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Empirical Evidence on Status of Street Vendors in Nepal amid COVID-19: A Structural Equation Modeling Approach

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Abstract

Background: During the COVID-19 pandemic, street vending businesses faced severe disruptions, exacerbating poverty and livelihood challenges for vendors. The government's neglect of this sector has further intensified these issues, highlighting the need for a comprehensive analysis of the situation.

Objectives: This study aims to investigate the impact of COVID-19 on street vendors in Kathmandu Valley. Specifically, it explores the relationships between poverty, unemployment, and street vending, and examines the role of migration as a mediating factor.

Methods: An explanatory research design was employed, utilizing a non-probability convenience sampling technique to collect data from 202 street vendors. Data were gathered using KOBO Toolbox and a structured questionnaire. Both descriptive and inferential statistics were applied, with Structural Equation Modeling (SEM) used to analyze relationships and impacts.

Results: The analysis reveals a significant impact of poverty on unemployment among street vendors during the pandemic. Migration has a notable influence on street vending and unemployment, serving as a mediator between poverty and street vending activities. Domestic migration, in particular, has been pivotal in enhancing street vending in Kathmandu Valley.

Conclusion: The study underscores the need for regulatory authorities at central, provincial, and local levels to develop a legal and political framework to support street vendors. Implementing such measures could significantly improve their status and mitigate the adverse effects of the pandemic on their livelihoods.

Paper Types: Research Paper

Keywords: Poverty, Migration, Street vending, Informal sector, Structural Equation Modelling, Nepal

JEL Classification: E26, O17

Introduction

Informality has become a prevalent phenomenon in developing countries (Romero-Michel et al., 2021), and it must be handled and concerns considered when governments map their economic pathways (Estevão et al., 2022) whereas informality in developed countries with the developed economies is also being utilized as a concept to better explain economic activity, the labor market, daily urbanization, and social interactions (Streule et al., 2020). However, Etim and Daramola (2020) also discussed that globally, economy of nations comprises of formal and informal economy. Based on study conducted in Ghana, a close bordering impoverished country, Keith Hart popularized the term "informal sector" for the first time in 1973 (Moser, 1978; Gërxhani, 2003; Alam, 2012; Yusuff, 2011). Different studies defined formal employment as structured, controlled, and centralized work, which has been changed into unregulated, unofficial, illegal, and non-unionized contractual informal work as a result of globalization (Ogunsade & Obembe, 2016; Bhattacharya, 2019).

The concept of informal sector is originated due to the fewer job opportunity in the rural area and movement of people to urban area in search of job (Karki et al., 2021), therefore, forced to involve in lower job quality due to less education and skill (Alam, 2012). The informal sector comprises of pint-sized and unaffiliated activities with high labor intensive and very low capital intensive, there is no proper supervision from the authorities in informal employment (Bigsten et al., 2004; Williams & Horodnic, 2019; Ohajinwa et al., 2017; Rothenberg et al., 2016).

In the least developed nations, like Nepal, the informal sector has emerged as a significant industry which plays a crucial part in economic activity and employment creation in emerging and least developed nations because of its dominance (Bhattarai & Pathak, 2020). The informal sector generates not only job opportunity but also autonomous economic growth, which results to increase in productivity in informal sector (Moser, 1978). The informal sector, according to this description, is the sum of all income-generating activities that do not include contractual or legally regulated employment (Gërxhani, 2003). The most visible manifestation of the informal sector is street vending (Bhattarai & Pathak, 2020; Nidan, 2010). Street vendors can be found in urban public spaces all around the world (Roever & Skinner, 2016). In developing countries like Bangladesh, India, Nepal and Pakistan, people are involved in the informal sector due to poverty, less education, unskilled, no training, parental disruption (International Labour Office, 2004; NLFS, 2019) and are likely to get low quality job (Koujianou Goldberg & Pavcnik, 2003). Furthermore, street vendors operate from temporary static buildings, movable kiosks, or head-loads instead of a fixed venue and provide a range of goods and services to the general public. However, popularity of this kind of work has skyrocketed in public spaces all over the world, especially in developing countries (Romero-Michel et al., 2021).

The major issue is that the growth of developing countries' informal economy has had a negative socio - economic impact on informal employees (Webb et al., 2020). In addition to being a sign of underdevelopment, the rise in informal employment may also be the primary cause of the steady underdevelopment of informal sector workers. As informality rises, it becomes necessary to establish unregistered, illegal firms and lose the benefits of doing business legally, such as access to formal financial institutions, authorities and judiciary protection, as well as participation in the global market. As a result, informal sector workers could be adversely affected by the absence of governing laws, no social rights, low wages, les job security, work burden and employee exploitation in the workplace (Singh & Kaur, 2022). The informal sector provides the opportunity of employment to the rural migrants and urban dwellers in small scale, micro level enterprises and home based enterprises in least developing countries like Nepal (Alam, 2012). Informal employment like street vendors has a key role in employment creation and economic activities in emerging countries. However, the growth in the informal sector creates the formation of unregistered and unofficial businesses more in the least developing countries like Nepal. The regulatory framework, policy, rules and regulations should

impose to the informal sector so that informal workers benefitted from the social security and health security in the work place. In order to reduce dangerous activities in the job, workers should improve their understanding of health awareness.

In context to Nepal, street vending is a source of intense debate in city areas. Therefore, several questions were unanswered like: what is the socio-economic status of street vendors during COVID-19? What difficulties did the street vendors confront all through COVID-19? What is the management strategy to solve the problem of street vending?- with the aim to analyze the socio-economic status of street vendors during COVID-19 by examining the factors influencing street vending, challenges faced by the street vendors by providing the managerial implications to solve the problem of street vending in Kathmandu Valley. Through this study, we try to fill the research gaps on the effects of COVID-19 on status of street vendors in city areas of Nepal by using a structural equation modeling approach that was rarely used in this sector.

