Beyond Cheap Eats: Behavioural Insights for Consumer Regulation in the Street Food Sector

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Abstract
Street food markets present a persistent consumer-regulation paradox: consumers continue to rely on informal vendors despite salient food-safety, environmental, and mobility risks. Drawing on behavioural insights, this study examines how urban consumers in Hanoi, Vietnam, evaluate affordability, spatial convenience, relational vendor trust, cultural authenticity, and perceived risks when forming attitudes and intentions to continue purchasing. Using survey data from 519 street-food consumers and partial least squares structural equation modelling, the study finds that economic benefits, spatial convenience, and local cultural authenticity significantly improve attitudes toward street food. In contrast, perceived food-safety risk and perceived urban environmental risk significantly reduce them. Contrary to expectations, relational vendor trust does not significantly shape attitude, suggesting a boundary condition of relationship-based trust in increasingly risk-aware urban food environments. Attitude strongly predicts continued purchase intention and mediates most relationships between consumer perceptions and behavioural intention. The study contributes to consumer policy by showing that exclusionary enforcement is unlikely to reduce demand where convenience and affordability remain structurally powerful. Instead, behaviourally informed regulation should preserve spatial access while making hygiene quality more visible, comparable, and verifiable through graded certification, salient cleanliness cues, and community-based vendor governance. These findings advance debates on how behavioural insights can inform consumer protection in informal food markets.

Keywords: Consumer attitude; Purchase intention; Food safety risk; Social capital; Convenience food.

Introduction

Street food markets are a central component of urban food systems in many low and middle-income countries. They provide affordable meals, spatial accessibility, and culturally familiar food options for workers, students, commuters, and lower-income households [1], [2]. In fast-growing cities such as Hanoi, street food is not simply a residual form of informal consumption; it is embedded in everyday mobility patterns, neighborhood routines, and urban livelihoods [3]. This makes street food a distinctive site for consumer regulation, where public authorities must balance food safety, consumer protection, urban order, and socio-economic inclusion.

The central research problem stems from the reality that urban consumers face multidimensional threats, encompassing perceived food safety risks alongside concerns regarding environmental urban risks, such as localized pollution and traffic congestion at vending sites [4], [5], [6], [7]. In environments where formal regulatory enforcement is frequently weak or absent, consumers are forced to rely on social capital, through relational trust with familiar vendors, and local cultural authenticity as psychological risk-mitigating mechanisms [6], [8], [9].

From a behavioral perspective, the problem is not merely that consumers lack information. Rather, consumers make rapid decisions under conditions of limited attention, time pressure, price sensitivity, and incomplete risk visibility. Food contamination, unsafe water, and poor storage practices are often difficult to observe at the point of purchase, whereas price, proximity, smell, queue length, vendor familiarity, and visual cleanliness are immediately salient. As a result, consumers may rely on heuristics that are reasonable in everyday life but imperfect as tools for assessing food safety risk [12], [13], [14]. This creates a classic behavioral consumer regulation problem: how can regulation make

safer choices easier, more visible, and more credible without destroying the affordability and accessibility that consumers value?

The core objective of this research is to decode how urban consumers navigate the complex risk-benefit paradox within the street food sector by simultaneously evaluating the impact of functional benefits and multidimensional risk perceptions on continued purchase intentions. Furthermore, the study aims to measure the mitigating power of social capital, specifically relational vendor trust and local cultural authenticity as psychological safety nets, while testing the mediating role of consumer attitude within a socio-cognitive network.

This paper contributes three aspects spanning theoretical, methodological, and practical dimensions. Theoretically, the primary contribution lies in proposing a multi-theoretical paradigm that integrates the Theory of Planned Behavior (TPB), the Value Attitude Behavior (VAB) model, and Pierre Bourdieu's framework of capital into a unified structural architecture. Instead of focusing exclusively on isolated health risks, this paper positions multidimensional risk perceptions, encompassing both food safety and environmental urban hazards, in direct opposition to the trust-building mechanisms of social capital and local cultural authenticity. Methodologically, this paper may overcome the limitations of existing research on social capital in informal food sectors, which is overwhelmingly dominated by descriptive qualitative methods and lacks quantitative validation and small sample sizes. By applying Partial Least Squares Structural Equation Modeling (PLS-SEM), the study provides an empirical measurement tool. Finally, this study contributes to consumer policy scholarship by reframing street food consumption not merely as a matter of individual preference, informality, or urban order, but as a behavioural consumer-regulation problem. By empirically modelling how benefits, risks, trust, authenticity, and attitude shape continued purchase intention, this study identifies the behavioural levers through which consumer regulation can become more effective, less exclusionary, and more context-sensitive.

Literature review and hypotheses development

Related research and research gap

The global street food sector's rapid expansion amidst accelerating urbanization has spurred a vast body of academic research aimed at decoding consumer behavior, shifting the perspective from street food as a localized necessity to a pillar of the modern food-away-from-home market, where purchasing decisions are governed by a web of cognitive, social, and cultural factors [15], [16], [17]. To understand this transition, academic literature has developed along four primary research trajectories, each yielding specific findings, contributions, and methodological insights.

The first and most foundational stream of research focuses on the core drivers of consumption, specifically economic benefits and spatial convenience [15], [18], [19]. These studies demonstrate that shifts in labor structures, particularly time poverty in urban centers and the increased participation of women in the workforce, have transformed street food into an optimal time and cost-saving solution [20]. Scholars in this group frequently employ traditional quantitative surveys and descriptive statistics to show that accessibility and affordability are the primary determinants of customer attraction, noting that price-sensitive consumers often make trial purchases based on convenience rather than actual quality [21], [22], [23].

However, this foundational approach reveals limitations by insufficiently addressing the associated health implications, prompting the emergence of a second research stream that examines consumption strictly through the lens of risk perception [2], [6], [8], [14], [24]. A major contribution of this cohort is the multidimensional deconstruction of risk into distinct categories, such as food safety and hygiene risks, financial risks, and urban environmental hazards [4], [13], [14], [25]. Methodologically, these studies predominantly rely on qualitative approaches, including in-depth interviews, focus groups, and ethnographic observations across developing nations, to explore how consumers form risk perceptions via visual cues [14], [26], [27], [28]. Their findings expose a concerning reality: customers typically evaluate safety based on personal experience, the vendor's visual cleanliness, or sensory attributes like appearance and smell, rather than a scientific understanding of pathogens or microbial contamination [29], [30]. Furthermore, the chaotic nature of roadside stalls and the pervasive use of single-use plastics significantly elevate consumers' perceived environmental risks in their minds [8], [31].

Despite an acute awareness of these threats, billions of consumers consume street food daily, a profound paradox that has catalyzed a third research stream centered on the roles of social and cultural capital as risk-mitigating mechanisms. Grounded in classical sociological frameworks, this stream's most significant contribution is illuminating how relational trust with familiar vendors and community information networks functions as a psychological filter, alleviating buyer apprehension in informal markets lacking stringent government quality control [2], [32], [33]. Utilizing mixed-methods approaches, researchers have confirmed that social capital fosters enduring relational trust between buyers and sellers, while cultural capital evokes a sense of belonging and local authenticity [13], [34], [35]. This infuses traditional dishes with an irresistible appeal, transforming consumption from a mere nutritional intake into a deeply engaging cultural and social experience.

Finally, the fourth research trajectory concentrates on modeling the structural architecture of behavioral decisions utilizing classic theoretical frameworks, such as the TPB and the VAB model [36], [37], [38]. Researchers within this domain apply advanced quantitative techniques, notably structural equation modeling, to test the causal relationships among cognitive variables. Their core findings prove that consumer attitude acts as a pivotal mediator, functioning as

a psychological buffer that synthesizes positive values from convenience, economic benefits, and social capital, while simultaneously neutralizing the negative impacts of perceived risks before forming continued purchase intentions and positive word of mouth [11], [21], [39], [40].

Although these four research streams establish a substantial theoretical foundation, juxtaposing them against current practical contexts and research objectives exposes three distinct research gaps, presenting an opportunity for academic contributions.

