

Enhancing Refugee Integration through Enrichment Programs

Samar Issa

Associate Professor of Business Administration Saint Peters University, USA

Corresponding author

Samar Issa, Associate Professor of Business Administration Saint Peters University, USA.

Received: April 01, 2026; Accepted: April 11, 2026; Published: April 23, 2026

ABSTRACT

This article examines labor-market barriers relevant to refugee integration in the United States and translates those patterns into practical recommendations for community-based enrichment programs. Because consistent annual refugee-only national time series are limited, the empirical section uses annual U.S. foreign-born indicators for 2012-2022 as a contextual proxy. The analysis combines trend review, descriptive statistics, correlation matrices, and exploratory ordinary least squares models linking unemployment to citizenship status, sex composition, marital status, home-language patterns, and region-of-birth shares. The descriptive trends show declining unemployment through 2019, a pandemic-era increase in 2020-2021, and partial recovery in 2022. Across the exploratory models, marital status is positively associated with unemployment in the Asia and Latin America specifications, Latin America is positively associated with unemployment, and Africa and Asia are negatively associated with unemployment. Language other than English at home is negatively associated with unemployment in the Latin America model after controls. The paper argues that these findings should be interpreted cautiously but the results point to clear programmatic priorities: flexible English instruction, digital-skills training, childcare support, credential navigation, financial literacy, and employer-facing job-readiness services.

Keywords: Refugee Integration, Enrichment Programs, Employment, Foreign-Born Population, United States, Labor Market

Introduction

Labor-market integration is one of the clearest markers of whether resettlement is becoming durable. Employment provides income, routines, social networks, language exposure, and a sense of agency. At the same time, integration is not reducible to employment alone. Ager and Strang conceptualize integration as a multidimensional process involving rights, citizenship, social connections, facilitators such as language and cultural knowledge, and markers such as work, housing, education, and health. Later work has reinforced the idea that refugee integration is dynamic, relational, and context-specific rather than a single end point Strang & Ager [1-3].

In high-income countries, refugees usually enter labor markets under more difficult conditions than other migrants. Forced migration interrupts schooling and employment trajectories, weakens the transferability of credentials, and is frequently accompanied by trauma, uncertainty, and legal complexity. As a result, refugees often lag behind other migrants in both

employment and wages, even when their outcomes improve over time [4]. Institutional context also matters. Local rules, labor-market access, and employer practices shape how quickly skills can be converted into work [5]. In the United States, network conditions and placement environments also influence early labor-market entry [6].

The COVID-19 period made these vulnerabilities more visible. Among recently arrived refugees in the United States, unemployment rose from 11.7% in early 2020 to 15.9% in early 2021, and childcare became the most common reason refugee women were out of the labor force [7]. These patterns suggest that integration policy should move beyond narrow placement models and instead address the interacting roles of language, caregiving, digital access, institutional navigation, and confidence-building.

This article examines how enrichment programs (understood here as community-based interventions that combine language instruction, computer training, financial literacy, professional development, and cultural orientation) can respond to labor-market barriers. The motivating applied context is the Women's Empowerment and Leadership Program affiliated with Saint

Peter's University and Welcome Home Jersey City. However, the present paper does not evaluate that program directly. Instead, it uses annual U.S. foreign-born indicators for 2012-2022 as a contextual proxy to identify broad labor-market patterns that enrichment programs should address. The study therefore asks two questions: Which factors are most strongly associated with unemployment in these annual foreign-born series, and what do those associations imply for the design of refugee-focused enrichment programs?

This paper is organized as follows: following the introduction and rationale of this study in section 1, section 2 gives the literature review. Section 3 provides the methodology of the paper. Section 4 presents empirical and graphical analysis of the results. The implications are presented in Section 5 and Section 6 concludes the paper. The appendices provide the graphs and empirical results of the paper.

