

INFORMAL ECONOMY, SOCIAL INEQUALITIES AND STREET VENDORS IN PAKISTAN: GOVERNANCE, POLITICS AND TOURISM IN PANDEMIC

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ABSTRACT

Street Vendors have significant role in informal economic structure. Tourist spots are major points of economic activities of these street vendors and they have deep connections with governance and politics. COVID-19 crisis has accounted income downturns and a big halt for nexus between street vendors and tourism. Street vendors and hawkers make living and earn income for their households through selling goods to tourists at roads intersections, local markets and sidewalks located in tourists' areas. They are exposed to severe vulnerability due to risks and impacts of dangers on tourism who are large and visible workforce. This study examines the vulnerability of street vendors located in tourists' areas and depending on tourism activities. The conceptual framework incorporates the role of resilience support and relief packages for decreasing the vulnerability of street vendors. The susceptibility of street vendors is inter-correlated with latent variables using partial least squares structural equation model (PLS-SEM). The results illustrate that the COVID-19 crisis is not only intensifying pre-existing social inequalities but also forms new imbalances trials in absence of government involvement. There is extreme challenge resorted against the punitive measures for overcoming crisis, as street vendors' dilemma is seldomly considered in government policies and tourism planning. Thus, the pandemic may not develop a balancing social distribution for magnifying economic vulnerability of the street vendors. The ultramodern retrieval is better and significant for the susceptible and marginalized population of street vendors.

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1. INTRODUCTION

The informal economy is an expressed the fault lines in elitist formal economic structure in Pakistan. The rising inequalities resulted the informality of economy which led to creation of street vendors specially at tourist points. Pakistan was taken as a case study due to uneven social structure and post-colonial orientation. The formal economy is captured by elite classes and informal economy is controlled by street vendors through state managers and bureaucracy. The vivid trouble of the COVID-19 in the world has impacted businesses of various sectors.

These sectors include manufacturing, commerce, exports, imports and the one followed by hospitality, tourism industry and so on (Carr, 2020; Gössling et al., 2020; Wen et al., 2020). The travel and tourism sector are among those having significant influence of pandemic. This led the area with the restricted source of income (Baum & Hai, 2020; Resnick, 2020). The interface of tourism and exploration of epidemic lies with a series of challenges and deep fluctuations. The instability is stroked at lesser developed extents which need to be protected and maintained with the vulnerability of small transactions (Muscogiuri et al., 2020; Corburn et al., 2020; Benjamin et al., 2020). Further the tourist's spots are obscure with limited or no visit of traveler that contributes for a difficult life and earning. Various businesses and jobs of the people associated with the hospitality and tourism sector are negatively predisposed by the event of coronavirus (Patel & Shah, 2020; Wilkinson, 2020; Meher et al., 2020; Barratt & Aldridge, 2020). Even individuals and countries pledge for limiting the pandemic affects, are unable to break the loss that is extensive and all-embracing.

The tourism stakeholder's relying on the vast informal sector that keeps much of the world from going starved (Bloch, 2020). People working in informal sector are among the worst-affected during Covid-19 due to lockdown and social distancing. Adding hard to their struggle for livelihoods and decrease in income, there is serious concern about the people working in the informal economy (Pizarro, 2020; Moreno, 2020; Dwivedi, 2020; Benjamin et al., 2020; Asante & Mills, 2020). The devastations of the pandemic are severe and these have disrupted their ability to fix the amenities. Specifically, the vendors working on streets, parking lots and sidewalks located in tourism sites are similarly obstructed (Mane, 2020). These vendors for the fulfilment of the basic needs, are providing an exclusive service to the people of bourgeois income (Kesar et al., 2020; Shafi et al., 2020; Ojong, 2020; Chackalackal; Zhong & Scott, 2020; Koonin, 2020; Nguyen & Vu, 2020; Sera et al., 2020). It left many in a fight for surviving their livelihoods and marginalized. The dreadful impact on the tourism is throwing street vendors to make serious adjustments in life. These adjustments are to maintain their very standards of living, following the significant drop in foot traffic and threat to be reduced for the tourist movement (Mckercher, 2020).

The appalling threat can be felt with the circumstances where street vendors are informally vending on tourist areas. But there is extreme challenge resorted against the punitive measures for overcoming COVID-19 crisis as their dilemma is seldom considered in government policies and tourism planning (Elizabeth, 2020). This trial of executing the pandemic becomes crucial for the countries to uplift the livelihoods of street vendors associated with tourist spots due to lack of safety net. Various studies (Esayas & Mulugeta, 2020; Musavengane et al., 2020; Çakmak & Çenesiz, 2020; Truong et al., 2020; Basu & Nagendra, 2020; Piazzoni & Jamme, 2020) have considered the vulnerability of different socioeconomic groups of informal workers to the disaster of COVID-19 and responses of those marginalized community. These studies focused on the relationship between socio-economic vulnerability and poverty by considering the scale of the pandemic around the globe (Krause, 2020; Amoako & Frimpong Boamah, 2020; Musavengane et al., 2020; Aufseeser, 2020; Uwizeye et al., 2020). Further, the studies also confirmed that COVID-19 has a significant and adverse effect on the vulnerability of street vendors which pushed them towards poverty. These investigations considered the impact of COVID-19 on groups of informal sectors (Trupp, 2020; Cakmak, 2020).

The vulnerability of street vendors located in tourist areas are from local suffered critically in downturn of tourism activities (Mason, 2020; Young, 2020). Absence of government policy support for tourism planning and relevant stakeholders raised the question on fragile resilient support of street vendors located in tourist areas. The study examines the adherence of COVID-19 vulnerability, and relative income deprivation of the street vendors. It includes the individuals and local community connected to street vending located in tourist area. Further, the analysis is based on two questions; first, how COVID-19 contributing for vulnerability, second, which factors impacting on susceptibility during COVID-19 sufferings due to decline of tourism activities. COVID-19 vulnerability and street vendors' in a country such as Pakistan is the prerequisite measures as the eradication of poverty is an overt aim for the governments in post disastrous setups (Turner et al., 2020).

2. THEORETICAL BACKGROUND

The study anticipates the literature broadly to view the indicators that refer to the various aspects of vulnerability in nexus between tourism and street vendors (Carr, 2020). Vulnerability theory has gained understanding for the role of government to respond affirmatively. The state has the responsibility to provide equal access and increase resilience for tourism related street vendors. These provide an intrinsic accumulation of damages contributing for the enhancing vulnerability of the street vendors during COVID-19 (Gössling et al., 2020). Vending becomes irrelevant when social and economic activities are at the low side of events on tourist spots (Shafi et al., 2020). The destinations are attractive when there is significant movement of people approaching for passing their leisure time (Wen et al., 2020). For that matter, this study is counterfeit with central variable of

vulnerability with various latent variables. It accumulates the potential socioeconomic damages for the street vendors; the model is used to reveal the condition to sustain the negative impacts of COVID-19 in terms of access to resources for living during lockdown and partial lockdown. This provision can offer street vendors a flexible assistance in terms of their business to get away from the borrowing arrangement against the disastrous impacts on tourism activities (Ojong, 2020). The endorsement of such policy support is multilateral and possessive for sustaining the small businesses on respective spots discussed in the study. The COVID-19 vulnerability is the central variable and it contributes for indicators of coping capacity, resilient support policy, risk perception and cash programs.

