on the data presented above, this study aims to make this research a tool for future managerial decision-making at PLN. This will primarily involve identifying which of the three factors (push, pull, mooring) researched has the most significant impact. This, in turn, is expected to enable future managerial decisions to be made using business research, ultimately enhancing sustainable business growth for PLN.

Literature Review

Push, Pull, Mooring (PPM) Model

In line with the research conducted by Nguyen et al. (2022), there are two main reasons why the adoption of this theory aligns with the author's research. First, consumer switching behavior towards a specific product is often determined by their experiences with existing products, which can be likened to human migration. Second, previous research has demonstrated the use and flexibility of the theory of human migration to predict switching behavior, which has broad applications in various contexts, especially in the electric vehicle context (Ha et al., 2023; Wang et al., 2021), e-commerce and online services (Cheng et al., 2019; Hsieh et al., 2012), and so forth.

The PPM model serves as a theoretical framework to elucidate the factors driving user switching behavior, comprising push factors that push users away from existing services, pull factors that attract users to alternatives, and mooring factors that inhibit or facilitate switching behavior (Bansal, 2005). Through the PPM approach, this research provides insights into how push, pull, and mooring factors can influence consumer decisions to switch from existing products or services to new ones. Consequently, this study holds significant relevance for the development of marketing strategies that are more adaptive and responsive to consumer needs and desires in an ever-changing and dynamic business environment.

Push Factors

Push factors represent negative attributes originating from the current position that drive individuals to migrate (Bansal, 2005). Push factors are also often referred to as driving factors and are defined as the forces that push people away from existing products or services. Generally, push factors describe the reasons for switching based on the characteristics of the current place (Jung et al., 2017). These are reasons that drive someone to leave their current location based on negative characteristics or issues in that place.

In the context of this research, push factors refer to negative issues related to the use of LPG stoves that motivate consumers to switch to induction stoves, such as environmental concerns, safety concerns, and perceived inconvenience. Safety concerns are also mentioned in the study conducted by Hollada et al. (2017), which identified 6 main themes of significant factors influencing the adoption and implementation of clean cooking, with Safety Concerns being the fourth theme. Therefore, the first hypothesis in this research is:

H1: Push factors have a positive influence on the Consumer Intention to Switch from LPG Stoves to Induction Stoves

Pull Factors

On the other hand, pull factors reflect the positive attributes of the available alternatives (Wang et al., 2019). Pull factors can also be interpreted as the positive attributes of a new destination that make it attractive and serve as compelling reasons for someone to move to that place (Jung et al., 2017). Undoubtedly, the desire to adopt new technology is influenced by its attractiveness, including the use of Induction stoves for daily activities. Furthermore, in several previous studies, it has been revealed that people will use new technology or services if they can enhance their work efficiency (Yoon & Lim, 2021).

The pull factors that have been previously researched and are also applied in the context of this study are Perceived Ease of Use (Ha et al., 2023; Lenz et al., 2023; Hsieh, 2021; Nayak et al., 2021; Wang et al., 2021; Zeng et al., 2021), Perceived Benefits (Ha et al., 2023; Lenz et al., 2023; Nayak et al., 2021; Wang et al., 2021; Zeng et al., 2021), and Government Incentive Policies (Ha et al., 2023). The majority of consumers have concerns related to the purchase price and consider price as an important factor in the decision-making process to adopt a product (Wang et al., 2017).

Several studies have examined the impact of financial incentive policies on the adoption and sales of electric vehicles (EVs) and have indicated that such policies have a positive influence on consumer interest in adopting EVs. In the context of this research, the adoption of EVs is illustrated as the adoption of Induction stoves.

The second hypothesis of this study is as follows:

H2: Pull factors have a positive influence on the Consumer Intention to Switch from LPG Stoves to Induction Stoves

Mooring Factors

Meanwhile, mooring factors encompass the psychological reasons that make someone stay in their current location or potentially switch to a new one, such as comfort, familiarity, or emotional attachment to the specific location (Jung et al., 2017). This dynamic relationship distinguishes the PPM framework from other theories that require establishing fixed relationships between variables (Tsai, 2023). The third factor is mooring, which describes the psychological reasons that motivate individuals to either stay in their current location or switch to a new one (Jung et al., 2017). From the PPM perspective, mooring factors do not have a direct influence on the intention to switch. However, variables within the mooring factor often act as moderators that facilitate switching behavior (Monoarfa et al., 2023).

