Consumer Readiness on Rejecting the Choice of Consumption of Plastic Packaged Goods: A Study of Karnali Province

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Abstract

Plastics for packaging have lead to massive environmental pollution and dreadful issues in human life. Thus consumers need to consider its deep-rooted impacts, and refuse the acceptance of plastic packaged goods. The present researchers have opted a critical constructivist perspective inclining at deductive approach to assess the consumer readiness on rejecting the choice of consumption of plastic packaged goods in the context of Karnali Province of Nepal. Causal-comparative research design was used to determine the cause or consequences of selected variables on dependent variables. In order to collect the primary data, an email survey was administered to 365 respondents of various demographic levels replied with the duly completed survey questionnaires. For the analyses, both descriptive and inferential analyses were used. The key findings of the structural equation model revealed that the plastic related concern with regard to health and environmental issues are the main factors influencing plastic rejection. Consumer readiness with regard to plastic rejection are also influenced by subjective knowledge and the weight placed on third party commitment to solving the plastic problem. The findings of the study also revealed significant contribution of the impact of employment status as the essential element determining consumer readiness on rejecting plastic packaged goods in the Karnali province. This indicates majorities of employed consumers have more readiness to reject the plastic packaged goods.

Keywords: Plastic pollution, consumer behavior, structural equation model, environmental concern, subjective knowledge

Introduction

Plastics for packaging are easily available (Jibreel & Al-shwafi, 2019), flexible and inexpensive (Macena et al., 2021) leading to wide use of plastics for packaging. However, most plastics have low recycling or reuse ratios, contributes substantially to environmental pollution (Macena et al., 2021; Borg et al., 2020). Moreover, plastic packages/bag pollution is growing day by day (Jibreel & Al-shwafi, 2019). Macena et al. (2021) have concluded that plastic food packages ultimately leads to environmental pollution. These studies found that the consumers are aware of negative impacts of use of plastic packages. These impacts could be highly observed in increase in human health issues (Adane & Muleta, 2011), decline of natural beauty of environment, sewage blockage, and decline in the population of animals (Jibreel & Al-shwafi, 2019). Also, concluded that changing plastic consumption habits has not been an easy task (Macena et al., 2021).

de Sousa (2023) found that there is a gap between consumer awareness and behavior regarding plastic waste, and that different research areas have different focuses and approaches to address the plastic problem. Scholars also identified some research gaps and opportunities for future studies. Adeniran et al. (2022) found that plastic waste management in sub-Saharan Africa faces many challenges, such as lack of infrastructure, policies, awareness, and incentives. The article also found that plastic waste pollution has negative impacts on the environment and human health, such as soil and water contamination, greenhouse gas emissions, wildlife ingestion, and disease transmission. The article proposed some mitigation strategies, such as waste reduction, recycling, education, and regulation. Environmental impacts of plastics and micro-plastics use, waste and pollution: European Parliament (2016) found that plastics and micro-plastics have various environmental and health effects, such as marine litter, toxic chemicals, endocrine disruption, and food chain contamination. The article also found that the EU and national measures to address the plastic problem are diverse and complex, and that there is a need for more coordination, harmonization, and implementation. Mugobo et al. (2022) found that consumer perceptions and attitudes towards plastic packaging and its environmental impact are influenced by various factors, such as knowledge, awareness, values, norms, emotions, and social influences. The article also found that consumer behavior towards plastic packaging is not always consistent with their perceptions and attitudes, and that there are some barriers and motivators to change their behavior. The article recommended some theoretical and practical implications for future research and interventions.

In Nepal, since 1990 the application of plastic has been increasing, and has led to various environmental issues. Interestingly, some towns in Nepal have

prohibited plastic bags since 2010, however this ban's intended impact hasn't materialized (Bharadwaj, 2016). Nepal has taken some measures to address the issues related to plastic waste and promote environmental protection. Here are a few policies and initiatives that were in place as of September 2021:

1. Plastic Bag Ban: In an effort to reduce plastic waste, the Nepalese government introduced a ban on the use of plastic bags with a thickness of less than 40 microns in the Kathmandu Valley in 2015. The ban has since been extended to other cities and districts across the country.