Theoretically, extant literature predominantly conceptualizes consumer utility and risk perceptions as isolated socio-cognitive tracks, thereby failing to capture the simultaneous, antagonistic dynamics characterizing the street food paradox. Specifically, conventional frameworks inadequately model how multidimensional risk vectors, encompassing both immediate microbiological anxieties and broader ambient urban-environmental hazards, compete directly against the compensatory mechanisms of social and cultural capital. By omitting this dialectical tension, current consumer policy models fail to capture the nuanced risk-benefit trade-offs that govern behavioral continuity in highly volatile, informal food economies. Methodologically, many studies on social capital and trust rely on descriptive qualitative methods with small sample sizes; the quantitative studies frequently overuse basic regression models or traditional covariance-based structural equation modeling. Thus, a methodological gap exists in quantifying the power of multidimensional risk and social capital constructs. In terms of practice and policy, in developing nations that rely on exclusionary mechanisms, focusing primarily on clearing sidewalks and rigidly imposing top-down hygiene standards, which frequently fail due to a lack of understanding of the sector's inherently social nature. The gap lies in the need for empirical research providing quantitative evidence on how community trust, close vendor relationships, and local cultural values can be leveraged as foundations for inclusive management policies.

By addressing these gaps, this research will not only expand the theoretical boundaries of traditional behavioral models by centralizing the social capital variable but also provide an empirical measurement tool. This will suggest to urban policymakers to shift management strategies from prohibition and confrontation toward community-based certification models, maximizing the power of trust to build a street food system that is both safe and capable of preserving sustainable urban cultural identities.

Theoretical foundations

The theoretical architecture of this study is grounded in a multi-theoretical paradigm that integrates the TPB [41], the VAB model [42], and Pierre Bourdieu's framework of Social and Cultural Capital [43] to decode the socio-cognitive mechanisms driving street food consumption. According to the TPB, an individual's behavioral intention is the most proximal predictor of action, which is profoundly shaped by their attitude [37], [36]. Attitude serves as a comprehensive internal evaluation of the behavior in question, acting as a crucial cognitive filter before an action is taken.

Complementing this framework, the VAB model postulates that behavioral intentions do not arise in a vacuum. Rather, they are the culmination of a cognitive process where perceived environmental values, personal beliefs, and external stimuli are processed through the psychological mediator of attitude before manifesting as a concrete intention [44], [45], [46]. In the context of street food, this means that consumers evaluate various functional benefits and inherent risks, which then collectively shape their overall disposition toward consumption.

However, in the highly informal and often unregulated street food sector, traditional economic utility and cognitive models may find it hard to capture the entire decision-making process, necessitating the incorporation of sociological perspectives. Bourdieu's theories of capital illuminate how urban consumers navigate this risk-laden environment by accumulating social capital, which functions as a relational amplifier and trust mechanism, allowing them to bypass formal safety checks. Furthermore, cultural capital elevates street food from mere sustenance to an authentic, culturally distinct experience, emphasizing that food choices are deeply intertwined with social identity and a sense of belonging.

By integrating these distinct theoretical frameworks, this study posits that the antagonistic forces of perceived multidimensional risks and functional benefits are reconciled through the mediating role of consumer attitude, supported by the mitigating power of social and cultural capital.

Behavioural insights and consumer regulation in informal food markets

Behavioural insights provide a useful lens for understanding why consumers may continue to purchase street food despite recognizing food safety and environmental risks. In informal food markets, consumers face bounded rationality: they have limited time, limited information, and limited capacity to evaluate invisible hazards such as microbial contamination or water quality [47], [48]. They therefore rely on more salient cues, including price, convenience, visual cleanliness, vendor familiarity, and cultural authenticity [12], [13], [17], [19], [49], [50]. These cues function as heuristics that simplify decision-making, but they may also lead consumers to underestimate risks that are not immediately observable.

For consumer regulation, this implies that information provision alone may be insufficient if safety information is not salient, credible, and easy to compare at the point of purchase. Behaviourally informed regulation should therefore redesign the choice environment by making hygiene quality visible, simplifying safety signals, and reducing the cognitive burden placed on consumers. In the street food sector, this may include colour-coded hygiene grades, visible

inspection stickers, clean-display requirements, default provision of covered utensils, and community-based monitoring systems.

Hypotheses development

Economic benefits and spatial convenience are expected to positively influence attitudes toward street food because they provide immediate and highly salient consumer value. Affordability reduces financial pressure, while spatial convenience lowers search costs, waiting time, and mobility costs [15], [18], [19], [51], [52]. From a behavioral perspective, these benefits are especially powerful because they are immediate, concrete, and easy to evaluate at the point of purchase. Consumers may therefore give disproportionate weight to price and convenience relative to less visible or delayed risks. Accordingly: *H1: Economic benefits positively influence attitude toward street food; H2: Spatial convenience positively influences attitude toward street food.*

In informal markets, relational vendor trust may operate as a substitute for formal quality assurance [33], [35], [53]. When official inspection information is absent or difficult to access, consumers may infer safety from repeated interactions, vendor familiarity, perceived benevolence, and community reputation. Similarly, local cultural authenticity may increase positive attitudes by connecting street food consumption with place identity, tradition, and belonging [17], [54]. These socio-cultural cues can reduce psychological uncertainty and transform street food from a purely functional purchase into a culturally meaningful experience. Therefore: *H3: Relational vendor trust positively influences attitude toward street food; H4: Local cultural authenticity (H4) positively influences attitude toward street food.*

Perceived food safety risk is expected to negatively influence attitude because consumers associate street food with potential contamination, unsafe handling, poor storage, and uncertain ingredient quality [2], [6], [12]. Although some of these risks are invisible, they may become behaviorally salient through media reports, personal illness experiences, or visible hygiene cues. Perceived urban environmental risk is also expected to reduce favorable attitudes, as consumers may associate street-food sites with dust, traffic obstruction, waste, pollution, and disorder [4], [55]. Accordingly: *H5: Perceived food safety risk negatively impacts attitude toward street food; H6: Perceived environmental urban risk negatively impacts attitude toward street food.*

Drawing upon the TPB, a robust and positive attitude forged when the mitigating forces of trust and authenticity successfully eclipse safety and environmental anxieties serves as the primary catalyst for future behavior [36], [37]. It is thereby hypothesized: *H7: A positive attitude toward street food positively influences continued purchase intention*.

Finally, aligning with the VAB framework, the diverse cognitive inputs of economic benefits, convenience, trust, authenticity, and multidimensional risks do not dictate purchasing behaviors directly. Instead, they are synthesized through the consumer's overall attitude, which functions as a crucial psychological buffer [44], [45], [56], [57]. Consequently, the final hypothesis: *H8: Attitude mediates the relationships between economic benefits, spatial convenience, relational vendor trust, local cultural authenticity, perceived food safety risk, perceived urban environmental risk, and continued purchase intention.*