2.1 *Street Vendors Vulnerability*

The persistence of vulnerability is the relationship of income loss which drifts to non-monetary dimensions. It links the wide-ranging conditions with vulnerability and the deprivation of essential resources and opportunities to which every human has the right. The street vendors were having capacity to earn but restricted to stay at their homes due to pandemic (Aznar et al., 2020). In other terms vending becomes a pronounced deprivation during COVID-19 crisis with low activity of tourism. For vendors poor access to different tourists' areas led them to become inadequate trader with no better opportunity or the insufficient capacity and physical security (Contreras et al., 2020). This study considers COVID-19 crisis as disaster for the street vendors and towards their active role in the tourism activities. The encouraging policy is based on the reforms to curb and reduce the pandemic effects on the nexus between street vendors and tourism with durable support. Studies Musavengane et al., (2020), Amoako & Frimpong Boamah (2020) and Aufseeser (2020) confirmed the impact of COVID-19 on street vendors with the sufficient amount of the risk and uncertainty which may be addressed through rehabilitative or post pandemic policy. A consolidating push to boost growth on the tourist spots along with the vending is directing to stabilize the calamitous situation of street vendors. The framework of the study is illustrated in figure 1 that examines interrelated impacts of each factor on street vendors' vulnerability.

2.2 *Hypotheses development*

2.2.1 *Resilient Policy Support (RPS)*

The resilient policy support is intended to boost the people or groups in reducing the hazards or adversities. At this point, these are the measures considered and reviewed for the positive and direct rehabilitation of tourist and street vendors (Moreno, 2020). The indirect planning and policy of the government is not aligned in accordance with expected positive outcomes to use and benefited from the vendors. This may be possible when a compressive framework is scheduled with the frequent revisions in the existing trends of what these poor fellows need to get over the COVID-19 pandemic. The alternative social support for basic needs and continuity of income source may ensure the vendors' position to be resumed (Dwivedi, 2020). The direct and positive measures assisting tourism vendors who have been protected in many realms. The reopening of sustainable vending and the income loss is more ostensible with relief based cash programs. According to the studies Benjamin et al. (2020), Asante & Mills (2020), it is the support for generating livelihoods and attached profits towards national treasury. Following this, it is also the improved social and economic conditions of vendors if they are able to counter the paramount effects of COVID-19 through a resilient tourist vending in Pakistan. This leads to:

- H1: Resilient support policy can have direct and positive effect to decrease COVID-19 vulnerability of street vendors located in tourist areas.
- H2: Resilient support policy can have indirect and positive effect on socio-economic conditions of street vendors located in tourist areas.
- H3: Resilient support policy can have indirect and positive impact on abilities to cope of the street vendors located in tourist areas.
- H4: Resilient support policy can have indirect and positive impact on cash programs for relief of street vendors located in tourist areas.

2.2.2 *Socioeconomic Conditions (SC)*

The socioeconomic conditions are related with the economic and social combined measures of person's experience (Paul et al., 2019). In this study, this is used as the positive and direct condition of street vendors

located in tourist areas to their livelihoods and the damage they faced during COVID-19 in Pakistan. The relevant studies focus on the effects of natural disaster and provide an established connection between socioeconomic conditions and defenselessness of street vendors (Boonjubun, 2017; Hidalgo & Cuesta, 2018). They have no business or resources to continue with socioeconomic status and to sustain their income. It led vendors to rely on the available resources which are not able to fulfill their basic needs. The determinants of socioeconomic status for street vendors are including source of income for interacting and managing vending during coronavirus (Belay, 2016). These factors of vulnerability and poor social condition of street vendors are relevant to their livelihoods. Hence, the street vendors are at the low economic state of affairs which shows the impact of crisis (Belay, 2016). Providing to this vulnerability, it is hypothesized that:

H5: Better socioeconomic conditions can have direct and positive impact to decrease COVID-19 impact on street vendors.

2.2.3 *Coping Capacity (CC)*

The ability to cope is the capacity to respond to effects of disasters through positive skills and direct resources (Wong et al., 2020). In this research, it is the potential of street vendors to alter the negative into positive influence of the COVID-19 in Pakistan. Their coping ability is the positive and direct component to measure the level of vulnerability (Fraenkel & Cho, 2020). The response against the pandemic is measured looking in to economic capacity, savings, assets and alternative livelihoods sources during downturns of tourism activities. The scholars have measured abilities to cope with coronavirus disastrous impact on earning (Wang, 2020). For the effective response or enhancing capability of street vendors the assets, savings and alternative sources can be part of the street vendors where they can survive their livelihoods. This leads to:

H6: Better abilities to cope can have direct and positive effect to get out of COVID-19 crisis.

2.2.4 *Cash Programs (CP)*

The cash programs are proposed to assist the economic hardship of vulnerable groups or the individual. During the time of crisis such initiatives brought much of the attention of state to overcome the negative impact with cash program in Pakistan. The personal approach of individuals about the severity of a vulnerability and low relief packages can serve as a driver of social safety. The studies (Lohiniva et al., 2020; Hedima et al., 2020) also elucidated the significance of these programs. The street vendors in this study are at a higher risk with probable chance to leave their services for the tourists (Dai et al., 2020). From the virus-prone areas and spots they received the inadequate relief package following the availability and non-availability of foot walkers. The hazard exposure and capacity of street vendors is minimized through the disastrous relief and resilience drivers (Jang et al., 2020). These all are related to relief and incapacitating the pandemic which provides that:

H7: Cash relief programs can have direct and positive impact to decrease vulnerability.

H8: Cash relief program can have indirect and positive effect on socioeconomic conditions to decrease vulnerability

2.2.5 *Health Services (HS)*

The health services are the maintenance, and improved health of the people through prevention, diagnosis and treatment. In this paper it is the major concern of corona cases reported during the street vending services (Truong et al., 2020). It is also interrelated positive and direct impacts on health of poor communities and those vendors' families. Social, mental, physical and trouble of each street vendors provide less interaction with concerned hospitals (Basu & Nagendra, 2020). The disease risk to be rapid spread large number of people offer to limit the visitors at destination spots. The street vendors have to go through unrest, fear, stress and trauma as explained by the studies (Musavengane: Çakmak & Çenesiz, 2020). The poor quality of health services aggravated the situation. The facts about the little or no access of resources and health services can affect the negative impacts of coronavirus on the street vendors. Consequently, the hypothesis is:

H9: Better maintenance of health service can have direct and positive effect to decrease vulnerability of street vendors located in tourist areas.