Literature Review

The refugee-integration literature consistently emphasizes that integration is both structural and social. Ager and Strang identify employment, housing, education, and health as core markers, but they also stress that progress in these domains depends on facilitators such as language, safety, and cultural knowledge [1]. Strang and Ager later argue that research must treat integration as a two-way and evolving process involving both newcomers and receiving societies [3]. Donato and Ferris similarly show that integration research across the United States, Canada, and Europe increasingly views employment, education, and health as interconnected rather than isolated outcomes [2].

Within this broader framework, labor-market integration occupies a central place because it affects both immediate self-sufficiency and longer-term incorporation into society. Brell synthesize evidence from high-income countries and find that refugees tend to enter the labor market more slowly than other migrants, with catch-up occurring more clearly in employment rates than in wages [4]. Dagnelie show, in the U.S. case, that co-ethnic entrepreneurial networks can improve refugees' short-run employment chances [6]. Ortlieb and Knappert extend this insight by arguing that integration outcomes are shaped not only by individual traits but also by institutional arrangements that govern access to work, recognition of skills, and workplace inclusion [5].

Language is one of the most robust facilitators identified in the literature. Lochmann find that language training in France improves immigrants' labor-force participation, while Foged and van der Werf show that access to local language training raises refugees' language proficiency and improves broader socioeconomic integration [8,9]. Yet language should not be understood only as an individual skill deficit. It is also shaped by opportunity structures, family responsibilities, and access to formal instruction. Moreover, language training often works best when paired with other forms of human-capital development, such as digital literacy, sectoral job preparation, and social network building.

Gender further complicates integration pathways. Bernhard and Bernhard show that among recent humanitarian migrants in Germany, women often face fewer language-learning

opportunities because of marital and childcare responsibilities, even when they can be highly efficient learners [10]. Kosyakova find that the refugee gender employment gap widens over time, partly because women carry a larger childcare burden and receive lower returns to their human and social capital [11]. A broader review of immigrant women's labor-market integration likewise shows that household responsibilities, institutional settings, and migration channels jointly shape employment outcomes [12].

Together, this literature suggests that enrichment programs are most likely to matter when they are multidimensional. Programs limited to classroom language instruction may improve one barrier while leaving others intact. By contrast, bundled interventions - English instruction, computer skills, financial literacy, job-search coaching, childcare support, and confidence-building - are more consistent with what the literature identifies as the actual structure of integration barriers. The present study contributes to that conversation by linking national labor-market patterns to program design. Its empirical contribution is modest and exploratory, but its practical contribution is to show how macro-level patterns can inform local program priorities.

Data and Methodology

The empirical analysis uses annual U.S. foreign-born indicators covering 2012-2022, compiled from publicly available U.S. Census Bureau foreign-born tables and related federal labor statistics. The dependent variable is the unemployment rate for the foreign-born population. The explanatory variables retained from the original manuscript are female share, non-citizen share, married share, share speaking a language other than English at home, and region-of-birth shares for Africa, Asia, and Latin America. The annual frequency yields 11 observations.

A key methodological clarification is necessary. The data describe the foreign-born population, not refugees alone. For that reason, the empirical section should be read as a contextual proxy for refugee-relevant labor-market barriers, not as a direct refugee-only estimate. This distinction matters for interpretation, but it does not eliminate the value of the exercise. Refugees enter the broader foreign-born labor market and are affected by many of the same structures that shape unemployment, citizenship transitions, family obligations, and language acquisition.

The study proceeds in four stages. First, it reviews the original annual trend graphs. Second, it summarizes the series with descriptive statistics. Third, it examines the original correlation matrices. Fourth, it estimates the three exploratory ordinary least squares models preserved from the source manuscript:

$$\text{Model 1: } U_t = \alpha + \beta_1 A_t + \beta_2 F_t + \beta_3 NC_t + \varepsilon_t$$

$$\text{Model 2: } U_t = \alpha + \beta_1 AS_t + \beta_2 F_t + \beta_3 M_t + \varepsilon_t$$

$$\text{Model 3: } U_t = \alpha + \beta_1 LA_t + \beta_2 LOE_t + \beta_3 M_t + \varepsilon_t$$