The current study is structured as follows: Section Two includes methods together with a conceptual framework and formulated hypotheses. Result and analysis is covered in Section Three, while conclusions are covered in Section Four.

Research Method

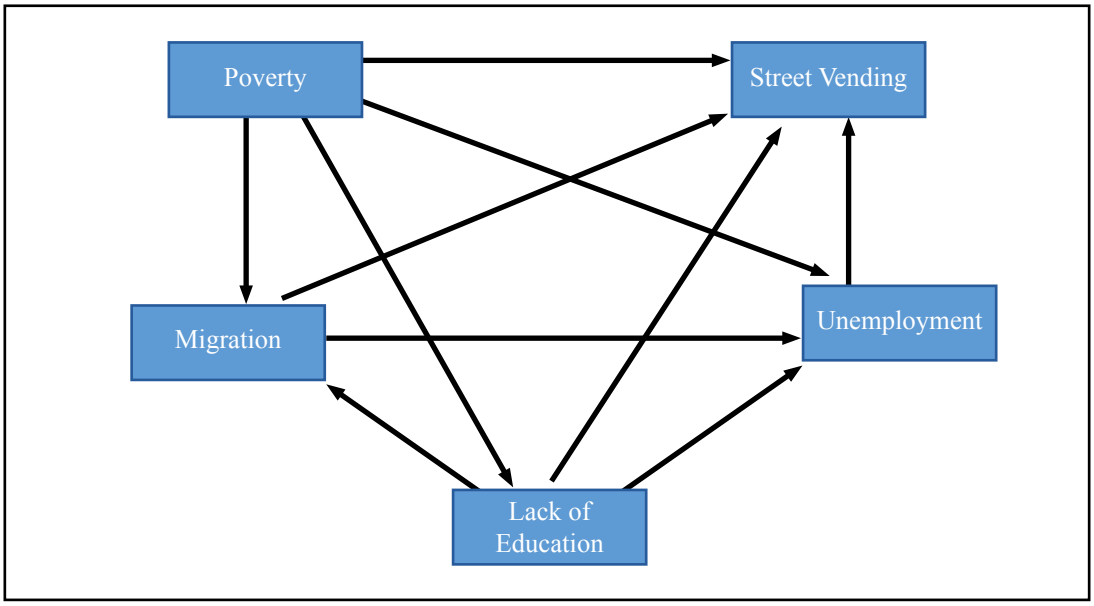
Theories on Street Vending

The theoretical framework is regarded as the blueprint of research that supports a theory of a research study (Kivunja, 2018). Different theories have been introduced for the study of socio-economic status of Street vendors, such as Cycle of Poverty (Sharma, 2018), Sustainable Livelihood Approach (Serrat, 2017), Lee's theory of Migration (Zanabazar et al., 2021), Structuralism theory (Al-Jundi et al., 2020) and Buyer Seller Dyads (Suresh & Kumar, 2020). However, there is no any single theory which clearly explain the concept of informal economies like street vending (Huang et al., 2020). The first theory is the cycle of poverty, which has been further divided into a number of sub theories of poverty, including those that blame regional discrepancies or accumulated and recursive interconnectivity for folk's deprivation and those that blame ethnic philosophies for assisting subgenres of economic hardship (Sharma, 2018). Similarly, Lee's Theory of Migration that explains that there are push and pull factors and intervening factors which attracted rural population to move towards urban area in search of improvement of their livelihood which also means of considering the goals, preferences and range of social evolution and comprises the capacity, resources, and actions required for sustaining life. Similarly, sustainable livelihood theory is a method that deepens understanding of the lives of the poor by organizing and illuminating the factors that restrict or expand living options. This method can help make decisions of developmental activities as well as the assessment of the effects that recent efforts have on maintaining lives (Serrat, 2017). Similar to this, the structuralism hypothesis contends that street vending's prevalence and future development may be justified as a means of survival or as the last resort as it is impossible for street sellers to obtain official employment. Similar to this, the idea of buyer-seller dyads argues that the term "dyad" relates to interpersonal contact, where "buyer-seller interactions" is also referred to as buyer-seller dyads. This theory aids in comprehending that the selling process is generally two-way, including both a vendor and a customer (Al-Jundi et al., 2020).

The researcher opted to use the structuralism approach because it perfectly suited to the Nepalese economy, which has faced economic issues such as high unemployment, poverty, worker retrenchment, and industrial closure. The researcher has analyzed five conceptual model based on the Structuralism theory. The first model is Involvement in informal economy for employment generation research in Dhaka city which aims to investigate the current situation of various street vendors in Dhaka City and indicates Poverty, migration from rural areas, a lack of education, labor shortages, and a big family size are all important driving variables in this industry, according to this study (Husain et al., 2015).

Similarly, Socio Cultural factors affecting Street vendors on Income Generation is another model where researcher has used social factors, economic factors, cyclical factors and geographical factors to analyze the impact of these factors on income in two city, Chennai and Vijayawada of India (Sharma, 2018). The Figure 1 indicates the conceptual framework proposed by the researcher which is adapted and modified from Jundi et al. (2020) where poverty, migration, lack of education and unemployment are the independent variables whereas street vending is the dependent variable for this study.

