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Factors Affecting Credit Card Usage Attitude: The Mediating Role of Transaction Behavior in Butwal Sub-Metropolitan City

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Abstract

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Purpose: The study aims to investigate the mediating effect of Transaction Behavior on the relationship between Bank image, Credit Knowledge and credit card usage attitude. Likewise, It also explores the factors influencing individuals' attitude towards the credit card.

Methods: Descriptive and causal-comparative methods were applied, with statistical analyses such as Correlation and Regression. Data were collected from 384 credit card users in Butwal City through a snowball sampling method using a five-point Likert scale questionnaire. The sample included individuals from diverse occupations, income levels, and educational backgrounds. However, the study is limited to Butwal City and does not represent the entire Nepalese population.

Results: The study found that Bank Image and Credit Knowledge are key factors influencing credit card usage attitude, mediated by Transaction Behavior. Transaction Behavior fully mediates the relationship between Bank Image and Credit Card usage attitude, while partially mediating the relationship between Credit Knowledge and Credit Card usage attitude.

Conclusion: The study concludes that Bank image should invest in educational campaigns aimed at improving customer credit knowledge and focus on building a positive reputation and promoting trust to increase the transaction behavior of the customers

Keywords: Bank image, credit knowledge, credit card usage attitude, transaction behavior

I. Introduction

In today's context, Credit Cards are widely used as a convenient and secure payment method in many countries. With advancements in technology, many credit cards offer contactless payments and integration with digital wallets for easy transactions. In recent decades, the use of credit cards has grown significantly worldwide, establishing itself as one of the most productive financial services (Kaynak & Harcar, 2001; Goyal, 2006). Compulsive spending behavior can lead to significant negative outcomes, including accumulating excessive debt, which in turn may lead to non-performing loans and bankruptcy proceedings (Shafinar et.al

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,2013). Over a certain duration, financial institutions have been alleviating liquidity constraints and extending credit which includes providing opportunities to prolong repayment schedules, with a specific focus on credit cards (Zheng et al., 2020). Butwal City, a growing financial hub in Nepal, is experiencing increased credit card adoption. However, limited credit knowledge among consumers leads to misunderstandings about benefits, interest rates, and repayments causing hesitation due to debt concerns and hidden charges.

Credit cards play a crucial role in the success and prosperity of banks by facilitating convenient transactions and expanding customer purchasing power. Credit cards offer great convenience by providing easy access to funds for various daily expenses. However, it is crucial to manage and regulate credit card usage effectively to prevent financial challenges (Butt et al., 2010). Moreover, organizations benefit from increased sales and revenue as credit cards encourage impulse buying and larger transactions. Overall, embracing credit card usage contributes significantly to the financial well-being and growth of organizations in today's dynamic business environment. Due to the changing perception, requirements and uncertainties, there is a significant risk of current credit cardholders switching to competing providers.

Various scholars offer diverse perspectives on factors influencing attitudes towards credit card usage. Pulina (2011) investigated credit card selection determinants among Italian banking customers, revealing factors such as gender, age, location, card type, ownership, credit line and spending patterns significantly impacting choices. Sriyalatha (2016) highlighted card use intention is the crucial factor in the credit card usage attitude in Sri Lanka. These perceptions emphasize the multidimensional influence of personal, societal, and economic factors on credit card usage attitudes

Bank image reflects consumers' perceptions of a bank based on past associations (Bravo et al., 2009). Credit knowledge entails understanding credit cards and making informed financial decisions (Wickramasinghe & Gurugamage, 2012). Consumer transaction behavior is influenced by socio-economic factors and individual preferences (Anderson & Patel, 2020), crucial for businesses to adapt their strategies. Combining these, a positive bank image, credit knowledge, and transaction behavior ensure confident and secure financial interactions.

A notable difference exists in the number of credit card users between developed countries, such as the USA, UK, and Germany and developing nations like Nepal and perception or factors varies according to the place, city or country. First, while previous studies have examined the influence of bank image (Nga et al., 2011) and credit knowledge (Singh et al., 2018) on financial behavior, limited research has explored their impact on credit card transaction behavior. Additionally, most existing studies have focused on Western economies (Atlas et al., 2019; Barua et al., 2018), leaving a gap in understanding consumer behavior in emerging markets such as Nepal. Conducting an area specific research contributes to a more effective comprehension of credit card usage on a global scale, enabling the implementation of targeted and effective financial strategies.