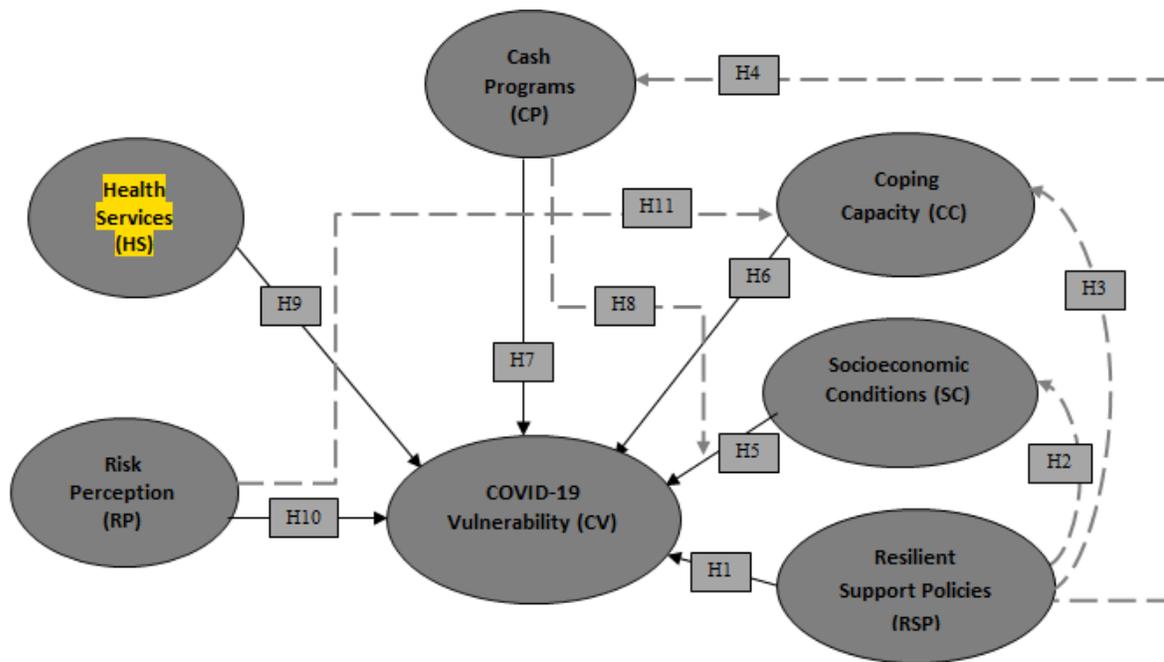
2.2.6 Risk Perception (RP)

The risk perception is the subjective judgment that people contain about severity of risk or characteristics associated with particular perception (Truong et al., 2020). For this research it is the insight of a street vendor which is amplifying their positive and negative perception to the loss during the times of COVID-19 (Barbhuiya & Chatterjee, 2020). Their perception is multidimensional because of reduced interaction which is not simply a reflection of what to say and when to say for availability of informal food. The risk variable is inclusive and considered as indicator of the positive and direct impacts of COVID-19 on street vendors where they have to restrict their business during the crucial time (Friedrich et al., 2020). Other aspects of the perception that are expected for vendor’s life in times of the crisis. The negative perception through which the event of COVID-19 contributes for increasing poverty of the street vendors. The usual interaction of travelers and vendors is at the risk and it demands for the informal workers to live with disrupted perception

H10: Good risk perception has direct and positive effect to decrease COVID-19 vulnerability of street vendors.

H11: Risk perception can have indirect and positive impact to enhance ability to cope street vendor’s vulnerability.

Figure1. Conceptual Framework



Note: The dash line arrows indicate mediating effects. RPS; Resilient Policy Support, SC; Socioeconomic Conditions, CC; Cope Capacity, CP; Cash Programs, HS; Health Services, RP; Risk Perception.

3. METHOD

The vulnerability of street vendors requires a comprehensive review of method to be applied for a cohesive conclusion. The quantitative method is considered to study the impact of COVID-19 vulnerability on the street vendors located in tourist areas.

3.1 Study Context

COVID-19 pandemic has reckless impacts on the livelihood of street vendors located in tourist areas in the north of Pakistan. Pakistan was ranked the world’s top travel destination by the British Backpacker Society in 2018 (Sana, 2018). Tourism industry is suffered from many hazards due to COVID-19 in Pakistan. The tourists

vending fascinates the visitors to the destinations in northern areas especially famous spots Patriata, Changla Gali, Nathiagali, Bhurban and Ayubia. The unspoiled natural beauty and stunning views of the mountains encourage street vendors a service to footpath customers those enjoying the outdoor shopping, with selling of seasonal items, grocery, local branded products, ornaments, hawkers 'stuff, decoration, flower glasses, hawkers (tea coffee, local fruits, and photographers carrying the carts (Amoako & Frimpong Boamah, 2020). The popular spots are located at an altitude of 6000-7000 feet above the level of sea (Zaman et al., 2020).

The selected locations are at the distance of 120-200 km from the federal capital. There are vendors living in this area where they vend locally designed artifacts and tools developed on their own. Similarly, few people are vending on the spots where the local development authority allowed them to continue (Javed et al., 2020) The spots and visiting sites are established as part of international movement for green and clean locations. In view of that, the state has spent significant amount from federal budget to sustain tourism related activities and provide an opportunity for a fair street vending (Baig et al., 2020). This resulted for a stable vending supporting socioeconomic vulnerability for poor class of society but the distortion of COVID-19 has led the vendors to stay at their homes. The increase livelihood sufferings of street vendors persuaded this research to select five tourist spots (Patriata, Changla Gali, Nathiagali, Bhurban and Ayubia) in the study area while following the survey approach to address COVID-19 vulnerability.

3.2 *Sampling and data collection*

The conceptual framework (figure 1) indicates the impact of various factors contributing on the street vendors' vulnerability due to COVID disastrous. It captures the relationship of resilient policy support, capacities to cope, cash programs, socioeconomic conditions, health services and risk perception with vulnerability. A survey was prepared and translated into local language with brief purpose of the study. The research team identified the local communities with the help of community members and municipalities staff. The data is collected from vendors linked to five tourist sites living across surrounded local community areas. Data is collected from local sellers vending on daily basis without fixed tangible stalls whose solemnly income source is depending on tourists' activities. The collection of such a multilevel data from street vendors across various communities is to consider vulnerability of important and large but invisible workforce in tourism and hospitality.

Ten street vendors were asked to respond to the survey for pre-test to improve interpretation of questions. After refining the interpretation of survey, the data was collected on weekly basis following preventive measures from semi-lockdown to complete reopening. It was confirmed that the participation of the respondents was voluntary. Four months June-September 2020 duration was spent on data collection and the sampling technique was consisted of random distribution of survey to 500 vendors across five tourists' sites. The survey was personally administered with the coordination of community members and municipalities staff. Preliminary screening of survey eliminated incomplete responses and total 480 surveys were retained for analysis.