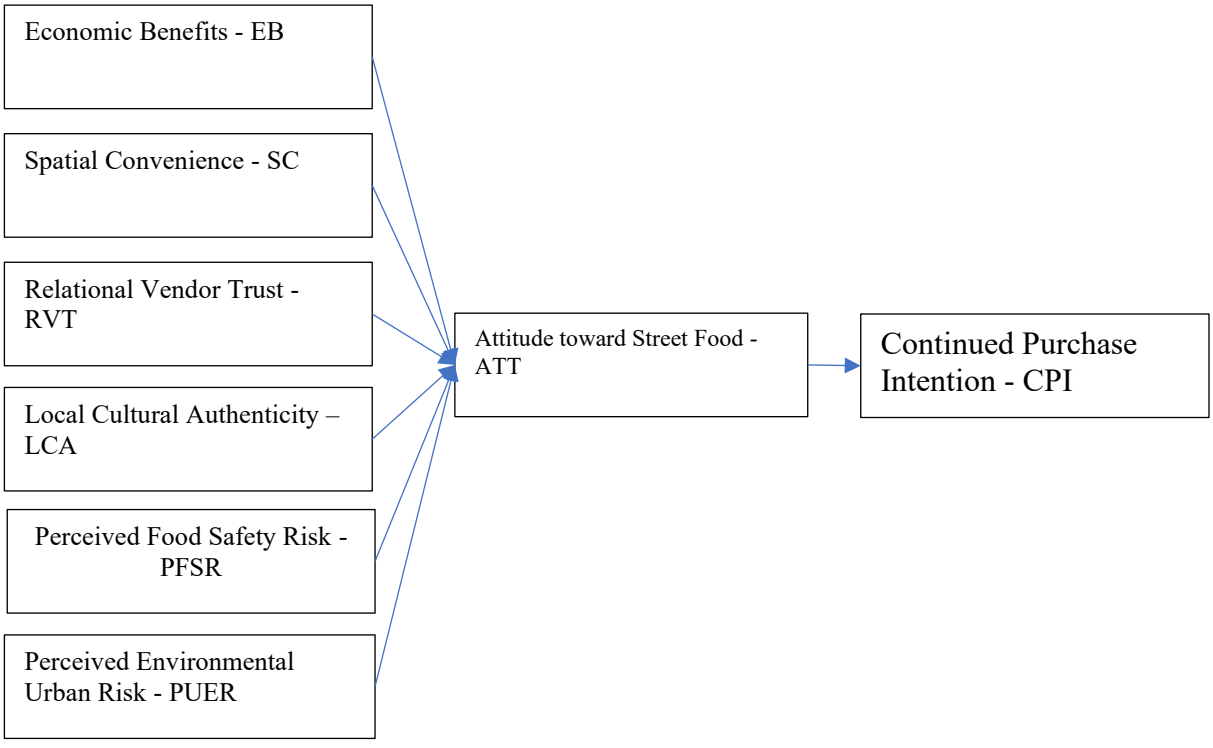

Fig. 1 Research model

Methodology

Research design and sampling strategy

To investigate the interplay of risk perception, social capital, and economic drivers within the informal food sector, this study employed a quantitative, cross-sectional research design. Data were collected from a highly targeted sample of street food consumers in Hanoi, Vietnam, a densely populated metropolis where the informal food economy is deeply embedded in the urban fabric. The final sample consisted of 519 valid responses.

A multi-stage cluster sampling technique was operationalized to ensure geographical representation and to capture the spatial heterogeneity of the city's street food landscape. In the first stage, eight inner-city wards were purposively selected from Hanoi's urban core to capture maximum socio-economic heterogeneity, rather than employing strict probability-proportional-to-size metrics, which are often structurally unfeasible in highly informal spatial settings. In the second stage, two to three high-density commercial streets within each selected ward were identified as primary data collection nodes. Finally, to optimize ecological validity and mitigate recall bias, an in-person street-intercept approach was operationalized. Interviewers approached every n-th consumer (systematic intercept technique) engaged in dining or commuting within these designated spatial nodes, yielding a final sample of 519 valid responses.

The deployment of the street-intercept method is strategically justified on two fronts. First, it maximizes ecological validity by capturing respondents in their natural consumption environment, often immediately preceding or following a street food transaction, thereby minimizing recall bias. Second, this approach effectively bypasses the coverage and self-selection biases inherently associated with online panels or telephone surveys, facilitating access to a broader, more socio-demographically representative cross-section of the urban population, including those who are notoriously difficult to reach through conventional digital means.

Survey instrument and procedural controls for common method bias

The measurement instrument was developed by adapting validated scales from extant literature, contextualized to fit the specific nuances of the Vietnamese street food sector. To ensure semantic equivalence and cultural resonance, the questionnaire underwent a back-translation process involving bilingual academic experts. Furthermore, a pilot study was conducted to ascertain the face and content validity of the constructs before widespread deployment.

All constructs were measured using multi-item reflective scales adapted from prior studies and contextualized for street food consumption in Vietnam. Respondents evaluated each item on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The original English items were translated into Vietnamese and then back-translated into English by bilingual researchers to ensure semantic equivalence. A pilot test was conducted to assess clarity, contextual relevance, and face validity before the main survey.

Table 1 Research Scale

Variable	Code	Items	Source
Economic Benefits (EB)	EB1	Street foods are not expensive	[44], [49], [52]
	EB2	I save money by using street food.	
	EB3	The cost of using street food is lower than other options.	
	EB4	Street foods are good value for money.	
Spatial Convenience (SC)	SC1	I readily find all the street foods I like.	[15], [18], [19]
	SC2	When I want to eat street foods, I have no trouble buying them.	
	SC3	It doesn't take long to buy street food.	
	SC4	Street food vendors are usually located near where I live.	
Relational Vendor Trust (RVT)	RVT1	Trustworthy relationship with the vendors.	[2], [13], [33], [34], [35]
	RVT2	The vendors are friendly, helpful, and communication with customer.	
	RVT3	I believe that familiar vendors are always committed to providing safe food.	

	RVT4	I believe that a familiar vendors wouldn't harm me.	
Local Cultural Authenticity (LCA)	LCA1	Street food showcases local culinary traditions.	[15], [29], [53], [58]
	LCA2	Street food offers an authentic local cultural experience.	
	LCA3	Street food reflects the unique character of that place.	
	LCA4	Consuming street food helps me connect with the social environment.	
Perceived Food Safety Risk (PFSR)	PFSR1	I am concerned about the use of stale or spoiled raw materials.	[2], [6], [8], [12], [13]
	PFSR2	I think the risk of getting sick from street food is high.	
	PFSR3	I am concerned about improper food storage and the use of unclean water.	
	PFSR4	I am concerned about the poor hygiene conditions and unsafe food handling practices of the vendors.	
Perceived Urban Environmental Risk (PUER)	PUER1	I am concerned about pollution in the street food area.	[25], [31], [59], [60]
	PUER2	The street food area affects overall hygiene.	
	PUER3	Street food stalls cause disorder, disrupt urban traffic, and hinder urban flow.	
	PUER4	Afraid of violating urban regulations when buying street food.	
Attitude toward Street Food (ATT)	ATT1	I have a positive attitude towards street food.	[21], [39], [45]
	ATT2	Eating street food gives me comfort.	
	ATT3	I appreciate and truly love street food.	
	ATT4	I think eating street foods is smart.	
Continued Purchase Intention (CPI)	CPI1	I plan on eating street foods regularly.	
	CPI2	I will recommen the eating of street food to the general public.	
	CPI3	I will eat street food at every opportunity in the future.	

	CPI4	I would choose street food over other similar options.	

Source: Author's compilation, 2026

Given that the study relies on self-reported, cross-sectional data, Common Method Bias (CMB) poses a potential threat to the validity of the findings. To preemptively mitigate this, sophisticated procedural remedies were integrated into the research design in strict accordance with the guidelines established by Podsakoff [61]. Procedurally, psychological separation was induced by strategically interspersing the predictor variables (e.g., economic benefits, spatial convenience) and the criterion variable (continued purchase intention) across different sections of the survey. Additionally, explicit assurances of absolute anonymity and confidentiality were provided, and respondents were instructed that there were no right or wrong answers, a psychological remedy proven to substantially reduce evaluation apprehension and social desirability bias.

Analytical approach

Data analysis was executed utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM). The choice of PLS-SEM over covariance-based SEM (CB-SEM) was dictated by the specific objectives and structural complexity of the proposed theoretical model. PLS-SEM is particularly advantageous for composite-based models that integrate multiple theoretical frameworks, as it does not strictly require the assumption of multivariate normality and is highly robust in estimating complex networks of direct and indirect effects.

PLS-SEM was used because the study aims to estimate a prediction-oriented model involving multiple latent constructs and indirect effects. This approach is suitable for examining complex relationships among consumer perceptions, attitudes, and purchase intention, particularly when the research objective combines theory development with predictive explanation [62]. The analysis followed established PLS-SEM reporting guidelines, including assessment of indicator reliability, internal consistency reliability, convergent validity, discriminant validity, collinearity, path significance, effect sizes, and predictive relevance.