This article breaks new ground by investigating how people's attitudes toward using credit cards are connected to their transaction control and actual transaction behaviors. Unlike past studies, we focus on how these behaviors play a crucial role in shaping attitudes. This unique approach not only deepens our understanding of credit card use but also provides practical insights for banks, policymakers and researchers to encourage responsible credit card habits. Exploring these behaviors as mediators adds a fresh perspective, offering valuable insights that can influence future research and financial practices.

The study aims to achieve the following objectives:

- a) To examine the relationship among the bank image, credit knowledge and transaction behavior to the credit card usage attitude
- b) To explore the role of transaction behavior as a mediating variable between bank image

and credit knowledge with credit card usage attitude

II. Reviews

Strong bank image creates trust, which enhances credit knowledge and encourages responsible credit usage. The cognitive-motivational-relational theory by Lazarus (1960) links cognitive and emotional responses illustrating how attitudes are influenced by cognitive appraisals, motivation and relational context in the dynamics of credit card usage. According to Theory of Planned Behavior (Ajzen, 1991), an individual's behavior is determined by their attitudes, societal norms and perceived control over their actions, predicting actual behavior based on intentions. In the context of credit card usage, positive transactional encounters, characterized by seamless purchases, rewards and punctual payments can enhance individuals' favorable dispositions toward credit card usage.

The objective of this study is to explore the influence of bank image and credit knowledge on credit card attitudes with transaction behavior serving as a mediating factor. The impact of each factor differs and it is essential for credit card issuers to consider these factors and focus on them when marketing their credit card products (De Silva & Patabendige, 2021). Norton (1993) suggests that the surge in credit utilization from the 1930s to the 1990s can be attributed, at least in part, to the attitudes of consumers towards the use of credit.

Several studies have found that individuals with a positive attitude toward credit card usage are more likely to own multiple credit cards and carry significant debt (Chien & Devaney, 2001; Davies & Lea, 1995; Hayhoe et al., 1999). Rishi et al. (2022) identified credit knowledge and transaction behavior as key factors influencing consumers' attitudes toward credit card usage. Similarly, De Silva et al. (2021) examined the factors affecting consumer credit card usage behavior.

Ahmed (2020) examined the impact of credit cards on consumer behavior with a specific focus on the Kurdistan region of Iraq. The study found a positive relationship between consumer knowledge and their behavior in using credit cards. Ahamed (2023) investigated the influence of credit cards on consumer behavior in Hyderabad, India, using chi-square and modeling analysis. The study found a positive relationship between consumer knowledge and credit card usage behavior.

Sari and Rofaida (2015) applied the Theory of Planned Behavior (TPB) model to examine factors influencing credit card usage among the university community at UPI. Their study found that attitudes had the greatest impact on both the intention to use credit cards and debt behavior. Ismail et al. (2014) investigated factors shaping Malaysian bank customers' attitudes toward credit card usage to inform strategic planning and service improvement. Using a survey-based approach, the study highlighted the significance of factors such as perceptions, family influence, knowledge, media awareness and religious considerations in shaping attitudes toward credit card usage in Malaysia. The following sections explain the variables and develop the hypothesis based on empirical findings.

Bank Image

Factors related to organizational image are evaluated based on the establishment's position within the economic system, its functions (or background image), cultural identity, profile and its perception within society (Druteikiene, 2000). The image of the bank is shaped by its physical attributes and behavior, and services as well as its commitment to promote positive relationships with customers. According to Bravo et al. (2010), establishing a strong corporate image is key for banks to differentiate themselves effectively with a strong brand serving as an effective strategy to alleviate decision-making uncertainties and gain a sustainable competitive advantage (Chernatony & Cottam, 2006). Therefore, it's crucial for banks to prioritize the development of a strong corporate image as it can influence initial customer preferences and promote lasting customer loyalty (Bravo et al., 2010). Based on the discussion and empirical findings the following hypothesis have been developed:

H₁: Bank image has direct and positive impact on transaction behavior.