3.3 *Measurement scales*

The relevant literature related to disastrous and COVID-19 is used to establish construct sources (Baum & Hai, 2020; Barbhuiya & Chatterjee, 2020; Forkuor et al., 2017; Cuvi, J. 2016; Palacios, R. 2016; Boonjubun, C. 2017; Truong, 2018; Aznar-Crespo et al., 2020). The items for questionnaire are modified according to the context of street vendors' vulnerability due to obstruction and dropping of tourists during pandemic. The ideas are also included from the aspects of futurists and building back better (BBB) for vending in resilience policy domain. The COVID-19 vulnerability scales are classified 1 being 'least vulnerable' to 5 being 'most vulnerable'. To measure the vulnerability based on street vendors' perceptions due to pandemic are depending on various factors. In calculating COVID-19 vulnerability (Ahmad, et. al., 2020; Piazzoni & Jamme, 2020; The Lancet, 2020), four items are used for each construct. Street vendors' vulnerability is measured by six key constructs; resilience support policy, socioeconomic conditions, abilities to cope, cash programs, health services and risk perception. More specifically, resilience policy support construct and items ideas (RPS-four items) are adopted from Moreno (2020); Dwivedi (2020); Benjamin et al., (2020); Asante & Mills (2020), socioeconomic conditions (SC-four items) from Paul et al., (2019); Belay (2016); Boonjubun (2017); Hidalgo & Cuesta (2018), coping capacity (CC-four items) from Wong et al. (2020); Liu et al. (2020); Fraenkel & Cho (2020); Wang (2020), cash programs (CP-four items) from Dai et al., (2020); Hedima et al. (2020); Jang et al. (2020); Lohiniva et al. (2020), health services (HS-four items) from Musavengane et al. (2020); Çakmak & Çenesiz (2020); Truong et al. (2020); Basu & Nagendra (2020) and risk perception (RP-four items) from Barbhuiya & Chatterjee (2020), Friedrich et al. (2020) and Ma et al. (2020).

4. DATA ANALYSIS AND RESULTS

The demographic attributes of the respondents are displayed in table 3. The representation of female participants is 15% and 68% of the sample is 30 to 35 years old and 25% between 36 to 50 years. Almost 70 % of the street vendors are married and living in joint family system with two or more dependents. In terms of years attached with same vending, 59% of the sample indicates more than fifteen years and 40 % more than ten years and rest indicates more than 5 years.

Table1. Street vendors sample characteristics

| Characteristics | Response | Frequency | Percentage (%) based on 480) |
|------------------------------------|---|-----------|------------------------------|
| Gender | Female | 72 | 15 |
| | Male | 408 | 85 |
| Age in years | 20-30 | 144 | 30 |
| | 31-45 | 216 | 45 |
| | 46-60 | 72 | 15 |
| | High school | 72 | 15 |
| | Elementary | 96 | 20 |
| Educational Level | Primary | 120 | 25 |
| | None | 192 | 15 |
| Marital status | Married | 427 | 89 |
| | Singe | 53 | 11 |
| Family System | Joint | 360 | 75 |
| | Separate | 120 | 25 |
| Dependents (Siblings and partners) | 3 - 5 | 338 | 70 |
| | 1 - 3 | 142 | 40 |
| Experience | More than 5 years | 48 | 10 |
| | More than 10 years | 288 | 60 |
| | More than 15 years | 144 | 30 |
| Vending Type | Toys Stuff (local mud made, baskets) | 83 | 17 |
| | Ornaments (sun glasses, gems, jewelry, umbrellas, scarfs, conical hats etc) | 72 | 15 |
| | Food Stuff (corns, tea, coffee, local fruits etc) | 185 | 38 |
| | Photographers and ride carriers (carts, horses) | 140 | 29 |
| Vending Work | Full Time Livelihood | 432 | 90 |
| | Spare time/seasonal (after cultivation and harvesting or depending on season) | 48 | 10 |

Authors field survey (June-September 2020) following preventive measures during semi-lockdown to complete reopening

4.1 PLS-SEM modelling

Partial least squares structural equation modeling (PLS-SEM) is used to test the model through SmartPLS 3 (Sarstedt et al., 2017). PLS-SEM model is allows much flexible in terms of data requirement and constructs

relationships. The conceptual framework shows the latent variables that represent hypotheses. Inner and outer models evaluation in PLS-SEM refers to structural and measurement models respectively (Ali et al., 2017; Haenlein & Kaplan, 2004; Ringle et al., 2014).

4.2 Measurement model

The outer model is assessed to examine reliability and validity of latent variables (Hair et al., 2016). Reliability is assessed on a set of standard metrics like indicator loadings, composite reliability and internal consistency reliability. It is shown in table 4; internal consistency (0.87 to 0.95) and composite reliability (0.92 to 0.97) are within range. In indicator loadings of the latent constructs, all items have minimum load of 0.81 and maximum load of 0.95. Therefore factor loadings which are all above a threshold of 0.6 (Henseler et al., 2015).

Average variance extracted (AVE) are above 0.7 as per requirements. It confirms the convergent validity meeting minimum threshold. Furthermore, the discriminant validity of the measures is evaluated. The Average variance extracted of each construct is of higher value than the squared coefficient (Gholami et al., 2013; Hanseler et al., 2015).

Table 2. Measurement Model (Factors loading, reliability and validity)

| Constructs and Items | Loadings | Means | S.dev | t-values | Cronbach's Alpha | AVE | CR | Average > Corr2 |
|---|----------|-------|-------|----------|------------------|------|------|-----------------|
| Resilient Support Policies (RSP) | | | | | 0.95 | 0.83 | 0.97 | .83>.624 |
| RPS1. The support policy by local government to enhance resilience | .93 | 0.936 | .010 | 77.00 | | | | |
| RPS2. Good support of policy to overcome the pandemic by reducing economic hazards | .94 | 0.945 | .007 | 129.87 | | | | |
| RPS3. Government policy framework is important for damages | .95 | 0.958 | .006 | 170.47 | | | | |
| RPS4. Advance recovery trends are followed in government support for resilience | .94 | 0.942 | .008 | 112.89 | | | | |
| Socioeconomic Conditions (SC) | | | | | 0.93 | 0.83 | 0.95 | .83>.615 |
| SC1. Monthly income loss due to pandemic | .92 | 0.924 | .010 | 94.15 | | | | |
| SC2. Distance from home to vending place | .93 | 0.931 | .011 | 81.77 | | | | |
| SC3. The vending types damaged more | .91 | 0.917 | .015 | 62.15 | | | | |
| SC4. Vending area | .88 | 0.885 | .022 | 39.81 | | | | |
| Abilities to Cope (AC) | | | | | 0.87 | 0.77 | 0.93 | .77>.661 |
| AC1. The economic capacity to overcome pandemic effects | .90 | 0.906 | .012 | 76.30 | | | | |
| AC2. Savings for future | .92 | 0.923 | .009 | 97.42 | | | | |
| AC3. Assets other than vending stock | .90 | 0.905 | .014 | 63.55 | | | | |
| AC4. Earning source of other family members | .81 | 0.815 | .036 | 22.81 | | | | |
| Cash Programs (CP) | | | | | 0.91 | 0.85 | 0.94 | .85>.719 |
| CP1. The scarcity due to income loss is possibly alleviated through relief packages | .92 | 0.923 | 0.01 | 89.92 | | | | |
| CP2. Cash programs help to survive | .92 | 0.924 | 0.01 | 94.15 | | | | |
| CP3. Unconditional cash programs sufficient | .93 | 0.931 | 0.01 | 81.77 | | | | |