Figure 1: Conceptual Framework



Source: Adapted and Modified from Al-Jundi et al. (2020)

Hypotheses Formulation

Poverty

Street vending is a result of destitution, which has detrimental effects. According to academic research, factors including poverty, political unpredictability, economic downturns or crises, and a lack of development all have an effect on street selling. Large family sizes and fast population increase lead to poverty, which forces people to hawk their wares on the streets (Husain et al., 2015). Vending on the street is a result of a lack of economic growth. Due to modernization theory, the phenomena is steadily fading as the economy advances (Williams & Gurtoo, 2012). Street vendors face problems like physical and verbal abuse, money robbed etc. Immigrants from rural regions with insufficient skills will have a tough time breaking into the formal economy. Rural migrants who migrate because of limited farming and low farm output work as street vendors which implies small capital to start, low barriers here to enter and flexible working hours. Their job is seen as unconventional, low-status, and illegal by the general population.

H_1: Poverty has positive impact on street vending.

H_2: Poverty has significant impact on Migration.

Lack of Education

Lack of knowledge is to blame for the predominance of street vending. People who work on the streets have little or no formal education, making it difficult for them to enter the official sector. School dropouts and a shaky educational system are consequences of war-related poverty. A substantial Poverty causes a lack of education, making it harder for persons with a low level of education to find formal job. Percentage of children who do not attend school, and female participation in elementary school is low. Thus, hypotheses are presented as:

H_3: Lack of education has positive impact on street vending.

H_4: Poverty has positive impact on lack of education.

Rural Migrants

In developing nations like Dhaka, and Nepal, for example, migrant street sellers use the streets for their advantage and turn them into visually appealing public marketplaces. However, destitute, without a license to sell on footways, and with their children in too, people who moved from rural to urban areas and hawk clothing, produce, and food on the streets are not uncommon. Municipal officials and cops harass them. They do not have permissions, which are quite expensive. The prevalence of street selling is a result of migration. Poverty is a cause of low academic success. Inadequate schooling is a result of poverty, where those with little literacy are incentivized to relocate to wealthier regions and are compelled in the unregulated market, such as street vending, since they have total absence the qualifications required for employment.

H_5: Migration has significant relation to Street vending.

H_6: Migration has positive impact on Lack of education.

Unemployment

Owing poor investment-to-GDP ratios, inflexible economies, and severely constrained technical advancement, unemployment rates in emerging and less developed nations are enormous, and many countries also have lengthy jobless periods and no unemployment insurance systems. Despite the low economic output of such job, unemployed people must make a livelihood by working in the unregulated economy, frequently as street vendors. Thus, informal economy is a major employer in developing nations (Günther & Launov, 2002). People are forced to work as street sellers due to a labor shortage or severe unemployment (Jundi et al., 2020). Unemployment remains, pushing jobless individuals to make a livelihood as street vendors.

H_7: Poverty has significant impact on unemployment.

H_8: Unemployment shows positive relation with street vending.

Illiteracy makes it imperative for those with poor backgrounds to get legitimate job, which causes unemployment. People are being forced to become street sellers as they move to the city to work due to unemployment.

H_9: Unemployment has significant relationship with Lack of education.

H_{10}: Unemployment shows significant impact on Migration.

Variables and Its Definition

The research's elements are described in this part. The variables that were used for this study is shown in table 1.

Table 1: Observed Variables and its Explanation

Construct	Variable Notations	Observed Variables	Explanation
Poverty (PO)	SV2*	No support	No support from municipals and authorities.
	SV3*	Improving Income	Without paying attention to the traffic on the streets or the flow of people on the sidewalks, street vendors aim to increase their income.
	SV5*	Unlicensed by Municipality	Unregulated by the local government or other administrative bodies.
	PO1*	Size of Family	Large size family.
	PO3*	In able to Business Expansion	Inability to expand the business.
	PO5*	Suffer from health hazards	Colporteur experiences hygienic risks, loudness, filth, and abuse.
Unemployment (UN)	UN3*	Employment Opportunity	Shortage of employment opportunity in the nation.
	UN4*	Job Offer	No job offers from rural sector.
	UN5*	Employment Source	A contemporary job opportunity is selling goods on the street.
Lack of Education (LA)	LA3*	University degree	A university degree is uncommon among street sellers.
	LA4*	Drop-out Rate	the rate of school abandonment has risen over past 10 years
	LA5*	Properly Prepared	Schools and universities do not adequately educate students for employment in contemporary businesses.
Migration (ME)	ME1*	Rural areas	Come from rural areas.
	ME2*	Poor areas	Come from poor areas.
	ME5*	Setting up successful business	Numerous outside-regional street sellers have been able to establish themselves in the streets.

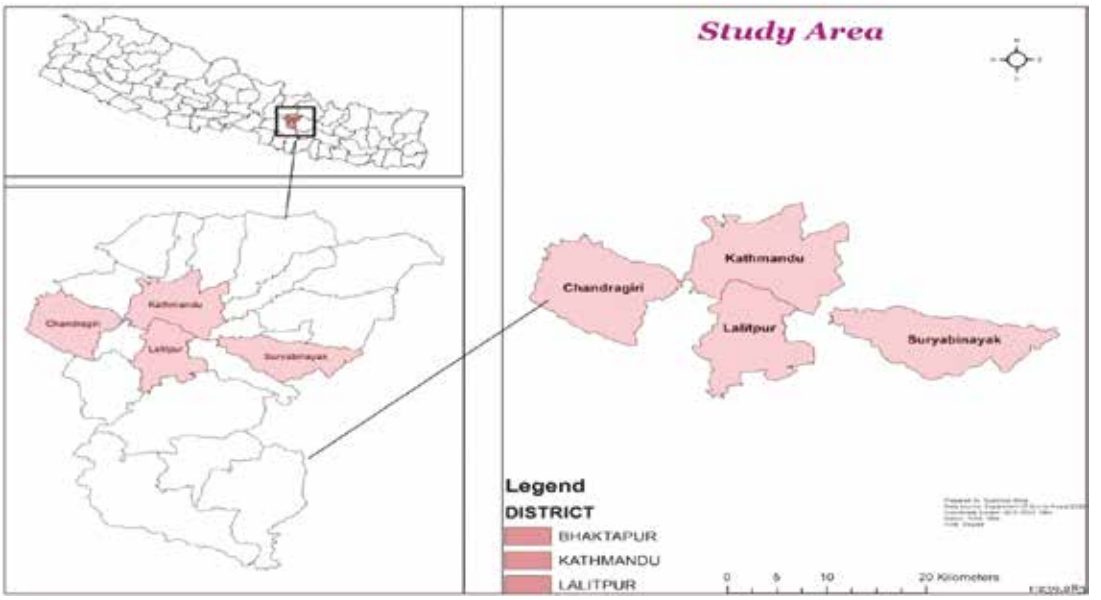
Note: * Items that passed the confirmatory and explanatory factor analysis were approved, and their values stay above 0.5.

