

HUMAN CAPITAL AND REGIONAL RESILIENCE: PROFESSIONAL ENGAGEMENT OF UKRAINIAN WAR-AFFECTED REFUGEE WOMEN

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Purpose: This article examines regional resilience from the perspective of human capital and its contribution to the adaptive capacities of communities. The objective of the study is to analyze the determinants influencing labor market engagement of Ukrainian war-affected refugee women in the Lublin region.

Design/methodology/approach: The research was conducted using two methodological approaches. The literature critique method involved a systematic analysis of scholarly works addressing the role of human capital in enhancing regional resilience, as well as the labor market situation of Ukrainian refugee women in Poland. This informed the methodological framework for the subsequent empirical investigation. The diagnostic survey method, employing a questionnaire technique, was used to collect data from Ukrainian refugee women residing in the Lublin region. The findings enabled an in-depth understanding of the factors determining their professional engagement.

Findings: The findings indicate that more than half of the respondents are employed in Poland, frequently in sectors with low entry requirements and below their qualification levels, resulting in professional dissatisfaction and intentions to change employment. The primary obstacles to labor market integration are insufficient proficiency in Polish and restricted access to childcare.

Research limitations/implications: This research employed a cross-sectional design and was conducted exclusively in the Lublin Voivodeship. The use of purposive sampling constrains the generalizability of the findings to the broader population of Ukrainian refugee women.

Practical implications: The findings underscore the necessity of implementing comprehensive strategies to support the labor market integration of refugee women, encompassing free and flexible Polish language courses, enhanced accessibility and adaptability of childcare services, streamlined recognition of qualifications, and the promotion of stable employment arrangements. Such measures would contribute to the effective utilization of refugee women's potential, thereby reinforcing human capital and enhancing the resilience of the Lublin region.

Social implications: The labor market integration of refugee women plays a crucial role in fostering social cohesion and economic stability within the region. Enhancing employment conditions and addressing existing barriers may mitigate the risk of marginalization, promote greater socio-economic engagement, and strengthen the regional adaptive capacity in anticipation of future crises.

Originality/value: This article contributes novel knowledge regarding the determinants of professional engagement among war-affected refugee women. The results may inform policymakers, non-governmental organizations, labor market institutions, and scholars focusing on migration, labor markets, and regional development.

Keywords: regional resilience, war-affected refugee women, labor market engagement, Lublin Voivodeship.

Category of the paper: Research paper.

1. Introduction

Amidst escalating environmental and socio-economic challenges, the concept of regional resilience has emerged as a pivotal field of inquiry within economic geography, regional economics, and management sciences. The dynamically evolving understanding of this concept has led to an expansion of its scope. Currently, it is no longer confined solely to the economic dimension but also encompasses a wide spectrum of social, environmental, institutional, and cultural aspects. Resilience has thus become a guiding approach to shaping and supporting regional transformation towards sustainable development.

Regional resilience is not just a fashionable term, but a fundamental condition for the long-term stability and prosperity of the region. This concept aids in understanding how regions anticipate, prepare for, respond to, adapt to, and recover from political, economic, environmental, or social shocks (Christopherson, Michie, Tyler, 2010; Neuhuber, 2025). The literature on this subject has expanded significantly over the past few decades, especially in connection with the increased frequency of various types of disruptions. Representatives of various scientific disciplines, as well as politicians, social activists, and business practitioners from around the world, consistently assert that regional resilience is a dynamic, multidimensional process.

Within this broad framework, human capital is increasingly recognized as one of the foundations for building and strengthening regional resilience. This is justified by the fact that it is people's skills and experience, their creativity and adaptability, as well as their capacity for collaboration, that drive innovation and economic and social development. In the face of dynamic changes such as economic crises, technological transformations, and demographic challenges, well-developed and flexible human capital enables the region to respond more quickly to threats, exploit opportunities more effectively, and build long-term competitive advantage. At the same time, problems in the realm of human capital, whether demographic or socio-economic in nature, can significantly undermine regional resilience.

For the Lublin Voivodeship, one of the most pressing issues is the mass influx of refugees, which began in February 2022 as a result of Russia's full-scale aggression against Ukraine. The scale of this phenomenon poses significant humanitarian, infrastructural,

and administrative challenges. Ukrainian female refugees report actively seeking stable employment to secure adequate living conditions for themselves and their families; however, their professional integration process encounters numerous barriers. The presented research aimed to analyze the determinants of professional activity among Ukrainian female refugees in the Lublin region.

