

CITIES POOR MANAGEMENT IN SOCIAL PROTECTION AND COVID-19: TRANSGENDER INEQUALITIES AND OPPORTUNITY BIAS

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ABSTRACT

The current situation of COVID-19 pandemic has magnified the existing inequalities and health threats in urban communities. The lockdowns of first, second, third and fourth waves have acutely hit the vulnerable and amplified the urban poverty in developing countries. Here, the transgender discrimination in terms of socio-cultural and legal aspects is identified which is leading to further inequality and opportunity hoardings the transgender often faces during COVID-19 pandemic and related containment. COVID-19 has curtailed deep disparities and transgender are fatally preyed by this pandemic. Therefore, this study examines transgender exposed to intensifying hardships due to pre-existing inequalities and opportunity hoardings during the four waves of pandemic. It investigates the underlying opportunity hoardings that are masked by structural inequalities. This study applies Tilly's theory which focuses on categorical inequality, economic opportunities and income sources between groups of transgender. The data is collected through self-developed quantitative survey instrument from 600 transgender in four different cities of Pakistan. The results indicate high levels of group segregation by social cluster among transgender. It is found that segregation leads to opportunity bias among transgender, which inhibits equitable access to work in the formal and informal sector. Finally, the results show the insufficient income source, economic status based on livelihood support leads to emerging poor management of cities. Further, this study suggests that the investment in social protection of transgender is important to strengthen the objectives of social and national strategies.

Keywords: COVID-19, Inequality, Social Inclusion Transgender, Unemployment

1. INTRODUCTION

Transgender are the most neglected and underserved community facing vulned ability towards basic living across the world, due to the burst of COVID-19. Social diversities in transgender community are not a new phenomenon, as it rages across the world. COVID-19 is unveiling the governments planning and policies that fail to recognize the transgender needs in various countries (Herman, 2020). During pandemic, cities administration placed major restrictions which heightened the discrimination and put transgender at higher risk (Otto, 2020). Transgender face high inequalities in all sectors of life including health, job opportunities and education that should be assured under big cities obligations. Gender identity and expression is the main cause of their implanted marginalization (Divan, 2016; Tang D et al., 2020).

In the developing world gender discrimination confirms the existence of high degree of social exclusion and inequalities for the marginalized groups centered to their identity (Roy, 2018). The

ongoing crisis has revealed vulnerability and transgender inequality (Wenham, 2020). Transgender are the most vulnerable group having worst conditions (Briggs & Ngo, 2020). In Pakistan's, the Government's social protection records aren't updated, big cities easily target slums and other informal settlements. The isolated disparate settings for vulnerable groups of transgender are the worst hit of Covid-19 that requires assessment to safety nets involving food and cash. In Pakistan, the only way of transgender earning is through begging and dancing, the pandemic restricted them to their homes without alternative personal security. Government compensation is rarely extended to marginalized groups, transgender is underrepresented, and their vulnerabilities intensified accordingly.

Pakistan imposed complete lock down on 23, March 2020 and the lockdown process shifted in phases from complete lockdown to smart or semi-lockdown (Farooq & Khan, 2020). During this forth wave after the first and onward second, third waves of complete drastic situation, transgender working in informal sector have been hit hardest (ILO, 2020). Most informal workers have not worked since three to four months (Nafees & Khan, 2020). Transgender are the most vulnerable group having situation that is negative and fare the worst. They are underrepresented in informal working sector where they already in normal routine face challenges such as, abused in sex work, begging, dancing and mocked by society (Shah et al., 2018). The Covid-19 pandemic is affecting more on vulnerability of transgender although already they have had similar hardships (Van der Miesen, 2020). The ongoing crisis has revealed more vulnerability and transgender inequality (Wenham, 2020). Recognizing the hardships of poorer segment of society, Pakistan government has announced cash payment packages (GOP, 2020). But transgender lacking their identity in official documents and social protection can not avail it fully.

This study attempts to unleash the existing hidden realities particularly targeting transgender. More exclusively the focus of study is to understand the evidence-base prevailing inequalities and expanding vulnerabilities of the marginalized transgender during COVID-19 in Pakistan. The study examines the inequalities and opportunity hoardings based on occupation type and other income sources between groups of transgender. The segregation of transgender in groups shed light on categorical inequality within the transgender in major cities which are the bases of income generation. The identity crisis of transgender is linked with social structures which show the gaps in access to earnings depending on occupations and sources of income. This study is structured into sections. The literature on transgender and inequalities is discussed in section 2 with theoretical framework. Section 3 presents the methodology and data, and section 4 examines the detailed analysis of empirical data. Section 5 explains the differences between groups and concludes the discussion with policy implications.

2. TRANSGENDERS AND INEQUALITIES

2.1. Opportunity Hoardings

During COVID-19, transgender face many difficulties as well as discriminations (Hansen, 2020). To find out transgender inequalities and social exclusion of transgender in various cities of Pakistan, this study applies Tilly's theory of durable inequality and opportunity hoarding (Van Eijk, 2010). The major indicators to explore the vulnerabilities of transgender in big cities in this study are 'occupation' and other income sources. Despite the limitations of the current research, discussion is focused on the socioeconomic challenges and health care issues due to joblessness (Wang D et al., 2019; Y. Lim et al., 2020; Van Dorn, Cooney & Sabin, 2020). The social closure theory obtaining opportunities is based on the accessibility to valuable resources and the resources are controlled through social acceptance and nationality identity (referral connections, licensing, certification etc.). Therefore, understanding the

mechanism of Tilly's theory (Tilly, 1999) in the transgender context can enforce policy interventions that can only help them reduce the segregation and exclusion.

This mechanism promotes the durable inequalities for vulnerable is 'opportunity hoarding', it foils to exploitation (Azar et al., 2020; Wiemers et al., 2020; Mongey, Pilossoph, & Weinberg, 2020). In the case of transgender, opportunity is hoarding due to other means, as COVID-19 prevents their access to resources (Sehgal, 2020; Knight, 2020b). Transgender are restricted to their homes, they are excluded from the occupations, dancing or begging. This hoarding is transformed into the way to exiting durable inequality. For a dignified life, equality is the key and natural justice demands the positive response or behavior of society towards transgender people, but the condition observed is precarious. In Pakistan, the focus is only on the instructed registration of government organizations. Meanwhile, transgender people are highly vulnerable at the societal level. Moreover, transgender people have less support for policies and are rejected from a society based on opportunity bias (Billard, 2018).