Where:

- U_t = unemployment in period t
- A_t = Africa
- AS_t = Asia
- F_t = Female
- NC_t = Not a Citizen
- M_t = Married
- LA_t = Latin America

- LOE_t = Language Other Than English
- α = intercept, β_i = slope coefficients, ϵ_t = error term

Because the design is ecological and the sample is very small, the coefficients are interpreted as associations rather than causal effects. Several variables are also imperfect proxies. 'Language other than English' is not the same as English proficiency; it captures home-language composition. 'Not a citizen' is a broad legal category and does not map neatly onto refugee or asylee status. Likewise, the female and married shares describe the composition of the annual foreign-born population, not the individual characteristics of unemployed persons. Finally, unemployment excludes those who are out of the labor force, which is especially important when interpreting gender and caregiving patterns.

Empirical Results

Descriptive Trends and Summary Statistics

The original trend figures reveal a coherent descriptive story (see Appendix Figures A1 and A2). Foreign-born unemployment declined steadily from 2012 to 2019, rose during the pandemic period, and then fell again in 2022. Over the same interval, the female share rose through 2019 before easing downward. The non-citizen shares and the share speaking a language other than English at home both trended downward. By contrast, the married share, the Africa share, and the Asia share generally trended upward, while the Latin America share trended downward.

**Appendix A
Trend Figures**

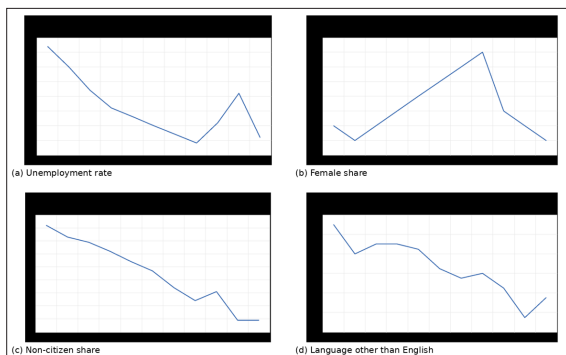


Figure A1: Trends in key foreign-born population indicators, 2012-2022.

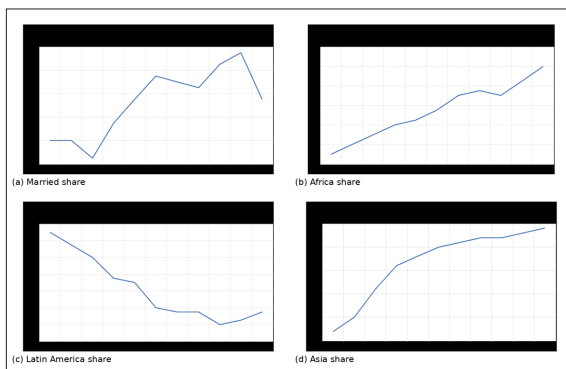


Figure A2: Trends in marital status and region-of-birth shares, 2012-2022.

Table 1 summarizes the descriptive statistics. Average unemployment over the sample is 3.61%, with a minimum of 2.40% and a maximum of 5.70%. The mean female share is 51.43%, the mean non-citizen share is 50.49%, and the mean married share is 63.05%. Average region-of-birth shares are 5.09% for Africa, 30.63% for Asia, and 50.84% for Latin America. The original Jarque-Bera results reported in the source file do not indicate strong departures from normality across the annual series, although the short sample limits the power of such tests.

Table 1: Descriptive statistics for the annual foreign-born series, 2012-2022

Variable	Mean	SD	Min	Max
Unemployment	3.609	1.045	2.400	5.700
Africa	5.091	0.565	4.200	6.000
Not a citizen	50.491	2.540	46.900	54.200
Female	51.427	0.200	51.200	51.800
Asia	30.627	0.752	29.200	31.400
Latin America	50.836	0.772	50.000	52.200
Language other than English	83.727	0.559	82.700	84.600
Married	63.055	0.584	62.100	63.900

Note: Values are reported as percentages or percentage shares, following the original source series.

