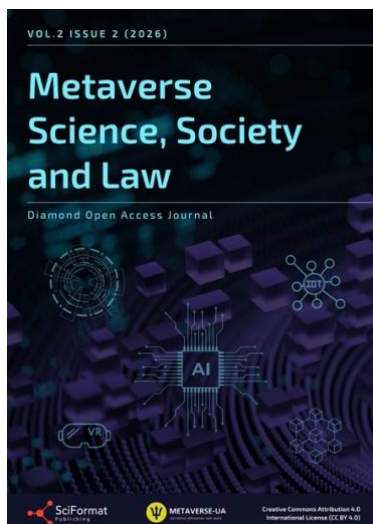




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Alberta, Canada, T3E0A7

+15878858911
✉ editorial-office@sciformat.ca

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THE DIGITAL INTEGRATION ECOSYSTEM: EVALUATING AI AND THE METAVERSE IN OVERCOMING THE LIMINAL CRISIS OF UKRAINIAN FORCED MIGRANT WOMEN

Tetyana Poverlyak

Ph.D., Associate Professor, M.Sc. in Psychology, Independent Researcher, United States

ORCID ID: 0000-0003-2472-003X

Liudmyla Lahuta

President, International Institute of Psychological Maturity Inc, United States

ORCID ID: 0009-0004-9967-778X

ABSTRACT

This article investigates the psychological and technological characteristics of the formation of transit identity among Ukrainian women who migrated abroad (primarily to the United States) following the full-scale invasion on February 24, 2022. Based on a comprehensive mixed-methods empirical design, the study shifts the traditional analytical focus from purely socio-psychological trauma to an evaluation of artificial intelligence (AI), digital services, and Metaverse environments as primary tools for integration. It analyzes the state of liminality, characterized by chronic uncertainty in life planning and an acute crisis of self-esteem resulting from professional de-qualification. A profound internal polarization within migrant family systems is identified: while mothers experience painful adaptation, their children demonstrate successful and proactive digital integration.

For the first time, the systemic role of the virtual contour as an existential "digital refuge" for the entire family is substantiated. It is proven that a child's "digital co-presence" with peers in Ukraine acts as an intergenerational buffer, significantly reducing maternal guilt complexes and adaptation stress. Finally, a two-level model of constructing a "New Self" is conceptualized, where the use of a digital "ego-shield" by mothers to protect their former professional status is contrasted with the use of generative AI by adolescents as a "cognitive accelerator" to restore a sense of agency within the host society.

KEYWORDS

Transit Identity, Liminality, Liquid Modernity, Digital Refuge, Digital Co-Presence, Generative AI, Proteus Effect, Intergenerational Approach, Ego-Shield, Cognitive Prosthesis, Agency

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1. Introduction & Literature Review

According to official United Nations (UN) estimates, the military conflict in Ukraine has triggered the most massive and dynamic crisis of forced displacement in Europe since World War II, necessitating an unprecedented regional response to refugee challenges. Intensive combat operations and massive shelling have resulted in over 3.7 million people becoming internally displaced persons (IDPs) within the country, while approximately 5.9 million citizens have been forced to cross borders, seeking refuge in neighboring states (particularly Poland, Hungary, and Moldova) and other countries worldwide. Poland has borne the greatest burden, currently providing living conditions for approximately 1 million Ukrainian refugees.

Concurrently, the dynamics of Ukrainian refugee arrivals in the United States demonstrate a rapid increase, which is confirmed by official data from U.S. government institutions. According to a report by the U.S. Department of Homeland Security, the scale of migration under the special "Uniting for Ukraine" (U4U) program has grown significantly during the first year and a half of its implementation, with over 158,000 individuals arriving in the United States via the U4U process as of September 30, 2023. This statistic indicates that the program has become a key instrument for humanitarian entry to the U.S. and for the adaptation of Ukrainian families in the context of forced migration.

A key sociological and psychological feature of this migration flow is its clearly defined gender specificity: approximately 76% of all refugees are women and children. Finding themselves in a situation of forced displacement, this population category faces heightened risks, including abrupt changes in social roles, adaptation stress, threats of gender-based violence, and risks of sexual exploitation and various forms of abuse in an unstable evacuation environment. The primary demographic burden of forced displacement has thus fallen on women with children who have experienced the instantaneous destruction of their familiar living space.

Physical departure from the conflict zone, while ensuring basic bodily safety, simultaneously triggers a profound internal crisis the transition of the personality into a chronic liminal (threshold) state. The liminality of forced migrant women is characterized by the rupture of cognitive ties with the past ("home" as a lost safe geography) and absolute uncertainty regarding the future, placing women in a spatial and semantic vacuum "between two realities," where long-term life planning becomes impossible. Traditional sociocultural institutions of host countries often offer rigid bureaucratic frameworks instead of fluid integration, which deepens deprivation and leads to professional de-qualification and a sharp decline in social status.

In these highly fragmented conditions, there is an urgent scientific need to rethink the role of digital technologies, moving beyond a purely psychological baseline to address a technological question: *How do artificial intelligence (AI), digital services, and the Metaverse function as direct instruments of psychological, social, and professional integration for these women?* Artificial Intelligence and virtual spaces cease to be merely instruments of pragmatic communication or entertainment; they transform into a "digital refuge" a new deterritorialized sociocultural and therapeutic space. The digital environment becomes the only stable constant where the personality can safely maintain, protect, and reconstruct their ethno-cultural and professional identity, minimizing the trauma of losing a physical home.