Mistaken attitudes and cultural beliefs reinforce inequalities but these factors are less responsible in stabilizing inequalities than the structural faults in which inequalities are embedded in the roots. Durable inequalities are intensified with the role of organizational structural system in pandemic situation. Durable inequalities are the disparities that exist for extended period of time regardless of turnover in individuals. According to Tilly (1999), 'categorical bounded pairs'(men/women, rich/poor etc.) are socially created and their institutionalization are the clear evidence for the existence of durable inequalities. Big cities have great impacts on the segregation of transgender. Few studies on poor management of big cities indicate the existence of high degree of discrimination for the marginalized group in Pakistan (transgender) based on various factors (Knight, 2020a; Humaira, 2005; Ali & Shashank, 2016). Therefore, further dissociations and diverse settlements are noticed based on socioeconomic status and occupation which can lead to greater exploitation of transgender in big cities. Besides gender, there are broad discrimination based on identity, occupation, and socio-economic life. Transgender has lost group connections and social interaction limited due to crisis situation, Covid-19.

2.2. THEORITICAL FRAMEWORK

Tilly theory adheres the social closure concept which shows opportunity hoardings that leads to durable inequality. These hoardings are controlled by policy makers under structural umbrella. Tilly's has proved that the inequality is affected by the state structural system. The arguments do not oblige the student of inequality to completely get rid of belief system like homophobia, bigotry and racial discrimination (Davidson, 2016). The victims of the inequality use beliefs to reduce and defend. The opportunity hoarders also utilize the belief to explain the process of the inequality. "Tilly theory shows that the belief exercises some independent influence on the mistaken beliefs like opportunity hoarders, emulation and alternation" further the Tilly theory explains that the social inequality results from the cultural factor dialectical and the dynamic interaction (Morris, 2000). The attitude of 'us' verses 'them' creates the inequalities, while the governmental attitude towards transgender make the inequalities durable. Tilly's concept of external categories defines best the category of transgender; their distinctions are based on the sex which doesn't originate by a particular organization.

Major cities are indispensable for transgender to be more financial capable but most cities are either uncertain or hostile towards them. If cities plan to include transgender in social protection schemes to help, the way forward is to have inclusive policies (Noreen et al., 2020). Additionally, cities need to

actively support marginalized groups by providing social protection and access to public services (Balachandar et al., 2020; Farr'e, Fawaz, Gonz'alez, & Graves, 2020; Hanagan&Tilly, 2010).

Covid-19 is highly contagious and has mutable epistemological features that cause vulnerability among larger group of people in a shorter period in Pakistan (Akram&Meo, 2020). Initially, the government was focused on precautionary measures instead of emergency lockdown. In the last twelve months since pandemic has spread around, a horde of repercussion have emerged, beyond the health associated with virus and threats to life. The major affected transgender people are recorded in big cities such as Lahore, Karachi and Islamabad. Amongst vulnerable groups in Pakistan, transgender is at higher risk of violence and discrimination during Covid-19 (Sehgal, 2020).

3. METHADODOLOGY

Quantitative method is employed with multivariate statistical techniques in this study. Three steps are followed in applying Tilly's theory with the context of transgender during COVID-19. First, dissimilarity index is applied to segregate transgender based on socioeconomic indicators. Second, correspondence analysis is used to find associations between socioeconomic groups. Lastly, regression analysis is done to know the inequality among groups of transgender.

3.1. STUDY CONTEXT

Transgender from major four cities of Pakistan are chosen to unleash the growing inequalities in developing countries. Despite the allocation of responsibilities and resources, all cities have an essential function in distributing social welfare focused on the inclusive and sustainable growth (Jeffery, 2016). In Pakistan the local management is considered to closer to each group of society and should be reaching the education, employment, poverty reductions and combating the social exclusion in the marginalized groups as well (Divan, 2016). In Pakistan developing cities are important drivers of social cohesion where the challenges arise firstly and transitions taking place. Transgender are facing specific obstacles in their rights; majorly the right of social protection (Hansen, 2020).

They are often excluded on the basis of gender identity. Transgender have traditionally been marginalized by cities in every field of life and face extreme vulnerability in COVID-19. Their vulnerabilities are legal, social, economic and cultural, need to be discussed as a serious concern. Inequity, violence and discrimination are commonly observed in Asian states (ADB, 2003). The estimated population of transgender in Pakistan is more than 400,000 who are surviving as wedding dancers, sex workers or beggars in fringes of social niche. Therefore, this study focuses on the inequality, opportunity hoarding and bias for transgender during pandemic situation in four major cities. The continuous hardships and exclusion in all two waves of COVID-19 was harder but the third wave of COVID-19 was distressed more. The current fourth wave of delta variant has hard-pressed thunder swelling social concerns.

3.2. DATA COLLECTION AND PARTICIPANTS

This study has employed survey to collect the data during first and second wave of COVID-19 through transgender community representatives in four major cities of Pakistan. The issues of transgender are considered in preparation of survey and feedback on survey was taken from experts in the field in pre-testing before final version. The challenges of transgender opportunity hoarding and confinement are considered in preparation of survey questionnaire based on poor management of big cities' authorities and dissimilarities in the big cities and relationship between their social wellbeing and income. The components of questionnaire trace the challenges being faced by transgender groups and their extended vulnerability in the COVID-19 situation. Their sources of income are vanished; big

cities' responsibilities towards marginalized groups are raised. Here the concern is to look for the vulnerabilities of transgender groups and highlight the role of big cities management to protect them. Four cities are selected where transgender people are in majority and the stratification criteria have been settled through social exclusion, joblessness, economic status, and livelihood support. This survey is done with 600 transgender living in four cities of Pakistan (Islamabad, Rawalpindi, Karachi and Lahore), the stratification is based on demographic variables includes: age factor, their living location or area, and economic status or occupation.

In chosen cities, the survey covered 600 of transgender people, choosing randomly after gaining trust of transgender who were being surveyed during all three waves. The survey questionnaire was translated into local and national language after gaining trust of transgender who were being surveyed. The survey was contained of 24 questions and occupation has been a prominent feature in transgender segregation as indicated in table 1. A level of trust was created by the survey team created between the transgender who were being surveyed. The team was prepared for the study purpose and the challenges involved, equipping them more sentence in their approach. The data was entered into the system database to ensure its' reliability and was checked to report errors. Income source has been a dominant factor in transgender segregation.

There are many transgender in these four cities and it was very difficult to go to each transgender. Therefore, contacts were made to the "Gurus"¹ and collected the data from their residents. After collecting data, it has been analyzed by using analytical techniques; (1) dissimilarity index, (2) correspondence analysis and, (3) regression analysis. In this study, results of the dissimilarity index are utilized for assessing the interaction/association in the income source, economic position, livelihood support, social standing and settlement type factors impact on spatial segregation in transgender inequalities. Moreover, OLS regression analysis is also used for assessing relationship and influence between the variables for the estimation of frequency of COVID-19 crisis impact on different income sources.