Correlation Patterns

The correlation matrices point to both meaningful patterns and serious collinearity concerns (see Appendix B). In the Africa panel, unemployment is positively correlated with non-citizenship ($r = .706$) and negatively correlated with Africa ($r = -.781$) and female share ($r = -.622$). However, Africa and non-citizenship are almost perfectly inversely correlated ($r = -.988$), which signals that multivariate estimates using both variables will be unstable.

In the Asia panel, unemployment is negatively correlated with Asia ($r = -.891$), female share ($r = -.622$), and married share ($r = -.606$). Asia and married share are strongly positively correlated ($r = .828$), which again suggests overlapping explanatory content. In the Latin America panel, unemployment is positively correlated with Latin America ($r = .834$) and language other than English ($r = .529$), while Latin America is highly correlated with language other than English ($r = .853$) and strongly negatively correlated with married share ($r = -.910$). These relationships anticipate suppression effects and sign changes once controls are introduced.

Exploratory Regression Models

Table 2 reports the three exploratory OLS models. All three models are statistically significant overall and explain a large share of annual variation in unemployment (R^2 between .918 and .947). Those fit statistics appear strong, but they should not be overstated given the annual sample size of 11 observations and the high correlations among regressors.

In Model 1, Africa ($b = -5.662, p = .001$), female share ($b = -2.179, p = .002$), and non-citizen share ($b = -0.991, p = .004$) are all negatively associated with unemployment. The Africa and

female coefficients are statistically precise in the original output, with 95% confidence intervals of [-8.13, -3.20] and [-3.29, -1.07], respectively. Yet the non-citizen result should be interpreted with particular caution because the bivariate correlation with unemployment is positive while the multivariate coefficient turns negative. That reversal is consistent with suppression generated by the near-perfect correlation between Africa and non-citizenship.

In Model 2, Asia is negatively associated with unemployment ($b = -1.602, p < .001$), female share remains negative ($b = -1.735, p = .016$), and married share becomes positively associated with unemployment ($b = 0.876, p = .024$). The 95% confidence interval for the married coefficient is [0.16, 1.60]. This is a more plausible directional result than the simple negative bivariate correlation because marriage may proxy care burdens and reduced labor-market flexibility once other compositional factors are held constant.

In Model 3, Latin America is positively associated with unemployment ($b = 2.736, p < .001$), language other than English is negatively associated with unemployment ($b = -1.062, p = .030$), and married share again enters positively ($b = 1.385, p = .022$). The positive Latin America coefficient is consistent with the source manuscript's emphasis on employment barriers for this segment of the foreign-born population, but the estimate should not be read as a cultural effect. It more plausibly captures compositional differences in sectoral concentration, legal precarity, and labor-market segmentation. The negative language coefficient does not necessarily imply that language barriers disappear; because the measure records home language rather than English proficiency, it may instead reflect bilingual labor demand, ethnic network effects, or the influence of omitted variables.

Model diagnostics are broadly reassuring but not definitive. The Breusch-Pagan-Godfrey tests reported in the original output do not reject homoskedasticity for the Africa model ($p = .531$), the Asia model ($p = .084$), or the Latin America model ($p = .999$). Durbin-Watson statistics are 2.03, 3.00, and 2.27, respectively, which suggests little serial correlation in Models 1 and 3 and possible mild negative autocorrelation in Model 2. With only 11 annual observations, however, these diagnostic tests should be treated as suggestive rather than conclusive.

Table 2: Exploratory OLS models of unemployment among the foreign-born population.