2. Regional resilience – the role of human capital

The resilience concept is constantly developing and evolving. Definitions vary depending on the research field-resilience is perceived differently by representatives of such sciences as sociology, urban planning, ecology, economics, and management. Moreover, the broad range of meanings and the open-ended nature of the term result in its interpretation through various conceptual frameworks. In the literature on regional resilience, three main types of approaches can be distinguished (Boschma, 2014; Fingleton, Garretsen, Martin, 2012; Liu et al., 2023; Martin, 2012; Masik, 2022; Simmie, Martin, 2010; Zampieri, 2021):

- The engineering concept defines a system's ability to withstand sudden, significant shocks and return to its pre-disturbance state or a stable equilibrium. This approach does not fully address the conditions of today's highly unstable world, as it fails to account for changes in the structure and functioning of regions.
- The ecological concept is based on the idea of dynamic equilibrium. A region may alter its structure and function in response to an external shock and achieve a new state of balance. A resilient region can withstand disturbances without transitioning to a new equilibrium, or one that is capable of moving from a less favorable to a more favorable long-term equilibrium along a previously chosen development trajectory.
- The evolutionary (adaptive) concept views resilience as a process of continuous change rather than a return to a previously existing or new stable state of equilibrium. Unlike the two previous concepts, a region never fully achieves equilibrium, or does so only temporarily. Its resilience depends on the ability to reorganize its internal social, economic, and institutional structures in response to external disturbances. This concept encompasses a region's capacity to cope with short-term shocks as well as to escape the effects of 'lock-in' and develop new development pathways. It therefore provides a comprehensive understanding and interpretation of the dynamic evolution of regional systems.

Numerous definitions of regional resilience formulated by various authors emphasize that it is a multidimensional capacity of a given area to anticipate, prepare for, respond effectively to, and recover from disruptions or transform in the long term, while maintaining key functions, structure, and identity. It is also noted that disruptions may originate externally (e.g., global

crises) or internally (e.g., local social conflicts). In a comprehensive approach to regional resilience, the following interrelated processes are identified (Bobowski, Menkes, 2024; Bristow, Healy, 2014; Cooke, 2012; Giacometti, Teräs, 2019; Holling, Gunderson, 2002; Martin, Sunley, 2007; Masik, 2022):

- 1) Forecasting and preparation - actively identifying potential threats and developing plans and programs to minimize their impact.
- 2) Response and shock absorption - buffering and mitigating the initial impact of a shock without losing the system's core properties.
- 3) Adaptation and recovery - flexibly transforming internal structures, procedures, and regional relationships to enable effective adjustment to new conditions.
- 4) Transformation and long-term development - not only restoring stability but also progressing to a higher level of complexity, thereby enhancing the region's capacity to cope with future challenges.

A key aspect of understanding regional resilience is the systems perspective: the region is treated as a network of nonlinearly interconnected elements (social, economic, infrastructural, and environmental) that, through diversification, self-organization, and local resources, can not only recover from a crisis but also evolve (Hayter, 2004). Among these resources, human capital stands out as a lever—a dynamic factor driving the processes that constitute resilience.

In every interpretation of the concept of 'resilience', regardless of the specific definitional perspective adopted, a fundamental element remains the reference to the scale of disturbances that a given system is able to absorb or withstand. According to Holling's original concept (1973), resilience is the capacity of a system to maintain its structure, functions, and feedbacks before undergoing a transformation to an alternative state of equilibrium. This transformation entails surpassing a critical threshold, after which the system loses its original properties and adopts a new configuration. Based on this and other interpretations, the social resilience of a region can be considered from the perspective of three key attributes (Carpenter et al., 2001; Holling, 1973; Maclean, Cuthill, Ross, 2013):

- 1) The range of changes that the social system can withstand while maintaining its structure and functions.
- 2) The extent to which the regional community is capable of self-organization.
- 3) The degree to which the social system can develop the capacity for learning and adaptation.

Human capital in the literature on regional resilience is understood in a very broad sense. It encompasses the knowledge and skills of residents, their physical and mental health and well-being, adaptive capacities, creativity and innovativeness, as well as social norms and values that facilitate cooperation and coordination of activities. Well-educated and highly skilled individuals adapt more quickly to economic and environmental changes, absorb knowledge and new technologies, and generate innovations. This, in turn, strengthens the region's capacity to 'bounce back' from various types of shocks or disturbances (Cappelli, Montobbio, Morrison,

2021; Zhou, Qi, 2023). Investments in education and skills development ensure high economic returns and enable the achievement of sustainable and long-term development goals. The physical health and mental well-being of residents form the foundation of social resilience, as they enhance professional activity, adaptability, and mobility, and consequently increase labor market flexibility (GUS, 2023). Meanwhile, social relationships and support networks facilitate the coordination of actions during a crisis and the rapid dissemination of information about resources and needs (Carmen et al., 2022).