Referring to the research model by Wang et al. (2020) and the researcher's analysis from interviews, Inertia becomes a mooring factor in this study. Inertia is an unconscious emotional process that plays a negative role in new choices (Lai et al., 2011). Consumers with high levels of inertia tend to stick with the same products or services and avoid change (Li and Ku, 2018). Inertia can be defined as resistance to change norms and habits, or a tendency to change norms and habits very slowly (Beltramello, 2012 in Wang et al., 2020).

In this study, Inertia is illustrated as a consistent pattern of choosing LPG stoves out of habit without much consideration of other factors. Inertia itself is a psychological process that reflects an individual's tendency to maintain and repeat choices they have made before (Worthy et al., 2013 in Wang et al., 2020). Therefore, the third hypothesis in this study is:

H3a: Mooring factors have a negative influence on the Consumer Intention to Switch from LPG Stoves to Induction Stoves.

Likewise, concerning the effect of Inertia on the previously mentioned push and pull factors, due to Inertia, consumers tend to choose their previous option without much consideration (Wang et al., 2020). In general, consumers with high inertia are more likely to continue using LPG stoves and less likely to switch to induction stoves.

On the other hand, individuals with low inertia tend to actively seek new alternatives and are more likely to switch to using induction stoves. Thus, inertia plays a moderating role in influencing the relationship between push factors and pull factors on the intention to switch. Based on these findings, the next hypotheses consist of two hypotheses as follows:

H3b: Mooring factors negatively moderate the effect of Push factors. This means that the effect of Push factors on the intention to switch is stronger in the low inertia group than in the high inertia group.
H3c: Mooring factors negatively moderate the effect of Pull factors. This means that the effect of Pull factors on the intention to switch is stronger in the low inertia group than in the high inertia group.

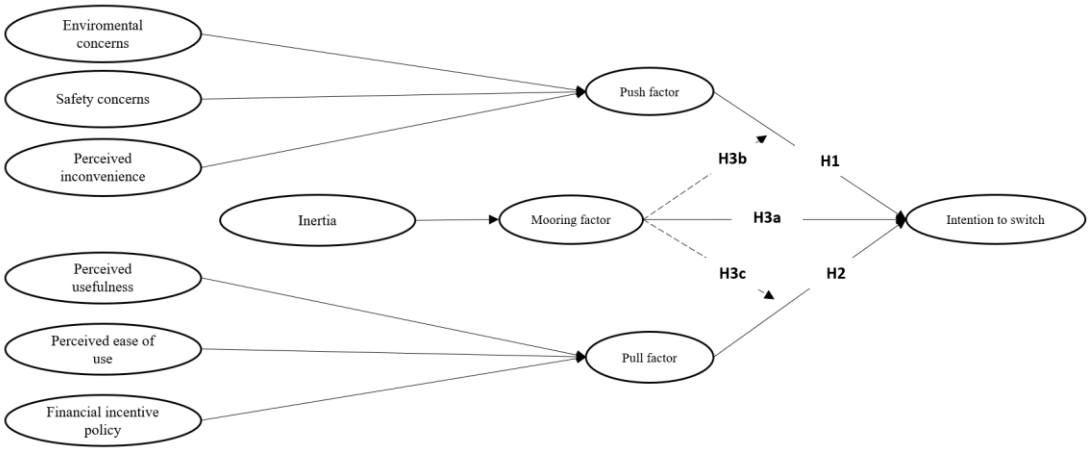

Figure 1. The Conceptual Research Model

RESEARCH METHOD

Research Methods

In this study, the researcher opted for an exploratory and descriptive research approach. The exploratory research was conducted to identify the factors influencing consumers' transition from using LPG stoves to induction stovess, which subsequently became the variables of interest in the subsequent descriptive research phase. The descriptive research, on the other hand, was employed to address the research problem formulated by exploring the interactive relationships among two or more variables (Cooper and Schindler, 2014: 21).