H₂: Bank Image has direct and positively effect on Credit card usage.

H₃: Bank image has an indirect impact on credit card usage attitude, with transaction behavior acting as a mediator in this relationship.

Credit Knowledge

Within the banking industry, inadequate knowledge and comprehension of credit card usage have been recognized as risks to customer welfare and market competitiveness (Lebdaoui & Chetoui, 2021; D'Astous & Miquelon, 1991). Banks use marketing activities to promote a favorable attitude toward credit knowledge in order to address this. They acknowledge that attitudes and credit card use are greatly influenced by an individual's understanding of credit (Jorgensen & Savla, 2010; Amin, 2012). In other words, cardholders' attitudes, beliefs, preferences and cognitive structures all affect their knowledge of credit (Kaynak & Harcar, 2001).

H₄: Credit knowledge has direct and positive effect on transaction behavior

H₅: Credit knowledge has a direct and positive impact on credit card usage attitude.

H₆: Credit Knowledge indirectly affects credit card usage attitude, where transaction behavior mediates the relationship between Credit Knowledge and credit card usage attitude.

Transaction Behavior

Several studies have examined the influence of various stimuli on credit card usage and their role in facilitating spending (De Matos et al., 2019; Ahmed et al., 2010). These stimuli have been shown to potentially increase both the amount spent and the time taken to make purchasing decisions (Zheng et al., 2020; Atlas et al., 2019; Wang, 2019; Feinberg, 1986). Additionally, factors such as lifestyle, convenience, family income, financial flexibility and social status significantly influence individual's credit card spending behavior (Khare et al., 2012; Lee & Kwon, 2002; Ramayah et al., 2002; Aksoy et al., 2017). Furthermore, irrational credit card transactions have been strongly associated with compulsive buying tendencies, which may elevate the risk of credit card fraud (Xie et al., 2019; Omar et al., 2014).

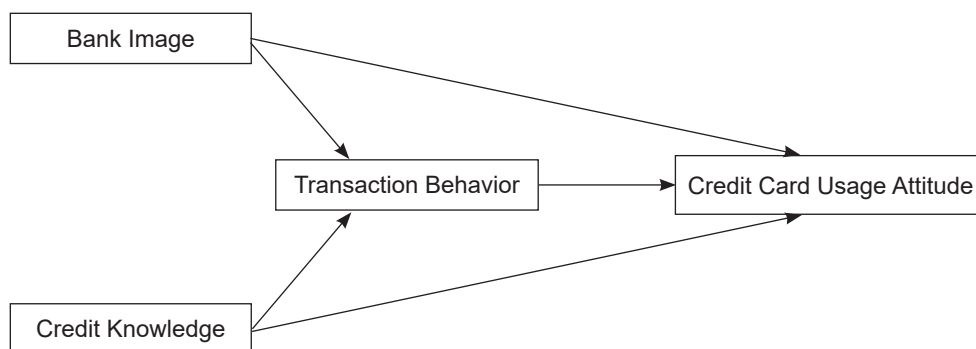
H₇: Transaction behavior has direct and positive impact on credit card usage attitude

Figure 1

Theoretical Framework

Independent Variables

Dependent Variable



Note. Adopted from Rishi et al. (2022)

III. Methodology

The study employs causal research design to determine the relation and effect about dependent and independent variable. This design is appropriate as it helps identify potential causal relationships based on observed group differences. The study population consists of all credit card users in Butwal sub metropolitan City. Since the exact population size is unknown, Yamane (1973) formula is used to determine the sample size, which is calculated to be 384. Snowball Sampling design is used for this study as it enables researchers to reach individuals with diverse attitudes towards credit card usage including those who weren't readily identifiable using conventional sampling techniques. This approach can be particularly useful for reaching hidden or marginalized populations. Snowball sampling enabled efficient access to qualified credit card users through referrals, ensuring a more relevant and representative sample. The questionnaire utilized in this study were derived from various studies: Ennew and Sekhon (2007), Sharpe, et al, (2012), Khare et al. (2012) and Hunter Heath (2017). Out of 384, 74 questionnaires were collected online and rest physically. The responses were collected in five-point Likert scale. The questionnaire has two sections, section A for demographic profile and section B for main questions. A pilot test involving 30 respondents was conducted to address errors and ambiguities.