Regional resilience largely relies on the accumulated potential of civil society, entrepreneurship, and the strengthening of regional institutions that are capable of setting development directions and coordinating the actions of local actors. Both public and private infrastructure - technical, telecommunications, and research - as well as the competencies of residents, are important. Local social structures, educational institutions, and other entities that enhance the capacity of local communities to collaborate in the face of crises also play a significant role. Leadership within regional structures is crucial: strong leadership enables rapid response to threats, the development of strategic solutions, and the implementation of changes necessary to maintain continuity of operations under conditions of shocks and disturbances (Bobowski, Menkes, 2024; Pike, Dawley, Tomaney, 2010; Sienkiewicz-Małyjurek, 2024; Stępka, 2021; Wolfe, 2010).

In the event of disturbances in the area of human capital, a significant weakening of the region's adaptive capacities and resilience mechanisms is observed. The most important negative phenomena include (Andersson et al., 2025; Raczkowska, Mikuła, Utzig, 2021):

- An excessive influx of migrants, which burdens local social, healthcare, and educational systems, leading to temporary or permanent disruption of demographic balance and increased socio-economic tensions.
- The outflow of skilled labor (brain drain), which reduces the region's capacity for rapid crisis response and limits its innovation potential.
- A high proportion of unemployed individuals whose skills do not match labor market needs, resulting in employment stagnation, decreased productivity, and reduced readiness of the region to implement new technologies.
- Population aging, which reduces the number of economically active workers, increases healthcare and social care costs, and diminishes labor market flexibility.
- Health and psychosocial problems, which lower the efficiency of human capital, increase absenteeism, and reduce the community's resilience to prolonged stressors.

Each of these phenomena, individually and in synergy, reduces the region's ability to recover quickly from crises, implement innovations, and maintain stable economic and social development.

In summary, it can be concluded that human capital constitutes not only a fundamental pillar of regional resilience but also a key lever of transformational processes and a driver of long-term economic growth. Consequently, regional policy instruments should include initiatives

aimed at strengthening human capital. These may encompass systemic investments in formal education (schools, universities) as well as support for individuals seeking to establish their own businesses (entrepreneurship incubation programs, mentoring, administrative facilitation). Equally important are professional activation programs, such as retraining courses, internships, and career counseling. Such measures will promote the development of resilient, innovative, and dynamically growing regions.

3. The professional activity of female war refugees from Ukraine in the Polish labor market

In recent years, Poland has experienced a range of challenges that have negatively influenced social resilience: the deepening effects of climate change, shortages of energy resources on global markets, the COVID-19 pandemic, Russia's aggression against Ukraine accompanied by a large influx of refugees, and the instrumental use of migrants as a weapon at the Polish - Belarusian border (PAP, 2023). On 25-26 June 2025, a seminar of ESPON (European Observation Network for Territorial Development and Cohesion) was held in Gdańsk, bringing together representatives of public administration, academia, and regional policy practitioners to exchange insights on the key challenges facing Europe and the evolving concept of resilience. Under the theme 'Resilience to Challenges in Border Regions', more than 180 participants analyzed the challenges facing Europe in the context of social, economic, and climate change. The seminar emphasized the need to redefine the concept of resilience. What is essential is the development of the capacity for adaptation and transformation, rather than merely the preservation of the current state. This is particularly important in view of the challenges along the eastern borders of the European Union (Gov.pl, 2025).

On 24 February 2022, the Russian Federation launched a full-scale invasion of Ukrainian territory, leading to a fundamental transformation of the socio-economic conditions of the entire Ukrainian population. The consequence of this military aggression was the mass displacement of civilians, forced to leave their permanent residences and abandon their previous way of life in search of shelter. This resulted in a sudden and unexpected influx of over one million war refugees (primarily women and children) into Poland's border regions. This situation generated a range of unprecedented humanitarian, infrastructural, logistical, and administrative challenges. It created an urgent need for local authorities and non-governmental organizations to rapidly implement integration and aid programs.

Over the past decade, migration from Ukraine to Poland has intensified, initially for economic reasons, and subsequently as a result of the armed conflict since 2014, the COVID-19 pandemic, and the full-scale Russian invasion in 2022. Currently, nearly one million Ukrainians reside in Poland, including approximately 600,000 adults. There is a clear

predominance of women (67%). Their numbers were higher both among pre-war migrants (54%) and refugees (76%). The employment rate among pre-war immigrants is 93%, whereas for refugees it is 68% (NBP, 2024). More than half of the women arrived in Poland with children under the age of 18. Most women had no prior work experience in Poland and did not speak Polish. The vast majority express a desire to be professionally active, and about one fifth intend to rely on their own financial resources (Długosz, Kryvachuk, Izdebska-Długosz, 2022; Zymnin, 2022).