Beyond procedural remedies, the potential contamination of CMB was also evaluated statistically using the Full Collinearity Variance Inflation Factor (VIF) approach. By examining the VIFs for all latent variables generated within the inner model, this advanced technique robustly detects pathological collinearity indicative of common method variance, ensuring that the structural estimates remain unbiased and mathematically sound. All statistical evaluations, encompassing measurement model validation, structural path estimations, and predictive relevance testing, were conducted following the most stringent and contemporary reporting standards for PLS-SEM.

Demographic profile of the respondents

Table 1 delineates the demographic profile of the 519 respondents. The sample exhibits a relatively balanced gender distribution, with females comprising 52.8% and males 47.2%. In terms of age, the respondents are predominantly young adults and millennials, with 65.2% falling between the ages of 18 and 35. This age structure accurately reflects the primary demographic actively engaged in urban street food consumption, corroborating recent empirical observations regarding millennial street food consumption patterns. Regarding economic status, the largest segment earns a monthly income between 5 and 10 million VND (38.1%), which typifies the urban middle-to-lower-middle-class working population in Hanoi. Notably, a substantial proportion of the respondents (83.6%) possess a tertiary education degree (bachelor's, college, or postgraduate). This high level of educational attainment is strategically crucial for the context of this study, as it ensures that the respondents possess the cognitive capability and awareness necessary to critically evaluate the complex interplay of food safety risks, urban environmental concerns, and vendor trust within the informal food sector.

Table 2 Demographic characteristics of the sample (N = 519)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	245	47.2
	Female	274	52.8
Age	18-25 years	182	35.1
	26-35 years	156	30.1
	36-45 years	108	20.8
	Above 45 years	73	14.0
Monthly Income	Under 5 million VND	125	24.1

	5-10 million VND	198	38.1
	10-15 million VND	114	22.0
	Above 15 million VND	82	15.8
Education Level	High school or below	85	16.4
	Bachelor/College degree	384	74.0
	Postgraduate	50	9.6

Source: Survey, 2026

Data analysis and results

Measurement model evaluation

During measurement model assessment, ATT2 and PUER2 were removed because their loadings did not meet acceptable reliability standards and their removal improved the overall measurement quality of the corresponding constructs. The retained indicators continued to capture the conceptual meaning of attitude and perceived urban–environmental risk, respectively.

Following the contemporary guidelines for PLS-SEM, the measurement model was assessed utilizing Confirmatory Composite Analysis (CCA). First, indicator reliability was evaluated. As delineated in Table 3, the vast majority of the standardized outer loadings exceeded the recommended threshold of 0.708. Two indicators (LCA2 = 0.692 and PFSR4 = 0.700) fell marginally below this strict criterion; however, following Hair et al. (2022), they were retained to preserve content validity, as their removal would not significantly increase the Average Variance Extracted (AVE) or composite reliability beyond the required minimums.

Internal consistency reliability was established via Cronbach's alpha, rho_c, and the exact reliability coefficient (rho_a). All constructs exhibited values comfortably above the 0.70 benchmark, with rho_a ranging from 0.765 to 0.897, indicating robust construct reliability. Convergent validity was supported, as the AVE for all latent variables exceeded the 0.500 threshold, with the lowest being Spatial Convenience (0.576) and the highest being Relational Vendor Trust (0.711).

Table 3 Construct Reliability and Convergent Validity

Constructs/Items	Outer loading	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	VIF
Attitude toward Street Food		0.787	0.792	0.875	0.699	
ATT1	0.863					2.526
ATT3	0.794					1.292
ATT4	0.850					2.47
Continued Purchase Intention		0.783	0.789	0.859	0.604	
CPI1	0.771					1.574
CPI2	0.755					1.529
CPI3	0.799					1.532
CPI4	0.783					1.502
Economic Benefits		0.774	0.781	0.854	0.595	
EB1	0.773					1.591
EB2	0.762					1.421
EB3	0.806					1.556
EB4	0.744					1.466
Local Cultural Authenticity		0.765	0.779	0.848	0.583	

LCA1	0.791					1.448
LCA2	0.692					1.467
LCA3	0.773					1.441
LCA4	0.794					1.652
Perceived Food Safety Risk		0.766	0.810	0.864	0.681	
PFSR1	0.810					1.766
PFSR2	0.734					1.381
PFSR3	0.861					1.969
PFSR4	0.700					1.471
Perceived Environmental Urban Risk		0.784	0.810	0.860	0.606	
PUER1	0.745					1.444
PUER3	0.904					1.93
PUER4	0.819					1.62
Relational Vendor Trust		0.868	0.897	0.908	0.711	
RVT1	0.889					2.297
RVT2	0.812					2.409
RVT3	0.874					2.657
RVT4	0.794					1.661
Spatial Convenience		0.755	0.765	0.845	0.576	
SC1	0.716					1.341
SC2	0.730					1.412
SC3	0.802					1.482
SC4	0.785					1.605

Source: Survey, 2026

To rigorously evaluate discriminant validity, the Heterotrait-Monotrait (HTMT) ratio of correlations was utilized, circumventing the well-documented methodological insensitivities of the classical Fornell-Larcker criterion. Table 3 details the HTMT matrix. The highest observed value was 0.645 (between Perceived Food Safety Risk and Attitude), significantly below the conservative threshold of 0.85. These results indicate adequate discriminant validity that all conceptual constructs embedded within the model are empirically distinct entities.

Table 4 Discriminant Validity (HTMT Ratio)

Constructs	Attitude toward Street Food	Continued Purchase Intention	Eco. Benefits	Local Cultural Auth.	Per. Envir. Urban Risk	Per. Food Safety Risk	Rel. Vendor Trust	Spatial Conv.
Attitude toward Street Food								
Continued Purchase Intention	0.560							
Economic Benefits	0.600	0.409						
Local Cultural Authenticity	0.549	0.406	0.302					
Perceived Environmental Urban Risk	0.512	0.396	0.441	0.366				

Perceived Food Safety Risk	0.645	0.453	0.352	0.530	0.384			
Relational Vendor Trust	0.103	0.095	0.049	0.043	0.080	0.079		
Spatial Convenience	0.518	0.347	0.430	0.353	0.615	0.398	0.071	

Source: Survey, 2026

Structural model assessment and hypothesis testing

Before hypothesis testing, the structural equations were evaluated for potential pathological collinearity. The Variance Inflation Factor (VIF) values for all inner model predictors were confirmed to be below the stringent maximum threshold of 3.0 (with the highest item-level VIF being 2.657 for RVT3), validating that multicollinearity does not distort the estimated path coefficients.

The structural relationships were examined using a non-parametric bootstrapping procedure with 10,000 subsamples, ensuring robust standard errors and precise significance testing. Table 4 displays the direct effect estimates. Regarding the established drivers of informal food consumption, Economic Benefits (beta = 0.280, $p < 0.001$) and Spatial Convenience (beta = 0.128, $p < 0.001$) exert significant positive effects on Attitude, thereby supporting H1 and H2. Local Cultural Authenticity also powerfully influences Attitude (beta = 0.187, $p < 0.001$), corroborating H4.

Conversely, the hypothesized risk barriers significantly erode consumer attitudes. Perceived Food Safety Risk delivers the strongest negative impact within the model (beta = -0.291, $p < 0.001$), followed by Perceived Environmental Urban Risk (beta = -0.104, $p = 0.013$). Hence, H5 and H6 are robustly supported. Intriguingly, Relational Vendor Trust failed to achieve statistical significance in its effect on Attitude (beta = 0.060, $p = 0.057$), leading to the rejection of H3. This striking deviation from traditional social capital literature signifies that interpersonal familiarity alone is insufficient to offset modern urban consumers' heightened safety apprehensions. Ultimately, Attitude functions as a potent predictor of Continued Purchase Intention (beta = 0.449, $p < 0.001$), validating H7.

