

**Stateless Rohingya Refugee Integration in Informal Economy: A Case from
Cox's Bazar District in Bangladesh.**

by

Nishat Tasnim Akhi

Submitted to

Central European University PU

Department of Economics and Business

In partial fulfillment of the requirements for
the degree of Master of Arts in Economic
Policy in Global Markets

Supervisor: Professor Yusaf H. Akbar

Vienna, Austria

2021

Abstract:

Myanmar's genocide on Rohingya Muslim community have caused displacement for this minority group and this led them to migrate into neighboring countries. Bangladesh is the country where majority of the people from Rohingya community of Myanmar have been sheltered as refugees over the years. Since these refugees do not hold any legal work right in Bangladesh, they are involving into different informal economic activities along with various crimes in the city where they have been kept. In this paper, it is being evaluated that if the refugees could successfully integrate in the informal economic sector in the Cox's Bazar district of Bangladesh by comparing their labor market activities with the local people. The findings say that there is a wide variation in terms of type of occupation and earnings per month between the local and refugee workers. Moreover, the results also indicate that Rohingya refugees face more difficulties while accessing to labor market compared to local workers.

Table of Contents

Abstract:	ii
List of Figures:	iv
List of Tables:	v
1. Introduction:	1
2. Literature Reviews:	3
2.1 Informal Economy:	3
2.2 Migration Impact on Labor Market:	6
2.3 Rohingya Refugees assimilation in Bangladesh:	8
3. Data and Methodology:	10
3.1 Data Collection:	10
3.2 Methodology:	10
3.2.1 Hypothesis Development:	11
4. Empirical Findings:	13
5. Discussion:	25
6. Policy Options and Conclusion:	26
References:	30

List of Figures:

Figure 1:Refugee Camps in Cox' Bazar.....	2
Figure 2: Education Level of Rohingya Refugees	14
Figure 3: Education level of Natives in Cox's Bazar	15
Figure 4:Average Monthly Income for Each Education Level for Rohingya	15
Figure 5: Variation in Occupation for Refugees	16
Figure 6: Variation in Occupation for Locals	17
Figure 7: Difficulty to Find a Job among Rohingyas: Language.....	18
Figure 8:Difficulty to Find a Job among Locals: Language	18
Figure 9:Difficulties to Enter Labor Market: Race: Rohingya	19
Figure 10:Difficulties to Enter Labor Market: Race: Locals	19
Figure 11:Difficulties to Enter Job Market: Rohingya: Religion	20
Figure 12:Difficulties to Enter Job Market: Locals: Religion	21

List of Tables:

Table 1:ANOVA Results for Occupation Sectors between Rohingya and Locals	21
Table 2:ANOVA Results for Earning Per Month of Rohingya and Local people	22
Table 3:ANOVA Finding of Language being a problem to get a job	22
Table 4:ANOVA Finding of Race being a problem to get a job	23
Table 5:ANOVA Finding of Religion being a problem to get a job	24

1. Introduction:

Over the past few years, violence, civil wars in countries have caused several displacements of the world population. As per UNHCR report of 2017, two thirds (almost 68%) of worlds' refugees come from five countries and those are- Syrian Arab Republic, Afghanistan, South Sudan, Myanmar, and Somalia. The host countries for these refugees are mainly turkey, Pakistan, Uganda, Lebanon, Islamic Republic of Iran, Germany, Bangladesh, and Sudan (UNHCR, 2018). In Myanmar, Rohingya genocide is a very recent case that had caught the attention of whole world because of the genocide, Myanmar government did on minority Muslim people in that country. Bangladesh has been the most prominent host country for the Rohingya Refugee who had been fleeing to Bangladesh since 1978 (Idris & Khatun, 2018). It took new dimension on 2017 when the mass genocide in Myanmar had started. In 2017, 655500 Rohingya Muslim minorities from Myanmar have been displaced to Bangladesh within just 100 days (UNHCR, 2018). They have been mostly staying in the Cox' Bazar district which shares the border with Myanmar through the Naf river.

Who are these Rohingya people? – that is a question to be answered in this section. Rohingya people are the ethnic minorities in western Myanmar living in the Rakhine state. They have been subjected to discrimination in terms of their national rights, basic human rights and even denied the right to live since ages (Amnesty International, 2018). They were forced to migrate to the neighboring countries having been subjected to abduction, rape, and mass killings. Bangladesh kept on giving shelter to these refugees and opened border for them. As per UNHCR, more than 9,000,000 Rohingya refugees are residing in three refugee camps in the coastal area of Bangladesh, Cox's Bazar (UNHCR, 2018). From 2017, Cox's Bazar in Bangladesh have become the one of the

largest areas where humanitarian crisis has taken place. A fact sheet of Population of Rohingya refugees by UNHCR in Bangladesh is shown below:

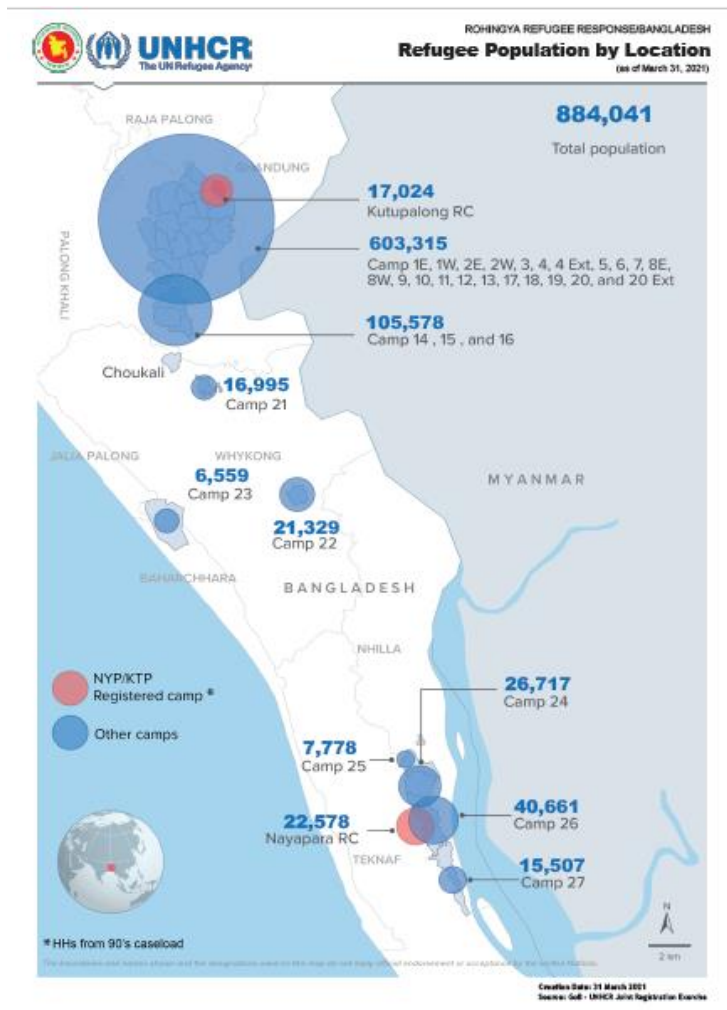


Figure 1: Refugee Camps in Cox' Bazar

Every nation which have been affected by such refugee inflow, have faced several socio political and economic issues. These kinds of examples can be found on other parts of the world i.e., Syrian refugees in Turkey, Palestinian refugees in Lebanon and so on (Idris & Khatun, 2018). Bangladesh is not a different case. Generations after generation, the Rohingya people were being assimilated in Bangladesh. It caught the light of world media very recently after the largest inflow of these

refugees. Thus, data driven work on the socio-political impact of Rohingya migration to Bangladesh is still very much negligible. The aim of this research is to see if the Rohingya Refugee could successfully integrate in the local economy of Cox's Bazar in Bangladesh or not.

To measure how successfully they have integrated in the labor market, this paper would look at the aspect of what kind of jobs these refugees are in compared to the local people. It would also assess the accessibility to labor market by these refugees relative to the natives in that community. Also difference in income level between natives and refugees on the same job would also be considered while concluding if the refugees have successfully integrated in the labor market of the Cox's Bazar District in Bangladesh or not.