Finding employment for female refugees is not an easy task, while at the same time it constitutes a form of testing their ability to achieve independence and secure one of the most basic needs for themselves and their children-safety and stability. Women who migrated to Poland independently show a willingness to undertake almost any type of work, whereas those who arrived with children tend to prefer employment in the form of part-time or shift-based work (Otto, Nowosielska, 2023).

The entry of Ukrainian women into the Polish labor market is accompanied by both positive and negative aspects (Deloitte, 2022; Konfederacja LEWIATAN, 2022; Otto, Nowosielska, 2023; Zymnin, 2022; Zyzik et al., 2023):

1. Positive aspects:

- Rapid, simplified access to legal employment thanks to the provisions of the Act of 12 March 2022 on Assistance to Ukrainian Citizens in Connection with the Armed Conflict on the Territory of that State (Dz.U. 2022, poz. 583).
- High demand for workers in sectors with low entry barriers (trade, eldercare, home care, childcare, logistics, food industry, education).
- Support and engagement of employers in facilitating refugees' entry into the labor market (specialized workshops, mentoring for newcomers, Polish language classes, career counseling, provision of computer equipment, assistance in finding housing, etc.).
- High levels of education and motivation among Ukrainian female refugees, as well as their willingness to improve qualifications (language courses, vocational training).
- Access to support networks, integration programs, local aid centers, and EU-funded initiatives. Since the beginning of the war, approximately 80% of Poles have been involved in assisting refugees (charity collections, food and clothing packages, volunteering, providing apartments and houses, etc.).

2. Negative aspects:

- Lack of fluency in Polish, limited knowledge of legal regulations, and insufficient familiarity with other aspects of social and economic life.
- Having underage children and limited access to childcare and eldercare, which restricts the ability to engage in full-time employment.

- Challenges in recognizing qualifications, time-consuming procedures for the nostrification of diplomas and certificates confirming educational attainment.
- Cases of discrimination and unequal treatment of Ukrainian women, along with a low level of mutual trust.
- Employment instability, short-term contracts, piecework, or employment through temporary work agencies, which generate a lower sense of job security.

Poland plays a crucial role in providing aid to Ukraine, offering not only financial, humanitarian, military, political, and diplomatic support, but also access to education, healthcare, and social assistance for refugees on an equal footing with Polish citizens. Despite significant support, Ukrainian women face difficulties in integrating into the Polish labor market. Only a few of them undertake employment commensurate with their qualifications, and they rarely occupy managerial positions. Most commonly, they find work in the service sector, particularly in hospitality and catering (51%), trade (20%), and in physical or technical jobs (20%) (Zymnin, 2022).

An important task for both central authorities, local governments, and non-governmental organizations is to create sustainable support mechanisms for Ukrainian female refugees, which would enable not only their immediate entry into the labor market, but, above all, the development of long-term careers and the full utilization of their potential in Poland. It is essential to consider additional specific barriers, such as traumatic experiences related to the war or the need to adapt to a new social environment, for support to be both effective and sensitive to individual needs.

4. Research methodology

The present study adopted an approach comprising a series of logically connected stages, allowing for the reliable achievement of the stated objective. Initially, a review of Polish and international publications on regional resilience and the conditions of professional activation of Ukrainian migrants was conducted. The results of this review were presented in the previous sections of the article. Subsequently, the research problem was formulated: Which factors influence the labor market participation of Ukrainian female refugees in the Lublin region? The authors aimed to conduct a study that would allow for the verification and refinement of the developed research instrument, as well as an assessment of the feasibility of a larger project (including practical aspects of implementation, such as participant recruitment, data collection logistics, and the clarity of survey questions). The objective of the research was to analyze the determinants of labor market participation of Ukrainian female refugees in the Lublin region. The following hypotheses were formulated:

H1: Ukrainian female refugees in the Lublin region undertake work that is inconsistent with their previous professional experience in Ukraine, primarily in unstable forms of employment, which leads to job dissatisfaction.

H2: Ukrainian female refugees wish to be professionally active; however, the unacceptability of difficult working conditions and barriers to labor market entry contribute to high unemployment within this group.

H3: Ukrainian female refugees are aware that insufficient knowledge of the Polish language hinders their ability to find or perform work in Poland and therefore strive to improve their language competencies.

H4: Ukrainian female refugees with a larger number of underage children experience greater difficulties in finding or performing work and are less likely to engage in employment.