The sampling method utilized in this study is non-probability sampling, where not every individual in the population has an equal chance of being selected. Due to the vastness of the population, the research sample was obtained using a convenience sampling technique. The questionnaire, consisting of 37 questions, was formulated using Google Forms and was based on previous studies as the Table 1 shows below:

Table 1. Variable Operationalization

Variable	Dimension	Items	Adapted Sources
Push Factors	Environmental Concerns (PL)	1. Environmental issues have become more critical in recent years.	Ha et al, 2023

Variable	Dimension	Items	Adapted Sources
		2. To improve environmental problems, people need to change their lifestyles.	
		3. Excessive use of LPG stoves causes indoor air pollution.	
		4. Overusing LPG stoves depletes limited natural resources.	
	Safety Concerns (KK)	1. Not all LPG stove users are skilled in cylinder installation, posing a high risk of fire accidents.	Ha et al, 2023
		2. Generally, the risk of LPG stove explosions in Indonesia is high and increasing.	
		3. LPG stoves lack safety features in case of explosions.	
		4. Cleaning LPG stoves after use is inconvenient.	
	Perceived Inconvenience (PI)	1. I have a hard time cleaning the LPG stove after using it	Wang et al, 2020
		2. I had trouble installing the LPG cylinder	
		3. I often have difficulty lighting the stove immediately after replacing the LPG cylinder	
		4. Large LPG cylinders require a special space to be placed, this makes it difficult for me	
Pull Factors	Perceived Usefulness (PU)	1. Induction stoves are useful for reducing indoor air pollution	Ha et al, 2023
		2. Induction Stoves are useful for reducing the problem of scarcity of limited natural resources	
		3. Induction stoves can make the cooking process shorter	

Variable	Dimension	Items	Adapted Sources
		4. Induction Stove is useful for reducing my household expenses	
		5. Induction Stove can improve my quality of life	
	Perceived Ease of Use (PE)	1. Learning how to use an Induction stoves is easy	Wang et al, 2018
		2. I will easily master the use of an Induction stoves	
		3. For me, the way to install an Induction Stove is simple (no hose, LPG cylinder, furnace, etc.)	
		4. For me, the way to use an Induction Stove is simple (just connect it to electricity)	
	Financial Incentive Policy (FI)	1. I understand PLN's Comfortable Induction Stove power add promo	Wang et al, 2018
		2. For me, PLN's Comfortable Induction Stove promotion for additional power is interesting, so I am interested in buying an Induction Stove	
		3. For me, PLN's Convenient Induction Stove power add promo is a useful promo	
		4. For me, PLN's additional power promo Comfortable Induction Stove is important when buying an Induction Stove	
		5. PLN's additional power promotion Comfortable Induction Stove is my consideration when buying an Induction Stove	
	Inertia (IA)	1. I am used to using an LPG stove	

Variable	Dimension	Items	Adapted Sources
Mooring Factors		2. I am reluctant to switch to an Induction stoves unless I have to	Wang et al, 2020; Wang et al, 2018; Han et al, 2018
		3. I will continue to use the LPG stove because changing it makes me stressed	
		4. I will continue to use the LPG Stove because I feel comfortable	
		5. In general, switching from an LPG stove to an induction stove is difficult	
		6. In general, switching from LPG Stove to Induction Stove is troublesome	
Adoption Intention (AI)		1. I am willing to use an Induction stoves	Ha et al, 2023; Wang et al, 2018; Ho, 2022
		2. I am considering purchasing an Induction stoves in the near future	
		3. If in the future I need to buy a stove, I will buy an Induction Stove (not an LPG stove or an electric stove)	
		4. Most likely I will use an induction stove in the future (switch from LPG stove)	
		5. I would like to recommend to friends to buy an Induction stoves	

RESULTS AND DISCUSSION

Participant profiles

In this study, researcher distributed an online questionnaire using Google Form, which was also advertised through social media channels, for respondents that were residents from Indonesia country. Among all 802 respondents, most of them were female (59.6%), were aged 27-36 years old (59.6%), and 56.1% claimed that they only have junior high school in education level. Most of the respondents have a monthly income of less than 5.000.000 Rupiahs (69.3%), whereas only have monthly income of more than 20.000.000 Rupiahs. Table 2 shows the detailed profiles of the respondents.