2. Literature Reviews:

The impact of immigrants or refugees on formal/informal economy has been discussed widely in several literatures. In this section of literature review, first part would be on brief overview of informal economy and how it looks in developing countries followed by immigrants' impact on labor market and finally Bangladesh government current policies regarding Refugees integration in the host country.

2.1 Informal Economy:

As per (ILO Report, 2018) more than 60% of worlds' working population is under informal economy. While it is very easy to be employed in informal economy, it is as hard to regulate the informal economy. This report further mentions that 93% of world' informal employment is in the developing countries. The informal sector is more attractive for women as an employment opportunity in lower- and middle-income countries. Moreover, the percentage also varies by the urban and rural areas of a country. In rural areas, the probability of getting employed in informal

economy is twice as higher as those in urban areas. This is explained by the level of education and access to opportunities in certain community. In general, rural community in specific country lack of basic facilities and industrialization is very unlikely to happen on those remote rural areas. Thus, the population in those areas have not many options except for engaging in informal labor market. The report went on mentioning that the higher the informality in an economy, the higher the lack of social protection, lack of good working conditions, denial of work rights and several other social economic issues.

As per ILO definition, informal sector can be defined as labor intensive with small scale of operations. More broader definitions explain informal economy as a process of earning income which is unregulated by the institutional law or policies (ILO Report, 2018). Given the nature of activities in informal economy, it is very much hard to regulate this part of the economy in a certain country. It is very hard to define the activities to bring under any institutional forms in informal economy. How do you tax a farmer who just grows vegetables in his small yard in front of the house and sell them in the neighborhood of 2-3 families? While the government can't regulate this sector the way it regulates formal economy, the discrepancy between these two form of economy remains very high (Pratap & Quintin, 2006). Most of the time, since there is hardly any regulation in informal economy, this sector sometimes get burdened with various illegal activities such as low wage workers import from the informal economy, unregistered small scale company establishments for tax evasion, and several others (Chen et al., 2002).

A research by (Rei & Bhattacharya, 2008) shows that democracy and corruption law has negative effect on informal economy. The inference of this statement is that if in a country there is democracy and government control the corruption, the size and scope of informal economy shrinks. Does that verify that informal economy might have more illegal work opportunities than

the formal economy? It is not verified by this research. The research further states that while government regulation is very poor in informal economy, it is a very attractive source for the immigrants to get employed in this sector. Working as a day labor or hourly wage worker is an attractive source of income for illegal immigrants in the developing countries. While these immigrants do not pose the official work permit from the government, they can easily switch firms when they are hired on a daily or hourly basis as wage workers. Thus, integration in informal economy is very easier for the immigrants in a specific country.

In Bangladesh, informal economy constitutes more than 87% of the labor force, states the ILO statistics of Bangladesh (ILO, 2016). The informal economic activities mostly involve labor force being low paid wage laborer, self-employed working person on small business, fishing and framing, and employed in other low skilled jobs. According to (Mondal, 2017), informal economic activities are not just concentrated in rural Bangladesh, it is widely also seen in the largest city (also a capital city) in Bangladesh, even though 92% of the informal workers are located in rural areas. Mostly, the informal workers are seen as vegetable and fish vendors in the streets of the city. People from rural Bangladesh migrate to cities in search of better livelihood and start involving in the informal economic activities before they get any formal job i.e., jobs in garment sectors. In Bangladesh, it is very easier to be in informal sector due to lack of any labor law institution actively working on this sector (Islam, 2017). To be self employed in the activities like- vegetable selling, rickshaw pulling, van driving and other informal activities to earn livelihood, does not require any permission from an authority.

People with no educational background or education level till primary school are the core participants of the informal labor force. As per (Mujeri, 2020), there exist a negative co relation between the educational attainment and informality in the labor market. It was found that more

than half of the population who are in informal labor force, are with no schooling while only .5% had some sort of vocational trainings in Bangladesh. Low wage, insecure working conditions, deprivation of on work rights are the common scenarios in the informal job sector of Bangladesh (Islam, 2017). A country where a citizen has to fight for the right of minimum welfare and working condition while being on job, employment for a refugee seems to be very high aiming policy.

2.2 Migration Impact on Labor Market:

Even though the widespread view of immigrants impact on labor market says that, immigrants or refugees have adverse effect on the labor market which impact the natives, several research have concluded that the refugees or immigrants have less or no impact on the labor market activities for the natives. The economic theory says something dissimilar from the research results. As per economic theory, inflow of refugees causes an expandable supply shock on the labor market and how it impacts the locals, it depends on the magnitude and characteristics of the refugee influx (Schneiderheinze & Lücke, 2020). As per the literature, if the refugees cannot obtain work permit, they are subjected to not being able to seek jobs. Then, they are forced into narrow labor market segments or search for jobs in informal economy starts. This results in wage disorder the local community and sizable income loss for the natives (Peri, 2014). The situation is more intensive in developing countries. As per (Schneiderheinze & Lücke, 2020), the developing countries which host the refugees receive a huge amount of financial support from the International community in the form of grants or cash based assistance to run the camps for refugees and support them. Yet some of the refugees flee these camps since the governmental support becomes not enough for them to survive and become the illegal migrants.

To gauge the effect of migration on labor market, (Pischke & Velling, 1997) have conducted a research on German workers' employability outcome by the migration impact. It used

previous employment outcome of the German workers before and after the migration by using difference and difference method and found no impact of migration on the employability of German workers. Yet, some other research has contradictory views as opposed to earlier literature. As per (Borjas & Katz, 2007), the educational level of immigrants can have detrimental effect on the natives. They investigated the migration effect of Mexican on local united states and found that natives who are less educated face competition in the presence of educated Mexican migrants.

On another research on the same country, USA, the result shows that the substitutability of immigrants with natives with the same level of quality in terms of education and experience level is very low. (Ottaviano & Peri, 2012) uses the alternative nested-CES models to see the elasticities of demand for the natives in the presence of migrant worker on the same level. Another research on native vs migrants integration into labor market in Malaysia says that migrants rather increase the employability of natives in the country. Thus, successful integration of migrants in the host country also depends on the demand of labor market of a specific region (Ozden & Wagner, 2016).

A study looked at the impact on firm level production by the influx of refugees. The study group was Syrian refugees on Turkish labor market. The research showed that increase in refugees by 1% point in total population, reduces the probability of getting employment by individuals by .3% points. Yet the refugee influx increases the local level firm production since the refugees replace the native workers in the informal labor market increasing the competition in low wage jobs. This ultimately reduce the labor cost for the firms and increase the marginal production (Altındağ et al., 2020).

Since some of these research state that there are no difference on natives and immigrants in the labor market integration as an impact of migration, it must be the case that then immigrants have no access to job market since the natives always have the priority and preferential benefits

by employers. Literature says something very different. According to (Desiderio, 2016), average employability is much less for refugees or beneficiaries of asylum compared to natives or the family migrants in Europe. The author argues that lack of policies to address the refugee issues put these refugees in disadvantaged position for the labor market and it impact their socio-economic lives.

2.3 Rohingya Refugees assimilation in Bangladesh:

As per (Mukta, 2020), the Rohingya refugees are mostly concentrated in shelter camps in Cox's Bazar District organized by local and international NGOs. They live on the support what they get from these NGOs and few government subsidies. None of these are enough to be able to survive in minimum of humanitarian ways of surviving. Due to which a lot these refugees have fled from these camps and mixed with local people. The local language of Cox's Bazar district and Rohingya language are quite similar which had made it easier for them to easily communicate and mingle with the local people. Yet, the state language Bengali which is also the official language in the job sectors and offices, even in any low paying jobs, is not known by these refugees. Ultimately, the reason for which they have fled from the camps remains very unchanged. Integrating in labor market remains hard for them. (Mukta, 2020) have comprehended the labor market access of refugees through the variables such as education level, time period of their stay in Bangladesh, and language. The results showed that the longer they stayed in the host country, the higher the chance was to get integrated in labor market. The study also indicated that education level and language affected their access to labor market very slightly.