Multicultural Education

| | | | | | | | | |
|---|-----|-------|-------|--------|------|------|------|----------|
| CP4. Direct planned cash relief is helpful | .93 | 0.931 | 0.01 | 102.75 | | | | |
| Health Services (HS) | | | | | 0.90 | 0.72 | 0.92 | .72>.615 |
| HS1. Facilities of hospitals or health care centers nearby | .85 | 0.851 | 0.01 | 46.03 | | | | |
| HS2. Access of basic water services | .87 | 0.876 | 0.02 | 39.77 | | | | |
| HS3. Food accessibility | .83 | 0.834 | 0.02 | 36.83 | | | | |
| HS4. Psychological issues due to pandemic | .79 | 0.796 | 0.03 | 20.94 | | | | |
| Risk Perception (RP) | | | | | 0.88 | 0.81 | 0.93 | .81>.719 |
| RP1. Livelihoods is maintained during pandemic | .92 | 0.923 | 0.009 | 97.42 | | | | |
| RP2. Stock of vending lost | .90 | 0.905 | 0.01 | 63.55 | | | | |
| RP3. Any future help expected plan for such a pandemics | .89 | 0.892 | 0.01 | 50.24 | | | | |
| RP4. The help and social protection you seek | .85 | 0.851 | 0.01 | 46.03 | | | | |
| COVID-19 Vulnerability (CV) | | | | | 0.95 | 0.82 | 0.96 | .82>.624 |
| CV1. The income loss drift is devastated | .90 | 0.906 | 0.01 | 76.30 | | | | |
| CV2. The livelihoods damage | .91 | 0.911 | 0.01 | 58.05 | | | | |
| CV3. The consequence of pandemic resulted in prevailing poverty | .90 | 0.905 | 0.01 | 41.71 | | | | |
| CV4. The source of earning situation | .92 | 0.920 | 0.01 | 71.17 | | | | |

4.3 Structural Model

Structural model or inner model is used to test the hypothesis relationship between the latent constructs. The significance and magnitude of the proposed paths are assessed via bootstrapping procedure (Hair et al, 2014).

3.4.1 Model predictive accuracy and relevance

The determination coefficient R² for the model accuracies in the model of endogenous variables to measure the models and Q² is also used to measure the models. In addition to predictive relevance, all predictive accuracies of endogenous variables are COVID-Vulnerability 0.96, Abilities to Cope 0.91, Cash Programs 0.68 and Socioeconomic Conditions 0.59. It indicates the predictive accuracies are within moderate and substantial (weak 0.25, moderate 0.5, & substantial 0.75), so predictive relevance of variables is established (Hair et al., 2016).

3.4.2 Hypothesis testing

The next structural model reveals direct effect and indirect effect that determine path coefficients. Indirect effect that quantifies impact with intervening variables. The relationships between exogenous and endogenous variables are evaluated on the basis of significant level of β value on estimate bootstrapping procedure which shows the indirect effect (Hair et al, 2016).

Direct effect

It is shown in the path analysis (table 5) that policy supports resilience and have a significant positive effect on COVID-19 vulnerability ($p < .05$) and socioeconomic conditions also have a direct and significant impact ($p < .05$). Abilities to cope also show significant impact on COVID-19 vulnerability ($p < .05$). It is indicated that cash programs ($\beta = 0.41, p < 0.05$), health services ($\beta = 0.22 p < 0.05$) and risk perception ($\beta = 0.35 p < 0.05$) show strong direct impact on vulnerability. These direct impacts support hypothesis 1, 5, 6, 7, 9 and 10.

Indirect effect

The inner model further shows the indirect relationships that indicate strong impact of resilient policy support on enhance socioeconomic conditions ($\beta = 0.62 p < .05$), abilities to cope ($\beta = 0.22 p < 0.05$) and on cash programs

($\beta = 0.42$ $p < 0.05$). Equally cash programs have indirect impact on socioeconomic conditions in creating impact on vulnerability. Same risk perception is also having impact on abilities to cope. This all supports hypothesis 2, 3, 4, 8 and 11.

Table 3. Path coefficient of inner model: direct and indirect relationships

| Relationships | Coefficient (β) | Mean | Standard deviation | T-value | P- value | Remarks |
|------------------------|-------------------------|-------|--------------------|---------|----------|---------------|
| <i>Direct effect</i> | | | | | | |
| RSP -> CV | 0.897 | 0.896 | 0.028 | 36.81 | | H1 supported |
| SC -> CV | 0.825 | 0.830 | 0.032 | 22.03 | | H5 supported |
| AC -> CV | 0.717 | 0.718 | 0.028 | 18.32 | | H6 supported |
| CP -> CV | 0.412 | 0.410 | 0.092 | 6.106 | | H7 supported |
| HS -> CV | 0.224 | 0.229 | 0.105 | 2.401 | | H9 supported |
| RP -> CV | 0.354 | 0.349 | 0.083 | 3.514 | | H10 supported |
| <i>Indirect effect</i> | | | | | | |
| RSP -> SC | 0.620 | 0.619 | 0.021 | 8.630 | | H2 supported |
| RSP -> AC | 0.209 | 0.212 | 0.061 | 2.322 | | H3 supported |
| RSP -> CP | 0.426 | 0.427 | 0.063 | 6.012 | | H4 supported |
| CP -> SC | 0.256 | 0.251 | 0.105 | 2.405 | | H8 supported |
| RP -> AC | 0.269 | 0.275 | 0.097 | 2.801 | | H11 supported |

5. DISCUSSION

This study on the COVID-19 vulnerability of street vendors is examined using the PLS-SEM structural equation model. The identified variables are six in their number; resilient support policy, socio-economic conditions, abilities to cope, cash programs, health services and risk perception. These variables are incorporated with the structure of model along with the measurement of their values through systematic data input information. The impacts of COVID-19 on the street vendors lead them to vulnerability which closes them to poverty with partial resources to rejoin the traveling activities and vending. Abilities to cope, cash programs and risk perception are having weak but significant relationship with vulnerability. But resilient policy support is having strong impact on enhancing socioeconomic conditions, abilities to cope and cash programs in lessening vulnerability. The services of street vendors are restricted as these are driven by the flow of people visiting the spots, northern zones and spaces included in the demographics. The elevation of the street vending business is paramount, and this cannot further without a sustainable socioeconomic condition. The status of key factors is similar for resilient tourist vending and the reduced policy support (A. Duarte Alonso et al, 2020; F. Hao, et al., 2020). Variables and interrelationships disclose that each of them is the reinforcement for others to identify the very causes of devastated street vendors. It further prioritized the need for initiatives taken to reduce the impacts of the COVID-19.

An integration of such measures as policy support is correspondingly auxiliary to decrease the other risks of pandemic (Truong et al., 2020; Basu & Nagendra, 2020; Piazzoni & Jamme, 2020). It enlightens for comprehending the planning and management that could lessen the poor impacts of COVID-19. The intersection of limited cash and resilient policy support is ultimately not in line with the broader vulnerability coping strategy. This pursues vendors to get away from an unfavorable situation of pandemic. A worst scale of travelling magnitude lead to enhanced poverty and limited tourists' exposure of street vendors. These reasons for extended vulnerability are correlating the fragile social position and planning of executive indicating the absence of coping capacity apparatus. The signs of vending vulnerability are unequal distribution of financial support by the state resources to manage the pandemic. The indirect effects show a high impact of COVID-19 on the economic and social status of the vending services. The contribution and size of producing a significant amount from the travelling products is possible when a smart lockdown is facilitated by the authorities. The fear of tendering towards pandemic allows most of the vendors to counter the adverse effects and their ultimate vulnerability. It

contributes for the nature of decisions that do not comply the vulnerability in terms of rationalization and planning for future impacts of COVID-19.