To verify the hypotheses, a diagnostic survey method was employed, using a questionnaire technique. The research instrument was an original survey questionnaire prepared in both electronic and paper formats. The questionnaire consisted of 21 substantive questions and 2 demographic questions. A purposive (arbitrary) sampling of respondents was applied, based on the subjective selection by the researcher, whose aim is generally to create a sample approximating representativeness (Szreder, 2010). This technique was used due to the impossibility of preparing a random sampling frame, that is, a list of refugees residing in the Lublin Voivodeship.

The survey questionnaire was translated into Ukrainian. The electronic version was shared on social media (Facebook, Telegram, Instagram) in groups popular among Ukrainian female refugees residing in the Lublin Voivodeship. The paper version of the questionnaire was made available at a shelter for Ukrainian refugees on Podwale Street and on Czwartaków Street in Lublin (after obtaining permission to conduct the study). In total, 122 completed questionnaires were collected, 32 in paper form and 90 electronically. After verification, 9 questionnaires were rejected due to formal errors. The responses of 113 participants were included in the subsequent analysis.

Sample structure:

- Age: 18-25 years - 41 women; 26-35 years - 36 women; 36-45 years - 29 women; 46-55 years - 6 women; over 55 years - 1 woman.
- Education level: higher education - 73 women; secondary education - 27 women; vocational education - 13 women.

During the study, participants' rights were respected: each respondent gave informed consent to participate, anonymity and confidentiality of data were guaranteed, and all procedures were prepared in accordance with GDPR guidelines.

5. Research results and analysis

The study was conducted more than a year after the Russian invasion of Ukraine. Most respondents have been residing in the Lublin region almost since the beginning of the war: 79% reported staying for more than six months, while 21% for up to six months.

To verify H1, respondents were asked 10 questions regarding their professional activity in Ukraine and in Poland.

At the beginning of the survey, respondents were asked about their professional activity in Ukraine and in Poland. The vast majority of women (98, i.e., 86.7%) were employed in Ukraine. Upon arriving in Poland, slightly over half of the refugees - 62 women (54.9%) - found employment, including 7 individuals who had not previously worked in Ukraine. Only 26 Ukrainian women (23%) had prior work experience in Poland. Table 1 presents the employment flows of women who worked in various sectors in Ukraine before coming to Poland.

Table 1.

Professional activity of Ukrainian female refugees in Ukraine and in the Lublin region (number of individuals)

Work in Ukraine	Work in Poland						
	Transport and Logistics	Industry	Service Sector	Administration, Office Work, Media	Education and Science	Trade	Unemployed
Construction		1					
Transport and Logistics	1						
Industry		2					3
Service Sector		3	11			2	12
Administration, Office Work, Media		3	8	1	1		12
Education and Science	1	2	2		5		5
Agriculture		3	1				6
Trade		2	4		1		6
Unemployed			5	1		1	8

Source: own elaboration.

The majority of respondents had to change their sector of employment upon arriving in Poland. In Ukraine, most women worked in the service sector, totaling 28 individuals. Of these, 11 found employment in a similar field in Poland, 12 remain unemployed, and 5 had to retrain. Among the 25 refugees previously employed in administration, office work, and media, only 8 continue to work in their original specialization, 5 are employed in other sectors, and 12 remain without employment. The service sector in the Lublin region offered the most job opportunities for women from various sectors - currently, 31 respondents are employed in this sector. In the industrial sector in Poland, 16 women are employed, significantly more than in Ukraine, where most of them require retraining.

A significant proportion of respondents who are professionally active in the Lublin region (84%) found employment relatively quickly, within up to three months of arrival. Another 14% of respondents obtained employment within four to seven months, while the remaining 2% secured work within eight to twelve months. The methods used by respondents to seek employment were as follows (multiple answers were allowed, so the results do not sum to 100%):

- Recommendations from friends and acquaintances - 32% of women.
- Through online job portals (e.g., olx.pl, pracuj.pl) - 21% of women.
- Through employment agencies - 19% of women.
- Announcements/information on social media - 14% of women.
- Invitation from a previous employer - 11% of women.
- Through the district labor office - 3% of women.

Participants in the study indicated their forms of employment in Poland as follows: under civil-law contracts - 50%; under employment contracts - 31%. Meanwhile, 19% of women reported working informally (without a contract), which is a concerning finding pointing to the presence of undeclared employment. None of the respondents operate their own businesses. When asked on what basis they would like to work in the Polish labor market, 69% of Ukrainian women indicated a permanent or fixed-term employment contract. This is an obvious choice, as such contracts provide greater stability, insurance, and a sense of security, which is particularly important for women with children. Employment under civil-law contracts is preferred by 6% of respondents. Twelve percent of women expressed a desire to start their own business. One individual indicated a willingness to work informally, while 12% of respondents stated that they do not wish to work (having another source of income).