Table 3.1 Arrangements of Transgender Group

Factors	G1	G2
Income source	Begging	Dancing (Leading, Non-leading)
Economic position	Low	High
Livelihood support	Adequate	Inadequate
Social standing	Elites	Non-elites
Settlement type	Native	Others

Table 1 elaborates the arrangements of the participants' groups based on five factors, divided into two groups. A random stratified sample has been utilized with a target of 600 number of transgender people from four big cities of Pakistan, with below mentioned stratification criteria:

- Age

¹In Pakistan, 'guru' the chela system is a structural embedment in transgender community. 'Guru' acts as guardian and leader of transgender groups. At some places guru provides safety nets.

- Specific city (Islamabad, Lahore, Peshawar, Rawalpindi)
- Residence location (core urban, periphery urban, semi-rural peripheries)
- Accommodation type (owned house, rented, shared)
- Key social group
- Key settlement type group

3.3 ANALYTICAL TECHNIQUES

The data is calculated through survey across four big cities based on five major factors – income source, economic position, livelihood support, social standing and settlement type. All multivariate statistical techniques are elaborated below for applying Tilly's theory in context of transgender.

3.3.1. Dissimilarity Index

Using the index of dissimilarity segregation is done across transgender groups. The index (D) (Duncan & Duncan, 1955) is used to quantify the segregation and analyze the socio-economic situation that creates social exclusion in the transgender.

It is computed as:

$$D = \frac{1}{2} \sum_{i=1}^n \left| \frac{T_i}{G1} - \frac{T_i}{G2} \right|$$

N indicates the total number of transgender,

T_i is the number of transgender s' belonging to the group G1 indicating i ,

T'_i is the number of transgender s' belonging to the group G2 indicating i .

D indicates the measure to segregate indices for comparison of two-group

Segregation is counted on the basis of five major factors – income source, economic standing, livelihood support, social group, and settlement.

3.3.2. Correspondence Analysis

Correspondence Analysis (CA) issued to find association among the key categorical variables (Hwang et al. 2010). The analysis is depicted in graphical representation. The segregation is done computed by D, and data is tabulated in row and column (Duncan & Duncan, 1955). The indicators closely associated are shown with low perceptual distance. The scales of categorical variables are nominal (Greenacre, 2010). Correspondence analysis is mostly used to describe the associations between groups.

So, in this study, CA is used to find the association among the key factors that segregate transgender in groups.

3.3.3. Regression Analysis

In this study, the regression analysis is applied among various social groups in transgender. Regression is done to show the segregation leading to way of living among transgender. For example, income source is associated with social clusters and age leading to economic standing which further extends the vulnerability. While analyzing age factor among various groups within transgender leads to more insights of income sources and hoardings during COVID-19 (Sehgal, 2020).

4. Results

In this part, the results are discussed of dissimilarity index and comparative analysis to show the association between livelihood support, economic position, social standing, settlement type and their impact on segregation in transgender.

4.1. Demographic Characteristics

Table 4.1 explains the demographic characteristics of the respondent. This table indicates that there are 35.8% male transgender and 64.2% female transgender participation. Further this table explained that age in year and their status in the country.

Since the monthly income in rupees of the transgender is reduced, the total monthly income provided in this table is initiated from 30USD to more than 300USD. All these numbers are less in capacity of fulfilling the basic needs of the transgender community. Most of the transgender are passing their hard time with an amount of 5000 or less than this. The medium class in these transgender is the effectors of poor sources of income that ultimately leads to poor total income of each month. A very less or those in the transgender are achieving the target of more than 40000 to 50000. This amount is again deteriorated by the sharp rise in the economic distortion and poor control over the prices linked with needs of transgender. The monthly income as presented in the table is the reflection of poverty and poor sources obtained by transgender.

Table 4.1: Demographic Characteristics of Transgender

Categorization		No of participants	Percentage
City	Islamabad	110	18.3%
	Lahore	300	50%
	Peshawar	50	8.3%
	Rawalpindi	140	23.3%
Residence location	core urban	77	12.8%
	urban periphery	310	51.6%
	semi-rural periphery	223	37.1%
Age in years	Less than 22	40	6.6%
	23-30	213	35.5%
	31- 40	253	42.1%
	More than 40	94	15.6%
Monthly income	Less than 30USD	64	10.6%
	100USD to 200USD	341	46.3%
	200USD TO 300USD	150	20.3%
	More than 300USD	45	4.75%
Accommodation type	owned house	40	6.6%
	rented	100	16.6%
	shared	460	76.6%

4.3.2 Location and Average Age

Table 4.2. Represent the Location Wise Avg. Age

Location	Avg. Age
Islamabad	39
Rawalpindi	40
Lahore	35
Peshawar	30
Periphery Urban	39
Urban	40

Table 4.2 explains the location wise average age of the participants in cities that used for the data collection. This table explains that average age of the participants in Islamabad is 39, in Rawalpindi is 40, in Lahore is 35, in Peshawar is 30, periphery urban and urban is 39 and 40 respectively.

Table 4.3. Main source of Income

		Frequency	Percent
	Begging	340	56.6
	Dancing	170	28.3
	Other	90	15.0
	Total	600	100.0

Pointing to the main source of income the respondents and results identified that half of the transgender are passing their life under begging profession. Their income for the dancing is less than 60% that is because of weak social position and opportunities in the film or movie industry. The frequency for two major sources stands at 340 and 170, while remaining 90 are using other sources including illegal workers. This shows a weak trend in the transgender income through a reasonable resources and major part of the work is to beg for their livelihoods.

4.2. Dissimilarity Index

The segregation is done on in terms of six factors in transgender inequalities. In this study, the dissimilarity index calculated the based-on income source, economic status, income, livelihood support, social division and migrants' factors. Table 4.4 indicated that the value of dissimilarity index (D) depends on the six factors on the transgender inequalities in this study. Results highlight that the degree of segregation on the income source (dancing and begging) ($D=0.27$) indicating a very low degree of segregation in transgender, economic standing (low and high) ($D=0.040$) shows the low degree of segregation and (adequate and inadequate) livelihood support ($D=0.497$) that's mean a median level of the degree of segregation were shown. Additionally, social division (elites and non-

elites) (D=0.1690) indicated that too much low degree of segregation and settlements (D=0.497) a median level of the degree of segregation were shown in the transgender inequalities...