The data analysis was conducted through a SPSS software version 20 registered software of LBC via correlation and regressions. In this context, the study utilized various statistical tools based on the suitability of the data. Descriptive statistics such as mean and standard deviation (SD) were calculated to analyze and interpret customer responses. Furthermore, a reliability and validity tests were performed to evaluate the consistency of the research instrument. To measure the relationship between variables a correlation tool is used. Similarly, the regression analysis is used to evaluate the influence of independent variables on the dependent variable. Furthermore, mediation analysis is performed to identify the direct and indirect effects between the variables.

IV. Results and Discussion

This section includes the analysis of data and critically examination of results on the basis of various statistical tolls.

Table 1

Measurement Items Assessment

Variables	Items	Loadings	VIF	Mean	SD	Mean of constructs	SD of construct
Bank Image	BI1	0.711	1.297	4.354	0.803	4.213	0.851
	BI2	0.819	1.807	4.182	0.831		
	BI3	0.82	1.877	4.052	0.948		
	BI4	0.777	1.614	4.263	0.824		
Credit Card Usage Attitude	CC1	0.896	1.498	4.214	0.723	4.159	0.756
	CC2	0.879	1.498	4.104	0.79		
Credit Knowledge	CK1	0.703	1.275	4.326	0.801	4.28	0.79
	CK2	0.729	1.433	4.156	0.814		
	CK3	0.766	1.496	4.341	0.737		
	CK4	0.779	1.514	4.294	0.813		

Transaction Behavior	TB1	0.823	1.398	4.24	0.781	4.1	0.84
	TB2	0.781	1.434	4	0.86		
	TB3	0.779	1.339	4.06	0.892		

Table 1 outlines the measures and validity of the outer model showing the standardized outer loadings, Variance Inflation Factor (VIF), mean and standard deviation (SD). All items have outer loading values above the 0.70 threshold confirming their significant role in measuring the respective variables (Sarstedt et al., 2017). The VIF values for all items are below 5 indicating no multicollinearity between the scale items (Hair et al., 2019). Therefore, multicollinearity is not present. The mean and SD values for all items are within an acceptable range on a 5-point Likert scale. Consequently, the measurement items meet the reliability and validity standards for further analysis.

Table displays the mean value of Bank Image, credit knowledge, transaction behavior and credit card usage attitude are 4.213, 4.28, 4.1, and 4.159, indicating that the credit card user's responses are close to a strongly agree regarding all the variables. This suggests a high positive attitude among users toward them.

Table 2

Construct Reliability and Validity Assessment

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Bank Image	0.788	0.787	0.863	0.613
Credit Card Usage Attitude	0.732	0.734	0.882	0.788
Credit Knowledge	0.733	0.736	0.833	0.555
Transaction Behavior	0.710	0.717	0.837	0.631

The Cronbach's Alpha values for all constructs exceed the standard threshold of 0.705 (Bland & Altman, 1997) confirming the internal consistency of the constructs and the reliability of the scale used for measurement. Additionally, Composite Reliability (CR) rho_a and CR rho_c values are above 0.70, indicating strong construct reliability and validity (Saari et al., 2021; Hair et al., 2022). The Average Variance Extracted (AVE) values surpass the 0.50 threshold, establishing the convergent validity of all constructs (Hair et al., 2022). Therefore, the results presented in the table meet all required quality criteria.

Table 3

Correlation

Variables	Bank Image	Credit Knowledge	Transaction Behavior	CC Usage Attitude
Bank Image	1	0.508**	0.379**	0.276**
Credit Knowledge		1	0.420**	0.368**
Transaction Behavior			1	0.578**
Credit Card Usage Attitude				1

Note. ** significant at 1% level of significance.