Predictor	Model 1 Africa	Model 2 Asia	Model 3 Latin America
Africa	-5.662*** (1.043)		
Asia		-1.602*** (0.237)	
Latin America			2.736*** (0.399)
Female	-2.179*** (0.468)	-1.735* (0.550)	

Not a citizen	-0.991** (0.231)		
Language other than English			-1.062* (0.392)
Married		0.876* (0.304)	1.385* (0.472)
Constant	194.518*** (27.690)	86.695* (28.197)	-133.865* (54.169)
R ²	.947	.938	.918
Adjusted R ²	.925	.911	.883
F-statistic	42.09	35.00	26.25
Prob > F	< .001	< .001	< .001
Durbin-Watson	2.03	3.00	2.27
BP-Godfrey p	.531	.084	.999

Note: Unstandardized coefficients reported with standard errors in parentheses. * $p < .05$. ** $p < .01$. *** $p < .001$. BP-Godfrey p refers to the Breusch-Pagan-Godfrey heteroskedasticity test p-value from the original output.

Discussion and Implications

The results support three broad conclusions. First, legal and administrative positioning matters. The positive simple correlation between unemployment and non-citizenship is consistent with the literature showing that uncertain legal status and limited institutional access complicate labor-market entry [4,5]. Second, marriage emerges as a recurring positive correlate of unemployment once regional composition is controlled, which aligns with the literature on caregiving, household specialization, and gendered labor-market constraints [10,11]. Third, regional composition matters, but it should be interpreted structurally rather than culturally. Region-of-birth shares likely proxy different mixes of human capital, sectors of employment, settlement patterns, and exposure to legal precarity.

The negative coefficient on female share deserves especially careful treatment. It would be incorrect to conclude that foreign-born women face fewer barriers than men. Unemployment rates exclude people who are not participating in the labor force, and the refugee literature shows that women are often more likely to leave the labor force because of childcare and household obligations. In other words, lower unemployment can coexist with lower participation. This is why the ASPE evidence on childcare among refugee women is so important: labor-market disadvantage may appear in the form of nonparticipation, not only open unemployment.

These findings have direct implications for enrichment programs. First, English instruction should be flexible, practical, and tied to workplace communication rather than offered as a stand-alone classroom requirement. The strongest evidence in the literature shows that language training improves integration when refugees can actually access it and combine it with broader socioeconomic supports [8,9]. Second, computer training and digital navigation should be treated as core integration services. Contemporary job search, benefit applications, school communication, and credential recognition all require basic digital competence.

Third, enrichment programs need built-in responses to caregiving constraints. Evening classes, hybrid options, transportation help, childcare referrals, and partnerships with local service organizations are not ancillary supports; they are central design features. Fourth, programs should include credential navigation, resume preparation, interview practice, and employer-facing partnerships that connect participants to sectors with relatively stable demand. Finally, financial literacy should be integrated into employment programming because budgeting, banking, taxes, and credit all affect whether early employment translates into durable stability.

For programs such as the Women’s Empowerment and Leadership Program associated with Saint Peter’s University and Welcome Home Jersey City, the policy lesson is clear: the most promising model is bundled rather than single-purpose. English practice, computer skills, financial literacy, professional networking, and confidence-building should be delivered as mutually reinforcing components. The program should also frame participants’ native languages as assets that can open community-facing, educational, healthcare, and service-sector opportunities rather than as deficits to be erased.

Conclusion

This article preserves the original paper’s central concern - how to strengthen refugee integration through enrichment programs - while placing the empirical analysis on a more defensible footing. Using annual foreign-born indicators for 2012-2022 as a contextual proxy, the study finds that unemployment is most consistently associated with marriage, non-citizenship in simple analysis, and regional composition, while the pandemic period visibly disrupted progress. The results also show why simple readings can be misleading: gender and language coefficients must be interpreted in light of labor-force participation, measurement limitations, and collinearity.

Even with these cautions, the policy implications are practical and clear. Effective enrichment programs should combine flexible English instruction, digital-skills training, financial literacy, childcare-sensitive scheduling, job-readiness support, and employer connections. In other words, the most useful response to refugee labor-market barriers is not a single intervention but an integrated package that treats employment, language, care work, and institutional navigation as parts of the same integration process. That is the central lesson this paper offers to scholars, practitioners, and community organizations working to improve refugee inclusion in the United States.