As per (Khatun, 2017), only 32.1% of the total appeal for humanitarian support for Rohingya refugees by government of Bangladesh have been met by International donors and agencies. Thus, these people are living at very inhuman condition in the Rohingya Camps of in

Cox's Bazar Districts where they have lack of access to health care facilities, education facilities for children and several other basic human rights. In these circumstances, these people are left with no other options than fleeing the camps and hold onto any income sources they get. Some local firms which are just after money making, give employment to these people with low wages. This impacts the local workers who demand the minimum wage at least set by the government. Some refugees who cannot get into any jobs start small business such as- selling vegetables in the streets, be a street hawker or be engaged in any crimes i.e., selling illegal drugs.

On another note, Bangladesh on 2018, have declared that they won't keep the Rohingya Refugees permanently in the country and Myanmar should make the situations so that these refugees can go back to their home country (Reuters, 2018). Yet, in 2021, Bangladesh government has made arrangements for the Rohingya refugees in an island called "Bhasan Char" which is a cyclone prone island in the Bay of Bengal. Government has claimed that this reallocation was necessary since due to lack of income, the refugees are fleeing from the camps in Cox's Bazar and getting into illegal activities. This results in increasing number of crimes in the district. Thus, moving them away from the local community will stop them to integrate with local people and this will exclude them from access to employability (AlJazeera, 2021).

A research by (Ahmed et al., 2020) have analyzed a survey data of 167 sample size to see how successfully the Rohingya refugees could be assimilated in the host country, that is Bangladesh. They have considered access to labor market as a key variable to assimilate in the host community. As a method of analysis, they compared the access to labor market both Rohingya refugees and local people for the same job sectors. It was found that the refugees faced discrimination in terms of their racial and ethnic identity while having access to job market compared to the local workers. Yet in terms of low wage jobs, the ration of access to these jobs

were similar both for the local people and refugees. Thus, they conclude that in some low skilled jobs the assimilation is inevitable, and government must take policies while considering this issue.

3. Data and Methodology:

3.1 Data Collection:

The survey data was collected from Kutupalong camps resided in Cox's Bazar district in Bangladesh where more than 50,000 Rohingya refugees are staying during 2020. Before going into the field, a mandatory permission was taken from a review board of an International University. Due to confidentiality purpose the name of the university has not been disclosed. This data collection process is part of a huge research conducted by the university itself. The permission was also taken from both local authority and the International authorities who were main organizers of the Rohingya camps. After the permission, a group of field workers have been appointed who were the local people of Cox's Bazar for easier communication among the respondents. The district office has given support with the administrative work as well while having access to the refugee camps of UNHCR and other national and International NGOs. I have been given permission to use a part of the data since I worked as a research assistant on that project.

The consents from the respondents were taken initially before starting of the survey. The surveys were recorded both in recordings and in written forms. The surveys were then put in the excel sheets while matching them with the recordings. The unique identifiers for this survey were their names which later in the dataset was transformed into randomly generated ids.

3.2 Methodology:

In this research, a survey data is being used from two groups of the population. The sample size consists of 300 refugees and 300 local people from the Cox' Bazar district where these Rohingya Refugees have fled to and currently staying. Given the small number of sample size, Analysis of Variance (ANOVA) approach would be used to compare the mean difference in the different categories. Means from different explanatory variables would be calculated such as income level, type of occupation, language, religion, and race as a barrier to enter the labor market. Type of occupation have classified in several groups and given a numeric number to each occupation. These are: 1= Researcher; 2=daily wage labor; 3= Rickshaw/ van driver; 4= Small business; 5= Fishing and related; 6=Farmer; 7=Teacher; 8= Clerk; 9= Computer related; 10= Cook/Housekeeper; 11= Plumber; 12= Carpenter; 13=others; and 14=multiple.

Earnings per month has been included as income level. Language, Race and Religion as a barrier to entry labor market are defined on the 4 different levels: 1 being very easy to 4 being very hard. I intend to see if there are any differences on these categories between locals and refugees to have access to labor market. The means from these categories would be compared across the two subgroups of the sample: local vs refugees.

3.2.1 Hypothesis Development:

The access to labor market is a vital factor to assimilate in the economy in terms of employment. While some of literature mentions that there are no differences in terms of employment between refugees and native people in a host country, some literature suggests that discrimination in terms of national identification do exist for accessing to labor market (Borjas & Monras, 2017). From 2017, when the Rohingya influx to Bangladesh was severe as per UNHCR database, local employment in the Cox's Bazar district was impacted in terms of abundant supply of labor. (Ahmed et al., 2020). In this regard, it is assumed that since the refugees lack skills that

are required formal sector employment and thus don't have access to that sector very easily. Yet, in informal economy they can easily replace the native workers and have no differences in terms of access to employment since it is very hard to regulate informal economy due to various legal and administrative processing (Altındağ et al., 2020).

Thus, my first two hypothesis are as follows-

H1: There is no difference between natives and Rohingya refugees by occupational level in informal sector.

H2: There is no difference between natives and Rohingya refugees in terms average monthly income.

While there have been reports regarding Rohingyas fleeing from the camps in Cox's Bazar district, they are generally integrating in the local economy and taking part in economic activities to meet their daily needs (Human Rights Watch, 2021). As per the report there have been discriminative activities from the firm level while giving employment. The number of factors affecting the access to employment for Rohingya refugees even in the informal sector is vivid i.e., race, religion, language, and several others(Ahmed et al., 2020).

Thus, my next three hypotheses are about to see if there are any differences while accessing the employment opportunities between Rohingya refugees and local people on the basis of religion, race and language.

H3: There is no difference between Rohingya refugees and natives while accessing the job opportunity on the basis of **language**.

H4: There is no difference between Rohingya refugees and natives while accessing the job opportunity on the basis of **Race**.

H5: There is no difference between Rohingya refugees and natives while accessing the job opportunity on the basis of **Religion**.

These five different models will be run on these explanatory variables as mentioned above through ANOVA approach. In this research, if we can reject all the null hypothesis, we will consider that refugees could integrate in local labor market alongside the natives.

4. Empirical Findings:

Almost 87% of the respondents in the survey group were male opposed to 13% female, since men are represented predominantly in public sphere of the economic activities in Bangladesh. 60% of the refugee have no educational qualification while around 25% of them have completed primary school level (figure 2). On the other hand, the local people living in the same

community have nearly 30% of the primary education, 20% of them have secondary education level and 35% of them have no schooling (figure 3).