Table 4.4 Degree of Segregation

Factors	G1	G2	D
Income source	Begging	Dancing	0.2714
Economic position	Low	High	0.0407
Livelihood support	Adequate	Inadequate	0.4972
Social standing	Elites	Non-Elites	0.1690
Settlement type	Native	Migrant	0.1805

4.3. CORRELATION MATTRIX

Moreover, for assessing the correlations calculated the dissimilarity index (D) depends on the five factors represent in Table 5. The correlation matrix indicated that highlighted associations between these region, income source, economic position, livelihood support, social standing, and settlement type six factors. The results show that high correlations were founded in the value of D in livelihood support, region, income source and settlement type at the value of 0.1 and 0.2. The table 4.5 reveals that livelihood support has a significant negative association with the region and livelihood support also shows negative association with the income source and moreover, settlements also show the negative association with the livelihood support. Other all the factors show that significant association amongst all the study factors. So, similarly, region, income source, economic position, livelihood support, social standing and settlement type are correlated. The segregation patterns are analyzed based on factors that should serve as a buffering for all the other associated factors.

Table 4.5 Correlation of Dissimilarity Index

	EP	IS	LS	SS	ST
EP	1				
IS	0.54	1			
LS	0.74	0.29			
SS	0.71	0.19	0.84	1	
ST	0.85	0.26	0.83	0.82	1

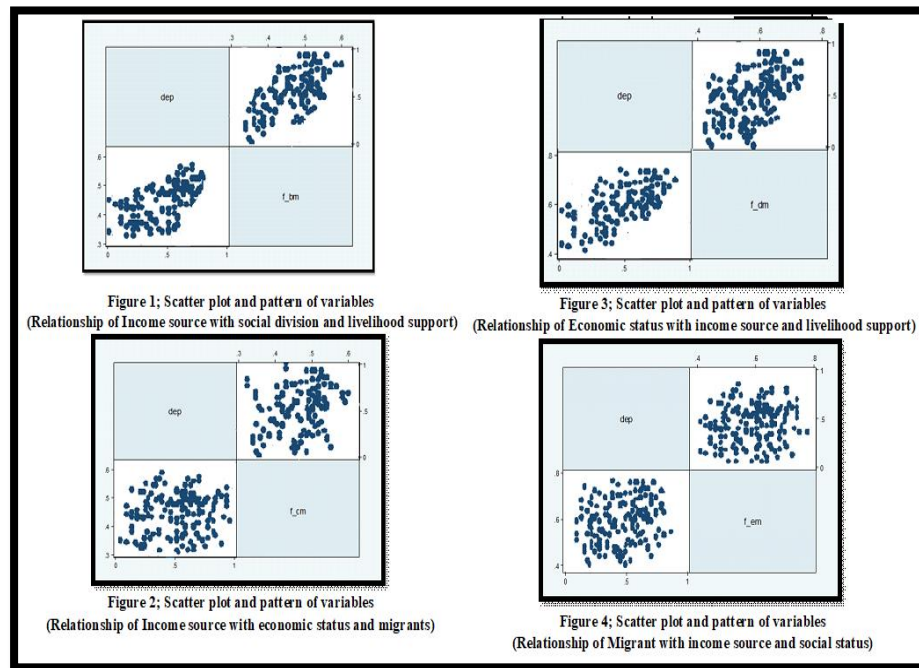
Note: ES=economic position, IS= income source, LS= livelihood support, SS= social standing and ST= settlement type

4.4. CORRESPONDENCE ANALYSIS

Correspondence analysis (CA) technique is used to explain the relationship between arrangements of groups. The scatter diagram plotting graphs are the pairs of numerical data explained in the form of values while representing the patterns of relationship that is obvious. Simple scatter plotting is technique to show the relationship between two or more variables. These variables can have positive

or negative relation among themselves. This study also has developed following scatter plotting to see the relationship between the, income source, economic status, livelihood support, social groups and Migrants. The values of vertical axis are dependent with horizontal axis that intersects at point of y axis value with dots putting, touching side by side.

4.4 Figures .Degree of Segregation



4.4.1. Segregation Based on Income Source

Figure 1 explains that the indicators and the values provided in the scatter plot are showing a pattern that the values move from left to the right. There is a positive relationship among variables. Compare to the values indicators are scattered and close to middle line, which reflect that this there are close relationship between the variables. In this diagram the income source is dependent variable and livelihood support and social groups are independent variable. This pattern shows that the livelihood support can increase the income of the transgender and social groups also help the transgender to improve their income level. If the income of the transgender increases, they can make their economic condition more efficiently. So, the income has positive link with the social groups and livelihood of the transgender (Debb, S. 2020).

4.4.2. Segregation Based on Economic Position

In the Figure 2, the indicators and the values provided in the scatter plot are showing a pattern that the values move from left to the right. There is a positive but weak relationship among variables. Compare to the values indicators are scattered and not much close to middle line, which reflect that this there are not close relationship between the variables. In this diagram the income source is dependent variable and economic standing and settlements are independent variable. This pattern shows that the economic standing can increase the income of the transgender (Debb, S. 2020). If economic standing of the transgender increases, they can make their income more efficiently. So, the

income has positive link with the economic standing. The plotting of settlements shows that positive but very weak relation with income source. Its mean there are other variables that are more important for the income source than Settlement.

4.4.3. Segregation Based on Settlement Type

In the Figure 3, the indicators and the values provided in the scatter plot are showing a pattern that the values move from left to the right. There is a positive relationship among variables. Compare to the values indicators are scattered and close to middle line, which reflect that there is close relationship between the variables. In this diagram the economic standing is dependent variable and income source and livelihood support are independent variable. This pattern shows that the livelihood support can increase the economic standing of the transgender and livelihood also help the transgender to improve their economic level (Herek, 2009). If economic position of the transgender increases, they can make their economic condition more efficiently. So, the economic position has positive link with the income source and livelihood of the transgender.

4.4.4. Segregation Based on Social Standing

The figure 4 shows the scatter plotting diagram. The values move from left to the right. There is a positive relationship but weak relationship among variables. Compare to the values of indicators are scattered and not close to middle line, which reflect that there is not close relationship between the variables. In this diagram the settlement is dependent variable and income source and social group are independent variable. This pattern shows that the social standing can urge to the transgender for settlement. If the social standing of transgender is low in one place, then they move toward the place where they can get good social and economic behavior (Kamal, 2020). The income source also effects the migration decision of the transgender. The income source urges the transgender to migrate from low economic area to highly beneficial economic region (Davidson, 2016).

4.5. STEPWISE REGRESSION ANALYSIS

Regression is used stepwise which unfolds that income level, age and locations have a significant impact on opportunity bias among transgender. In table 6, it is clearly reflected that 45.3% of the total opportunity bias due to absence of cities social protection is depicted by these factors. However transgender inequalities often lead to vulnerability due to poor social protection of cities. Therefore, it is important to know the connection between income level during COVID-19 and opportunity hoardings in cities. From the survey data, it is obvious that the decrease in cities solutions during COVID-19 has increased the inequality and vulnerability of transgender.