Table 5 Direct Effects (Hypotheses Testing)

Relationships	Beta	STDEV	T-Statistics	P-Values	Decision
Economic Benefits -> Attitude (H1)	0.28	0.033	8.509	0	Supported
Spatial Convenience -> Attitude (H2)	0.128	0.035	3.638	0	Supported
Relational Vendor Trust -> Attitude (H3)	0.06	0.031	1.902	0.057	Not Supported
Local Cultural Authenticity -> Attitude (H4)	0.187	0.031	6.013	0	Supported
Perceived Food Safety Risk -> Attitude (H5)	-0.291	0.033	8.816	0	Supported
Perceived Urban-Environmental Risk -> Attitude (H6)	-0.104	0.042	2.479	0.013	Supported
Attitude -> Continued Purchase Intention (H7)	0.449	0.035	12.868	0	Supported

Source: Survey, 2026

The explanatory capacity of the model was verified through the effect size (f2) assessment. Attitude demonstrates a medium-to-large effect size in predicting Continued Purchase Intention (f2 = 0.253), while Economic Benefits (f2 = 0.123) and Food Safety Risks (f2 = 0.118) yield small-to-medium substantive effects on Attitude. Furthermore, the out-of-sample predictive relevance (Q2) calculated for Attitude (0.306) and Continued Purchase Intention (0.118) exceeded zero, affirming the model's predictive validity.

Mediation analysis

Eschewing the statistically flawed Sobel test and VAF ratios, which are strictly deprecated in contemporary PLS-SEM due to restrictive distributional assumptions and the potential for suppression effects, this study evaluated mediation exclusively through the significance of specific indirect effects via bootstrapping.

The results, presented in Table 6, unequivocally demonstrate that Attitude operates as a critical mediating mechanism. Attitude significantly channels the influences of Economic Benefits, Local Cultural Authenticity, Spatial Convenience, Food Safety Risk, and Environmental Urban Risk onto Continued Purchase Intention (all p-values < 0.05). Reflecting the failure of the direct path, the indirect pathway emanating from Relational Vendor Trust was non-significant ($p = 0.060$). These empirical findings provide robust support for H8, illustrating that objective drivers and

barriers in the informal food sector do not manifest as behavior directly; rather, they are rigorously negotiated through the consumer's cognitive-affective evaluation.

Table 6 Indirect Effects (Mediation Analysis)

Relationships	Beta	STDEV	T-Statistics	P-Values	Decision
EB -> ATT -> CPI	0.126	0.018	7.051	0	Supported
SC -> ATT -> CPI	0.057	0.016	3.536	0	Supported
RVT -> ATT -> CPI	0.027	0.014	1.883	0.06	Not Supported
LCA -> ATT -> CPI	0.084	0.016	5.269	0	Supported
PFSR -> ATT -> CPI	-0.131	0.019	6.897	0	Supported
PUER -> ATT -> CPI	-0.047	0.02	2.399	0.016	Supported

Source: Survey, 2026

The structural model (Figure 2) shows how key consumer perceptions influence Attitude Toward Street Food and, in turn, Continued Purchase Intention. Economic benefits (EB) have a strong positive effect on attitude (β = 0.280), followed by Spatial Convenience (SC) with a smaller but significant positive effect (β = 0.128). Local Cultural Authenticity (LCA) also positively contributes to attitude (β = 0.187). In contrast, Perceived Food Safety Risk (PFSR) exerts a substantial negative influence on attitude (β = -0.291), indicating that higher perceived risk reduces favourable evaluations. Relational Vendor Trust (RVT) shows a positive but statistically non-significant association with Attitude (β = 0.060), suggesting it does not independently shape attitudinal evaluations in this model. Finally, Attitude has a strong positive effect on Continued Purchase Intention (β = 0.449), and the model explains a meaningful portion of variance in both attitude and intention. Outer loadings indicate that measurement items perform well across constructs, supporting the reliability of latent variables.

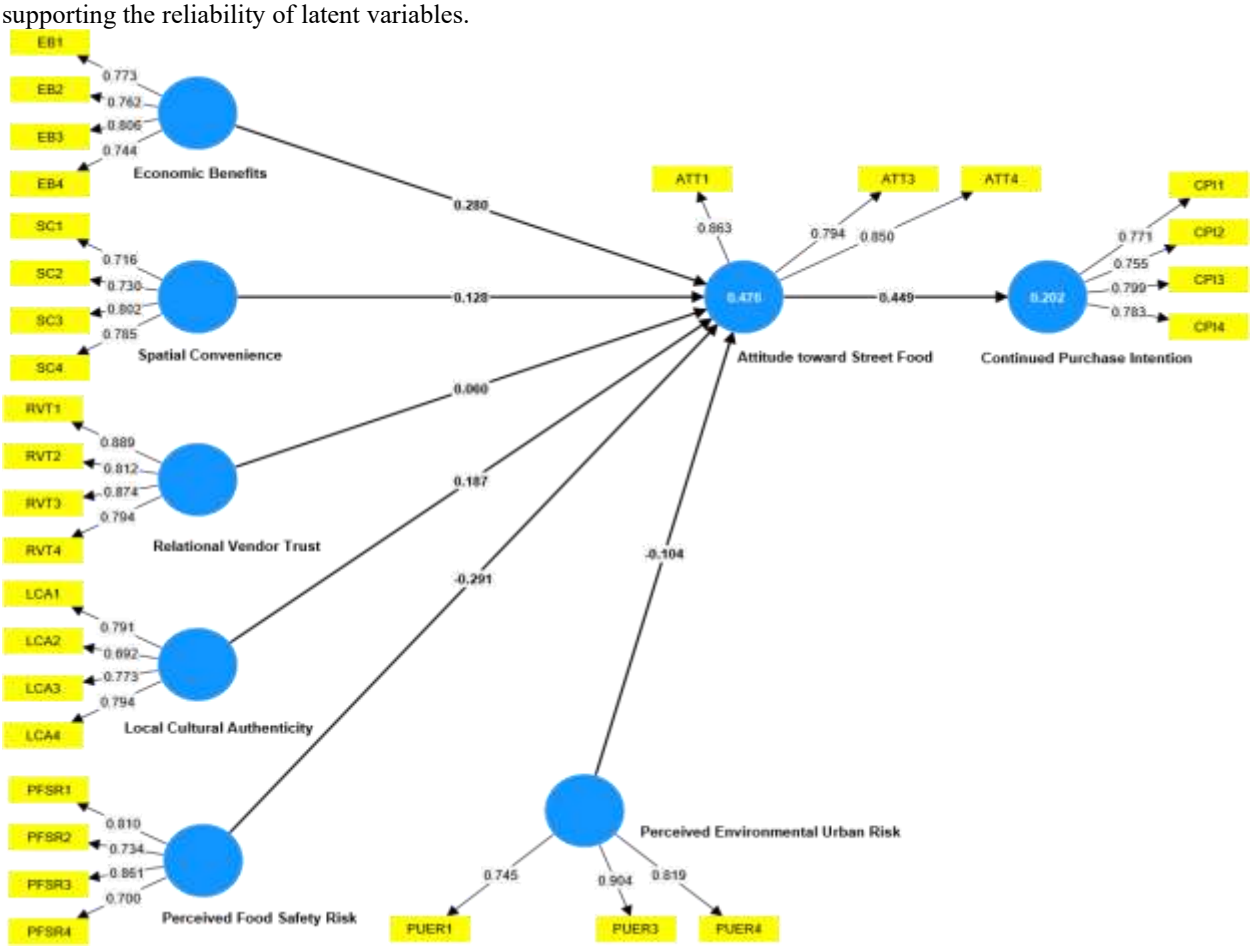

Fig. 2 Structural Model Results of Consumer Perceptions, Attitude, and Continued Purchase Intention

Source: Survey, 2026

Discussion

A central contribution of this study lies in empirically demonstrating how spatial and economic utilities overshadow severe biological risk perceptions in the informal food sector. The findings confirm that Economic Benefits (beta = 0.280) and Spatial Convenience (beta = 0.128) are powerful drivers of positive attitudes toward street food. This is in alignment with [15], [19], [49], [52]. In the specific context of Hanoi, spatial convenience transcends mere geographical proximity; it embodies a unique drive-through motorbike culture where the sidewalk acts as a seamless extension of the urban commuting network. Consequently, consumers engage in a calculated risk assessment (risk negotiation) where the immediate gratification of time-saving and cost-efficiency effectively overrides the delayed, probabilistic threat of Perceived Food Safety Risk. Even though food safety risk exerts the strongest negative influence on attitude (beta = -0.291), the combined positive pull of convenience, price, and cultural authenticity generates a net-positive intention to consume. This explains the paradoxical resilience of street food stalls operating in highly polluted, traffic-congested urban arteries.