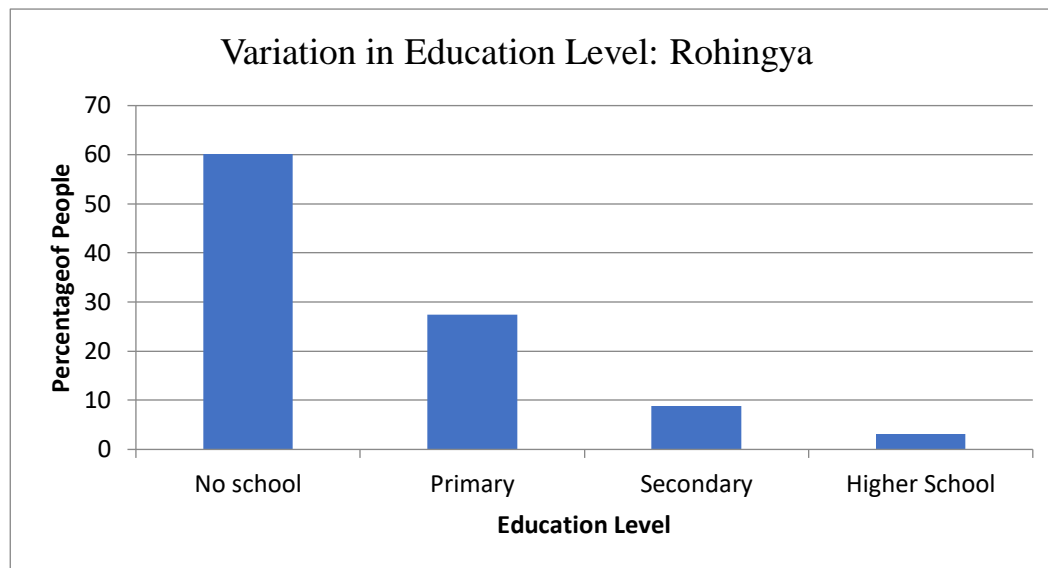


Figure 2: Education Level of Rohingya Refugees

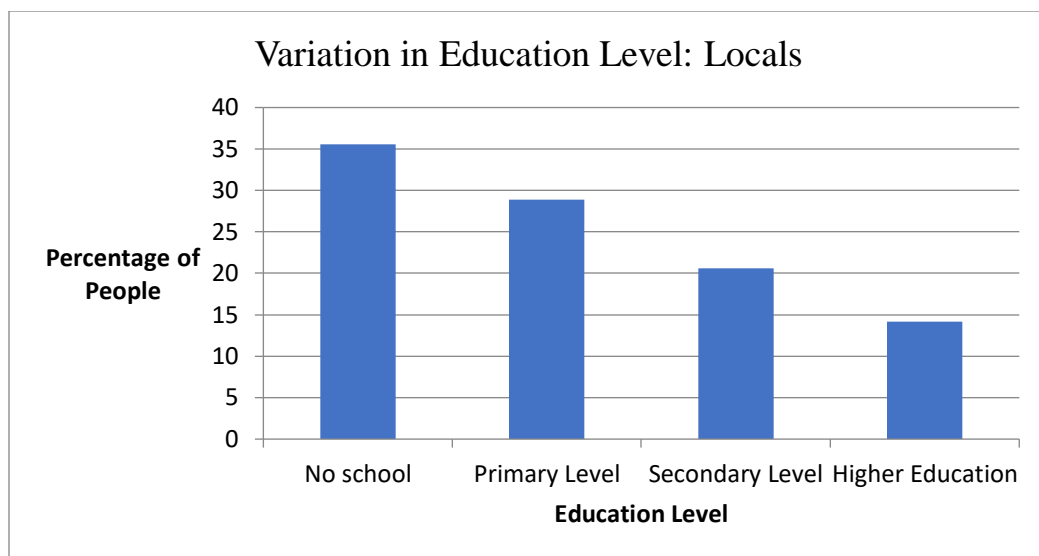


Figure 3: Education level of Natives in Cox's Bazar

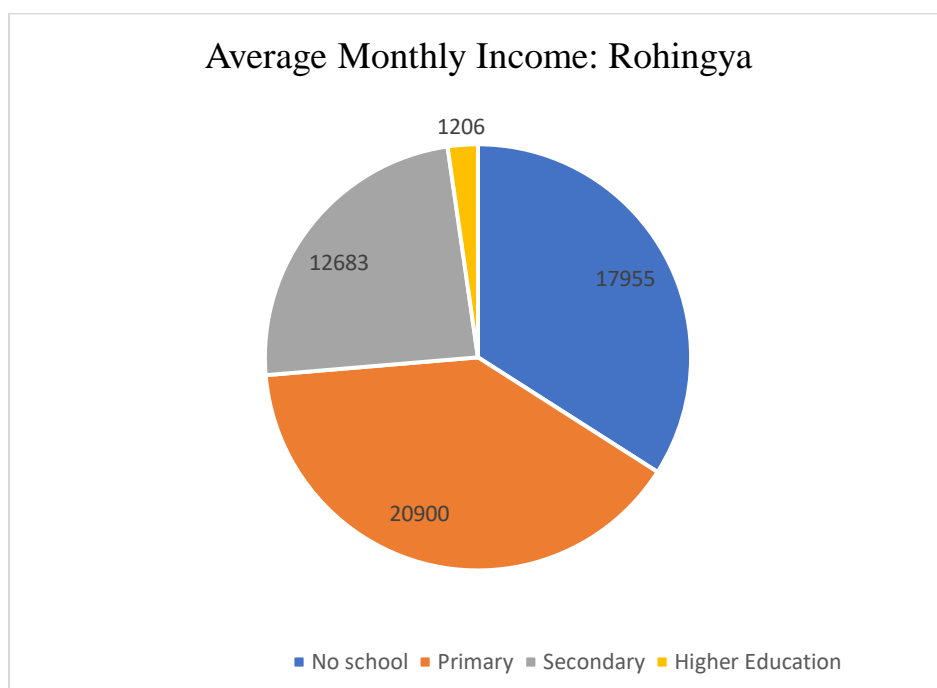


Figure 4: Average Monthly Income for Each Education Level for Rohingya

Also, the figure 4 shows the average monthly income by education level of the refugees. It is visible by the figure that people with Primary Education level has more average monthly income than people with no schooling, secondary level schooling and higher educational level. It is very

interesting to see that people with only primary education earn more than secondary and higher education level. This can be explained by figure 5 which shows their occupational field for earnings. Since the higher number of Rohingya Refugees are involved in being daily wage laborers and in small business, these jobs do not require higher level of education. Thus, people with educational level higher than primary level cannot really go for these jobs due to not meeting the job level according to their education level.

In terms of occupation level, both of the groups were mostly involved in small business. Here, the small business is defined as small tea stalls, and vegetable vendors. As per figure 5 and 6, Rohingya refugees have around 20% of them involved in these small businesses whereas local people of the same district have this percentage around 30%.