Table 4.6 Regression Analysis of Factors Influencing Opportunity Hoardings

Features	(R square)	(Standard error)	(p-value)
Income level	0.162	1.91	0.0001*
Age	0.243	1.11	0.0011*
Location	0.453	1.83	0.0001*

5. RESULTS AND POLICY IMPLICATIONS

In the previous section research has investigated the challenges of opportunity hoarding and confinement based on poor management of big cities 'authorities and dissimilarities in the big cities,

relationship between their social well-being, income through formal and informal sector. In this section researcher discuss the results and their impact with respect to Tilly's theory of group segregation. Systematic social and economic inequalities are associated with several group identities region, income source, economic status, income, livelihood support, and social groups and settlements transgender 'impact of environmental factors in transgender inequalities (Ott, 2020)

Tilly's theory refers to economic processes of discrimination that contribute to discrimination (ability gap, impoverishment), adaptation and simulation. Researchers used the dissimilarity index in the results section to classify the primary category ideologies responsible for discrimination in transgender inequality (Massey and Denton, 1988). The result indicates that the area is an essential category that contributes to transgender discrimination. As group segregation is a primary factor of discrimination, this result is significant as it marginalizes the economically disadvantaged group from exposure to public and private services (such as sources of income, economic status, income, support for livelihoods, social groups). This stimulates their economic independence and promotes the stigmatization of racist perceptions. Understanding how area affects the circumstance in the evaluation of transgender inequalities by mutilated segregation in two components: degree of segregation, matrix of association and regression analysis, as discussed in the section on the theoretical system (Chakrapani, V. (2010).

This study finding highlights stark reality of urban inequality in cities where COVID-19 impacts are showing invisible impacts on transgender. Multiple layers of factors determine the contributing inequality as cities can spot inequalities easily with identification of disparities hoarding into local governance and mechanism. The revenue generation may be planned with zoning inclusion and infrastructure development with new opportunities in urban planning. The value of dissimilarity index (D) depends on the five factors (Income Source, Economic Status, Livelihood Support, Social Groups and Migrants) on the transgender inequalities. The results highlight that the degree of segregation on the income source indicating a very low degree of segregation in transgender, moreover, economic standing shows the low degree of segregation and livelihood support that's mean a median level of the degree of segregation were shown.

Additionally, social groups indicated that too much low degree of segregation and settlements a median level of the degree of segregation were shown in the transgender inequalities (Debb, 2020).The other finding of this study indicates that support for livelihoods has a major negative correlation with the region and support for livelihoods also shows a negative correlation with the source of income and, in comparison, settlements also have a significant negative relationship with support for livelihoods. Similarly, area, source of wealth, economic status, and support for livelihoods, social divide, and settlements are associated, and study of region-based segregation patterns can serve as a buffering mechanism for all other relevant factors. Moreover, this study findings revels that region have a significant relationship and impact on the source of income, economic status, and support for livelihoods, social divide and migrants.

The results of this research demonstrate that the region plays a key role in generating inequality. While Tilly appropriately suggests that, through replication or adjustment, propositional discrimination evolves and retains themselves, the absence of public policy leads to the propagation of disparity among income groups. In this research, the findings indicate that separation enhances transgender socioeconomic disparity and resource prejudice (Patel et al., 2012; Ren, 2017).

Government should prioritize their attention to the marginalized groups during the distancing measures and lockdown situation, includes Transgender who are subjected to the existing violence

based on their identity. Inequalities are not only global but present with the boundaries of municipalities as well. There are many areas in Lahore, Karachi, and other Pakistani cities that lack access to such basic infrastructure. These pockets of exclusion are getting bigger and bigger with the passage of time. It is needs of time that Government should consolidate the resistance by investing in emergency preparedness and public health risks in the COVID-19 lockdown (Billard, 2018). Transgender, the most poor and vulnerable, are highly deprived and need social protection. The prioritizing policies of social and economic inclusion of transgender should be developed for them (Mohan, 2020). The government should revise the existing policies for the transgender. Local authorities are the closest level of government available to citizens and they should be addressed to fulfill the needs and social challenges.

6. CONCLUSION

The main aim of this study is to explore the management of the big cities in Pakistan because these cities are the direct representatives of the local community, including marginalized groups. Karachi, Rawalpindi, Islamabad and Lahore are the big cities of Pakistan, and fastest growing cities in Pakistan. Large numbers of transgender are part of these cities which poses a serious challenge to policy planners and cities' management. The stress of city planning emphasizes the stratification by socio-economic and geographic groups in transgender populations for context-specific approaches (Briggs & Ngo, 2020). Overall, analyzing the disparity (between region communities) in urban Pakistan will uncover key policy consequences, urban development or deprivation reduction, as new policies need to take into account various region-wise people and geographical practical skills who have also provided essential to the survival of transgender people and their communities.

This study examines the link between transgender (based on income source, economic position, livelihood support, and social standing and settlement type factors) and opportunity hoardings. In the Covid-19, the revenues of big cities dropped, but unfortunately, the poor management in Pakistan like other developing countries and economic condition left big cities far behind. Somehow, the management involved in coping with the situation but the services are limited. Transgender community does not enjoy the resources, also their voices aren't heard. Government has to look for out-of-box initiatives to ensure their citizenship rights. Equal access to education, housing etc. isn't supported by laws and policies that protect and assure their freedom of choices including security and safety (Ren, X. (2018).

REFERENCE

1. ABDI, H., & BÉRA, M. (2014). CORRESPONDENCE ANALYSIS. *ENCYCLOPEDIA OF SOCIAL NETWORK ANALYSIS AND MINING*, SPRINGER.(PP. 275–284)
2. AKRAM, J., & MEO, S. A. (2020). PAKISTAN'S ROLE IN COVID-19 PANDEMIC. *BIOMEDICAL*. 2020; 36(COVID19-S2):1-4
3. AKHTER, N. (2020). TRANSGENDER REALITIES IN THE CONTEXT OF COVID-19 IN BANGLADESH.
4. SHAH, S. P. (2019). SEDITION, SEXUALITY, GENDER, AND GENDER IDENTITY IN SOUTH ASIA. *SOUTH ASIA MULTIDISCIPLINARY ACADEMIC JOURNAL*, (20).
5. BALACHANDAR, V., MAHALAXMI, I., KAAVYA, J., VIVEKANANDHAN, G., AJITHKUMAR, S., ARUL, N., & DEVI, S. M. (2020). COVID-19: EMERGING PROTECTIVE MEASURES. *EUR REV MED PHARMACOLSCI*, 24(6), 3422-3425.
6. ADAMS, J., BRAUN, V., & MCCREANOR, T. (2008). FRAMING GAY MEN'S HEALTH: AN ANALYSIS OF POLICY DOCUMENTS. *GAYS AND LESBIAN ISSUES AND PSYCHOLOGY REVIEW*, 4(2), 108-126.