During the survey it is observed that influential aspects of the local vending are diverted with the weak stream of travelers to tourist spots. The lack of the arrangements to save the divested situation of street vendors seems unbalanced. Physical locations of these spots are changed and the weather is followed by the scenarios of unstreak system of managing the tourists. The coping capacity is not able to respond the incumbent crisis, supported by the vulnerable population of street vendors. Travelers are not attending areas in their frequent routines and especially during the COVID-19 event which cemented for extreme sense of deprivation among the groups and workers of street vending. In the current research it is demonstrated that PLS-SEM model is suitable for assessing the vulnerability and the crisis situation of vendors that brings a willful disaster. The slow progress of rehabilitation and easy interaction of street vendors with the travelers on these spots is mainly forced by the fear of extending the pandemic. Overall results and figures indicate a cohesive response in lieu of managing the street vendors' vulnerability. The disaster of the pandemic has mainly affected the street vendors with increase poverty, poor capacity building and the response loaded with fear of extending cases of the individuals pronging towards COVID-19. The street vendors associated with the vending on key tourist spots are depended on the pattern of better resilient support policy. Drawing a cohesive response against the pandemic it is appeared that present situation may extend social and economic vulnerability, which stipulate most people living under the poverty line.

5.1 Policy implications and Conclusion

The policy with a resilient planning solely develops a framework for appraisal of unified tourists-based spots. It implied for scientific reasons to assess the social and economic vulnerability of street vendors.

- The interlinking of localized effects of COVID-19 and situations at the spots may promote rebuilding and reopening of vending. The assembling of risk perception is tracked with a decrease ratio of inferior socioeconomic settings in many countries. COVID-19 vulnerability is significantly worsened and evidence based vulnerability suggest that disparity may not be able to recover back easily. Policy support needs to be developed as model to attract economic activity.
- In response to mitigate economic effects on street vendors, immediate need of policy measures for relief packages are required. The exact and proper data is prerequisite of informal sector for timely and rapid measures.
- It is evident that COVID-19 impacts vary within countries and between destinations because of local scenarios. So emergency response to protect street vendors are needed to set by the local governments in line with tourism organizations.
- The legal rights of street vendors are seldom considered in tourism planning and policies. For longer term implications, the engagement of all stakeholders is essential for effective recovery. Beyond the rapid response, coordination with various stakeholders will improve crisis management.
- COVID-19 has given the chance to evaluate street vendors as visible and large stakeholder for tourism development to be included for inclusive and resilient support.
- Street vendors' recovery and support measures need valid consideration for comprehensive sustainability. The specific situation with country Pakistan is not the pandemic but rather the daily wagers income loss which is highly significant for a developing country.
- Marginalization of street vendors under current circumstances creates a question for states and grassroots level governments who are agent of services delivery. The need of rights and abilities to cope has to be strengthened with relevant policy and relief packages.

Vulnerability is the degree to which a system or individual react adversely with an occurrence of disasters like COVID-19 pandemic. The study focused on economic and social indicators through a survey-based methodology for vulnerability of the street vendors. Determining vendors association to the tourist's spots, various characteristics relates the collocated values in trading tourists visiting to the destinations. The inference of PLS-SEM model covers the objectives, well defined with the multifarious indicators. The research provides that the resilience of social and economic conditions is driven by the features of resilient support policies, health services,

capacity to cope and the cash program. The inference supports to the social and economic signs of the street vendors serving on the tourist's spots are not only significant but these are lasting for their livelihood in the given situation. The wide-ranging image of the disaster posed by COVID-19 on different spots is analyzed with the vulnerability reasons. Impacts of pandemic challenges are the centralized assessment overriding destination-based estimations.

The study highlights significance of street vendors' vulnerability to help in formulation of evidence-based policies. This prospect is the key of producing cost-less decisions from the state towards crisis hitted minor groups. The destination or spots based explicit approach is the need for limiting vulnerability of street vendors residing in the pandemic-prone areas. This may force better policies and COVID-19 case interventions through the upshot of indirect and direct calculation. the pandemic. The characteristics of economic arrangement and resilient direction towards street vendors positively develop a vending survival guideline.

References

1. A. Duarte Alonso et al. (2020). COVID-19, aftermath, impacts, and hospitality firms: An international perspective. *International Journal of Hospitality Management* 91 (2020) 102654
2. Ahmad, A., Ryoa, C., Lisa, E., Agomoni, Ganguli-Mitra., Matthew, H., and Rebecca, R., et. al. (2020). What does it mean to be made vulnerable in the era of COVID-19? Redefining vulnerability in the era of COVID-19. *The Lancet*, April 27, Vol. 395, pp. 1481-1482, doi: [https://doi.org/10.1016/S0140-6736\(20\)30979-X](https://doi.org/10.1016/S0140-6736(20)30979-X)
3. Ali, F., Rasoolmanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2017). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management*, forthcoming.
4. Amoako, C., & Frimpong Boamah, E. (2020). Becoming Vulnerable to ing: An Urban Assemblage View of ing in an African City. *Planning Theory & Practice*, 21(3), 371-391.
5. Andriamasilalao, H. (2020). Pro-Poor Tourism in Madagascar: Rural Development Through the Tourism Industry (Doctoral dissertation, University of Cincinnati).
6. Asante, L. A., & Mills, R. O. (2020). Exploring the Socio-Economic Impact of COVID-19 Pandemic in Marketplaces in Urban Ghana. *Africa Spectrum*, 0002039720943612.
7. Aufseeser, D. (2020). Placing the vulnerable subject: re-theorizing Peruvian street children's lives through an ethic of care. *Social & Cultural Geography*, 21(3), 336-356.
8. Aziz, T. (2018). MYTH AND REALITY OF VULNERABILITY TO DISASTER: PRESSURE AND RELEASE MODEL FOR HAZARDS IN BANGLADESH. *Journal of South Asian Studies*, 6(1), 23-31.
9. Aznar-Crespo, P., Aledo, A., & Melgarejo-Moreno, J. (2020). Social vulnerability to natural hazards in tourist destinations of developed regions. *Science of the Total Environment*, 709, 135870.
10. Backhaus, N. (2020). Managing diversity: the government of a Malaysian hawkker place. *Malaysian Management Journal*, 19, 65-76.
11. Baig, S., Qasim, M., Xuemei, L., & Alam, K. M. (2020). Is the China-Pakistan economic corridor an opportunity or a threat for small and micro-entrepreneurs? Empirical evidence from Northern Pakistan. *Sustainability*, 12(5), 1727.
12. Barbhuiya, M. R., & Chatterjee, D. (2020). Vulnerability and resilience of the tourism sector in India: Effects of natural disasters and internal conflict. *Tourism Management Perspectives*, 33, 100616.
13. Basu, S., & Nagendra, H. (2020). The street as workspace: Assessing street vendors' rights to trees in Hyderabad, India. *Landscape and Urban Planning*, 199, 103818.
14. Baum, T., & Hai, N. T. T. (2020). Hospitality, tourism, human rights and the impact of COVID-19. *International Journal of Contemporary Hospitality Management*.
15. Belay, D. G. (2016). 'Being Small Is Good': A Relational Understanding of Dignity and Vulnerability Among Young Male Shoe-Shiners and Lottery Vendors on the Streets of Addis Ababa, Ethiopia. In *Generationing Development* (pp. 151-174). Palgrave Macmillan, London.
16. Benjamin, M. B., Jean-Helene, K. K., & Arsene, M. B. (2020). Poverty and Informal Sector in Bukavu: Profile of Agricultural Product Retailers During the COVID-19 Pandemic. *Journal of Economics, Finance and Accounting Studies*, 1-10.
17. Bloch, N. (2020). Beyond a sedentary Other and a mobile tourist: Transgressing mobility categories in the informal tourism sector in India. *Critique of Anthropology*, 40(2), 218-237.
18. Boonjubun, C. (2017). Conflicts over streets: The eviction of Bangkok street vendors. *Cities*, 70, 22–31. <https://doi.org/10.1016/j.cities.2017.06.007>.
19. Çakmak, E. (2020). The practice of informal tourism entrepreneurs: a Bourdieusian perspective (Doctoral dissertation, Wageningen University).