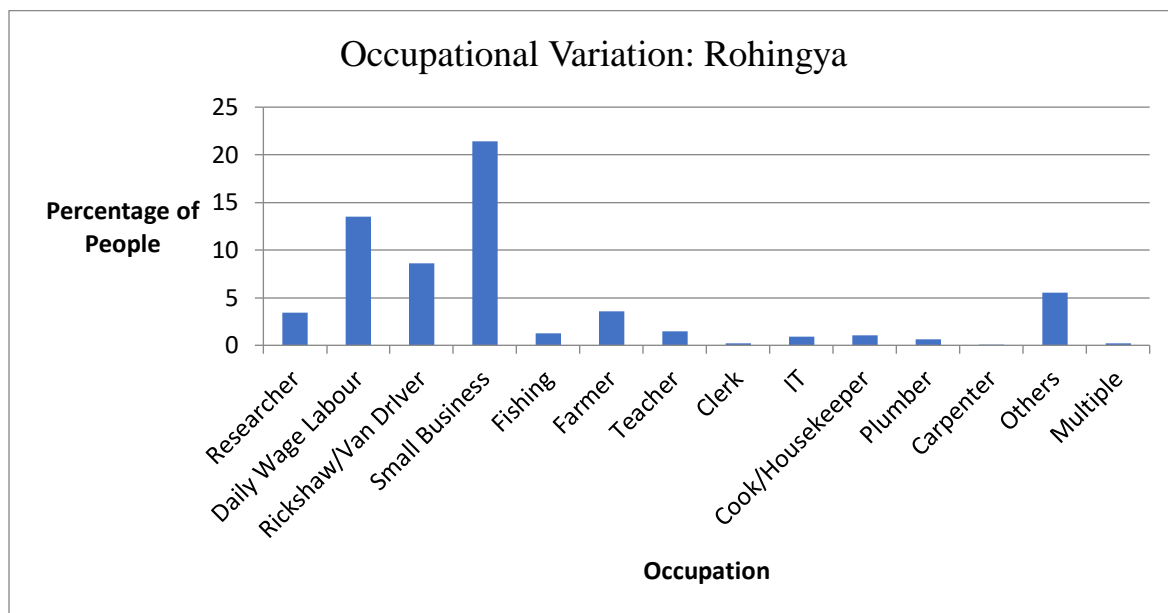


Figure 5: Variation in Occupation for Refugees

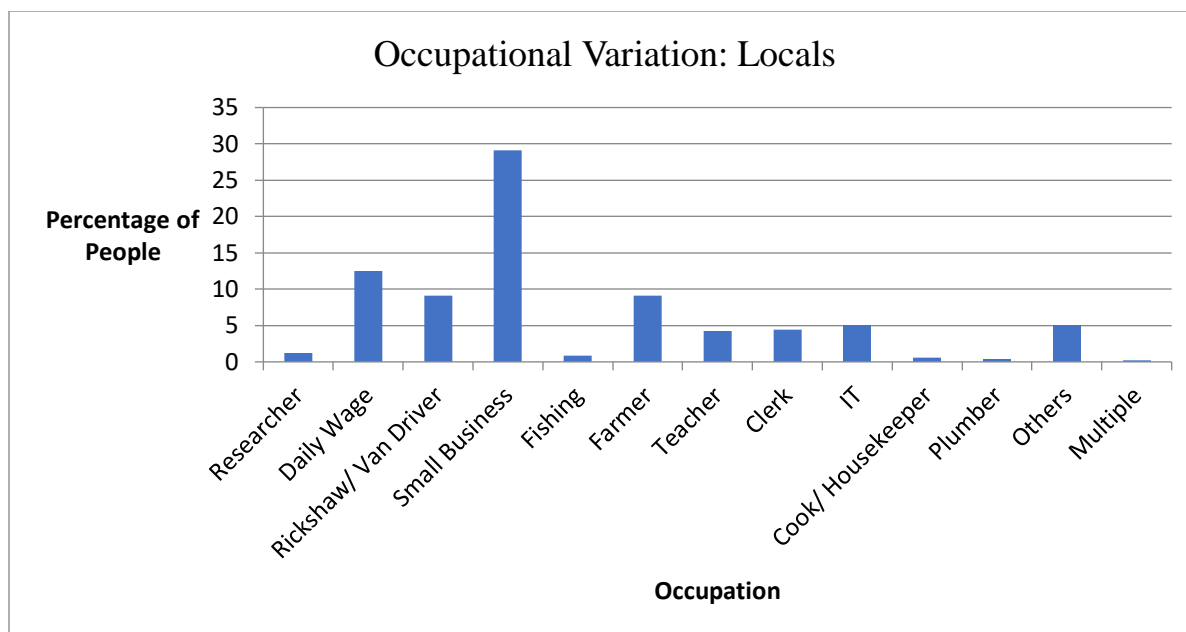


Figure 6: Variation in Occupation for Locals

Factors Affecting Labor Market Access:

Language:

As per the survey data, Language as a factor to find a job had been a major problem for 34% of the Refugees in the sample group (figure 7). On contrary, for locals the percentage was nearly 1% (figure 8). There is a huge gap of language being not a problem at all between these Rohingyas and local people which equal to 47.40%. This 47.40 percentage point gap illustrates that language is a key factor while finding a minimum wage providing job in the labor market. Here language skills referred to Bengali native language skills in the community.

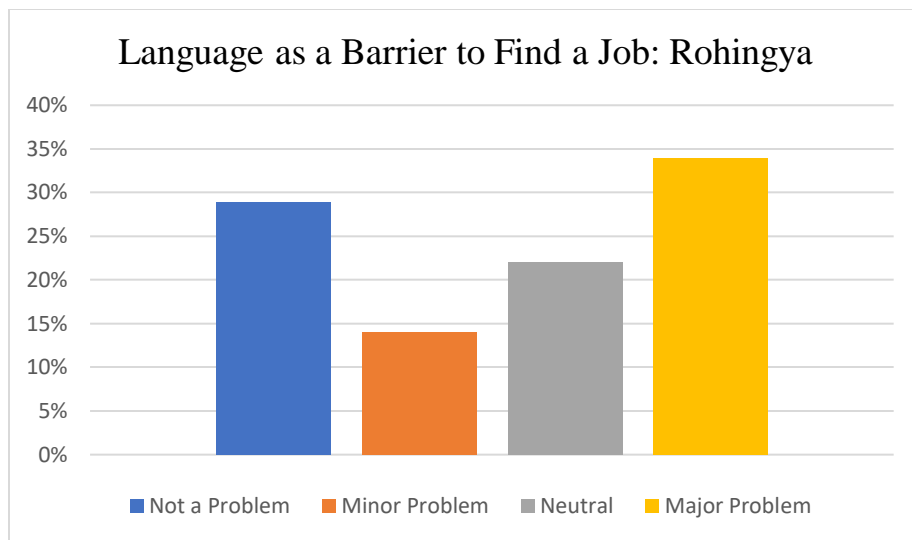


Figure 7: Difficulty to Find a Job among Rohingyas: Language

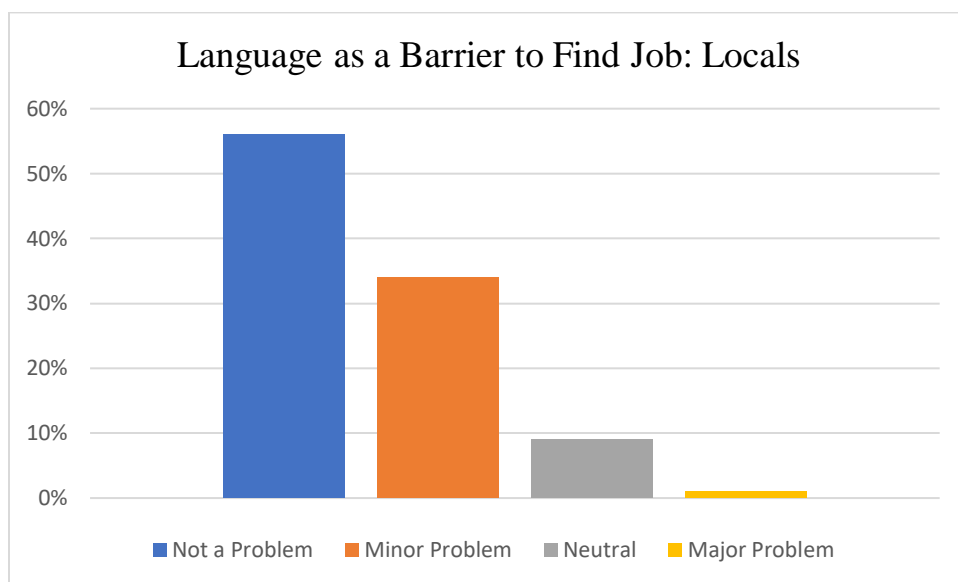


Figure 8: Difficulty to Find a Job among Locals: Language

Race:

While assessing if Race played a role for Rohingyas in accessing the job market we see that for Rohingya community Race was a major problem compared to local ones. Being Rohingya did really played a role while looking for jobs in the labor market. For Rohingya refugees, race

being a major problem responded by 30% of the sample size opposed to hardly 1% in the local people as illustrated in figure 9 and 10. This could explain the refugees mostly being involved in small business (figure 4). Due to their ethnic racial identity, it is very hard to get into any wage paying employment.

