Factors Affecting the Consumption of Energy-Efficient Lighting Products: Exploring Purchase Behaviors of Thai Consumers

Nuttakrij Apipuchayakul ¹ and Sujitra Vassanadumrongdee ^{2,*}

Supplementary Materials

Cronbach's Alpha (reliability statistics).

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N. of Items
0.789	0.822	5

Squared multiple correlation results.

Endogenous Variable	Square Multiple Correlation (SMC = R^2)
PURCHASE INTENTION	0.499
PURCHASE BEHAVIOR	0.500

Age Groups Comparisons—ANOVA and Post Hoc using Scheffe Test.

Descriptive statistics (age group comparisons).

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		
		11	Mean Stu. Deviation		Sta. Elloi	Lower Bound	Upper Bound	
Purchase Behavior	18–35 Yrs	144	4.2014	0.70981	0.05915	4.0845	4.3183	
	36-49 Yrs	104	4.3750	0.59969	0.05880	4.2584	4.4916	
	50-70 Yrs	39	4.5556	0.53712	0.08601	4.3814	4.7297	
	Total	287	4.3124	0.65989	0.03895	4.2358	4.3891	

ANOVA (age group comparisons).

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	4.488	2	2.244	5.308	0.005
Purchase Behavior	Within Groups	120.053	284	0.423		
	Total	124.541	286			

Post-hoc comparisons using the Scheffe test (age groups).

Domandant	(I) A CE Crosse	(I) A CE Crour	Mean	Std.		95% C.I.
Dependent Variable	(I) AGE Group [Recode]	(J) AGE Group [Recode]	Difference	Error	Sig.	Lower
v allable	[Recode]	[Recode]	(I–J)	EHOI		Bound
	18–35 Yrs	36-49 Yrs	-0.17361	0.08367	0.118	-0.3795
		50-70 Yrs	-0.35417*	0.11737	0.011	-0.6430
Purchase	26 40 3/	18-35 Yrs	0.17361	0.08367	0.118	-0.0323
Behavior	36–49 Yrs	50-70 Yrs	-0.18056	0.12208	0.336	-0.4810
	50–70 Yrs	18-35 Yrs	0.35417 *	0.11737	0.011	0.0654
		36-49 Yrs	0.18056	0.12208	0.336	-0.1198

 $^{^{\}ast}$ The mean difference is significant at the 0.05 level. Source: Author's own calculation.

Electric bill payer groups comparisons—ANOVA and post-hoc test using the Scheffe Test.

Descriptive statistics (electric bill payer comparisons).

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
				Deviation		Lower Bound	Upper Bound
	Unreported	2	4.3333	0.47140	0.33333	0.0979	8.5687
Purchase	Paid Some Months	15	3.9111	0.66029	0.17049	3.5455	4.2768
Behavior	Paid Regularly	174	4.4310	0.60082	0.04555	4.3411	4.5209
	Never Paid	97	4.1684	0.71706	0.07281	4.0239	4.3129
	Total	288	4.3148	0.65999	0.03889	4.2383	4.3914

ANOVA (electric bill payer comparisons).

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	6.875	3	2.292	5.509	0.001
Purchase Behavior	Within Groups	118.137	284	0.416		
	Total	125.012	287			

Post-hoc comparisons using the Scheffe test (electric bill payer groups).

Dependent Variable	(I) E-Bill Payers	(J) E-Bill Payers [Recode]	Mean Difference	Std. Error	Sig.	95% Confidence Interval
valiable	[Recode]	[Recode]	(I–J)	Elloi		Lower Bound
		Paid Some Months	0.42222	0.48551	0.860	-0.9432
	Unreported	Paid Regularly	-0.09770	0.45867	0.997	-1.3876
		Never Paid	0.16495	0.46073	0.988	-1.1308
	Paid Some Months	Unreported	-0.42222	0.48551	0.860	-1.7876
		Paid Regularly	-0.51992*	0.17356	0.031	-1.0080
Purchase		Never Paid	-0.25727	0.17894	0.559	-0.7605
Behavior	Paid Regularly	Unreported	0.09770	0.45867	0.997	-1.1922
		Paid Some Months	0.51992*	0.17356	0.031	0.0318
	Regularly	Never Paid	0.26265 *	0.08173	0.017	0.0328
		Unreported	-0.16495	0.46073	0.988	-1.4607
	Never Paid	Paid Some Months	0.25727	0.17894	0.559	-0.2460
		Paid Regularly	-0.26265*	0.08173	0.017	-0.4925

 $^{^{\}ast}$ The mean difference is significant at the 0.05 level . Source: Author's own calculation.