Comparison of the employment structure of women in Ukraine and Poland indicates significant changes in the nature of work performed. Upon arriving in the Lublin region, many women were forced to change sectors, often taking jobs below their qualifications. Therefore, it is not surprising that 61% of study participants wish to change their current job, of whom 74% hold higher education degrees. When asked why they are considering changing their current employment, respondents provided the following answers (multiple responses were allowed, so the results do not sum to 100%):

- The job does not match their qualifications - 25% of women.
- Unfavorable working conditions, work overload - 20% of women.
- Low salary - 18% of women.
- Lack of opportunities for promotion and professional development - 17% of women.
- Work-related stress (conflicts, discrimination) - 8% of women.
- Lack of possibility to work remotely - 7% of women.
- Lack of flexible working hours - 5% of women.

The responses of the participants indicate that they often take employment in sectors different from their previous experience, frequently below their qualifications. This is associated with the need to adapt to new conditions in Poland. Many of them plan to change jobs, mainly due to a mismatch with their qualifications, low wages, difficult working conditions, and lack of career development prospects. Therefore, there are no grounds to reject Hypothesis 1.

Three questions were used to verify Hypothesis 2. Participants indicated what motivated them to take up employment upon arriving in Poland (multiple responses were allowed, so the results do not sum to 100%):

- Desire for independence - 28% of respondents.
- Lack of means to support themselves and their children - 25%.
- Striving to improve their financial situation - 19%.
- Desire to start a new stage in life - 13%.
- Recognition of new opportunities and willingness to take advantage of them - 10%.
- Change in family circumstances - 5%.

For the majority of refugees, the decision to take up employment in Poland was not driven by a single factor, but by a combination of various needs and life circumstances. Women were guided not only by economic necessity, although lack of means to support themselves was an important motivator. Equally significant were factors related to personal independence, the need for stability, and the desire to rebuild their lives following forced migration. For the study participants, work represents not only a source of income but also a tool for constructing their own identity and agency in a new country. The fact that nearly all respondents indicated multiple motivations demonstrates that the process of professional adaptation for refugees is complex and strongly embedded in both economic and socio-emotional contexts.

The next question concerned the employment conditions that respondents would be willing to accept to support themselves and their children. Responses were provided on a scale from 1 - not acceptable at all, to 5 - fully acceptable (Table 2).

Table 2.

Acceptable employment conditions for Ukrainian female refugees in the Lublin region (in %)

Item	Rating					Mean rating
	1	2	3	4	5	
Work inconsistent with qualifications	18.6	8.6	14.3	42.9	15.7	3.3
Work not meeting expectations	27.1	24.3	15.7	32.9	0.0	2.5
Work far from place of residence	34.3	25.7	2.9	27.1	10.0	2.5
Overtime work	40.0	22.9	10.0	24.3	2.9	2.3
Night work	51.4	20.0	4.3	17.1	7.1	2.1
Low-paid work	52.9	30.0	11.4	4.3	1.4	1.7
Physically demanding work	67.1	18.6	7.1	7.1	0.0	1.5

Source: own elaboration.

The most acceptable condition, with a mean rating of 3.3, is work inconsistent with qualifications. This type of employment was rated positively by 58.6% of respondents (ratings 4 and 5), indicating their willingness to change sectors or perform tasks below their qualifications. Moderate acceptability was observed for work not meeting expectations and work far from the place of residence (mean rating 2.5). Less acceptable conditions include overtime work (mean rating 2.3) and night work (2.1). For over 80% of women, low-paid work (mean rating 1.7) and physically demanding work (mean rating 1.5) are difficult to accept.

The labor market participation of Ukrainian female refugees in the Lublin region, despite a clear willingness to work, is significantly burdened by various barriers of a personal, institutional, or socially prejudiced nature. In both the job search process and the subsequent performance of professional duties, women encounter a range of challenges. Respondents were asked about factors that hinder their professional activity. Table 3 presents the responses measured on a scale from 1 - 'does not hinder' to 5 - 'hinders very much'.

Table 3.

Factors hindering the labor market participation of Ukrainian female refugees in the Lublin region (in %)

Item	Rating					Mean rating
	1	2	3	4	5	
Language barrier	25.5	15.7	4.9	23.5	30.4	3.2
Having underage children	40.2	7.8	3.9	26.5	21.6	2.8
Excessive employer requirements regarding experience, qualifications, certifications, etc.	36.3	18.6	11.8	24.5	8.8	2.5
Discrimination based on nationality	40.2	25.5	11.8	18.6	3.9	2.2
Discrimination based on gender	75.5	12.7	3.9	5.9	2.0	1.5
Discrimination based on age	69.6	12.7	3.9	10.8	2.9	1.6
Employers' reluctance to legalize employment	60.8	16.7	5.9	10.8	5.9	1.8

Source: own elaboration.