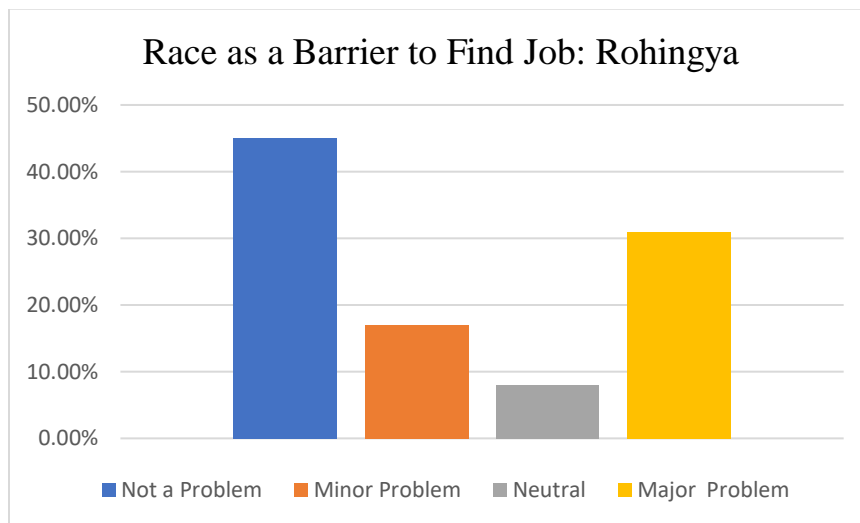


Figure 9: Difficulties to Enter Labor Market: Race: Rohingya

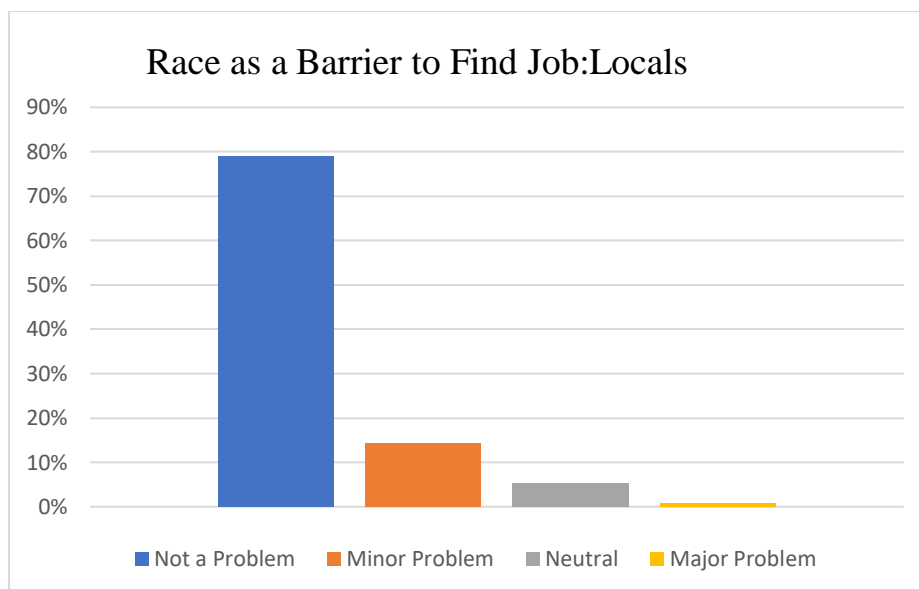


Figure 10: Difficulties to Enter Labor Market: Race: Locals

Religion:

As illustrated in figures 11 and 12, religion seems to affect the entry to labor market very negligibly. Still 10% of the Rohingya refugees have stated that it was a major problem as per figures 11 and 12. Since Bangladesh has the population where majority of them are Muslims in religion, Rohingya Refugees being Muslim shouldn't impact their access to labor market. Yet it did for 10% of the sample population.

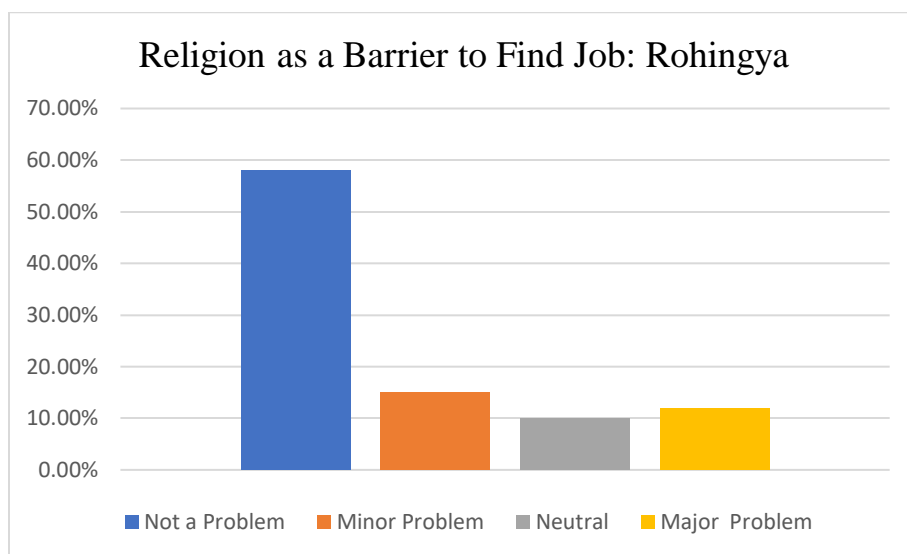


Figure 11: Difficulties to Enter Job Market: Rohingya: Religion

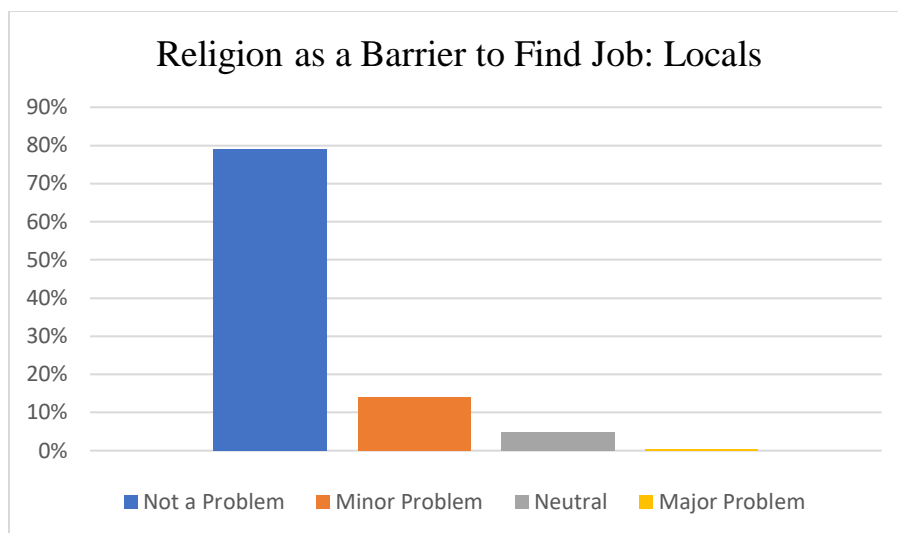


Figure 12: Difficulties to Enter Job Market: Locals: Religion

To see if these differences are statistically significant or not, we perform the ANOVA (Analysis of Variance Approach) test on these variables which play crucial roles in determining the accessibility in the labor force.

Table 1: ANOVA Results for Occupation Sectors between Rohingya and Locals

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
dummy_country	1	69.9	69.87	42.57	1.51e-10 ***
Residuals	569	933.9	1.64		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					

The term “dummy_country” stands for the nationality of the respondents. If they are Rohingya refugees, it gets 1; otherwise 0. Table 1 shows that variation in Occupation among Rohingya and Refugees does exist. There is a difference between Rohingya Refugees and Local people while having a job in different sectoral level as depicted in earlier figures of 4 & 5. With p value being less than .0001, we reject the null hypothesis that says there are no differences in occupation level between Rohingya Refugees and Local people. In the table, sum of squares is

represented under “Sum Sq” tab. The sum of square for occupational variance between locals and refugees is 69.9 which is very high indicating a larger variance in means among these two groups.

It indicates that occupational level varies widely among these two groups.

Table 2:ANOVA Results for Earning Per Month of Rohingya and Local people

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
dummy_country	1	3.878e+09	3.878e+09	36.4	2.9e-09 ***
Residuals	569	6.063e+10	1.065e+08		

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1					

:

In terms of earnings, the difference between average earnings per month between Rohingya Refugees and local people is statistically significant at 0.1% level which is visible at p value being less than .001. Thus, we reject the null hypothesis and state that there is a statistically significant difference among Rohingya people and local people in terms of average income per month. Moreover, the average monthly income of 15900 (\$198) Bangladeshi Taka for Rohingya Refugees is higher than the average monthly earnings of local people in the same jobs and that is 10679 Bangladeshi Taka (\$134). This difference could be explained through the receipt of financial aid Refugees sometimes getting from International Organizations situated in Cox’s Bazar.

In terms of getting access in the labor market, language plays a vital factor. As per the figure 7 and 8, language being a major problem while finding a job is very high for Rohingya refugees compared to local people. Table 3 shows the Anova results of language being a problem to get a

Table 3:ANOVA Finding of Language being a problem to get a job

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
dummy_country	1	152.8	152.79	104	<2e-16 ***
Residuals	569	835.9	1.47		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

job in the labor market. Refugees having language being a major problem while accessing to job market is very high while for natives, language is not a problem at all. This difference is statistically significant at 0.1% significance level leading us to reject the null hypothesis number 3 which states that “There is no difference between Rohingya refugees and natives while accessing the job opportunity on the basis of **language**.” This is the predicted estimation as well, since natives speak their mother tongue, but refugees may take several years to learn the language of a host country while being denied access to basic rights.