2. Bagmati Clean-up Campaign: The Bagmati Clean-up Campaign is a popular initiative aimed at cleaning up the Bagmati River, which flows through the Kathmandu Valley. The campaign involves mass volunteer participation and has helped raise awareness about plastic pollution and environmental protection.

3. Plastic Free Himalayas: In 2018, the Nepalese government launched the "Plastic Free Himalayas" campaign, aiming to make the Himalayan region of Nepal free from single-use plastics. The campaign focuses on reducing plastic waste and promoting sustainable alternatives in the tourist areas and trekking routes of the Himalayas.

4. Waste Management Act: Nepal introduced the Solid Waste Management Act in 2011 to address the overall management of waste, including plastic waste. The act emphasizes waste segregation, recycling, and the establishment of proper waste management systems.

5. Environmental Impact Assessment (EIA): Nepal requires an Environmental Impact Assessment for development projects that may have significant environmental impacts, including those related to plastic manufacturing or waste management. These assessments help identify potential environmental risks and promote sustainable practices.

While there may exist policies and initiatives aimed at reducing plastic packaged products in the Karnali Province, it remains uncertain whether consumers are truly ready to reject such products. Despite the implementation of these policies, there is a lack of research examining the actual consumer attitudes, behaviors, and readiness to embrace alternatives to plastic packaging. This research gap highlights the need to explore the extent to which consumers are aware, and has the understanding of the environmental impact of plastic packaging, and the various factors that may hinder or facilitate their willingness to reject plastic in favor of more sustainable alternatives. Similarly, in the same line, while there is growing global concern over plastic pollution and increasing efforts to reduce plastic waste, there is a lack of research specifically examining consumer readiness and the factors influencing the rejection of plastic packaged goods in the Karnali Province. Limited attention has been given to understanding the unique factors that shape consumer

attitudes and behaviors towards plastic consumption in this region. Therefore, the research gap lies in the absence of comprehensive studies that investigate the specific challenges and opportunities for sustainable consumption practices related to plastic packaging in the context of the Karnali Province. Therefore, the general objective of the present work was to evaluate the consumer readiness on rejecting the choice of consumption of plastic packaged goods staying in the specific location. To grasp the general objective, the present researchers have pointed out the specific objectives as listed below. These objectives was to:

1. assess the general understanding of consumers plastic-related concern with regard to the rejection of plastic packaged goods,

2. examine consumers' subjective knowledge about plastic-related issues with regard to rejecting the plastic packaged goods,

3. determine subjective knowledge about plastic-related issues among the consumer, and

4. evaluate commitment of third parties for beating plastic-related environmental impact affects the extent to which consumers readiness on rejecting purchasing plastic packaging goods.

Figure 1

Conceptual Framework
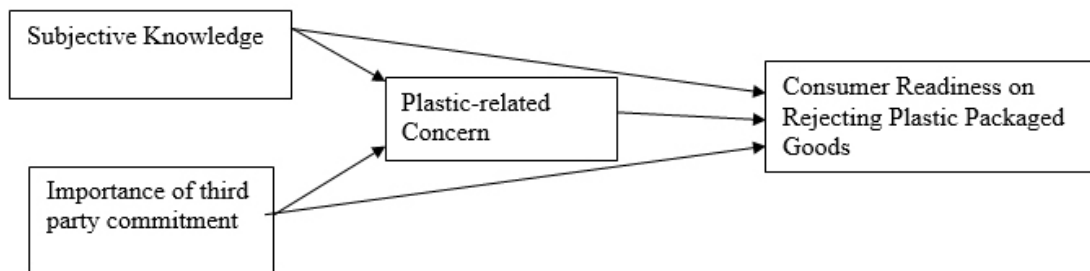
Adopted From: Cavaliere et al. (2020)

The overall research is based on following working hypothesis that was also adopted on (Cavaliere et al., 2020).

H1: There is direct and significant impact of consumer plastic-related concern on consumers readiness on rejecting purchasing plastic packaging goods.

H2-1: The higher the consumers' subjective knowledge about plastic-related issues, the higher the probability that the consumer reject plastic packaging goods.