Study Area and Population

Nepal's Kathmandu Valley serves as the researcher's study location (See Figure 2). The Kathmandu Valley is made up of three districts, Kathmandu, Lalitpur, and Bhaktapur, all of which are located in the Nepalese province of Bagmati (Maharjan et al., 2022). Together, these three districts span an area of 899 square kilometers, while the valley as a whole comprises 665 square kilometers. The valley encompasses the entirety of the district of Bhaktapur, 85% of Kathmandu, and 50% of Lalitpur (Adhikari et al., 2021b). Kathmandu Valley has become a central focus for many business and service activities. Being the capital city of Nepal, the valley is home to a huge number of small enterprises as well as one of the country's largest populations, with people arriving from all over the country in

search of better and more job possibilities (Adhikari et al., 2021b). With Nepal's growing urbanization, street selling is becoming more common in all cities, especially the Kathmandu Valley. Street sellers may be found in practically every region of the Kathmandu Valley's urban area. Minimal entrance restrictions, malleable work schedules, a paucity of opportunities to work in the mainstream economy, failure in prior endeavors, a lack of necessary knowledge to work in the official sector, and impairment are all major factors that motivate people to work on the streets (Bhattarai & Pathak, 2020).

Figure 2: Study Area



Sampling, Data Collection and Analysis

This research is based on non-probability sampling, because it is less costly, quicker, and simpler than alternative sampling method. The sample size for the investigation was determined using the formula is $n = z^2pq/l^2$ (Basnet et al., 2024 & Bhandari et al., 2021). Where, n = sample size required for the study, confidence level of 5%, p is prevalence or proportion of an event and allowable error that can be tolerated is 6%. With the given value total population for the study is 267. We add non-response error 5%, which gives the total sample population of 280. Because of current pandemic i.e. COVID-19, and therefore, required number data was unable to collect. Only 202 data could be collected. Hence this study limits to 202 street vendors.

The principal research tool in this study, a structured questionnaire, is based on primary data. For data collection, the developed checklist is kept in the KOBO toolbox. After the Questionnaire was injected into KOBO toolbox, pre-testing of few samples questions was tested in order to get feedback for the consistency and accuracy of the instrument. The necessary changes were made finally on basis of feedback provided by pre-testing survey. Data was collected from the month of February 2022 to March 2022. Interview was conducted among the Street Vendors of different categorical items in Kathmandu Valley. KOBO Toolbox, ArcGIS, Microsoft Excel were used for descriptive analysis whereas SPSS and SPSS AMOS were used to analyze data inferentially.

Data Analysis and Results

Socio-Demographic Characteristics

Information on the socio-demographic traits of the survey sample is provided in this section. Data was

gathered from the 202 respondents. Age, gender, education level, family job, family type & size, family income level, and other factors have been computed and shown in one type of diagram in this part to provide a clear picture of the socio-demographic aspects of the pattern facts.

The result of the socio-demographic characteristics revealed that the majority (54%) of the respondents are males who belong to the 31–40 age group and are married. It indicates that most of the street vendors are males who dominated the street vending business compared to females in the Kathmandu valley, and usually fell into the youthful population categorization in Nepal (Devkota & Phuyal, 2017). Similarly, majority of the respondents are illiterate which accounts 45%. This indicates that lack of education led many people towards the street vending. Furthermore, this study also concludes that there is no need of high qualification for street vending business and other similar studies also proved this fact. Likewise, majority of the respondents prefer nuclear families (61%) and have a family size of 4 to 6 members, which accounts for 55% of respondents and are likely to earn average of Rs. 700 in a day which is termed to be disconsolation and implies that street vending is a livelihood alternative for new entrants, which has low entrance barrier in terms of human and financial resources required.

Business Profile of the Street Vendors

This section deals with the various categorization of business in street vending. Majority of respondents (42%) have experienced some form of unemployment in the past. After having 5-10 years of experience, it had been reported that street vendors have been engaging in multi-point sales but majority (57%) of street vendors are involved in single point sales which includes providing services related to vegetables, food & beverages, *panipuri & chatpate*, fruits, cold drinks & ice-cream, fish food, pan, fish and tailoring. Similarly, the study of Dhas (2020) in India, found that high proportion of street vendors were previously jobless and therefore it might be said that unemployment is the primary driving force for the street vending business because of lack of education and less skilled which forced to involve in low level work such as street vending. Additionally, Rahman (2019) found street vendors were unable to secure loans from established formal financial institutions as a result of their failure to satisfy collateral management obligations. The results from the study shows that there is lack of access to capital from the financial institution to low level workers such as street vendors and never able to expand the business. This study also asked street vendors about their initial investment to carry out the street vending business. The result indicates that majority (60%) had initial investment of less than NRs 10000 having their family as the pillar of business resulting to 43%.