Table 4:ANOVA Finding of Race being a problem to get a job

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
dummy_country	1	14.4	14.38	9.983	0.00166 **
Residuals	569	819.5	1.44		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					

Similar results were in terms Race being a factor affecting the labor market access for Rohingya refugees in Bangladesh. Being a refugee already make them unable to work in formal sector in Bangladesh since they don't have the legal right to work. In the informal sector also, these refugees face difficulties to find suitable source to earn compared to the local people on the basis of their Race as seen by figure 9 and 10. The ANOVA analysis on Table 4 shows if the mean differences of these two groups in terms of race being a barrier to enter job market is statistically significant or not. As per this the table, p value is higher than .001 but less than .01, stating the mean difference of race being a major problem to find job among the native and refugees is statistically significant at 1% level. Thus, we reject the 4th hypothesis which states that “There is

no difference between Rohingya refugees and natives while accessing the job opportunity on the basis of **Race**".

Table 5:ANOVA Finding of Religion being a problem to get a job

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
dummy_country	1	102.8	102.75	122.8	<2e-16 ***
Residuals	569	475.9	0.84		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					

Along with the Race and language, religion was also a vital factor affecting the labor market access to the refugees. Even though there were no differences in terms of religious belief between the locals and Rohingya refugees, there was still a variation of getting access to jobs on the basis of religion. 99% of the respondents among the refugees in the survey data were Muslims, while locals were all Muslims. Even though religion wasn't a big of a factor while accessing the labor market opportunities, nearly 11% of the refugees attested that it was a major problem for them to find a job. Yet for the native people on the same locality, religion wasn't a problem at all to access the job market. The ANOVA results on mean difference also state that the mean difference of both groups is statistically significant. P value being less than .001 makes us reject the 5th hypothesis that states "There is no difference between Rohingya refugees and natives while accessing the job opportunity on the basis of **Religion**".

Among the three factors that are taken as barriers to enter the labor market, language and religion had higher sum of squares values than race explaining language and religion being the important factors to create variance among the control and treatment groups. Even though Bangladesh is a Muslim majority country, still religion was also a barrier for the Rohingya Muslim refugees to find a job.

Thus, it can be inferred to some extent that Refugees couldn't integrate in the labor market in Cox's Bazar District alongside the local people. Average opportunities and earnings were not same for the local people and refugees as different literature said. Moreover, the barriers to find a job were also higher for the Rohingya refugees than the natives.

5. Discussion:

To survive in a host country, access to employment is a key element for the refugees to be able to integrate in the local labor market. In Bangladesh, Rohingya refugees aren't granted work permit, these refugees can't enter into any formal job sectors (Thacham Poyil, 2020). As per the empirical findings the refugees are not into any formal job sectors as well. They are mostly in the occupation where it does not require many formalities or legalities like the as mentioned earlier-small vegetable vendors or tea stalls. Doing these small businesses does not need these refugees to show any personal identification numbers or work permit. Anytime, easily they can close their shops if any legal teams require them to do so. Similar results were found in a research conducted in India. According to (Kaveri, 2020), in India the Rohingya refugees have been termed as illegal migrants. Being illegal migrants excludes the people from accessing any basic rights; access to employment and integration in labor market is farfetched dream. The difference in income could be also explained by a theory of (Ruisi & Shteivi, 2016) in their research. They have used the method of both ANOVA analysis and quasi linear model of marginal returns of employment for locals while one additional migrant worker enters the same firm. They have found that inflows of migrants in host country may pose vulnerabilities in low wage jobs for the local community. Since there would be a huge supply of workers in the economy to whom the firms can pay less since the workers are in dire need of jobs, the wages would drop significantly and that would highly impact the local workers. According to this theory, the migrant workers must have very easy access to

labor market which according to the survey data results was not a case. The barriers the refugees face to have access to job market are very much higher on the same factors than the local workers. This results contradict with what (Mukta, 2020) have found in her studies that language does not impact the labor market access for the Rohingya refugees living in Cox's Bazar district. In the empirical findings of this paper it is seen that language is one of the most major problems while accessing the job market. Their integration in local market is not at ease at all. In Bangladesh, where unemployment is at peak and low skilled workers are abundant (Thacham Poyil, 2020), fight for meeting both ends on a daily basis is twice as much higher for illegal migrant workers than the local people. The data shows that people with schooling till primary school earn more than people with no schooling and secondary schooling. This can be explained by the availability of low skilled jobs in the labor market of Bangladesh. Without the legal work permit and national identification cards, the jobs which pays higher wages are very difficult to obtain since the legal formalities are very strict there. Thus, jobs where basic writing and reading can do the work, competition is higher there among local and refugee workers. Since companies tend to hire workers with low wages, hiring migrant workers with low wages become a issue in the area where the refugees are concentrated (Chowdhury & Mostafa, 2020). Some small firms with intention to exploit the labor force do these kinds of activities.

6. Policy Options and Conclusion:

The forced migration of Muslim Rohingya refugees of Myanmar was considered as a temporary situation which could be settled quickly through the attention of UN. Yet, the displacement continued for a long time and it has created political and economic pressure on the Bangladesh government. The aim of this paper was to see if the Rohingya refugees could successfully integrate in the labor market specifically informal labor market or not. The results

from the survey indicate that they could not. This is a noteworthy problem since lack of livelihood means lack of access to basic needs of life i.e., healthcare, education, livable place and so on.

The Rohingya refugees in Bangladesh do not hold any right to work. They aren't even allowed to leave their designated camps which are established by different local and international NGOs (Ministry of Foreign Affairs- Bangladesh, 2014). They are not covered by any labor protection law in Bangladesh. Moreover, the law enforcement authority in Bangladesh have the rights to detain refugees on the ground of being illegal personal roaming around the country. Thus, having a proper policy to address the Rohingya refugee issue in Bangladesh is a crying need for the human rights of these people.

The results of the survey say that most of the Rohingya refugees are involved in the small business-like street vendors, hawkers and owner of small road-side tea stalls. As discussed above and explained by the literatures of (Ahmed et al., 2020) that this is a case due to lack of proper labor law institutions in the informal labor market in Bangladesh. To address this issue, government must provide them with legal work permit by not hampering the native workers. Though Bangladesh government have already taken measures on how to involve these refugees, the decision has attracted a lot of criticism internationally. According the report from New York Times, thousands of Rohingya refugees are being moved to a remote island where before them no life lived (Beech, 2021). The government has taken this action to reallocate the refugees from the area where they had higher possibilities to assimilate with in the local community and be involved in informal economic activities which are certainly not permitted due to their refugee status. On this island, called Bhasan Char, the Rohingya refugees would be involved in agricultural activities including farming. They would receive the government support to habituate the place with the family. UN officials and other international organizations have condemned this decision of

Bangladesh government stating that this goes against human rights since the island lacks all the basic necessities like medical needs, poor supply of drinkable water and a very cyclone prone island (Hossain, 2020).

Since Bangladesh is already a labor abundant country, giving work permit to these refugees to work anywhere in the country may not bring any welfare development to country's economic development. Rather, it might increase the unemployment level in the country since there would be huge supply of labor with lower number of working sectors. Yet since, as per the data the average age of the respondents was 37 which is a working age, providing them with trainings and educational facilities so that they can start their own small business rather than the street vending might bring a positive economic impact on their lives.

While comparing the data with locals and refugees, language was one of the biggest barriers for these refugees to assimilate in the labor market. thus, the refugees must be now familiarized with formal language of the country in terms of reading, writing and speaking. With that, if they get the work permit, they could easily be eligible to find the jobs as per their level in the labor market. Even if they don't get the work permit for the employment under any firms, but for being self-employed, the language factor would play a huge role for them to easily communicate with the local people for their business and communication purpose.

In the island as mentioned above, Bangladesh government must provide these refugees with all the basic necessities that are needed to survive along with the help of International organizations. If the government doesn't want to give access to these refugees in the local labor market, it must give them training facilities, education to the refugee children and proper medical facilities in that island where they are being taken. Moreover, proper labor law institutions must be enforced in the Cox's Bazar district so that even if the refugee get in the informal business, the

government can register it or have it in the consideration. In this way, the crimes on that area can be reduced as well.

Given all these recommendations, Bangladesh government must not also compromise the livelihood of the native workers while making policy regarding the employment for the refugees.