20. Çakmak, E., & Çenesiz, M. A. (2020). Measuring the size of the informal tourism economy in Thailand. *International Journal of Tourism Research*.
21. Carr, A. (2020). COVID-19, indigenous peoples and tourism: a view from New Zealand. *Tourism Geographies*, 1-12.
22. Chackalackal, D. J., Al-Aghbari, A. A. A., Jang, S. Y., Ramirez, T. R., Vincent, J., Joshi, A., ... & Villa, J. M. (2020). The covid-19 pandemic in Low-and Middle-Income Countries, who carries the burden? Review of mass media and publications from six countries.
23. Contreras, D., Chamorro, A., & Wilkinson, S. (2020). The spatial dimension in the assessment of urban socio-economic vulnerability related to geohazards. *Nat. Hazards Earth Syst. Sci*.
24. Corburn, J., Vlahov, D., Mberu, B., Riley, L., Caiaffa, W. T., Rashid, S. F., ... & Jayasinghe, S. (2020). Slum health: arresting COVID-19 and improving well-being in urban informal settlements. *Journal of Urban Health*, 1-10.
25. Cuvi, J. (2016). The politics of field destruction and the survival of São Paulo's street vendors. *Social Problems*, 63(3), 395–412. <https://doi.org/10.1093/socpro/spw013>.
26. Dai, Y., Hu, G., Xiong, H., Qiu, H., & Yuan, X. (2020). Psychological impact of the coronavirus disease 2019 (COVID-19) outbreak on healthcare workers in China. *MedRxiv*.
27. Dwivedi, A. K. (2020). How the Pandemic has changed what one requires to be an Entrepreneur: An academic explains
28. Esayas, E., & MULUGETA, S. (2020). Analysis of Socioeconomic Vulnerability Of Street Vendors. *Theoretical and Empirical Researches in Urban Management*, 15(2), 49-65.
29. Fei Hao, Qu Xiao and Kaye Chon (2020). COVID-19 and China's Hotel Industry: Impacts, a Disaster Management Framework, and Post-Pandemic Agenda. *International Journal of Hospitality Management* 90 (2020) 102636.
30. Forkuor1, J. B., Kofi O. Akuoko1, and Eric H. Yeboah (2017). Negotiation and Management Strategies of Street Vendors in Developing Countries: A Narrative Review. *SAGE Open* January-March 2017: 1–13
31. Fraenkel, P., & Cho, W. L. (2020). Reaching Up, Down, In, and Around: Couple and Family Coping During the Coronavirus Pandemic. *Family Process*.
32. Friedrich, J., Stahl, J., Fitchett, J. M., & Hoogendoorn, G. (2020). To beach or not to beach? Socio-economic factors influencing beach tourists' perceptions of climate and weather in South Africa. *Transactions of the Royal Society of South Africa*, 1-9.
33. Gholami, R., Sulaiman, A. B., Ramayah, T., & Molla, A. (2013). Senior managers' perception on green information systems (IS) adoption and environmental performance: Results from a field survey. *Information and Management*, 50(7), 431-438.
34. Gómez, G. M., Chawla, S., & Fransen, J. (2020). Exploring the Entrepreneurial Ecosystem Within the Informal Economy with a Multifactor Framework. In *Urban Studies and Entrepreneurship* (pp. 181-202). Springer, Cham.
35. Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 1-20.
36. Haenlein, M., & Kaplan, A. M. (2004). A beginner's guide to partial least squares analysis. *Understanding Statistics*, 3, 283–297.
37. Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
38. Hair, Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modelling (PLS-SEM). *European Business Review*, 26(2), 106-121. <http://doi.org/10.1108/EBR-10-2013-0128>.
39. Hedima, E. W., Michael, S. A., & David, E. A. (2020). Knowledge and Risk Perception of the Novel Coronavirus Disease among Adult Population in Nigeria: A cross-sectional study. *medRxiv*.
40. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <http://doi.org/10.1007/s11747-014-0403-8>.
41. Hidalgo, H. A., & Cuesta, M. (2018). Remodeling Livelihood Vulnerability Indicators for The Informal Food Microentrepreneurs. *SEAS (Sustainable Environment Agricultural Science)*, 2(1), 1-9.
42. Jang, W. M., Kim, U. N., Jang, D. H., Jung, H., Cho, S., Eun, S. J., & Lee, J. Y. (2020). Influence of trust on two different risk perceptions as an affective and cognitive dimension during Middle East respiratory syndrome coronavirus (MERS-CoV) outbreak in South Korea: serial cross-sectional surveys. *BMJ open*, 10(3), e033026.
43. Javed, B., Seerat, W., Sarwer, A., & Mashwani, Z. U. R. (2020). Ethnopharmacological approaches of the native hill people of Murree and Kotli Sattian, District Rawalpindi, Province of Punjab, Pakistan. *Botany Letters*, 1-17.
44. Kesar, S., Abraham, R., Lahoti, R., Nath, P., & Basole, A. (2020). Pandemic, informality, and vulnerability: Impact of COVID-19 on livelihoods in India. *CSE Working Paper*, 2020.