One of the most striking and theoretically disruptive findings of this research is the rejection of Hypothesis 3. Contrary to classical sociological perspectives, which argue that relational vendor trust (a proxy for social capital) functions as a fundamental shock-absorber for risk in the informal economy [33], [35]. This finding reveals that trust no longer significantly drives positive attitudes (beta = 0.060, p = 0.057). This indicates a paradigm shift in urban consumer psychology. In modern Hanoi, interpersonal familiarity and social bonds are no longer sufficient to offset heightened apprehensions regarding foodborne illnesses. As contemporary consumers gain more exposure to public health discourse, their trust mechanisms are transitioning from relationship-based trust (e.g., knowing the vendor personally) to evidence-based trust (e.g., observing tangible hygiene practices like the use of gloves, clean water, and glass display cases). If hygiene visibility is compromised, the social capital embedded within the vendor-customer relationship is rapidly rendered obsolete, leading to permanent customer attrition.

The dynamics observed in Hanoi resonate deeply with broader global discourses on informal food systems, particularly when compared to other major emerging metropolises like Bangkok and Bogota [29], [63]. Historically, municipal authorities across the Global South have vacillated between tolerance and eradication. For instance, Bangkok has frequently implemented draconian street cleansing operations aimed at forcibly removing vendors to reclaim public spaces for formal modernization. However, these spatial interventions, often involving relocations to formal, enclosed markets, frequently collapse because they strip away the very Spatial Convenience that our PLS-SEM model identifies as a core driver of consumer demand. The failure of the cleansing approach in peer cities validates the findings of this study: the demand for street food is deeply structural, embedded in the socio-spatial and economic realities of the urban workforce. Attempting to suppress the supply side without addressing the demand side merely displaces the informal economy rather than resolving its inherent risks.

Implications

Theoretical implications

Theoretically, this study extends behavioral consumer-policy research by integrating TPB, the VAB framework, and social/cultural capital perspectives in the context of informal food markets. The findings show that consumer attitudes are formed through the simultaneous evaluation of immediate benefits, perceived risks, and socio-cultural meanings. Importantly, the non-significant effect of relational vendor trust identifies a boundary condition of social capital: interpersonal familiarity may not translate into favorable attitudes when consumers perceive food-safety and environmental risks as salient. This finding refines existing assumptions about trust in informal markets and highlights the need to distinguish between relational trust and evidence-based trust.

Managerial and policy implications

From a consumer-regulation perspective, the findings suggest that policy should move beyond a binary choice between tolerance and eradication. Because affordability and spatial convenience remain strong drivers of consumer attitudes, exclusionary enforcement is unlikely to eliminate demand for street food. At the same time, the strong negative effect of perceived food-safety risk shows that consumers are concerned about safety and may respond to credible, visible, and easy-to-understand regulatory signals.

A behaviorally informed regulatory strategy should therefore focus on three principles. First, regulation should increase the salience of hygiene quality at the point of purchase. This can be achieved through visible hygiene-grade labels, inspection stickers, color-coded certification, and clean-display requirements. Second, regulation should reduce consumers' cognitive burden by making safety information simple, comparable, and trustworthy. Consumers should not be expected to infer food safety from fragmented visual cues or vendor familiarity alone. Third, regulation should reduce compliance frictions for vendors by providing low-cost access to clean water, waste collection, food-covering equipment, and basic hygiene training.

Such an approach preserves the consumer benefits that sustain street food demand while addressing the invisible risks that consumers cannot reliably assess on their own. Rather than replacing informal trust with punitive enforcement, regulators can build evidence-based trust through visible standards, community monitoring, and incremental formalization.

Conclusion and research limitations

In conclusion, this study shows that street food consumption persists not because consumers ignore risk, but because they negotiate risk against immediate economic, spatial, and cultural benefits. The findings demonstrate that perceived food-safety risk matters, but its effect operates within a broader behavioural system shaped by affordability, convenience, authenticity, and attitude. For consumer regulation, the key implication is clear: effective policy should not merely remove informal vendors or demand that consumers make perfectly informed choices. Instead, regulation should redesign the street-food choice environment so that safer options become more visible, comparable, and easier to choose. This is the central promise of applying behavioural insights to consumer regulation in informal food markets.

This study has several limitations. First, the cross-sectional design limits causal inference and does not capture how consumer attitudes may change after food-safety incidents, regulatory campaigns, or vendor relocation policies. Second, the study measures continued purchase intention rather than observed purchasing behavior. Future research could combine surveys with behavioral observation, field experiments, or transaction-level data. Third, the study is limited to Hanoi, and the findings should be tested in other Vietnamese and Southeast Asian cities with different regulatory regimes and street-food cultures. Fourth, the relatively high education level of the sample may influence risk awareness and should be considered when interpreting the results. Finally, the study examines perceived food-safety risk rather than objective hygiene conditions. Future research could integrate consumer surveys with vendor audits, microbial testing, or inspection data to compare perceived and actual risk.

References

[1] "Actors and Functions of Street Economy," in *Contemporary Studies in Economic and Financial Analysis*, Emerald Publishing Limited, 2020, pp. 11–28. doi: 10.1108/s1569-375920200000103002.

[2] A. A. Adaku, I. S. Egyir, C. Gadegbeku, A. P.-H. Kunadu, V. Amanor-Boadu, and A. Laar, "Barriers to ensuring and sustaining street food safety in a developing economy," *Heliyon*, vol. 10, no. 11, p. e32190, Jun. 2024, doi: 10.1016/j.heliyon.2024.e32190.

[3] N. T. T. Loc and P. Moustier, "Toward a Restricted Tolerance of Street Vending of Food in Hanoi Districts: The Role of Stakeholder Dialogue," *Wiley*, vol. 2–3, no. 2–1, pp. 67–78, Mar. 2016, doi: 10.18278/wfp.2.2.3.1.5.

[4] X. S. Grangxabe, B. S. Madonsela, T. Maphanga, B. Gqomfa, T. T. Phungela, and K. C. Malakane, "An overview of waste management practices of street vendors in sub-saharan africa: A meta-analysis," *Journal of Environmental Management*, vol. 364, p. 121464, 2024, doi: https://doi.org/10.1016/j.jenvman.2024.121464.

[5] V. Krishnasree, P. V. Nethra, J. Dheeksha, M. S. Madumitha, R. Vidyaeswari, and P. Lakshya, "A pilot study on assessing the sustainability of food safety and hygienic practices in street food handling system," no. of, Nov. 2018, doi: 10.18805/ajdfr.dr-1381.

[6] K. H. Seo and J. H. Lee, "Understanding Risk Perception toward Food Safety in Street Food: The Relationships among Service Quality, Values, and Repurchase Intention," *Multidisciplinary Digital Publishing Institute*, vol. 18, no. 13, pp. 6826–6826, Jun. 2021, doi: 10.3390/ijerph18136826.

[7] S. Wertheim-Heck, J. Raneri, and P. Oosterveer, "Food safety and nutrition for low-income urbanites: exploring a social justice dilemma in consumption policy," *SAGE Publishing*, vol. 31, no. 2, pp. 397–420, Jun. 2019, doi: 10.1177/0956247819858019.

[8] O. A. B. Koumassa, R. Ouétchéhou, M. Hounsou, O. Zannou, and D. S. Dabadé, "Factors influencing street-vended foods quality and safety in developing countries: a review," *Discov Food*, vol. 5, no. 1, p. 18, Jan. 2025, doi: 10.1007/s44187-025-00286-w.