The language barrier (mean score of 3.2) emerges as by far the most significant challenge - almost 54% of respondents rated it at 4 or 5, indicating that without support in learning Polish, they find it difficult to enter the labor market effectively. A second pronounced barrier concerns childcare responsibilities (mean score of 2.8), with more than 48% of women assigning ratings of 4 or 5. This suggests that the lack of flexible working hours or accessible childcare options substantially constrains their employment opportunities. For approximately one-third of the study participants, employers' excessively high demands regarding qualifications or professional experience also constitute a considerable barrier (ratings of 4 and 5). On a more positive note, relatively few refugee women reported experiences of discrimination on the grounds of nationality, gender, or age.

A little over half of refugee women have entered employment in Poland. While they demonstrate both a declared willingness to engage in professional activity and strong motivation to work, they do not accept adverse working conditions. Furthermore, a range of structural barriers - most notably insufficient command of the Polish language and the responsibility of caring for underage children - contribute to the persistence of unemployment

among a considerable share of refugee women. These findings provide substantive grounds for accepting Hypothesis 2.

Hypothesis 3 was verified based on four questions. The desk-based and literature review revealed that access to the Polish labor market for refugee women from Ukraine is substantially constrained by the language barrier. In the survey, participants were asked to assess their linguistic competencies. A mere 11% reported possessing a good command of Polish, while 27% indicated an intermediate, communicative level. A significant proportion of respondents (41%) stated that they are able to understand Polish but are unable to speak it. Meanwhile, 16% of women possess only basic expressions, and 5% reported no knowledge of Polish whatsoever.

In a subsequent question, respondents were asked to specify how inadequate linguistic competencies impede their ability to secure or perform employment (multiple responses were permitted; therefore, percentages do not sum to 100%):

- Inability to obtain employment commensurate with their qualifications - 45.1%.
- Limited access to information concerning their workplace rights and employers' obligations - 24.8%.
- Difficulties in establishing relationships with employers and colleagues - 12.4%.
- Incomplete understanding of the requirements associated with the position - 5.3%.
- No difficulties related to the language barrier - 18.6% of respondents.

The findings demonstrate that the language barrier significantly limits Ukrainian women's ability to secure employment that meets their aspirations. In some cases, they are compelled to accept low-skilled positions that do not require interaction with clients or colleagues. Their sense of security in the workplace is further undermined by an incomplete understanding of employment conditions, labor rights, remuneration principles, and related regulations.

In this context, it might be expected that participants would seek to enhance their linguistic competencies. Nevertheless, when asked whether they intended to study Polish, only 66% responded affirmatively. Respondents who provided a negative answer were further asked to specify the reasons for their decision. A lack of motivation was cited by 33% of women, which may be associated with moral and emotional exhaustion resulting from displacement caused by the war and the necessity of residing in a foreign country. A further 27% reported insufficient time due to work and childcare responsibilities, while another 27% stated that Polish was unnecessary in their current occupations, as they performed only simple tasks. For 11% of women, financial constraints - specifically, the inability to afford language courses - were decisive. Only 2% of respondents indicated that they lacked the aptitude for foreign language learning.

An analysis of refugee women's responses indicates that Hypothesis 3 can be positively verified in its initial dimension: more than 80% of Ukrainian respondents acknowledge that inadequate proficiency in Polish constrains their professional opportunities. Concerning the second dimension, however, Hypothesis 3 may be confirmed only partially. While two-thirds

of participants reported an intention to pursue language learning, the remainder did not plan to enhance their linguistic competencies, citing a range of barriers including lack of motivation, limited time, financial constraints, and the nature of their current work.

To test Hypothesis 4, participants were asked four questions. Desk-based and literature analyses indicate that a considerable proportion of Ukrainian refugee women arrived in Poland accompanied by underage children. The responsibility for their care, coupled with the provision of emotional and psychological support during the process of adapting to new living conditions, educational settings, and social interactions, imposes significant temporal and energetic burdens on mothers. These factors constitute a natural barrier to labor market engagement, affecting both job-seeking efforts and actual employment. Among the participants, 38% have one child, 26% have two children, and 5% have three or more children. Nearly one-third (31%) report having no children under 18 years of age.