H2-2: There is direct and significant impact of consumers' subjective knowledge about

plastic-related issues on plastic-related concern.

H3: The importance attributed to the commitment of third parties for beating plastic-related environmental impact affects the extent to which consumers readiness on rejecting purchasing plastic packaging goods.

Methods and Procedures

The current study adopts a critical constructivist perspective and employs a deductive approach to evaluate consumer readiness to reject the consumption of plastic-packaged goods within the context of the Karnali Province in Nepal. A causal-comparative research design is utilized to discern the causes or consequences of selected variables on dependent variables. For primary data collection, an email survey is administered to 365 respondents representing various demographic levels. The respondents provided completed survey questionnaires. Both descriptive and inferential analyses are conducted on the collected data. The survey employs a closed-ended structured questionnaire. The data is scrutinized, analyzed, and interpreted using statistical tools such as SPSS, SPSS Amos, and various statistical methods including descriptive statistics (Mean, standard deviation) and inferential statistics (Correlation, ANOVA, factor analyses, and structural equation modeling). To validate the regression model assumptions, a Multicollinearity test is performed using the Variance Inflation Factor (VIF), and the results indicate values less than 10, suggesting that the constructs are not strongly correlated with each other.

Results and Discussion

Table 1

Demographic Information and Result of ANOVA Test

Demographic information		Frequency	Percent	F-value	Sig.
Gender	Female	270	74.0	1.056	.397
	Male	95	26.0		
	Total	365	100.0		
Age	Less than 30 Years	61	16.7	.668	.782
	30 to 40 Years	117	32.1		
	40 to 50 Years	147	40.3		
	Above 50 Years	40	11.0		
	Total	365	100.0		

	Employed	201	55.1	2.243	.010
	Unemployed	76	20.8		
Employment Status	Student	78	21.4		
	Retried	10	2.7		
	Total	365	100.0		

The demographic data of the sampled consumers and ANOVA between demographic information and dependent construct (Rejection of plastic packaged goods) is described in Table 1. Table 1 reveals that approximately 74 percent of the respondents are males while 26 percent are females, this might be as a result of high number of female consumers and buyers of plastic packaged goods in the Karnali. In addition, Most (40 percent) of the consumers fall within the ages 40-50 years, 32 percent of consumers fall between 30-40 years, 17 percent of consumers fall within the age of less than 30 years, and only (11 percent) are above 50 years. Table 1 further shows on employment status, 55 percent of consumers are employed, 21 percent are unemployed consumers, 21 percent are students and 3 percent are retried.

The ANOVA test is used to assess whether there are statistically significant differences among group means. In this table, the F-value represents the ratio of the variance among group means to the variance within the groups. The significance level (Sig.) is the probability of observing such results by chance. For Gender and Age, the p-values (Sig.) are greater than 0.05, indicating that there is no significant difference among the groups. However, for Employment Status, the p-value is 0.010, suggesting a significant difference among the employment status groups at the 0.05% confidence level.

Table 2

Result of ANOVA test between Demographic Information and Subjective Knowledge

Demographic Information		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	3.778	23	.164	.842	.677
Gender	Within Groups	66.496	341	.195		
	Total	70.274	364			
	Between Groups	12.835	23	.558	.680	.865
Age	Within Groups	279.669	341	.820		
	Total	292.504	364			

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	23.733	23	1.032	1.322	.149
Employment Status	Within Groups	266.202	341	.781		
	Total	289.934	364			

The table above represents the result of ANOVA between demographic information and plastic- concern subjective knowledge. There is no significant difference between, gender, and subjective knowledge; age groups, and subjective knowledge; employment status, and subjective knowledge.

Table 3

Result of ANOVA test between Demographic Information and Third Party Concern

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	8.838	24	.368	2.038	.003
Gender	Within Groups	61.436	340	.181		
	Total	70.274	364			
	Between Groups	24.994	24	1.041	1.324	.144
Age	Within Groups	267.510	340	.787		
	Total	292.504	364			
	Between Groups	16.899	24	.704	.877	.635
Employment Status	Within Groups	273.035	340	.803		
	Total	289.934	364			

The Table 3 represents the result of ANOVA between demographic information and third party concern. There is no significant difference between age groups, and third-party concern; employment status. However, there is significant difference of commitment of third party concern among male and female.