Table 3 shows that the correlation values for bank image credit knowledge and transaction behavior in relation to credit card usage attitude are 0.276 0.368 and 0.578 respectively indicating a positive relationship between the independent and dependent variables. Among these factors transaction behavior has the strongest positive relationship with credit card usage attitude at 0.578 meaning that an improvement in transaction behavior leads to a higher credit card usage attitude. Credit knowledge also has a positive relationship with credit card usage attitude but to a lesser extent at 0.368. Bank image has the weakest positive relationship at 0.276 suggesting that while it influences credit card usage attitude its impact is lower compared to transaction behavior and credit knowledge. Additionally, the P-value for bank image credit knowledge and transaction behavior in relation to credit card usage attitude is 0.00 in all cases indicating statistical significance at the 0.01 level. This confirms a significant relationship between these independent variables and credit card usage attitude leading to the acceptance of hypotheses H_3 H_5 and H_7 .

Structural Model Assessment

Figure 2

Path Diagram

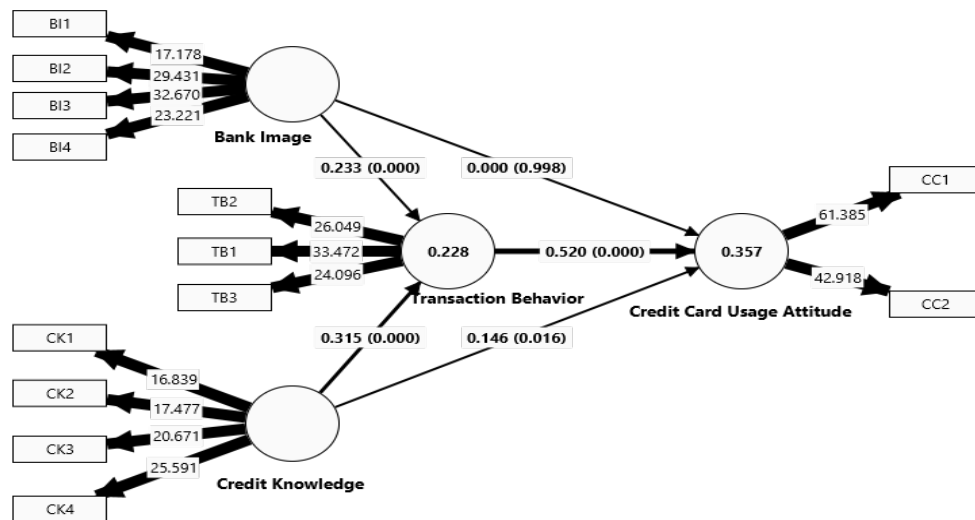


Table 4

Hypothesis Testing (Direct effect)

Hypothesis	β	P- values	Decision
Bank Image -> Credit Card Usage Attitude	0.000	0.998	Rejected
Bank Image -> Transaction Behavior	0.233	0.000	Accepted
Credit Knowledge -> Credit Card Usage Attitude	0.146	0.016	Accepted
Credit Knowledge -> Transaction Behavior	0.315	0.000	Accepted
Transaction Behavior -> Credit Card Usage Attitude	0.52	0.000	Accepted

The R-square value for credit card usage attitude is 0.352 which shows a moderate level of predictive power. Likewise, the R-square value for transaction behavior is 0.224 which indicates weak predictive power according to Cohen 1988. Bank image credit knowledge

and transaction behavior together explain 35.7 percent of the variation in credit card usage attitude. Similarly bank image and credit knowledge account for 22.8 percent of the variation in transaction behavior.

The table above presents the bootstrapping results based on 5000 subsamples and the decisions regarding the hypotheses. Hypothesis H_2 , H_3 , H_4 and H_5 are accepted at a significance level of 0.05, while H_1 is rejected. Therefore, there is no significant relationship between bank image and credit card usage attitude ($\beta=0.000$; $p>0.05$). On the other hand, bank image has a positive and significant impact on transaction behavior ($\beta=0.233$; $p<0.05$). Credit knowledge has a positive and significant impact on credit card usage attitude ($\beta=0.146$; $p<0.05$). Additionally, credit knowledge positively and significantly influences transaction behavior ($\beta=0.315$; $p<0.05$). Likewise, transaction behavior has a positive and significant impact on credit card usage attitude ($\beta=0.520$; $p<0.05$). In conclusion, there is no significant relationship between bank image and credit card usage attitude, but there are significant relationships between transaction behavior and credit card usage attitude, as well as between credit card usage attitude and credit knowledge.