General Views of Street Vendors on How Poverty Affects Street Vending

The attitude of street vendors about the impact of poverty on street vending is covered in this section. The research variables are Street Vending, Poverty, Unemployment, Lack of education and Migration and street vending which were rated as strongly disagree (1), disagree (2), neutral (3), agree (4) and strongly agree (5), to the statement.

Street Vending has explanatory variables as unlicensed by municipality, improving income and no support. The results show that the majority (125) of respondents strongly agree with unlicensed where a business is not licensed by the municipality or other government offices, the majority of respondents (112) strongly agree with street vendors seeking to increase their income while ignoring traffic and pedestrian movement on the pavements, and the majority of respondents (97) strongly agree with no government and authority. Likewise, the study conducted by Husain et al., (2015) found that in Dhaka, selling goods on the street is viewed as a crime, and lawmakers will remove vendors from their locations if they are found. The uncertain relocation of the firm, in addition to the restricted access to money, poor local infrastructure, and harassment by the local authorities, had a detrimental effect on their ability to operate.

Similarly, poverty contains suffer, business expansion and large family size as explanatory variables where findings replicates that majority of respondents concur that their problems include filth, loudness, harassment, and illnesses, as well as a lack of awareness about company development and having a big family. Similarly, the study conducted by Bhowmik (2005) found Street vendors in Asia were more susceptible due to poverty; suffer from health hazards and inadequate understanding of one's responsibilities. Additionally, they lack access to official economic resources that may aid in the growth of their earnings and organizational development.

Likewise, unemployment covers employment sources, job offer and employment opportunity as explanatory variables. The result indicates that majority (95) of respondents agree that street vending is a current source of employment for them, similarly 95 respondents agree that they do not get job in rural area and 87 respondents agrees that there is lack of employment opportunities in nation. While comparing with the study of Reddy (2017), explained unemployment in emerging nations has also been raised related to the trend of urbanization, high youth unemployment rate and also found about a half of the informal sector operators in urban regions genuinely relocate in rural areas because of weaker labor possibilities in rural sector.

Properly prepared, drop-out and university degree are the explanatory variables of the education. The results show that the majority of respondents do not hold a university degree, that the school dropout rate has grown, and that neither schools nor universities adequately educate people for employment in contemporary businesses. The finding indicates that education is one of the major aspects that needed to be considered in any field. Similarly, the study conducted by Dyer (2007) introduced a significant problem for the Republic of Yemen is integrating Yemen's population of young people into schooling. These kids work in a variety of sectors, from sidewalk selling to farm security and household tasks. However, the majority of the families of the rural areas are struggling financially, thus they must rely on the work of the children too for their existence and livelihood.

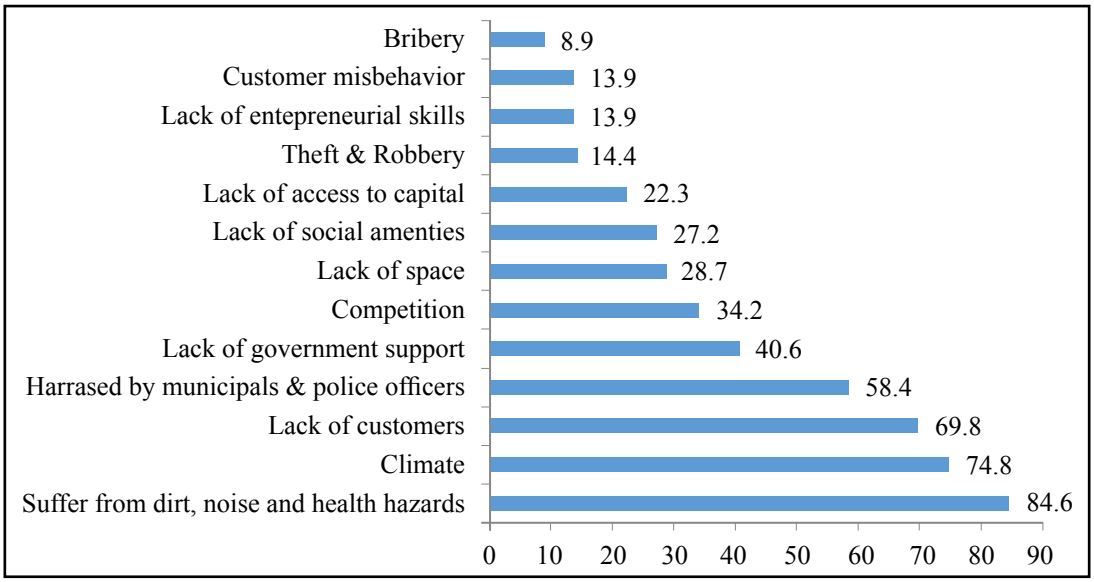
Likewise, Migration contains explanatory variables such as setting up successful business in street, poor areas and rural areas. The findings show that the majority of respondents (72) believe that certain street sellers who have been relocated from several other places are successful in establishing their street selling businesses, majority of 85 respondents agree with the poor areas 'street vendors migrated from poor areas, majority of 78 respondents agree that they are migrated from rural areas. Similarly, the study of Adhikari (2018) explained that the rural poor in metropolitan areas benefit from street trading since it gives jobs and revenue. Not only are the rural poor earning possibilities in the informal sector; it also provides things at a lower cost to the urban poor.

Challenges and Managerial Solution on Street Vendors

The respondents were asked whether they face any challenges or problems while operating their business in the street. The result indicated that majority (87%) of respondents believe that there are different challenges in street vending business.