7. AHMAD, S. & KAMAL, A. (2000). DEVELOPMENT OF RAPE MYTHS SCALE AND ITS RELATION WITH GENDER ROLE ATTITUDE. PAKISTAN JOURNAL OF PSYCHOLOGICAL RESEARCH, 15(1-2), 45-74.
8. AIDMAN, E. V., & CARROLL, S. M. (2003). IMPLICIT INDIVIDUAL DIFFERENCES: RELATIONSHIPS BETWEEN IMPLICIT SELF-ESTEEM, GENDER IDENTITY, AND GENDER ATTITUDES. EUROPEAN JOURNAL OF PERSONALITY, 17, 19–37.
9. ANTOSZEWSKI, B., KASIELSKA, A., JEDRZEJCZAK, M., & KRUK- JEROMIN, J. (2007). KNOWLEDGE OF AND ATTITUDE TOWARD TRANSSEXUALISM AMONG COLLEGE STUDENTS. SEXUALITY AND DISABILITY, 25, 29-35.
10. AZAR, K. M. J., SHEN, Z., ROMANELLI, R. J., LOCKHART, S. H., SMITS, K., ROBINSON, S., ET AL. (2020). DISPARITIES IN OUTCOMES AMONG COVID-19 PATIENTS IN A LARGE HEALTH CARE SYSTEM IN CALIFORNIA. HEALTH AFFAIRS, 39(7), 1253–1262.
11. BILLARD, T. J. (2018). ATTITUDES TOWARD TRANSGENDER MEN AND WOMEN: DEVELOPMENT AND VALIDATION OF A NEW MEASURE. FRONTIERS IN PSYCHOLOGY, 9, 387.
12. BOELLSTROFF, T. (2004). PLAYING BACK THE NATION: WARIA, INDONESIAN TRANSVESTITES. CULTURAL ANTHROPOLOGY, 19(2), 159-195.
13. BEZHAN, F AND AHMAD SHAH AZAMI. (2013). PAKISTAN'S THIRD GENDER CONTESTS FIRST ELECTIONS", RADIO FREE EUROPE RADIO LIBERTY (2013).
14. BOHNER, G., & WANKE, M. (2002). ATTITUDES AND ATTITUDE CHANGE. NEW YORK: TAILOR & FRANCIS GROUP.
15. COLLINS CO BUILD. (2003). ADVANCED LEARNERS 'ENGLISH DICTIONARY (4TH ED.). THE UNIVERSITY OF BIRMINGHAM: HARPER COLLINS PUBLISHERS. P. 945.
16. CONNER, M., & ARMITAGE, C. J. (2008). ATTITUDINAL AMBIVALENCE. IN W. D. CRANO & R. PRISLIN (EDS.), ATTITUDES AND ATTITUDE CHANGE (PP. 261-286). NEW YORK, NY: TAYLOR & FRANCIS GROUP.
17. CHAKRAPANI, V. (2010). HIJRAS/TRANSGENDER WOMEN IN INDIA: HIV, HUMAN RIGHTS, AND SOCIAL EXCLUSION.
18. CHEN, J. A., GRANATO, H., SHIPHERD, J. C., SIMPSON, T., & LEHAVOT, K... (2017). A QUALITATIVE ANALYSIS OF TRANSGENDER VETERANS' LIVED EXPERIENCES. PSYCHOLOGY OF SEXUAL ORIENTATION AND GENDER DIVERSITY, 4(1), 63.
19. DAVIDSON, S. (2016). GENDER INEQUALITY: NONBINARY TRANSGENDER PEOPLE IN THE WORKPLACE. COGENT SOCIAL SCIENCES, 2: 1236511.
20. DIVAN, V., CORTEZ, C., SMELYANSKAYA, M., & KEATLEY, J. (2016). TRANSGENDER SOCIAL INCLUSION AND EQUALITY: A MIDDLE PATH TO DEVELOPMENT. JOURNAL OF THE INTERNATIONAL AIDS SOCIETY, 19, 20803.
21. DEBB, S. (2020). LIVING ON THE EDGE: COVID-19 ADDS TO DISTRESS AND DISCRIMINATION OF INDIAN TRANSGENDER COMMUNITIES.
22. HEALTH AND HUMAN RIGHTS. DAVIDSON, S. (2016). GENDER INEQUALITY: NONBINARY TRANSGENDER PEOPLE IN THE WORKPLACE. COGENT SOCIAL SCIENCES, 2(1), 1236511.
23. DEVINE, P. G., & SHARP, L. B. (2009). AUTOMATICITY AND CONTROL IN STEREOTYPING AND PREJUDICE. IN T. D. NELSON (ED.), HANDBOOK OF PREJUDICE, STEREOTYPING, AND DISCRIMINATION (PP. 61-87).
24. DUNCAN, D. B. (1955). MULTIPLE RANGE AND MULTIPLE F TESTS. BIOMETRICS, 11, 1–41.
25. FARR'E, L., FAWAZ, Y., GONZ'ALEZ, L., & GRAVES, J. (2020). HOW THE COVID-19 LOCKDOWN AFFECTED GENDER INEQUALITY IN PAID AND UNPAID WORK IN SPAIN. DISCUSSION PAPER SERIES NO. 13434. IZA INSTITUTE OF LABOR ECONOMICS.
26. HANYKUNG. (2020). 'IMPACTS OF CORONA':
27. GRANT JM, MOTTET LA, TANIS J, HERMAN JL, HARRISON J, KEISLING M. (2010). NATIONAL TRANSGENDER DISCRIMINATION SURVEY REPORT ON HEALTH AND HEALTH CARE. WASHINGTON, DC: NATIONAL CENTER FOR TRANSGENDER EQUALITY AND THE NATIONAL GAY AND LESBIAN TASK FORCE.
28. GREENACRE, M. J. (2010). CORRESPONDENCE ANALYSIS. WILEY INTERDISCIPLINARY REVIEWS: COMPUTATIONAL STATISTICS, 2(5), 613-619.