Table 2. Participants Profile

Profiles	Frequency	Percentage
Gender		
Male	123	15%
Female	679	85%
Age		
17-27	189	23.6%
27-36	478	59.6%
37-46	108	13.5%
47-56	18	2.2%
>56	9	1.1%
Education Level		
Elementary School	7	0.9%
Junior High School	39	4.9%
Senior High School	450	56.1%
Diploma	63	7.9%
Bachelor's Degree	211	26.3%
Master's Degree	31	3.9%
Doctoral	1	0.1%
Job		
Housewives	475	59.2%
State Owned Enterprise Employee	40	5.0%
Civil Servants	27	3.4%
Private Sector Employee	108	13.5%
Students	25	3.1%
Entrepreneur	99	12.3%
Others	28	3.5%
Monthly Income Level		
< Rp 5.000.000	556	69.3%
Rp 5.000.000 - Rp 10.000.000	200	24.9%
Rp 10.000.000 - Rp 15.000.000	33	4.1%
Rp 15.000.000 - Rp 20.000.000	12	1.5%
> Rp 20.000.000	1	0.1%

Evaluation of First-Order Measurement Models

The reliability was measured with Cronbach's alpha (CA) values and the composite reliability (CR) values with the minimum levels of 0.7 (Hair et al., 2019). Convergent validity was assessed through factor loadings and the average variance extracted (AVE) of indicators. Hair et al. (2019) recommended the thresholds of 0.5 for AVE and Chin (1998) recommended the thresholds of 0.5 for factor loadings. As shown in Table 3, all of the estimated values of AVE and factor loadings fell in the acceptable ranges; thus, the criterion of the convergent validity was met. This demonstrates strong reliability of the instruments used.

Table 3. Assessment of measurement models

Construct	Items	Loading		Cronbach's alpha	Composite reliability
Environmental concerns	ML1	0.604		0.709	0.814
	ML2	0.630			
	ML3	0.833			
	ML4	0.809			
Safety concerns	KK1	0.730		0.853	0.902
	KK2	0.898			
	KK3	0.888			
	KK4	0.813			
Perceived Inconvenience	PI1	0.813		0.840	0.893
	PI2	0.839			
	PI3	0.845			
	PI4	0.791			
Inertia	IA1	0.266	(dropped)	0.879	0.914
	IA2	0.859			
	IA3	0.870			
	IA4	0.860			
	IA5	0.902			
	IA6	0.908			
Perceived Usefulness	PU1	0.779		0.877	0.910
	PU2	0.823			
	PU3	0.807			
	PU4	0.824			
	PU5	0.856			
Perceived ease of use	PE1	0.888		0.917	0.941
	PE2	0.904			
	PE3	0.897			
	PE4	0.890			
Financial incentive policy	FI1	0.776		0.914	0.936
	FI2	0.901			
	FI3	0.927			
	FI4	0.898			
	FI5	0.807			
Adoption intention	AI1	0.874		0.917	0.938

	AI2	0.726
	AI3	0.901
	AI4	0.923
	AI5	0.905

Furthermore, the reflective constructs met the criterion for discriminant validity, supported by the Heterotrait-Monotrait (HTMT) ratio values in Table 4, which were below 0.85 (Hair et al., 2019).