In response to the question regarding childcare arrangements, participants reported the following: managing childcare independently - 20% of women; children attending nursery, kindergarten, school, or daycare - 33%; and a combination of both approaches - 47%. While the majority of refugee women rely on educational and childcare institutions, they frequently encounter a range of challenges, including:

- Fixed operating hours of facilities that do not coincide with mothers' work schedules - 31% of respondents.
- Insufficient financial resources to cover childcare expenses - 24%.
- High costs associated with childcare services - 16%.
- Lack of available childcare facilities - 14%.
- Limited availability of places in childcare facilities - 3%.
- No obstacles in this regard - 12% of respondents.

In a subsequent phase of the study, participants evaluated the influence of having children on their labor market engagement in the Lublin region. The findings are as follows:

- Mothers with one child more frequently reported substantial challenges (74.4%) but, notwithstanding these difficulties, had the highest relative employment rate (41%). This suggests that while challenges are perceptible for mothers with a single child, they are comparatively easier to manage, potentially through the use of childcare facilities, familial support, or flexible employment arrangements.
- Mothers with two children less frequently reported difficulties (65.4%), yet their employment rate was approximately half that of mothers with one child (21%). This may indicate that, although they perceive their situation as somewhat less challenging, their practical employment opportunities are more limited due to increased domestic responsibilities and fewer flexible childcare solutions.

- Mothers with three or more children reported difficulties even less frequently (60%), but nearly none were employed (2%). The reduced reporting of difficulties may reflect acceptance of circumstances or assistance from older siblings, but the actual capacity to engage in employment is minimal given the magnitude of caregiving responsibilities.

In conclusion, the lower incidence of reported difficulties among participants with larger numbers of children does not indicate that employment is comparatively easier for them. Instead, it highlights that subjective evaluations do not fully capture the objective constraints, which are most pronounced for mothers with three or more children. Accordingly, Hypothesis 4 is rejected with respect to the relationship between the number of children and perceived difficulties, but is supported regarding the correlation between the number of children and actual labor market participation.

6. Conclusions

The findings underscore the multifaceted nature of professional integration for war-affected refugee women in the border region of Lublin. Despite the implementation of simplified employment procedures and a local demand for labor, a significant number of women are employed below their qualification level, diminishing job satisfaction and impeding sustainable integration into the labor market. Over the longer term, this may contribute to a 'low-skills trap' and occupational marginalization. In Poland, refugee women frequently engage in sectors differing from their previous professions, predominantly in services and industry, and less commonly in roles aligned with their formal education. Such circumstances necessitate substantial adaptation efforts and increased time investment for professional adjustment. Employment without formal contracts or under civil law agreements is common, fostering perceptions of instability and vulnerability. Consequently, many refugee women plan to change jobs, primarily due to qualification mismatches, low remuneration, challenging working conditions, and limited prospects for career advancement.

The findings suggest that the labor market participation of Ukrainian refugee women in the Lublin region is predominantly constrained by structural and economic barriers. Of particular significance are linguistic limitations, restricted access to childcare, and employers' demands, alongside a low tolerance for low-paid and physically demanding employment. The presence of children markedly impedes engagement in work, with actual professional opportunities diminishing as the number of children rises, despite a comparatively lower subjective perception of difficulty in these cases.

The current study presents certain limitations. A purposive sampling strategy was employed, which constrains the generalizability of the findings to the broader population of refugee women. Additionally, the research was conducted exclusively in the Lublin

Voivodeship, whose specific characteristics as a border region may have influenced the results. Nonetheless, the data obtained are informative and provide a basis for further investigation into the circumstances of Ukrainian war-affected refugee women. Prospective research avenues include longitudinal studies to evaluate how the professional situation of refugee women evolves over time in Poland. A comparative analysis between border and central regions could elucidate the influence of local labor market conditions on professional integration. Conducting qualitative research would further enhance understanding of subjective barriers and coping mechanisms. Future studies should also assess the effectiveness of support programs designed for refugee women.

The limited labor market integration of refugee women has the potential to undermine local human capital, a critical pillar of resilience in the Lublin region. Qualification - job mismatches, precarious forms of employment, and barriers to labor market participation diminish the effective utilization of refugees' skills and capacities. In the longer term, these dynamics may entrench labor market segmentation, exacerbate inequalities, and reduce the region's capacity to respond to future crises. Consequently, effective strategies to bolster the resilience of the Lublin region should encompass measures that facilitate the full integration of refugee women into the local workforce - including investments in language acquisition, improved access to childcare, recognition of qualifications, and the creation of stable employment opportunities. Such a comprehensive approach would not only enhance the well-being of the migrants but also strengthen the adaptive resources of the region, rendering it more resilient to socio-economic shocks.

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