29. HERMAN, J. L., & O'NEILL, K.(2020). VULNERABILITIES TO COVID-19 AMONG TRANSGENDER ADULTS IN THE US. LOS ANGELES, CA.
30. HANSEN, K. (2020). CITIES: THE NEW FRONTIER OF SOCIAL PROTECTION, VOICES.
31. HUMAIRA JAMI, (2005). CONDITION AND STATUS OF HIJRAS (TRANSGENDER, TRANSVESTITES ETC) IN PAKISTAN". IN SEXUALITIES, GENDERS AND RIGHTS IN ASIA', 1ST INTERNATIONAL CONFERENCE OF ASIAN QUEER STUDIES.
32. FAROOQ, F., KHAN, J., & KHAN, M. U. G. (2020). EFFECT OF LOCKDOWN ON THE SPREAD OF COVID-19 IN PAKISTAN. ARXIV PREPRINT ARXIV: 2005.09422.
33. CHEN, J. A., GRANATO, H., SHIPHERD, J. C., SIMPSON, T., & LEHAVOT, K. (2017). A QUALITATIVE ANALYSIS OF TRANSGENDER VETERANS' LIVED EXPERIENCES. PSYCHOLOGY OF SEXUAL ORIENTATION AND GENDER DIVERSITY, 4(1), 63.
34. DIVAN, V., CORTEZ, C., SMELYANSKAYA, M., & KEATLEY, J. (2016). TRANSGENDER SOCIAL INCLUSION AND EQUALITY: A MIDDLE PATH TO DEVELOPMENT. JOURNAL OF THE INTERNATIONAL AIDS SOCIETY, 19, 20803.
35. HANAGAN, M. AND TILLY, C. (2010). CITIES, STATES, TRUST, AND RULE: NEW DEPARTURES FROM THE WORK OF CHARLES TILLY. THEOR SOC 39:245–263.
36. HWANG H, TOMIUK MA, TAKANE Y (2010) CORRESPONDENCE ANALYSIS, MULTIPLE CORRESPONDENCE ANALYSIS AND RECENT DEVELOPMENTS. IN: MILLSAP R, MAYDEU-OLIVARES A (EDS) HANDBOOK OF QUANTITATIVE METHODS IN PSYCHOLOGY. SAGE, LONDON
37. MONITOR, I. L. O. (2020). COVID-19 AND THE WORLD OF WORK. UPDATED ESTIMATES AND ANALYSIS.
38. MOHAN, M. (2020). CORONAVIRUS: TRANSGENDER PEOPLE 'EXTREMELY VULNERABLE' DURING LOCKDOWN. GENDER AND IDENTITY CORRESPONDENT, BBC NEWS.
39. KAMAL, H. J. A. (2020). CHAPTER FIVE A GEOGRAPHICAL ANALYSIS OF ATTITUDES AND MYTHS SURROUNDING HIJRAS IN PAKISTAN. PSYCHOSOCIAL EXPLORATIONS OF GENDER IN SOCIETY, 74.
40. KHAN, F. A. (2014). KHWAJASIRA: TRANSGENDER ACTIVISM AND TRANSNATIONALITY IN PAKISTAN. SOUTH ASIA IN THE WORLD: AN INTRODUCTION, 170-184.
41. KNIGHT, K... (2020). PAKISTAN OFFICIAL SUPPORTS TRANSGENDER COMMUNITY AMID COVID-19.
42. MASSEY, D. S., & DENTON, N. A. (1988). THE DIMENSIONS OF RESIDENTIAL SEGREGATION. SOCIAL FORCES, 67(2), 281-315.
43. MONGEY, S., PILOSSOPH, L., & WEINBERG, A. (2020). WHICH WORKERS BEAR THE BURDEN OF SOCIAL DISTANCING POLICIES? NATIONAL BUREAU OF ECONOMIC RESEARCH WORKING PAPER SERIESNO. 27085.
44. MORRIS, A. (2000). BUILDING BLOCKS OF SOCIAL INEQUALITY: A CRITIQUE OF DURABLE INEQUALITY. COMPARATIVE STUDIES IN SOCIETY AND HISTORY. 42. 482 - 486.
45. NAFEEES, M., & KHAN, F. (2020). PAKISTAN'S RESPONSE TO COVID-19 PANDEMIC AND EFFICACY OF QUARANTINE AND PARTIAL LOCKDOWN: A REVIEW. ELECTRON J GEN MED. 2020; 17 (6): EM240.
46. NOREEN, N., DIL, S., NIAZI, S. U. K., NAVEED, I., KHAN, N. U., KHAN, F. K., ... & KUMAR, D.(2020) CORONAVIRUS DISEASE (COVID-19) PANDEMIC AND PAKISTAN; LIMITATIONS AND GAPS.
47. N VAN DOREMALEN, ET AL. (2020). AEROSOL AND SURFACE STABILITY OF HCOV-19 (SARS-COV-2) COMPARED TO SARS-COV-1. THE NEW ENGLAND JOURNAL OF MEDICINE.
48. OTT, H., (2020). TRANS WOMAN FINED FOR VIOLATING PANAMA'S GENDER-BASED CORONAVIRUS LOCKDOWN. CBS NEWS.
49. PEREZ-BRUMER, A., & SILVA-SANTISTEBAN, A. (2020). COVID-19 POLICIES CAN PERPETUATE VIOLENCE AGAINST TRANSGENDER COMMUNITIES: INSIGHTS FROM PERU. AIDS AND BEHAVIOR, 1.
50. ROY, D., LEES, M. H., PFEFFER, K., & SLOOT, P. M. (2018). SPATIAL SEGREGATION, INEQUALITY, AND OPPORTUNITY BIAS IN THE SLUMS OF BENGALURU. CITIES, 74, 269-276.
51. ROY, D., LEES, M. H., PFEFFER, K., & SLOOT, P. M. (2018). SPATIAL SEGREGATION, INEQUALITY, AND OPPORTUNITY BIAS IN THE SLUMS OF BENGALURU. CITIES, 74, 269-276.
52. REN, X. (2018). GOVERNING THE INFORMAL: HOUSING POLICIES OVER INFORMAL SETTLEMENTS IN CHINA, INDIA, AND BRAZIL. HOUSING POLICY DEBATE, 28(1), 79-93.