This study has several important limitations. Most importantly, the dataset represents the foreign-born population rather than refugees specifically. The paper therefore speaks most confidently about refugee-relevant barriers in the broader immigrant labor market, not about refugee-only causal effects. Second, the analysis is ecological and annual, so it cannot recover individual-level behavior or distinguish between unemployment and nonparticipation at the person level. Third, the small sample size increases the risk of overfitting and makes the high R² values look more impressive than they should. Fourth, several regressors are highly collinear, which means coefficient magnitudes and even signs may be unstable across alternative specifications. Fifth, some measures are imperfect proxies: home

language is not direct English proficiency, non-citizenship is a broad category, and regional shares are not synonymous with race or ethnicity. Finally, the paper does not contain participant-level data on actual enrichment-program attendance, so it cannot estimate program effects directly.

**Appendix B
Correlation Matrices**

Table B1: Correlation matrix for the Africa model variables.

	Unemployment	Africa	Not a citizen	Female
Unemployment	1.000	-0.781	0.706	-0.622
Africa	-0.781	1.000	-0.988	0.241
Not a citizen	0.706	-0.988	1.000	-0.221
Female	-0.622	0.241	-0.221	1.000

Table B2: Correlation matrix for the Asia model variables.

	Unemployment	Africa	Female	Married
Unemployment	1.000	-0.891	-0.622	-0.606
Asia	-0.891	1.000	0.430	0.828
Female	-0.622	0.430	1.000	0.422
Married	-0.606	0.828	0.422	1.000

Table B3: Correlation matrix for the Latin America model variables.

	Unemployment	Latin America	Language	Married
Unemployment	1.000	0.834	0.529	-0.606
Latin America	0.834	1.000	0.853	-0.910
Language	0.529	0.853	1.000	-0.811
Married	-0.606	-0.910	-0.811	1.000

The author gratefully acknowledges Tabata Patino for excellent research assistance.

References

1. Ager A, Strang A. Understanding integration: A conceptual framework. *Journal of Refugee Studies*. 2008. 21: 166-191.
2. Donato KM, Ferris E. Refugee integration in Canada, Europe, and the United States: Perspectives from research. *The Annals of the American Academy of Political and Social Science*. 2020. 690: 7-35.
3. Strang A, Ager A. Refugee integration: Emerging trends and remaining agendas. *Journal of Refugee Studies*. 2010. 23: 589-607.
4. Brell C, Dustmann C, Preston I. The labor market integration of refugee migrants in high-income countries. *Journal of Economic Perspectives*. 2020. 34: 94-121.
5. Ortlieb R, Knappert L. Labor market integration of refugees: An institutional country-comparative perspective. *Journal of International Management*. 2023. 29: 101016.
6. Dagnelie O, Mayda AM, Maystadt JF. The labor market integration of refugees in the United States: Do entrepreneurs in the network help? *European Economic Review*. 2019. 111; 257-272.

7. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Labor force trends of recently-arrived refugees during COVID-19 pandemic. 2023.
8. Lochmann A, Rapoport H, Speciale B. The effect of language training on immigrants' economic integration: Empirical evidence from France. *European Economic Review*. 2019. 113; 265-296.
9. Foged M, van der Werf C. Access to language training and the local integration of refugees. *Labour Economics*. 2023. 84: 102366.
10. Bernhard S, Bernhard S. Gender differences in second language proficiency-Evidence from recent humanitarian migrants in Germany. *Journal of Refugee Studies*. 2022. 35: 282-309.
11. Kosyakova Y, Salikutluk Z, Hartmann J. Gender employment gap at arrival and its dynamics: The case of refugees in Germany. *Research in Social Stratification and Mobility*. 2023. 87: 100842.
12. Schieckoff B, Sprengholz M. The labor market integration of immigrant women in Europe: Context, theory, and evidence. *SN Social Sciences*. 2021. 1: 276.
13. U.S. Census Bureau. American Community Survey tables on the foreign-born population by table number. 2024.