Figure 3 indicates that, street vendors have been threatened by police officers for occupying major traffic junctions and uncertainty over site distribution makes it difficult for street vendors to wheel vending carts from one spot to another on damaged roadways. Climate adds to their problems by creating product damage and needing additional accessories as a result of rain, scorching heat, and frigid winter blustery weather and also lack of shelter and storage space is a challenge for street vendors. Finally, respondents were asked where all these issues came from. The result indicates that, most of the challenges came from the side of government and municipals accounting 39%, likewise, 15% by customers, 6% from competitors, 4% from shopping mall and retailers and others.

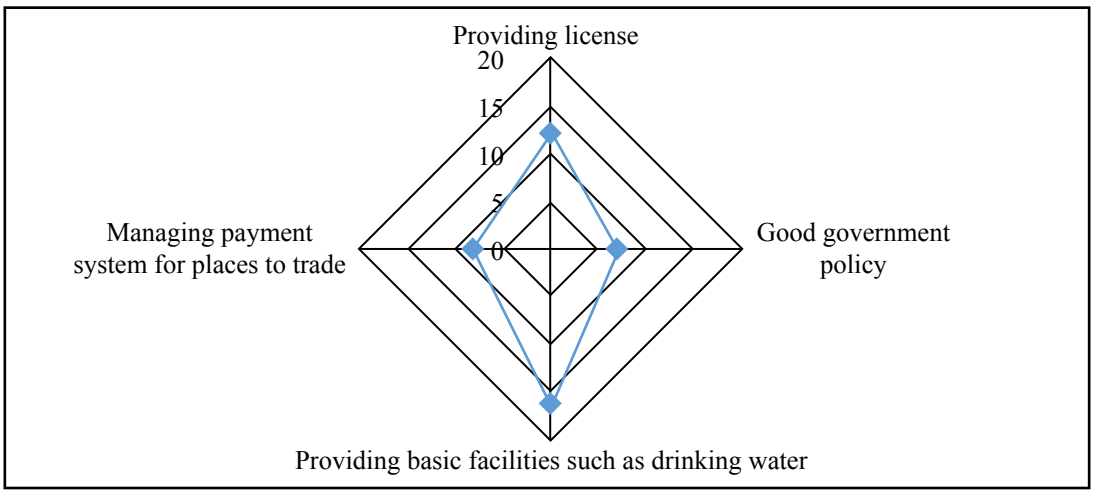
Figure 3: Challenges and Barriers Faced by Street Vendors



Source: Field Survey, 2022

Similarly, respondents were asked whether the challenges are manageable or not? The result indicates that 87% respondents believe that it is difficult to manage different challenges in street vending business. But collaborative effort will save money and make it easier to sell a diverse range of items within a specific geographical region. Figure 4 indicates various managerial solutions that were suggested by the respondents. Respondents mainly suggest the solutions like providing license at affordable cost, managing payment system for places to trade freely without harassment by municipals and police officers, formulating good government policy to manage and control the street vending business and providing basic facilities such as toilet, drinking water to street vendors. However, street vending gives job to several people who are shut out of the formal employment, thus jurisdictions, especially local government authorities, should establish a supporting legislative environment that offers an appropriate atmosphere for generating income through street vending.

Figure 4: Managerial Strategy



Source: Field Survey, 2022

Thus, the majority of respondent's responses the issues related to Street vending can be managed if the country can make supportive government policy and municipality laws regarding street vending practices.

Inferential Analysis

Summary Statistics and Exploratory Factor Analysis

The data is analyzed using the mean, standard deviation, skewness, and kurtosis. Mean and standard deviation lie in the range from 3.4505 to 4.5842 and 0.5602 to 1.0052, respectively, suggesting that there is not much variation in the responses from the average scores. Skewness is a metric for asymmetry in a frequency distribution that is mean-centered, while kurtosis is defined as a statistic that describes the peaking of a symmetrical frequency distribution (Duhan & Pandey, 2013). In this study, the value of skewness of data varied between -0.938 and 0.147 representing predominantly positive skewness of the data. Similarly, all the measures of kurtosis varied from -2 to +2 which reveals data is free from normality problem. Before examining the data, the applicability of the data must be evaluated using the KMO and Bartlett's tests. In this study, the KMO value is 0.740 which satisfy the minimum threshold of 0.60. Similarly, the data is considered significant as the value Bartlett's Test is less than 0.001 which is below 0.05 representing that the data is significant.

Common Method Bias and Confirmatory Factor Analysis

Harman's single is used to determine whether or not the study has common method bias. Additionally, the results of an EFA analysis are examined using Harman's single factor test to see if the first extracted component accounts for more than 50% of the variation (Tehseen et al., 2017). To detect and correct for technique bias, this study used statistical and procedural metrics. By choosing questionnaires from a variety of sources, procedural procedures were used to prevent biases stemming from a single source (Devkota et al., 2021). In this study, the total variance for single factor is 31.39% which is under 50% considering that the study doesn't have common method bias. Similarly, CFA aims to establish the sets of observed variables which can better define sharing the co-variances features which will better define the co-variance characteristics constructs (Flora et al., 2012). The decision of whether the model fit is excellent or not is determined by using CMIN/DF (1.871<5), RMR (0.025<0.08), GFI (0.910>0.80), CFI (0.975>0.95), TLI (0.967>0.95), IFI (0.975>0.95) and RMSEA (0.066<0.08) as the fitness indicators. In this study, the model fits the result as all indicators lie under the criteria of CMIN/DF<5, RMR<0.08, GFI>0.8, CFI>0.9, TLI>0.9, IFI>0.9 and RMSEA<0.08 for good fitting.

Measurement Model

Reliability and validity of the data was confirmed by using convergence validity and discriminant validity as shown in table 2. For the data to demonstrate convergent validity, it should satisfy the condition of CR>0.70 and AVE>0.50 (Thapa et al., 2023). Additionally, for the data to demonstrate discriminant validity, it should satisfy the condition of AVE>MSE and square root of AVE>correlation (Sah et al., 2023). The finding of this study includes both convergence and discriminant validity as it satisfies the above-mentioned criteria in table 2.