Table 4. The result of checking the HTMT criterion

	AI	**FI**	**IA**	**KK**	**ML**	**PE**	**PI**	**PU**
AI								
FI	0.799							
IA	0.635	0.52						
KK	0.504	0.567	0.332					
ML	0.522	0.598	0.418	0.799				
PE	0.638	0.741	0.483	0.457	0.573			
PI	0.575	0.595	0.408	0.739	0.637	0.488		
PU	0.765	0.834	0.571	0.667	0.686	0.711	0.675	

Note: AI=Adoption intention, FI=Financial incentive policy, IA=Inertia, KK=Safety concerns, ML=Environmental concerns, PE=Perceived ease of use, PI=Perceived inconvenience, PU=Perceived usefulness

Evaluation of Second-Order Measurement Models

The successful outcomes from assessing the first-order measurement models enabled the evaluation of the second-order measurement models. Within this study, these measurement models consisted of (1) the push factor being formatively shaped by environmental concerns, safety concerns, and perceived inconvenience; (2) the mooring factor being formatively shaped by inertia; and (3) the pull factors being formatively shaped by perceived usefulness, perceived ease of use, and financial incentive policies.

The multi-collinearity risk was insignificant because the values of the variance inflation factor (VIF) for all dimensions were lower than 3 (Hair et al., 2019). As can be seen in Table 5, the weights of all dimensions were statistically significant (i.e., $p < 0.05$) except for perceived ease of use, and sufficiently larger (i.e., weight > 0.1) (Lohmöller, 1989). The strongest contributor to the push factor was that of safety concerns while the counterpart to the pull factor was perceived ease of use.

Table 5. Evaluation of second-order measurement model.

Second-Order Constructs	Outer Weights	Standard Deviation	p-Values	VIF
Dimensions of pull factors				
Financial incentive policy	0.587	0.052	0.000	2.678
Perceived ease of use	0.128	0.054	0.009	1.981
Perceived usefulness	0.377	0.049	0.000	2.466
Inertia	1.000	1.000	0.000	1.000
Dimensions of push factors				
Environmental concerns	0.368	0.079	0.000	1.737
Safety concerns	0.218	0.094	0.010	2.101
Perceived Inconvenience	0.582	0.077	0.000	1.698

Evaluation of Structural Model

Evaluation of Predictive Capacity and Model Fit

The structural model's predictive capability underwent evaluation using the coefficient of determination (R2) and the cross-validated redundancy measure (Q2), which was calculated using the blindfolding method. For the adoption intention, both R2 and Q2 values exceeded 0—the established benchmark. Specifically, the R2 of 0.642 indicated a moderate level, while the Q2 of 0.479 indicated a moderate predictive ability (Hair et al., 2019).

Model fit was assessed using the normed fit index (NFI) and standardized root mean square residual (SRMR). The findings revealed an NFI value of 0.847, surpassing the minimum threshold of 0.8, and an SRMR value of 0.052, falling below the maximum cut-off of 0.08 (Hair et al., 2017). Hence, the structural model displayed a good fit with the data.

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Hypothesis Testing

Table 6 and Figure 2 present the outcomes of the path analysis. Both the push factor ($\beta = 0.051$) and the pull factor ($\beta = 0.594$) demonstrate a positive influence on adoption intention, with the former showing a smaller impact. This confirms the validation of H1 and H2. However, H3b and H3c were not supported, as inertia was found to have an insignificant role in facilitating adoption intention. Additionally, the findings reveal that inertia did not act as a moderator in the effect of the push factor on adoption intention. Conversely, it negatively moderated the impact of the pull factor on adoption intention. Consequently, individuals exhibiting higher inertia levels experienced a reduced positive effect of the pull factor on intention compared to those with lower inertia levels.