Validity and Reliability Analysis

Evaluating and measuring the robustness, accuracy, coherence, and reliability and efficacy of the data and the survey data was essential before testing the hypothesis. The research model is affected by four factors, which are plastic related concern, subjective knowledge, third party concern and consumer readiness for rejecting plastic packaged goods.

Table 4

Result of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.902

	Approx. Chi-Square	5336.194
Bartlett's Test of Sphericity	df	210
	Sig.	0.000

Note: KMO = Kaiser Meyer Olkin

Sample adequacy is measured by Kaiser Meyer Olkin (KMO), which is an index that assesses the appropriateness of factor analysis. The Table 4 shows that the KMO value is 0.902, which is between 0.5 and 1.0, and a value near 1 means that factor analysis is appropriate and the sample is adequate for further analysis. The table also shows that Bartlett's test is used to examine the hypothesis that there is no correlation among the variables in the population. The table above also shows that the value of Bartlett's test is 5336.194 with a sig. of 0.00, which is below the significance level of 0.5, meaning that there is no correlation among the variables or constructs in the population.

Table 5

Rotated Component Matrix with AVE and CR

Variables	Items	Rotated Component Matrix AVE and CR				
		Factor Loadings	Communalities	AVE	Cronbach's Alpha	CR
Consumer Readiness on Rejecting Plastic Packaged Goods	Rej1	.812	.688			
	Rej2	.823	.718	.523	.764	.767
	Rej3	.793	.658			
Plastic-related Concern	PRC2	.750	.679			
	PRC3	.860	.848	.724	.907	.913
	PRC4	.843	.842			
	PRC8	.793	.723			
Subjective Knowledge	SK1	.679	.506			
	SK2	.820	.710			
	SK3	.872	.795			
	SK4	.801	.673	.609	.909	.916
	SK5	.811	.729			
	SK6	.657	.539			
	SK7	.767	.647			

	TPC1	.738	.621			
	TPC2	.865	.775			
	TPC3	.825	.733			
Importance of third party commitment	TPC4	.851	.767	.683	.937	.938
	TPC5	.847	.737			
	TPC6	.834	.735			
	TPC7	.862	.769			

Note: Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
CR = Composite Reliability; AVE = Average Variance Extracted.

The degree to which the measurement items of a construct differ from other constructs is measured by discriminant validity. Discriminant validity is evaluated using two tests: Average Variance Extracted (AVE) analysis and Cross Loading analysis. The square root of the AVE (diagonal in table 8) must be higher than the correlations between the variables (off-diagonal factors in table 8). The diagonal value is higher than the off-diagonal value, as shown in Table 8. The cross loading analysis in Table 5 shows that the individual items of each construct load more on their own constructs than on other constructs. The cross loading difference is also higher than the recommended threshold of 0.1 (Gefen & Straub, 2005), which means that the model has good discriminant validity. The above information shows the Rotated Component Matrix with AVE, MSV, and CR values of the chosen constructs for the study. The values of Cronbach's coefficient were above the 0.70 standard suggested by (Nunnally & Bernstein, 1994). This verifies the internal consistency and reliability of the data. Average variance extracted (AVE) was used for the Convergent Validity (CV). CV indicates the extent to which two tests of constructs that are theoretically related are actually related. Composite Reliability (CR) should be greater than 0.5 and CR should be greater than AVE for CV (Campbell & Fiske, 1959). All the constructs satisfy the required criteria for CV. Discriminant Validity (DR) assessment shows that a test of a construct is not highly associated with other tests that measure different constructs. For data validation, certain conditions must be satisfied, such as CR>AVE, AVE>MSV, and √AVE> r (correlation). The table above shows the results of the constructs after running in SPSS and AMOS.