Table 3 shows that there is a relationship between different constructs i.e. Street Vending, Poverty, Unemployment, Lack of education and Migration. The reliability values have already been confirmed and discussed. The statistics shows that correlation between the construct falls between 0.877 and 0.933. There is no issue of validity and reliability in the dataset.

Table 2: Reliability and Validity

Constructs	Indicators	Factor Loading	Cronbach's Alpha	CR	AVE	MSV
	SV2	.736				
Street Vending	SV3	.813	0.874	0.879	0.710	0.086
	SV5	.865				
	PO1	.832				
Poverty	PO3	.938	0.935	0.939	0.837	0.082
	PO5	.911				
	UN3	.933				
Unemployment	UN4	.862	0.948	0.949	0.862	0.131
	UN5	.927				
	LA3	.872				
Lack of Education	LA4	.781	0.906	0.909	0.770	0.058
	LA5	.882				
	ME1	.932				
Migration	ME2	.887	0.952	0.953	0.870	0.131
	ME5	.922				

Table 3: Latent Construct Correlation

	LA	PO	SV	UN	ME
LA	0.877				
PO	0.080	0.915			
SV	0.180	0.118	0.843		
UN	0.064	0.287	0.139	0.928	
ME	0.241	0.249	0.294	0.362	0.933

Test of Hypothesis

The hypothesis H2, H5, H6, H7 and H10 shows the significant result as p-value is less than 0.05. The test result reveals that migration has significant role in street vending and unemployment. And, poverty has significant role in unemployment. Similarly, the finding also reveals that lack of education and poverty has significant role on migration. However, hypothesis H1, H3, H4, H8 and H9 is not supported by the study. The regression analysis, variable analysis, and assessment of the normalcy pattern are all analyzed using EM in the inferential phase of the study. The model's fitness standards show that it in good fit. The result demonstrates that CMIN/DF is smaller than X2/df (CMIN/DF). The p value for a meaningful association between latent variables and observables is less than 0.05, according to the findings. Because the meaning level of all hypotheses (p-value) is less than 0.05, the hypothesis H2, H5, H6, H7 and H10 is analysis are considerably accepted (see table 4). The outcome shown in the figure 5 is on the basis of SPSS Amos 22. There is total of five constructs with 15 variables. There are three variables (i.e. latent variables, observed variables, and error variables) used in the study. As shown in the path diagram figure 5, total of five are the latent variable and each of them has five observed variables. Similarly, from e1 to e19 are the error variable. To provide it with a scale of measurement, the error components were previously assigned values of 1 as the unstandardized path coefficients.

Figure 5: Path Analysis

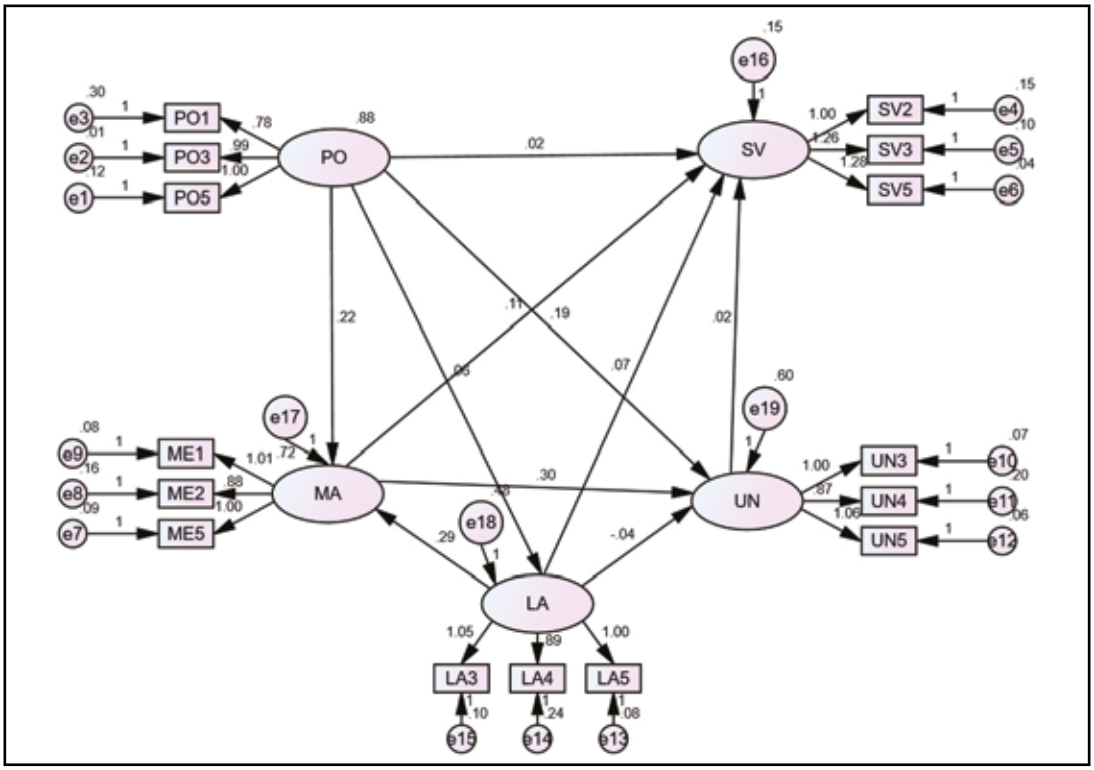


Table 4: Path Estimates for Structural Model

Hypothesis	Estimate	S.E.	C.R.	P	Hypothesis Result
H1: Poverty → Street Vending	.022	.042	.519	.604	Insignificant
H2: Poverty → Migration	.288	.087	3.308	***	Significant
H3: Lack of Education → Street Vending	.065	.043	1.524	.127	Insignificant
H4: Poverty → Lack of education	.079	.073	1.083	.279	Insignificant
H5: Migration → Street Vending	.109	.037	2.953	.003	Significant
H6: Lack of Education → Migration	.280	.090	3.119	.002	Significant
H7: Poverty → Unemployment	.243	.080	3.032	.002	Significant
H8: Unemployment → Street Vending	.016	.038	.407	.684	Insignificant
H9: Lack of Education → Unemployment	-.034	.083	-.416	.677	Insignificant
H10: Unemployment → Migration	.295	.067	4.392	***	Significant