Table 6. The results of hypothesis testing

Path	β	SD	p-Value	Hypothesis	Decision
PUSH -> AI	0.051	0.028	0.032	H1	Accept
PULL -> AI	0.594	0.035	0.000	H2	Accept
MOOR -> AI	-0.260	0.030	0.000	H3a	Accept
MOOR*PUSH -> AI	0.055	0.036	0.064	H3b	Reject
MOOR*PULL -> AI	0.022	0.032	0.248	H3c	Reject

Note: SD—standard deviation

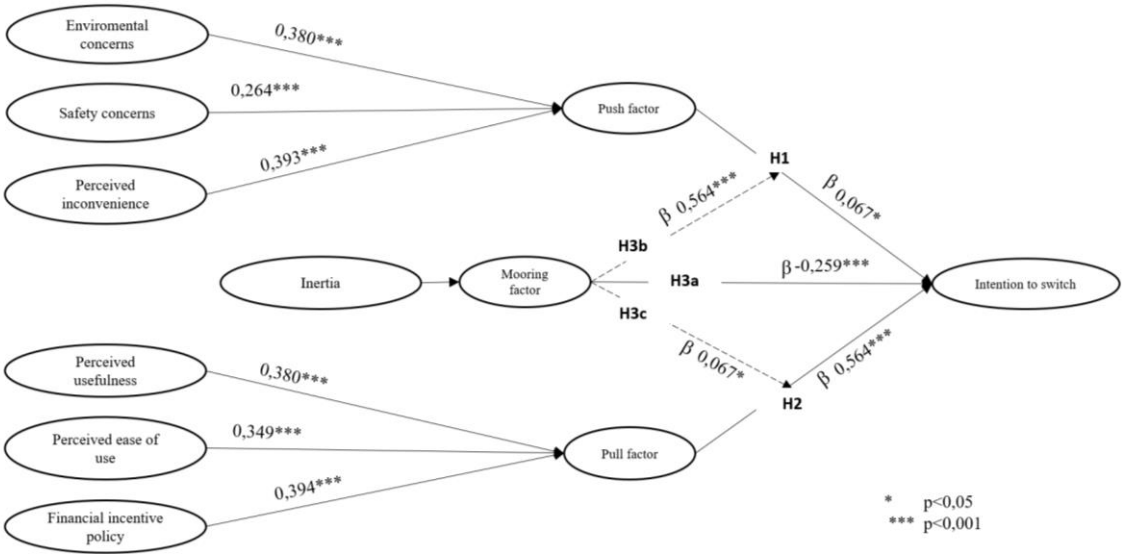

Figure 2. Graphical results of the effects

Discussion

This research unveils a nuanced picture of factors influencing the LPG-to-induction stove transition in Indonesia. Push factors (environmental concerns, safety anxieties, inconvenience) and pull factors (perceived benefits, ease of use, incentives) significantly influence switching intentions. Notably, inertia, initially conceptualized as a barrier, reveals a more complex role: negatively moderating switching but also amplifying the positive influence of pull factors. This suggests context-specific interactions between inertia and other drivers of technology adoption, warranting further investigation across diverse markets and individual profiles.

These findings offer valuable insights for policymakers and industry stakeholders, informing interventions that leverage both push and pull forces while acknowledging the intricate role of inertia in facilitating clean energy transitions. It's worth acknowledging that, like any study, this one isn't without its limitations. In the future, researcher could consider some aspects for further exploration,

especially when it comes to navigating factors like the unique cultural aspects of Indonesia, unexplored dimensions of perceived product maturity, differences in how long people use LPG, and uneven access to electricity across households.

CONCLUSION

The conclusion of this study reveals that Indonesian consumers' intention to switch from LPG stoves to induction stoves is influenced by three main factors: push, pull, and mooring factors. Push factors, such as environmental and safety concerns, as well as the inconvenience associated with LPG stoves, motivate consumers to make the switch. Pull factors, including perceived ease of use, benefits, and financial incentives, serve as positive attractions encouraging adoption of induction stoves.

The study also finds that mooring factors, specifically inertia or habitual use of LPG stoves, act as a barrier to consumer intention to switch. However, inertia does not completely prevent switching but moderates the influence of push and pull factors. Consumers with high inertia are less likely to switch, although pull factors like financial incentives show a positive effect.

The implications of these findings are critical for policymakers and PLN in designing policies that promote the transition to electricity usage to address Indonesia's electricity surplus. By understanding the complex role of push, pull, and inertia factors, PLN can maximize the effectiveness of sustainable energy transition strategies, supporting climate change mitigation targets and gradually increasing domestic electricity consumption.

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