Table 6

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.833	37.301	37.301	7.833	37.301	37.301	5.106	24.312	24.312
2	3.575	17.026	54.327	3.575	17.026	54.327	4.664	22.211	46.523
3	1.941	9.244	63.571	1.941	9.244	63.571	3.051	14.528	61.051
4	1.542	7.342	70.912	1.542	7.342	70.912	2.071	9.862	70.912
5	.754	3.590	74.503						
6	.609	2.902	77.404						
7	.547	2.604	80.008						
8	.537	2.558	82.566						
9	.445	2.119	84.685						
10	.415	1.978	86.663						
11	.387	1.844	88.507						
12	.368	1.753	90.260						
13	.336	1.602	91.861						
14	.331	1.575	93.436						
15	.269	1.282	94.718						
16	.237	1.130	95.848						
17	.214	1.021	96.869						
18	.198	.944	97.812						
19	.177	.844	98.656						
20	.160	.763	99.420						
21	.122	.580	100.000						

Note: Extraction Method: Principal Component Analysis.

The Table 6 presents the Eigenvalues, which indicate the total variance explained by each component. The initial Eigenvalues for components 1, 2, 3, and 4 are all greater than 1, indicating that only these four factors can be derived. Specifically, component 1 accounts for 24.312 percent of the variance, component 2 explains 22.211 percent, component 3 explains 14.528 percent, and component 4 explains 9.862 percent of the variance. In total, these four factors collectively explain 70.912 percent of the variance in the study, out of a possible 100 percent.

Measurement of Model Fit indices
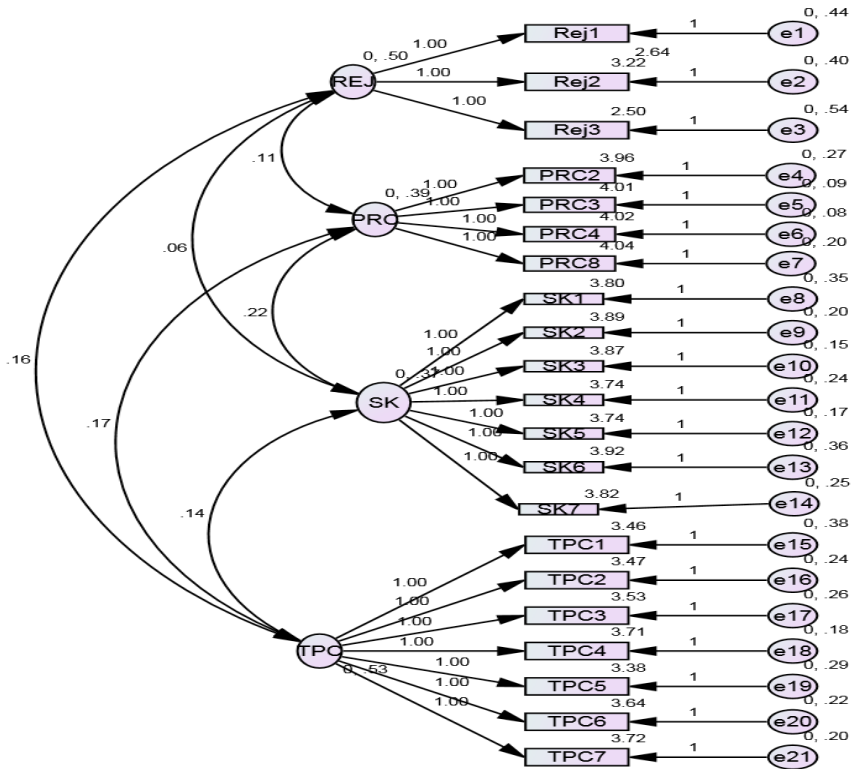
Figure 2

Confirmatory Factor Analysis

Table 7

Analysis of Model Fit Indices of CFA

Model Fit Indices	Recommended Value	Obtained Value
P-value	≤ 0.05	0.000
Chi-Square/df	<3	2.955
TLI	>0.90	0.922
CFI	>0.90	0.925
RMSEA	<0.08	0.073
GFI	>.90	0.945
RMR	≤ 0.05	0.018

The model fit indices displayed in table 7 indicate that the model was acceptable. The model fit is corroborated by (Haire et al. 2010, Hu & Bentler, 1988; Henseler et al., 2010).