Mediation Analysis

Mediation analysis quantifies the extent to which a variable contributes in the transmission of change from a cause to its consequence. To investigate the impact of the mediating variables, we used the Sobel test. After the successfully completing of the Sobel test, it shows that $p \leq 0.05$, which implies that mediating variables such as unemployment (UN), Migration (ME), and lack of education (LA) has mediating effect on the relationship between the poverty (PO): independent variable and street vending (SV): dependent variable. The mediation analysis is shown in table 5.

Table 5: Mediation Analysis

			Mediating effect		Test statistic	p-value
			b	Sb		
H11: Poverty → Unemployment → Street Vending	A	0.248	0.139	0.042	0.379	0.70
	SA	0.65				
H12: Poverty → Migration → Street Vending	A	0.215	0.614	0.039	2.504	0.012
	SA	0.65				
H13: Poverty → Lack of Education → Street Vending	A	0.700	0.097	0.054	1.794	0.073
	SA	0.019				

As per the table, the hypotheses H11 and H13 are statistically insignificant. Thus, in contrast, the hypothesis H12 is accepted since the p value is less than 0.05, which indicates that migration mediates the relationship between poverty and street selling. The results suggest that unemployment doesn't play any mediating function between poverty and street vending. Because the research was done in a short period of time to meet a degree requirement, it was limited to a single place. More study on this topic is needed in other parts of the country to assess the opinion of street vendors. This study only used a questionnaire survey approach; however, in addition to these surveys, a few in-depth interviews or focused group discussions might have aided in understanding the underlying causes for perceived positive and negative impacts and participation in street vending.

Discussion

In order to develop and test the link between the construct, different reliability test and multiple linear correlation were utilized in the study. The study focuses on investigating the impact of poverty, unemployment, lack of education, migration on dependent variable street vending. The supported hypothesis 2 has significant impact on the migration. This hypothesis supported by the study of de Bustillo and Antón (2011) stated that poverty is considered as a driving force behind migration from impoverished or rural regions to large or capital cities, as well as from emerging nations to developed ones. Likewise, hypothesis 5 is also significant which states that migration has a significant impact on street vending. This hypothesis supports the study of Adhikari (2018) that the major driver of the rise of the urban informal sector is rural-urban migration. Urban areas frequently have better public infrastructure, and the urban informal economy offers better chances than the rural one. Earnings in urban informal work are higher than in rural jobs. Similarly, this study supported hypothesis 6 which depicts that low education impact on the migration of street vendors, which supports the study conducted by Al-Jundi et al. (2020) which proved that people with a poor degree of education have a low level of skills. They were unable to find work in their impoverished and insecure cities. As a result, people have a motivation to emigrate forcibly, either domestically or internationally, in quest of better economic opportunities. In a similar vein, hypothesis number seven asserts that unemployment is significantly impacted by poverty. Al-Jundi et al. (2020) study shows that lack of growth in a nation results in significant unemployment owing to a lack of financial resources, and that this increases street selling. Likewise, hypothesis 10 states that unemployment has an impact on migration of street vending. Truong (2018) found that street vendors migrate from rural areas in search of better income opportunities and no job offer from rural areas. Similarly, skilled and educated workers also migrate from underdeveloped to developed countries for better job opportunity (Oberman, 2015). Similarly, Husain et al. (2015) replicate that the preponderance of vendors in Asia come from remote regions and are compelled to work as street vendors since they often have poor literacy standards and find it difficult to get jobs in the official economy.

Conclusion and Recommendations

Socio-economic effect of street vendors during COVID-19 was analyzed in this study. Various reviews of the literature were carried out to provide direction for future research and to broaden knowledge in the subject area. Primary and secondary data were collected through checklist, webpages, magazines, and papers, and descriptive and inferential statistical analysis was performed to provide the result of the study. 202 respondents were interviewed to analyze the socio-economic effect of street vendors and factors influencing street vending activities. The structural equation model was used for descriptive and inferential analysis. Descriptive analysis result shows that majority of male population aged between 31-40 were involved in street vending. Similarly, lack of education is one of the aspects, which leads to carry out street vending. Moreover, majority of street vendors are married, have nuclear family having 4-6 family members and earn between Rs. 500-700/day who usually migrate from other districts of Nepal for searching better opportunities. SEM result shows that migration has significant role in street vending and unemployment. Likewise, poverty has significant role in unemployment likewise, lack of education and poverty has significant role on migration. Moreover, Sobel test shows that migration play mediating role between poverty and Street Vending. There should be an appropriate legal and policy framework that supports and promotes an appropriate environment for street vendors to earn a living in urban areas, and the government should make it easier to control street vending by eliminating or revising restrictive rules and implementing appropriate legislation to legalize vending areas in urban development plans. Based on the above findings, the researcher recommends: local government and authorities should take initiatives in migration management and street vendors should be getting the provision of license, registration and vending zones in order to manage street vendors in urban areas are some strategies to enhance the street vending business.

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