[9] N. W. I. Rahayu, M. Sawir, F. Melawati, and A. Mu'is, "The public space Paradox: Balancing governance and street vending in urban Indonesia," *Social Sciences & Humanities Open*, vol. 11, p. 101559, 2025, doi: https://doi.org/10.1016/j.ssaho.2025.101559.

[10] Y. Gao, D. Du, and N. Furuya, "Assessment framework of walking satisfaction on sidewalks in commercial districts: Combining built environment and personal attributes (applied in Japan)," *Frontiers of Architectural Research*, vol. 14, no. 5, pp. 1380–1397, Oct. 2025, doi: 10.1016/j.foar.2025.01.005.

[11] A. K. S. Ong, E. R. Tacardon, and Ma. J. J. Gumasing, "An extended theory of planned behavior approach for assessing factors affecting street food consumption in the Philippines," *Food Quality and Preference*, vol. 123, p. 105344, Feb. 2025, doi: 10.1016/j.foodqual.2024.105344.

[12] B. Sarfo, C. Y. Asiedu, S. Opoku-Mensah, G. A. Akuriba, and D. K. Antwi, "Unwrapping risk perception towards street food safety: The relationships among net profit margin, perceived customer satisfaction and repurchase intention," *Food and Humanity*, vol. 5, p. 100843, Dec. 2025, doi: 10.1016/j.foohum.2025.100843.

[13] M. M. Sepadi and T. Hutton, "Health and Safety Practices as Drivers of Business Performance in Informal Street Food Economies: An Integrative Review of Global and South African Evidence," *International Journal of Environmental Research and Public Health*, vol. 22, no. 8, p. 1239, Aug. 2025, doi: 10.3390/ijerph22081239.

[14] J. M. Soon-Sinclair *et al.*, "Street-vended food safety in Southeast Asia: consumers' strategies to ensure food safety and vendors' hygiene practices," *International Journal of Environmental Health Research*, vol. 0, no. 0, pp. 1–13, Apr. 2026, doi: 10.1080/09603123.2026.2659935.

[15] L. Lata, P. Walters, and S. Roitman, "A marriage of convenience: Street vendors' everyday accommodation of power in Dhaka, Bangladesh," *Cities*, vol. 84, pp. 143–150, Jan. 2019, doi: 10.1016/j.cities.2018.08.002.
[16] P. Pinazo-Dallenbach and F. Castelló-Sirvent, "Gender, Perceived Insecurity, Corruption Perception, Subjective Norm, and Household Income: A Configurational Approach to Entrepreneurial Intention," *J Knowl Econ*, vol. 15, no. 2, pp. 5864–5892, Jun. 2024, doi: 10.1007/s13132-023-01387-6.
[17] T. Rachmawati, "Relocation for a better livelihood: A case study of street vendors in local authorities in Indonesia," *Int. J. of Green Economics*, vol. 7, pp. 44–55, Jan. 2013, doi: 10.1504/IJGE.2013.055371.
[18] M. Buckley, C. Cowan, and M. McCarthy, "The convenience food market in Great Britain: Convenience food lifestyle (CFL) segments," *Elsevier BV*, vol. 49, no. 3, pp. 600–617, Nov. 2007, doi: 10.1016/j.appet.2007.03.226.
[19] A. Drewnowski and P. Monsivais, "Taste, cost, convenience, and food choices," *Elsevier BV*. pp. 185–200, Jan. 2020. doi: 10.1016/b978-0-12-818460-8.00010-1.
[20] ILO, "Women and men in the informal economy: A statistical picture." International Labour Office, 2018.
[21] A. T. Nguyen *et al.*, "Customers' Knowledge, Attitude, and Practices towards Food Hygiene and Safety Standards of Handlers in Food Facilities in Hanoi, Vietnam," *Multidisciplinary Digital Publishing Institute*, vol. 15, no. 10, pp. 2101–2101, Sep. 2018, doi: 10.3390/ijerph15102101.
[22] H. P. D. Setiyorini, T. Abdullah, and W. Ariandani, "Does Food Image Affect Customer Intention to Buy Food?," Jan. 2019, doi: 10.2991/isot-18.2019.70.
[23] C. Thatchinamoorthy and J. Meenambigai, "Customer Relationship Management and Retention in Street Food Sector," vol. 5, no. 1, pp. 25–29, Mar. 2018, doi: 10.15436/2377-0619.18.1789.
[24] A. M. Alimi, "Risk factors in street food practices in developing countries: A review," *Elsevier BV*, vol. 5, no. 3. pp. 141–148, Sep. 2016. doi: 10.1016/j.fshw.2016.05.001.
[25] N. Larson and M. Story, "A Review of Environmental Influences on Food Choices," *Oxford University Press*, vol. 38, no. S1. pp. 56–73, Oct. 2009. doi: 10.1007/s12160-009-9120-9.
[26] S. Basu and H. Nagendra, "The street as workspace: Assessing street vendors' rights to trees in Hyderabad, India," *Landscape and Urban Planning*, vol. 199, p. 103818, Jul. 2020, doi: 10.1016/j.landurbplan.2020.103818.
[27] N. Dai, T. Zhong, and S. Scott, "From Overt Opposition to Covert Cooperation: Governance of Street Food Vending in Nanjing, China," *Urban Forum*, vol. 30, no. 4, pp. 499–518, Dec. 2019, doi: 10.1007/s12132-019-09367-3.
[28] J. Peláez-Higuera, G. Calderón-Hernández, and H.-M. Serna-Gómez, "Social, commercial and economic diversity. Poverty and expectations among street vendors in Florencia, Caquetá, Colombia," *Cities*, vol. 140, p. 104448, 2023, doi: https://doi.org/10.1016/j.cities.2023.104448.
[29] İ. Çifçi, O. Atsız, and V. Gupta, "The street food experiences of the local-guided tour in the meal-sharing economy: the case of Bangkok," *Emerald Publishing Limited*, vol. 123, no. 12, pp. 4030–4048, Apr. 2021, doi: 10.1108/bfj-01-2021-0069.
[30] A. Özçelik and O. Akova, "The impact of street food experience on behavioural intention," *Emerald Publishing Limited*, vol. 123, no. 12, pp. 4175–4193, Jun. 2021, doi: 10.1108/bfj-06-2020-0481.
[31] A. R. Khanal, R. H. Timilsina, and P. Dhungana, "Do environmental awareness and food safety information nudges enhance youth's affinity to safer food consumption? Findings from an experiment in Nepal," *Journal of Agribusiness in Developing and Emerging Economies*, vol. ahead-of-print, no. ahead-of-print, Jan. 2024, doi: 10.1108/JADEE-01-2024-0019.
[32] A. Artyushina, "Is civic data governance the key to democratic smart cities? The role of the urban data trust in Sidewalk Toronto," *Telematics and Informatics*, vol. 55, p. 101456, Dec. 2020, doi: 10.1016/j.tele.2020.101456.
[33] M. Hough, J. Jackson, and B. Bradford, "Legitimacy, Trust, And Compliance: An Empirical Test Of Procedural Justice Theory Using The European Social Survey," in *SSRN Electronic Journal*, 2013. doi: 10.2139/ssrn.2234339.
[34] M. S. H. Swapan and S. Khan, "Urban informality and parallel governance systems: shaping citizens' engagements in urban planning processes in Bangladesh," *International Planning Studies*, vol. 27, no. 1, pp. 1–17, Jan. 2022, doi: 10.1080/13563475.2021.1899902.
[35] E. Wang, H.-C. Lin, and M.-C. Tsai, "Effect of Institutional Trust on Consumers' Health and Safety Perceptions and Repurchase Intention for Traceable Fresh Food," *Multidisciplinary Digital Publishing Institute*, vol. 10, no. 12, pp. 2898–2898, Nov. 2021, doi: 10.3390/foods10122898.
[36] L. H. Binh and L. T. Mai, "Applying the extended theory of planned behavior to investigate consumer purchase intention toward street food vendors," *VNU University of Economics and Business*, vol. 3, no. 6, Art. no. 6, Dec. 2023, doi: 10.57110/vnujeb.v3i6.240.
[37] B. Esiti and A. Ayodele, "Applying The Extended Theory of Planned Behaviour to Predict Street Food Patronage Behaviour: A Literature Review," *International Journal of Business and Management Review*, vol. 13, pp. 66–83, Jan. 2025, doi: 10.37745/ijbmr.2013/vol13n26683.
[38] Y. Gao, D. Du, and N. Furuya, "Micro-scale built environment and pedestrian behavior: A focus on sidewalks in commercial districts in Tokyo," *Frontiers of Architectural Research*, vol. 14, no. 2, pp. 416–428, Apr. 2025, doi: 10.1016/j.foar.2024.08.008.