Table 8

Model Validity Measures

Constructs	CR	AVE	MSV	MaxR(H)	REJ	PRC	SK	TPC
REJ	0.767	0.523	0.096	0.768	**0.723**			0.310***
PRC	0.913	0.724	0.331	0.928	0.256***	**0.851**		0.376***
SK	0.916	0.609	0.331	0.92	0.136*	0.575***	**0.78**	0.324***
TPC	0.938	0.683	0.141	0.94				**0.826**

Notes: No validity concerns here.

The above table 8 shows that the value of AVE was greater than 0.5 and values of CR were likewise obtained to be higher than 0.7, both discriminant and the convergent validity has been satisfied. Therefore, it can be concluded that there is no issues of any kind of validity and reliability in the present study.

Mediating Analysis

The mediating analysis was conducted in order to know the direct and indirect impacts of dependent variables on independent variables.
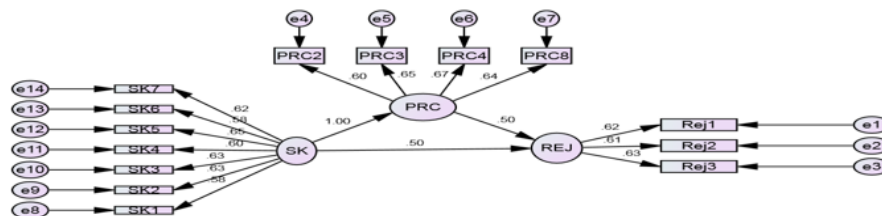
Figure 3

Test of the mediating role of PRC on SK

Table 9

Model's Results

			Estimate	S.E.	C.R.	P	Label
PRC	<---	SK	.591	.050	11.935	***	par_2
REJ	<---	PRC	.300	.087	3.445	***	par_1
REJ	<---	SK	-.019	.090	-.210	.834	par_3

The result in Table 9 shows that the relationship between knowledge on plastic-related and plastic rejection behavior was mediated by plastic-related concern. The higher the consumers' subjective knowledge about plastic-related issues, the higher the probability that the consumer readiness to reject plastic packaging goods. The hypothesis H2-1 was rejected. However, the higher the subjective knowledge about plastic-related issues, the higher the plastic-related concern. Therefore, H2-2 was not rejected.

Figure 4

Test of the Mediating role of PRC on TPC
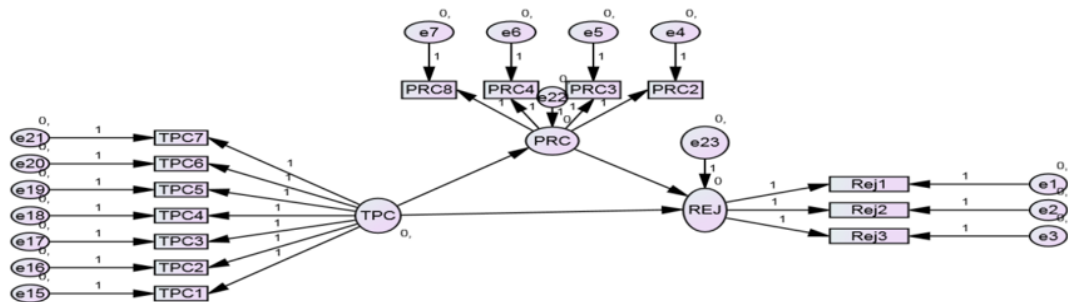
Table 10

Model's Results

			Estimate	S.E.	C.R.	P	Label
PRC	<---	TPC	.322	.045	7.149	***	par_2
REJ	<---	TPC	.242	.062	3.889	***	par_1
REJ	<---	PRC	.182	.073	2.491	.013	par_3

Notes: (***) denotes p-values significant at the 0.01 level of significance.

The result in Table 10 shows that Third Party Commitment (TPC) has significant impacts on plastic related concern. The table above also shows that Third Party Commitment (TPC) has direct and significant impacts on consumer decision to reject the plastic packaged goods.