Table 5

Mediating Effects

Hypothesis	B	Mean	STDEV	T stat.	P-value	Hypothesis
Bank Image -> Transaction Behavior -> Credit Card Usage Attitude	0.121	0.123	0.034	3.551	0.00	Accepted
Credit Knowledge -> Transaction Behavior -> Credit Card Usage Attitude	0.164	0.164	0.035	4.619	0.00	Accepted

This shows the bootstrapping results and the decisions regarding the hypotheses with mediating effects. The results indicate a positive and significant mediating effect of transaction behavior ($\beta=0.121$; $p<0.05$) in the relationship between bank image and credit card usage attitude. The direct impact of bank image on transaction behavior is significant, transaction behavior on credit card usage attitude is significant, and bank image on credit card usage attitude is insignificant. Therefore, full mediation exists among these variables. Additionally, there is a positive and significant mediating effect of transaction behavior ($\beta=0.164$; $p<0.05$) in the relationship between credit knowledge and credit card usage attitude. The direct impacts of credit knowledge on transaction behavior, transaction behavior on credit card usage attitude and credit knowledge on credit card usage attitude are all significant. Hence, partial mediation exists among these variables.

The study reveals that credit knowledge and transaction behavior are important factors in influencing credit card usage attitude. The influence of credit knowledge on customers' attitudes toward credit card usage aligns with findings from previous research (Maswati et al., 2015; Barua et al., 2018). Banks have the opportunity to support customers in conducting transactions smoothly, thus promoting positive perceptions of customers' transaction behavior, particularly in relation to their use of credit cards. While Bank Image has no significant relation toward the card usage attitude. Therefore, marketers' efforts to enhance bank image and promote credit cards may not necessarily impact customers' actual credit card usage. In summary, these findings contribute to existing literature of India (Khare et al., 2012; Pirzada et al., 2014). As indicated by our research results, customers' level of credit knowledge has a positive impact on their transaction behavior. This means that individuals who are well-informed about credit are more likely to understand their spending habits and the associated advantages and disadvantages. Therefore, knowledgeable customers tend to exert some

level of control over their transactions, although not always extensively). Silva et al. (2021) explored how Bank Image and Credit Knowledge impact Credit Card Usage Attitude, with Transaction Behavior playing a key mediating role. The study found that both Bank Image and Credit Knowledge positively influence Credit Card Usage Behavior, highlighting the significant role consumer behavior plays in shaping attitudes and usage patterns which is consistent with the present findings. The findings suggest that enhancing bank image and increasing credit knowledge can lead to more positive credit card usage behaviors.

These findings align with previous research indicating the mediating role of transaction behavior in the relationship between bank image and credit card usage attitudes (Rishi et al., 2024). Furthermore, this study contributes to the existing literature by highlighting the dual role of credit knowledge, both as a direct predictor of credit card usage attitudes and as an influencer of transaction behavior, which then indirectly affects attitudes.

V. Conclusion and Implication

Considering the key findings, this study emphasizes the crucial influence of transaction behavior on consumer attitudes toward credit card usage with credit knowledge and bank image also playing contributing roles. The findings highlight the importance of improving transaction experiences and providing comprehensive financial education to promote responsible credit card usage. By ensuring that consumers have clear and accessible information about credit card features and potential risks, banks can support informed financial decision-making. Furthermore, while bank image may not directly impact credit card usage attitudes, it can have an indirect effect through transaction behavior. These insights underscore the need for a strategic focus on customer education, engagement and transaction efficiency to encourage responsible credit card use and enhance financial well-being.

Finally, it is concluded that banks can promote responsible credit use through targeted financial products and improved transactions ensuring informed decisions and stability.

The implications of these findings suggest that banks and financial institutions should focus on comprehensive financial education, offer appealing rewards programs, clarify terms and fees, and encourage responsible card use through clear communication and strong customer support to enhance customers' attitudes toward credit card usage. In terms of practical implications, analyzing the impact of all the factors studied could assist managers in defining strategies for effective customer management. This insight might lead to a better understanding of customers' attitudes towards credit card usage.

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