[39] A. N. T. Thi, N. T. M. Hằng, D. K. Thanh, and L. V. Hoa, "Evaluation of microbial safety knowledge, attitude and practice of street food vendors and consumers in Can Tho City, Vietnam," *Rynnye Lyan Resources*, vol. 4, no. 5, pp. 1802–1814, Jul. 2020, doi: 10.26656/fr.2017.4(5).153.
[40] P. Wang, D. Fang, G. Cao, and Q. Luo, "Does information sharing affect the regulation of street vending: An analysis based on the dynamic tripartite evolutionary game in social networks," *Cities*, vol. 141, p. 104494, Oct. 2023, doi: 10.1016/j.cities.2023.104494.
[41] I. Ajzen, "The theory of planned behavior," *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179–211, Dec. 1991, doi: 10.1016/0749-5978(91)90020-T.
[42] Homer and Kahle, "A structural equation test of the value-attitude-behavior hierarchy," *Journal of Personality and Social Psychology*, vol. 54 (4), pp. 638–646, 1988.
[43] P. Bourdieu, "The forms of capital," *Handbook of Theory and Research for the Sociology of Education*, pp. 241–5, 1986.
[44] J. Ma, Q. Wang, D. Liu, H. Pan, and H. Ran, "Do environmental values drive artificial intelligence products green purchasing behavior? A value-attitude-behavior approach," *Acta Psychologica*, vol. 260, p. 105467, Oct. 2025, doi: 10.1016/j.actpsy.2025.105467.
[45] A. A. Sheikh *et al.*, "Modeling a value-attitude-behavior framework and personality traits: examining consumers' green purchase behavior for environmentally friendly technology products," *Discov Sustain*, vol. 6, no. 1, p. 779, Aug. 2025, doi: 10.1007/s43621-025-01605-y.
[46] "Sheikh et al. - 2025 - Modeling a value-attitude-behavior framework and p.pdf."
[47] J. M. Bauer and L. A. Reisch, "Behavioural Insights and (Un)healthy Dietary Choices: a Review of Current Evidence," *J Consum Policy*, vol. 42, no. 1, pp. 3–45, Mar. 2019, doi: 10.1007/s10603-018-9387-y.
[48] S. Mills, S. Costa, and C. R. Sunstein, "AI, Behavioural Science, and Consumer Welfare," *J Consum Policy*, vol. 46, no. 3, pp. 387–400, Sep. 2023, doi: 10.1007/s10603-023-09547-6.
[49] W. Bell, J. Coates, J. Fanzo, N. Wilson, and W. A. Masters, "Beyond price and income: Preferences and food values in peri-urban Viet Nam," *Elsevier BV*, vol. 166, pp. 105439–105439, Nov. 2021, doi: 10.1016/j.appet.2021.105439.
[50] T. H. Trịnh *et al.*, "Diet Quality Index and Food Choice Motives in Vietnam: The Roles of Sensory Appeal, Mood, Convenience, and Familiarity," *Multidisciplinary Digital Publishing Institute*, vol. 12, no. 13, pp. 2505–2505, Jun. 2023, doi: 10.3390/foods12132505.
[51] R. S. Morano, A. Barrichello, R. R. Jacomossi, and J. R. D'Acosta-Rivera, "Street food: factors influencing perception of product quality," *Emerald Publishing Limited*, vol. 53, no. 4, pp. 535–554, Oct. 2018, doi: 10.1108/rausp-06-2018-0032.
[52] T. C. Thang and D. T. B. Linh, "How to Support Poor Vietnamese Consumers to Deal with Food Price Volatility and Food Safety Issues," *Wiley*, vol. 46, no. 6, pp. 84–89, Nov. 2015, doi: 10.1111/1759-5436.12190.
[53] Y. Shen, R. Song, and Z. Zhang, "Governance Patterns of Vendors and Their Differences among Large, Small and Medium-sized Cities in the Yangtze River Delta Region in the Post Epidemic Era - A Case Study of Nine Cities, Including Shanghai, Tonglu and Shengzhou City," in *Proceedings of the 2023 8th International Conference on Modern Management and Education Technology (MMET 2023)*, vol. 798, H. Kassim, N. Malik, P. Rajagopal, and M. K. M. Singh, Eds., in Advances in Social Science, Education and Humanities Research, vol. 798. , Paris: Atlantis Press SARL, 2023, pp. 489–507. doi: 10.2991/978-2-38476-146-3_54.
[54] Y. Liu and Y. Liu, "Detecting the city-scale spatial pattern of the urban informal sector by using the street view images: A street vendor massive investigation case," *Cities*, vol. 131, p. 103959, 2022, doi: https://doi.org/10.1016/j.cities.2022.103959.
[55] H. Abou-Senna, E. Radwan, and A. Mohamed, "Investigating the correlation between sidewalks and pedestrian safety," *Accident Analysis & Prevention*, vol. 166, p. 106548, Mar. 2022, doi: 10.1016/j.aap.2021.106548.
[56] N. Van Phuong, M. Mergenthaler, and P. N. H. Quynh, "Consumer transition: analyzing the impact of environmental and health consciousness on green food choices in Vietnam," *Discov Sustain*, vol. 6, no. 1, p. 415, May 2025, doi: 10.1007/s43621-025-01275-w.
[57] N. H. Q. Pham, T. L. Pham, V. T. Hang Nga, P. M. Hung, and N. Van Phuong, "Factors Affecting Entrepreneurial Intentions of Women in Rural Areas of Vietnam," *Res. World Agric. Econ.*, pp. 395–407, Feb. 2025, doi: 10.36956/rwae.v6i1.1442.
[58] S. Turner and L. Schoenberger, "Street Vendor Livelihoods and Everyday Politics in Hanoi, Vietnam The Seeds of a Diverse Economy?," *Urban Studies*, vol. 49, pp. 1027–1044, Apr. 2012, doi: 10.1177/0042098011408934.
[59] D. C. Petrescu, I. Vermeir, and R. M. Petrescu-Mag, "Consumer Understanding of Food Quality, Healthiness, and Environmental Impact: A Cross-National Perspective," *Multidisciplinary Digital Publishing Institute*, vol. 17, no. 1, pp. 169–169, Dec. 2019, doi: 10.3390/ijerph17010169.
[60] Thu Huong Dau, Thi Phuong Linh Nguyen, and Hoang Ngan Vu, "Examining consumers' pro-environmental purchase intention of electric vehicles: perspective of value-attitude-behavior framework," *International Journal of Energy Sector Management*, vol. 20, no. 3, pp. 978–998, Nov. 2025, doi: 10.1108/IJESM-08-2025-0022.

[61] Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., and Podsakoff, N. P., "Common method biases in behavioral research: A critical review of the literature and recommended remedies," *Journal of Applied Psychology*, pp. 879–903, 2003. [Online]. Available: https://doi.org/10.1037/0021-9010.88.5.879

[62] J. Hair, G. T. M. Hult, C. Ringle, and M. Sarstedt, *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2022.

[63] M. Donovan, "Informal Cities and the Contestation of Public Space: The Case of Bogota's Street Vendors, 1988 2003," *Urban Studies*, vol. 45, pp. 29–51, Jan. 2008, doi: 10.1177/0042098007085100.