Structural Equation Modeling (SEM)

By examining the magnitude, significance, and direction of the path coefficients among all independent variables (Plastic-related concern, subjective knowledge, and importance of third-party commitments), the structural model was evaluated. A higher coefficient value shows a stronger impact of the independent variable on the dependent variable. Hypotheses were assessed at a significance level of 1%. The acceptance of hypotheses H1, H2-2, and H3 is confirmed by the path

analysis results, presented in Table 11. This indicates that variables such as plastic-related concern, subjective knowledge, and third-party commitments make a positive and significant contribution to the dependent variable.
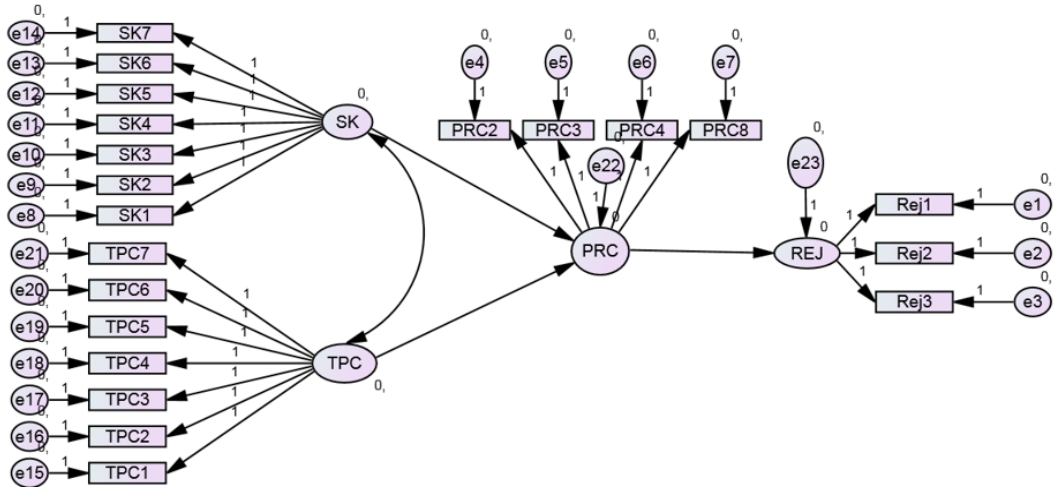
Figure 5

Structural Equation Model

Table 11

Path Analysis Estimates

	Path		Beta	S.E.	C.R.	Significance	Hypothesis
REJ	<---	PRC	0.436	0.077	5.668	***	H1
REJ	<---	SK	-0.019	0.09	-0.21	n.s.	H2-1
PRC	<---	SK	0.628	0.029	22.006	***	H2-2
PRC	<---	TPC	0.201	0.023	8.903	***	H3

Notes: (***) Denotes p-values significant at the 0.01 level of significance.

The path analysis of the study model, as presented in above table 11 and Figure 5, revealed that plastic-related concerns have a significant influence on rejecting plastic packaged goods with a value of 0.436 and probability (p) of 0.000 (p < 0.01). Thus, H1 is supported. The results are in line of past literature reviews showing that the consumers readiness to reject the plastic packaged goods as consumers have higher environmental concern (Cavaliere et al., 2020; Gu et al., 2023). However, hypothesis 2-1 dealing with the consumers' subjective knowledge about plastic-related issues, and rejecting plastic packaged goods had insignificant negative relationships with each other with a value of -0.019 and probability (p > 0.01). Therefore, hypothesis 2-1 is rejected. The results are in line of past literature

reviews showing that though consumers have subjective knowledge of the various issues of plastic, consumers are not showing readiness to reject the plastic packaged goods (Cavaliere et al., 2020). Plastic-related concern has a significant influence on subjective knowledge with a value of 0.626 and probability (p) is less than ($p < 0.01$). Thus, a test of H2-2 is supported. The results are in line of past literature reviews showing that the consumers with higher subjective knowledge about plastic-related issues have higher plastic-related concerns (Cavaliere et al., 2020). Third party concern has a significant and direct influence on Plastic-related concern with a value of 0.201 and probability (p) is less than ($p < 0.01$). Thus, H3 has been supported. The results are in line of past literature reviews showing that the consumers reject plastic packaged goods if the third party has committed for tackling issues stemming from plastic used for packaging (Cavaliere et al., 2020).