53. PATEL, A., KOIZUMI, N., & CROOKS, A. (2014). MEASURING SLUM SEVERITY IN MUMBAI AND KOLKATA: A HOUSEHOLD-BASED APPROACH. *HABITAT INTERNATIONAL*, 41, 300-306.
54. SCHEIM, A. I., & BAUER, G. R. (2015). SEX AND GENDER DIVERSITY AMONG TRANSGENDER PERSONS IN ONTARIO, CANADA: RESULTS FROM A RESPONDENT-DRIVEN SAMPLING SURVEY. *THE JOURNAL OF SEX RESEARCH*, 52(1), 1-14.
55. HAIDER, S. K., & BANO, M. (2006). FALLACY ABOUT MALE-TO-FEMALE GENDER DYSPHORICS IN PAKISTAN. *PAKISTAN JOURNAL OF PSYCHOLOGY*, 37(2), 45-60.
56. HAMILTON, D. L., SHERMAN, S. I., CRUMP, S. A., & SPENCER-RODGERS, J. (2009). THE ROLE OF ENTITATIVITY IN STEREOTYPING. IN T. D. NELSON (ED.), *HANDBOOK OF PREJUDICE, STEREOTYPING, AND DISCRIMINATION* (PP. 179-198).
57. HEREK, G. M. (2009). SEXUAL PREJUDICE. IN T. D. NELSON (ED.), *HANDBOOK OF PREJUDICE, STEREOTYPING, AND DISCRIMINATION* (PP. 441-467).
58. FORSS, A., & ISRAR, H. (2016, JUNE 03). TRANSGENDER IN PAKISTAN: A "FORGOTTEN PEOPLE. RETRIEVED JUNE 17, 2018, FROM INTER PRESS SERVICES:
59. NAZIR, N., & YASIR, A. (2016). EDUCATION, EMPLOYABILITY AND SHIFT OF OCCUPATION OF TRANSGENDER IN PAKISTAN, A CASE STUDY OF KHYBER PAKHTUNKHAWA. *THE DIALOGUE* 11(2), 158-176.
60. SHAH, H. B. U., RASHID, F., ATIF, I., HYDRIE, M. Z., FAWAD, M. W. B., MUZAFFAR, H. Z., & HASSAN, A. (2018). CHALLENGES FACED BY MARGINALIZED COMMUNITIES SUCH AS TRANSGENDERS IN PAKISTAN. *THE PAN AFRICAN MEDICAL JOURNAL*, 30.
61. VAN DER MIESEN, A. I., RAAIJMAKERS, D., & VAN DE GRIFT, T. C. (2020). "YOU HAVE TO WAIT A LITTLE LONGER": TRANSGENDER (MENTAL) HEALTH AT RISK AS A CONSEQUENCE OF DEFERRING GENDER-AFFIRMING TREATMENTS DURING COVID-19. *ARCHIVES OF SEXUAL BEHAVIOR*, 1.
62. TANG D, TOU J, WANG J, CHEN Q, WANG W, HUANG J, ET AL.(2020) PREVENTION AND CONTROL STRATEGIES FOR EMERGENCY, LIMITED-TERM, AND ELECTIVE OPERATIONS IN PEDIATRIC SURGERY DURING THE EPIDEMIC PERIOD OF COVID-19.
63. TILLY, C. (1999). *DURABLE INEQUALITY*. CALIFORNIA, US: UNIVERSITY OF CALIFORNIA PRESS.
64. VAN DORN, A., COONEY, R. E., & SABIN, M. L. (2020). COVID-19 EXACERBATING INEQUALITIES IN THE US. *LANCET*, 395(10232), 1243.
65. WAHBA, S., SHARIF M. M., MIZUTORI., & SORKIN L. (2020). CITIES ARE ON THE FRONT LINES OF COVID-19. *SUSTAINABLE CITIES*.
66. WANG D, HU B, HU C, ZHU F, LIU X, ZHANG J, ET AL.(2020) CLINICAL CHARACTERISTICS OF SPITALIZED PATIENTS WITH 2019 NOVEL CORONAVIRUS-INFECTED PNEUMONIA IN WUHAN, CHINA. *JAMA*. 323:1061-9.
67. WANG D, HU B, HU C, ZHU F, LIU X, ZHANG J, ET AL.(2020) CLINICAL CHARACTERISTICS OF SPITALIZED PATIENTS WITH 2019 NOVEL CORONAVIRUS-INFECTED PNEUMONIA IN WUHAN, CHINA. *JAMA*. 323:1061-9.
68. WENHAM, C., SMITH, J., & MORGAN, R. (2020). COVID-19: THE GENDERED IMPACTS OF THE OUTBREAK. *THE LANCET*, 395(10227), 846-848.
69. WINTER, S., DIAMOND, M., GREEN, J., KARASIC, D., REED, T., WHITTLE, S., & WYLIE, K. (2016). TRANSGENDER PEOPLE: HEALTH AT THE MARGINS OF SOCIETY. *THE LANCET*, 388(10042), 390-400.
70. SEHGAL, H. F. (2020). ACCELERATING THE PACE TO A FAIRER WORLD. *DEFENCE JOURNAL*, 23(7), 64.
71. SHAH, H. B. U., RASHID, F., ATIF, I., HYDRIE, M. Z., FAWAD, M. W. B., MUZAFFAR, H. Z., ...& HASSAN, A. (2018). CHALLENGES FACED BY MARGINALIZED COMMUNITIES SUCH AS TRANSGENDERS IN PAKISTAN. *THE PAN AFRICAN MEDICAL JOURNAL*, 30.
72. KNIGHT, K. (2020). SOCIETAL DISCRIMINATION COMPOUNDS HEALTH RISKS. *HUMAN RIGHTS WATCH*. RETRIEVED FROM HEALTH CARE SCHEME FOR TRANSGENDER. *AL JAZEERA NEWS*. RETRIEVED FROM
73. JEFFERY, P., (2016). WHAT ROLE DO CITIES PLAY IN SOCIAL INCLUSION AND WELFARE POLICIES? *POLICY BRIEF FOR EURO CITIES*.
74. JAMI, H., & KAMAL, A. (2015). MEASURING ATTITUDES TOWARD HIJRAS IN PAKISTAN: GENDER AND RELIGIOSITY IN PERSPECTIVE. *PAKISTAN JOURNAL OF PSYCHOLOGICAL RESEARCH*, 30(1).

75. VAN EIJK, G.. (2010). UNEQUAL NETWORKS: SPATIAL SEGREGATION, RELATIONSHIPS AND INEQUALITY IN THE CITY VOL. 32. GWEN VAN EIJK.
76. WIEMERS, E., SCOTT ABRAHAMS., MARWAALFAKHRI,, V. JOSEPH HOTZ., ROBERT F. SCHOENI., AND JUDITH A. SELTZER (2020). DISPARITIES IN VULNERABILITY TO COMPLICATIONS FROM COVID-19 ARISING FROM DISPARITIES IN PREEXISTING CONDITIONS IN THE UNITED STATES. RESEARCH IN SOCIAL STRATIFICATION AND MOBILITY 69, 100553.
77. Y. LIM., HYUNJOON PARK., HANNAH TESSLER., MEERA CHOI., GOWOONJUNG.,AND GRACE KAO. (2020). MEN AND WOMEN’S DIFFERENT DREAMS ON THE FUTURE OF THE GENDERED DIVISION OF PAID WORK AND HOUSEHOLD WORK AFTER COVID-19 IN SOUTH KOREA. RESEARCH IN SOCIAL STRATIFICATION AND MOBILITY 69, 100544.
78. ZHOU P, YANG X-L, WANG X-G, HU B, ZHANG L, ZHANG W, ET AL. (2020) A PNEUMONIA UTBREAK ASSOCIATED WITH A NEW CORONAVIRUS OF PROBABLE BAT ORIGIN. NATURE. 579:270–3.