45. Khalique, M., Hina, K., Ramayah, T., & bin Shaari, J. A. N. (2020). Intellectual capital in tourism SMEs in Azad Jammu and Kashmir, Pakistan. *Journal of Intellectual Capital*.
46. Koonin, L. M. (2020). Novel coronavirus disease (COVID-19) outbreak: Now is the time to refresh pandemic plans. *Journal of business continuity & emergency planning*, 13(4), 1-15.
47. Krause, K. C. (2020). Stigma in Paradise: Experiences of Young Haitian Im/Migrant Men with Structural Violence, Occupational Health, and Social Capital in the Informal Tourism Sector of the Dominican Republic.
48. Lohiniva, A. L., Sane, J., Sibenberg, K., Puumalainen, T., & Salminen, M. (2020). Understanding coronavirus disease (COVID-19) risk perceptions among the public to enhance risk communication efforts: a practical approach for outbreaks, Finland, February 2020. *Eurosurveillance*, 25(13), 2000317.
49. Ma, X., de Jong, M., Sun, B., & Bao, X. (2020). Nouveauté or Cliché? Assessment on island ecological vulnerability to Tourism: Application to Zhoushan, China. *Ecological Indicators*, 113, 106247.
50. Mane, A. B. (2020). Impact of COVID-19 Pandemic on Indian Economy. *Purakala with ISSN 0971-2143 is an UGC CARE Journal*, 31(44), 119-127.
51. Marques, C. P., Zolnikov, T. R., Noronha, J. M. D., Angulo-Tuesta, A., Bashashi, M., & Cruvinel, V. R. N. (2020). Social vulnerabilities of female waste pickers in Brasília, Brazil. *Archives of Environmental & Occupational Health*, 1-8.
52. Mason, P. (2020). *Tourism impacts, planning and management*. Routledge.
53. Mckercher, B. (2020). Anatomy of successful tourism shopping districts. *International Journal of Tourism Cities*.
54. Meher, S., Ranjan, A., Tamgire, L., & Shukla, P. (2020). 'It is lockdown but homes are not closed. Income has been shut down but expenses continue:' Impact of lockdown due to COVID-19 on the livelihood of Street Vendors in Maharashtra.
55. Moreno-Tabarez, U. (2020). Rural pandemic: The afterlives of slavery and colonialism in Costa Chica, Mexico. *Dialogues in Human Geography*, 10(2), 230-233.
56. Mulugeta, M. The Impact of COVID-19 Pandemic on Food Security in Ethiopia.
57. Musavengane, R., Siakwah, P., & Leonard, L. (2020). The nexus between tourism and urban risk: Towards inclusive, safe, resilient and sustainable outdoor tourism in African cities. *Journal of Outdoor Recreation and Tourism*, 29, 100254.
58. Nguyen, T. H., & Vu, D. C. (2020). Impacts of the COVID-19 pandemic upon mental health: Perspectives from Vietnam. *Psychological trauma: theory, research, practice, and policy*, 12(5), 480.
59. Ojong, N. (2020, June). The COVID-19 Pandemic and the Pathology of the Economic and Political Architecture in Cameroon. In *Healthcare* (Vol. 8, No. 2, p. 176). Multidisciplinary Digital Publishing Institute.
60. Palacios, R. (2016). The new identities of street vendors in Santiago. *Chile. Space and Culture*, 19(4), 421–434. <https://doi.org/10.1177/1206331216643778>.
61. Patel, A., & Shah, P. (2020). Rethinking slums, cities, and urban planning: lessons from the COVID-19 pandemic. *Cities & Health*, 1-3.
62. Paul, A., Dekka, J., Gujre, N., Rangan, L., & Mitra, S. (2019). Does nature of livelihood regulate the urban community's vulnerability to climate change? Guwahati city, a case study from North East India. *Journal of environmental management*, 251, 109591.
63. Piazzoni, F., & Jamme, H. T. (2020). Private uses make public spaces. *Routledge Handbook of Street Culture*.
64. Pizarro, C. A. (2020). The impact of the COVID-19 Pandemic on labor migrants in Argentina.
65. Resnick, D. (2020). COVID-19 lockdowns threaten Africa's vital informal urban food trade. *IFPRI book chapters*, 73-74.
66. Ringle, C. M., Wende, S., & Becker, J. M. (2014). *SmartPLS 3*. Hamburg: SmartPLS. *Academy of Management Review*, 9, 419–445.
67. Samani, S. A. (2016). Steps in research process (partial least square of structural equation modeling).
68. Sana Jamal. (2018). British adventurers back to explore Pakistan's mountains. Published on November 30. *Gulf news*. <https://gulfnews.com/world/asia/pakistan/british-adventurers-back-to-explore-pakistans-mountains-1.60605937>
69. Sarstedt, M., Christian M. Ringle, and Joseph F. Hair (2017). Partial Least Squares Structural Equation Modeling. In book: *Handbook of Market Research* Chapter: 15 Publisher: Springer Editors: Christian Homburg, Martin Klarmann, Arnd Vomberg. DOI: 10.1007/978-3-319-05542-8_15-1
70. Sera, L., Abafita, J., & Berecha, A. (2020). Potential Implications of COVID-19 Pandemic on Unemployment in Ethiopia. *Journal of Business and economics*, 53-63.
71. Shafi, M., Liu, J., & Ren, W. (2020). Impact of COVID-19 Pandemic on Micro, Small, and Medium-Sized Enterprises operating in Pakistan. *Research in Globalization*, 100018.
72. The Lancet, (April 4, 2020). Redefining vulnerability in the era of COVID-19. *The Lancet*. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30757-1/fulltext#articleInformation](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30757-1/fulltext#articleInformation)

73. Truong, V. D. (2018). Tourism, poverty alleviation, and the informal economy: The street vendors of Hanoi, Vietnam. *Tourism Recreation Research*, 43(1), 52–67.
74. <https://doi.org/10.1080/02508281.2017.1370568>.
75. Truong, V. D., Liu, X., & Pham, Q. (2020). To be or not to be formal? Rickshaw drivers' perspectives on tourism and poverty. *Journal of Sustainable Tourism*, 28(1), 33-50.
76. Trupp, A. (2020). 8 Migration into tourism micro-entrepreneurship. *Tourism and Development in Southeast Asia*.
77. Turner, S., Adenwala, A., & Zuberec, C. (2020). Vulnerability and resilience on the streets: Interrogating intersectionality among Southeast Asias' street vendors. In *Handbook on Gender in Asia*. Edward Elgar Publishing.
78. Wang, C. (2020). To Cope with a New Coronavirus Pandemic: How Life May Be Changed Forever. *Chinese Journal of International Law*.
79. Wen, J., Kozak, M., Yang, S., & Liu, F. (2020). COVID-19: potential effects on Chinese citizens' lifestyle and travel. *Tourism Review*.
80. Westmont, V. C. (2020). Of Guinea Pigs and Tourists: Sustainable Development, Sustainable Tourism, and "Local Food" in Cusco, Peru. *Tourism Planning & Development*, 1-23.
81. Wijaya, A. A. M., Hanifa, L., Hastuti, H., & Maryasih, L. (2020). Street Vendors Resiliencies: The Role of Social Capital and Community Governance. In *Proceedings Aceh Global Conference-Business, Economics, and Sustainable Development Trends (Vol. 2, pp. 37-41)*.
82. Wilkinson, A. (2020). Local response in health emergencies: key considerations for addressing the COVID-19 pandemic in informal urban settlements. *Environment and Urbanization*, 0956247820922843.
83. Wong, K. K. K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.
84. Wong, M. C., Teoh, J. Y., Huang, J., & Wong, S. H. (2020). The potential impact of vulnerability and coping capacity on the pandemic control of COVID-19. *The Journal of Infection*.
85. Young, G. (2020). Urban informal economies in peace building: competing perspectives and implications for theory and praxis. *Third World Quarterly*, 1-20