Conclusion

This research aimed to empirically analyze how ready consumers are to avoid buying plastic packaged goods in the Karnali Province, using a statistical method called structural equation modeling. This study created and tested a tool to measure consumer readiness to avoid plastic packaged goods in the Karnali province, and explored how it was influenced by factors such as concern about plastic's impact, personal knowledge, and the perceived efforts of others to address plastic environmental problems. The study found that these three factors were important predictors of consumer willingness to reject plastic packaged goods.

Plastics for packaging have lead to massive environmental pollution and dreadful issues in human life. Thus consumers need to consider its deep-rooted impacts, and refuse the acceptance of plastic packaged goods. The present researchers have opted a critical constructivist perspective inclining at deductive approach to assess the consumer readiness on rejecting the choice of consumption of plastic packaged goods in context of Karnali Province of Nepal. The key findings of the structural equation model revealed that the plastic related concern with regard to health and environmental issues are the main factors influencing plastic rejection. Consumer readiness with regard to plastic rejection are also influenced by subjective knowledge and the weight placed on third party commitment to solving the plastic problem. The findings of the study also revealed significant contribution of the impact of employment status as the essential element determining consumer readiness on rejecting plastic packaged goods in the Karnali province. This indicates majorities of employed consumers have more readiness to reject the plastic packaged goods.

To encourage the rejection of plastic packaged goods and promote alternative

choices, both policy and managerial implications can play a crucial role. Here are some measures that can be considered:

Policy Implications

1. Nepalese Government must strictly consider implementing bans or restrictions on certain single-use plastic packaging goods. Such policies create a legal framework that discourages the consumption of plastic packaged goods.

2. Single-use plastic goods and plastic packaging may be subject to taxes or levies by the government. This may make products in plastic packaging substantially more expensive than alternatives, so motivating customers to select environmentally responsible choices.

3. Governments may reward companies that use sustainable packaging techniques with subsidies or tax exemptions. This may influence manufacturers and merchants to select packaging made of recyclable, biodegradable, or renewable resources.

4. Governments can fund projects aimed at creating novel and environmentally friendly packaging solutions. Alternative packaging materials and technologies may be discovered via funding research initiatives and partnerships with academic institutions and businesses.

Managerial Implications

1. Managers might launch awareness efforts to inform customers about the negative effects of plastic packaging on the environment and the advantages of selecting alternatives. Consumer behavior may be influenced by actively advocating eco-friendly options and disseminating information on sustainable packaging materials.

2. Managers can search for and provide plastic-free alternatives for their products on a proactive basis. Investigating other packaging materials, such as paper, glass, or biodegradable or compostable ones, can help with this. Giving consumers this choice may encourage them to shun products packed in plastic.

3. Managers can work with suppliers to find environmentally friendly packaging materials. Businesses may actively promote the development and use of eco-friendly packaging solutions by collaborating closely with their suppliers.

4. Managers may evaluate and improve the packaging they use to reduce the amount of plastics used. Plastic use may be decreased by cutting back on unnecessary packing, adopting lighter materials, and using effective packaging strategies.

5. Managers may support recycling initiatives and become involved by putting in place efficient recycling procedures inside their businesses. To guarantee the correct disposal and recycling of packaging materials, this involves offering consumers specific recycling containers and forming alliances with recycling facilities.

By combining policy implications that create a supportive regulatory environment with managerial implications focused on consumer education, alternative choices, and sustainable practices, it is possible to encourage the rejection of plastic packaged goods and drive a shift towards more environmentally friendly alternatives.

There are several limitations of this present works. Firstly, as this paper is cross-sectional analysis, the time frame for the study was from December 2022 to May 2023. Secondly, the sampling survey conducted were based on respondents from urban and rural settings i.e. Western Rukum, Salyan, Dolpa, Humla, Jumla, Kalikot, Mugu, Surkhet, Dailekh, and Jajarkot. Thus, the findings were based on mixed responses.

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