References:

- Ahmed, M., Nawal, S. N., Lhamo, U. S., & Bui, N. T. (2020). The Assimilation of Stateless Rohingyas in Bangladesh. In *Citizenship, Nationalism and Refugeehood of Rohingyas in Southern Asia* (pp. 137–154). Springer Singapore. https://doi.org/10.1007/978-981-15-2168-3_7
- AlJazeera. (2021, January 27). Bangladesh to move more Rohingya refugees to remote island | Human Rights News | Al Jazeera. *ALjazeera News*.
<https://www.aljazeera.com/news/2021/1/27/bangladesh-to-move-more-rohingya-muslims-to-remote-island>
- Altındağ, O., Bakış, O., & Roza, S. V. (2020). Blessing or burden? Impacts of refugees on businesses and the informal economy. *Journal of Development Economics*, 146, 102490. <https://doi.org/10.1016/j.jdeveco.2020.102490>
- Amnesty International. (2018, February 7). Myanmar: Fresh evidence of ongoing ethnic cleansing as military starves, abducts and robs Rohingya | Amnesty International. *Amnesty International*. <https://www.amnesty.org/en/latest/news/2018/02/myanmar-fresh-evidence-of-ongoing-ethnic-cleansing-as-military-starves-abducts-robs-rohingya/>
- Beech, H. (2021, December 4). Rohingya Refugees in Bangladesh Moved to Remote Island - The New York Times. *New York Times*.
<https://www.nytimes.com/2020/12/04/world/asia/rohingya-bangladesh-island-camps.html>
- Borjas, G. J., & Katz, L. F. (2007). Title: *The Evolution of the Mexican-Born Workforce in the United States*. University of Chicago Press. <https://www.nber.org/books-and-chapters/mexican-immigration-united-states/evolution-mexican-born-workforce-united-states>
- Borjas, G. J., & Monras, J. (2017). The labour market consequences of refugee supply shocks. *Economic Policy*, 32(91), 361–413. <https://doi.org/10.1093/epolic/eix007>
- Chen, M. A., Jhabvala, R., & Lund, F. (2002). *EMPLOYMENT SECTOR 2002/2 Supporting Workers in the Informal Economy: A Policy Framework*.

- Chowdhury, S. A., & Mostafa, A. T. (2020). Rohingya Refugees: Risks and Safety in Bangladesh. In *Citizenship, Nationalism and Refugeehood of Rohingyas in Southern Asia* (pp. 155–170). Springer Singapore. https://doi.org/10.1007/978-981-15-2168-3_8
- Desiderio, M. V. (2016). *Integrating refugees Into Host Country Labor Markets: CHALLENGES and POLICY OPTIONS*. www.migrationpolicy.org.
- Hossain, A. (2020, December 4). Rohingya relocated to remote island against their will, rights groups say - BBC News. *BBC News*. <https://www.bbc.com/news/world-asia-55177688>
- Human Rights Watch. (2021, April 27). Bangladesh: Rohingya Refugees Allegedly Tortured | Human Rights Watch. *Human Rights Watch*. <https://www.hrw.org/news/2021/04/27/bangladesh-rohingya-refugees-allegedly-tortured>
- Idris, M., & Khatun, H. (2018). (PDF) *Rohingya Refugees: Assimilation with Host Community and Socio-Political Impact on Cox's Bazar*. https://www.researchgate.net/publication/329026735_Rohingya_Refugees_Assimilation_with_Host_Community_and_Socio-Political_Impact_on_Cox's_Bazar
- ILO. (2016). *Informal economy in Bangladesh (ILO in Bangladesh)*. <https://www.ilo.org/dhaka/Areasofwork/informal-economy/lang--en/index.htm>
- ILO Report. (2018). More than 60 per cent of the world's employed population are in the informal economy. *International Labor Organization*. http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_627189/lang--en/index.htm
- Islam, T. (2017). Informal Sector In South Asia: A Case Study of Bangladesh. *Global Journal of HUMAN-SOCIAL SCIENCE: E Economics*, 17(3).
- Kaveri. (2020). The Politics of Marginalization and Statelessness of the Rohingyas in India. In *Citizenship, Nationalism and Refugeehood of Rohingyas in Southern Asia* (pp. 71–95). Springer Singapore. https://doi.org/10.1007/978-981-15-2168-3_4
- Khatun, F. (2017). *Implications of the Rohingya Crisis for Bangladesh At the dialogue on "Addressing Rohingya Crisis: Options for Bangladesh."*
- Ministry of Foreign Affairs- Bangladesh. (2014). *Strategy Paper On Addressing The Issue of*

Myanmar Refugees and Undocumented Myanmar Nationals in Bangladesh / Myanmar / Rohingya People. <https://www.scribd.com/document/248296931/Strategy-Paper-on-Addressing-the-Issue-of-Myanmar-Refugees-and-Undocumented-Myanmar-Nationals-in-Bangladesh>

Mondal, M. S. H. (2017). Urban informal economy in Bangladesh: A case study on a mobile vegetable vendor in Dhaka city. *Qualitative Report*, 22(11), 2893–2903.
<https://doi.org/10.46743/2160-3715/2017.3106>

Mujeri, M. K. (2020, February 18). *Informal economy and economic inclusion / The Daily Star.* <https://www.thedailystar.net/supplements/29th-anniversary-supplements/digitisation-and-inclusivity-taking-everyone-along/news/informal-economy-and-economic-inclusion-1869601>

Mukta, M. (2020). Radio in the Lives of Rohingyas in Camps in Bangladesh. In *Citizenship, Nationalism and Refugeehood of Rohingyas in Southern Asia* (pp. 189–196). Springer Singapore. https://doi.org/10.1007/978-981-15-2168-3_10

Ottaviano, G. I. P., & Peri, G. (2012). RETHINKING THE EFFECT OF IMMIGRATION ON WAGES. *Journal of the European Economic Association*, 10(1), 152–197.
<https://doi.org/10.1111/j.1542-4774.2011.01052.x>

Ozden, C., & Wagner, M. (2016). *Immigrants versus Natives? Displacement and Job Creation.* https://www.researchgate.net/publication/294722704_Immigrants_versus_Natives_Displacement_and_Job_Creation

Peri, G. (2014). *Do immigrant workers depress the wages of native workers?*
<https://wol.iza.org/uploads/articles/42/pdfs/do-immigrant-workers-depress-the-wages-of-native-workers.pdf?v=1>

Pischke, J.-S., & Velling, J. (1997). EMPLOYMENT EFFECTS OF IMMIGRATION TO GERMANY: AN ANALYSIS BASED ON LOCAL LABOR MARKETS. *The Review of Economics and Statistics*, 79(4), 594–604. <https://doi.org/10.1162/003465397557178>

Pratap, S., & Quintin, E. (2006). *A Service of zbw The informal sector in developing countries: Output, assets and employment Standard-Nutzungsbedingungen.* www.econstor.eu

- Rei, D., & Bhattacharya, M. (2008). *The Impact of Institutions and Policy on Informal Economy in Developing Countries An econometric exploration*. www.ilo.org/publns
- Reuters. (2018, September 12). Bangladesh says it won't assimilate Rohingya Muslims | Reuters. *Reuters*. <https://www.reuters.com/article/us-wef-vietnam-bangladesh-rohingya-idUSKCN1LS1Z5>
- Ruisi, F., & Shteivi, M. (2016). Economic and Social Integration of Migrants and Refugees in Jordan and Lebanon. *Migrants and Refugees. Impact and Policies. Case Studies of Jordan, Lebanon, Turkey and Greece*, 28–55.
- Schneiderheinze, C., & Lücke, M. (2020). *POLICY STUDIES Socio-economic impacts of refugees on host communities in developing countries*.
- Thacham Poyil, S. (2020). National Identity and Conceptualization of Nationalism Among Rohingya. In *Citizenship, Nationalism and Refugeehood of Rohingyas in Southern Asia* (pp. 31–50). Springer Singapore. https://doi.org/10.1007/978-981-15-2168-3_2
- UNHCR. (2018). *UNHCR - UNHCR Global Trends 2017*. <https://www.unhcr.org/statistics/unhcrstats/5b27be547/unhcr-global-trends-2017.html>