We define this cyberpsychological ecosystem as a holistic system of human interaction with the digital environment, where technology acts not merely as a tool, but as an extension of the personality's psychic space. Classic works by John Suler (the concept of cyberspace as a projective screen) and Mary Aiken have substantiated that the digital environment is capable of compensating for real-world deficits. In the context of war migration, this ecosystem becomes a virtual container for the traumatized Ego.

In the psychology of migration and trauma, a child's adaptation is a primary factor determining the mother's mental state. For women with high educational and professional qualifications who find themselves facing language barriers and social downgrading, their children's well-being becomes a key resource for psychological resilience. A mother's mental health in emigration is in direct systemic dependence on how successfully her child overcomes the relational trauma of being separated from their familiar social environment. School-aged children represent a distinct group of Ukrainian children abroad that requires specific attention. It is during school age that socialization through education actively occurs, and fundamental rules of communication and cultural codes are internalized. Prolonged stays in a foreign linguistic and cultural environment influence personality formation, meaning children raised in such environments may find it difficult to communicate with other family members and can inadvertently "anchor" the family abroad. In the event of a return to their homeland, their reintegration may be significantly complicated; if such reintegration fails, these children may prompt their parents to re-emigrate.

The total number of school-aged children outside the country continues to grow due to the inclusion of those who left Ukraine at a preschool age, as well as the continued departure of older students. The latter is driven by parental anxiety regarding the children's safety in a territory where a full-scale war has been ongoing for four years, and fears concerning the potential lowering of the mobilization age to 18. This permanent maternal fear for a child's safety negates the therapeutic effect of physical presence in the host country, forcing the family to seek psychological support within global digital networks.

Studies of migrant communities conducted in various countries indicate that the child's age significantly influences the readiness for return migration, and the probability of returning decreases as children grow older. While young children adapt to relocation more easily, school-aged children have already formed social bonds and integrated into the host country's cultural environment. Returning to their home country can lead to educational difficulties and psychological stress for middle and older school-aged children, meaning the child's discomfort can deter the family from returning or lead to re-emigration if reintegration proves unsuccessful. As children age, the family's mobility decreases.

When a child communicates virtually with their Ukrainian friends via messengers, video calls, shared online games such as Roblox/Minecraft, or social networks, this process transcends mere communication. Scientifically, this is defined as "digital co-presence" and the preservation of the primary matrix of socialization. In conditions where a child's real environment has changed radically, meta-spaces and shared gaming universes begin to perform the function of a virtual psychological stabilizer. The effect of children's connections with peers in Ukraine aligns directly with Shanhua Zhao's theory of digital co-presence, which describes the subjective feeling of being with others in a virtual space despite physical distance. This co-presence acts as a psychological buffer for the family system.

Immersive platforms and elements of the Metaverse (gaming worlds such as Roblox, Minecraft, and social VR spaces) have been studied in the context of identity construction by scholars such as Nick Yee and Jeremy Bailenson. They identified the "Proteus Effect", according to which a person's behavior and self-perception in reality change under the influence of their virtual avatar. For displaced children, the Metaverse becomes a space where they regain a lost sense of agency, creating worlds at a time when their real-world environment has been shattered. Within the framework of "liquid modernity," the destruction of a child's peer network is a severe form of relational trauma.

The "digital refuge" thus functions as an intergenerational system. Virtual communication between evacuated children and their peers in Ukraine creates the phenomenon of digital co-presence, allowing the child to preserve their primary matrix of socialization, maintaining their linguistic and cultural identity. This directly reduces cognitive load and the mother's emotional anxiety regarding the child's assimilation. The stability of the child's psyche, supported through digital channels, automatically releases the mother's internal psychological resources, allowing her to focus on her own adaptation tasks.

In conditions of such profound fragmentation—where children integrate into the host country's space faster than their parents, or conversely, retreat into alienation—the "digital refuge" acquires new systemic functions. For Ukrainian refugees, this is not merely an ecosystem of official, volunteer, and international online platforms assisting with housing, temporary protection, employment, and social services. Today, it is a complex cyberpsychological space where generative AI (personalized AI tutors, adaptive language assistants) and the Metaverse become intermediaries between a disoriented mother, a traumatized child, and the pressures of a foreign society. AI acts as a "cognitive prosthesis," reducing the mother's level of institutional helplessness and helping her solve the child's educational and medical problems, thereby directly protecting her mental health.

However, prior studies have not sufficiently addressed the specifics of the identification process in the context of global sociocultural and geopolitical transformations, nor have they characterized mediated visibility and immersion as a mode of constructing transit identity in virtual reality (the Metaverse). Furthermore, the role of artificial intelligence as a factor of therapeutic support and protection of agency for migrant women remains unexplored, and the critical interrelation between the use of meta-spaces for maintaining children's mental health and the dynamics of mothers overcoming their liminal crisis remains understudied. Therefore, the goal of this article is to reveal the specifics of constructing personal and transit identity among Ukrainian women in the virtual environment and the Metaverse, as well as to define the therapeutic role of AI tools in supporting their mental health and the psychological well-being of their children.

2. Methods

To study the patterns of transformation of personal structures among Ukrainian migrant women, a comprehensive empirical design was developed, based on the principles of methodological triangulation (mixed-methods research). The phenomenon of transit identity in the context of war migration is multidimensional and dynamic, necessitating the simultaneous application of quantitative metrics (to capture general socio-structural trends) and qualitative markers (for a phenomenological analysis of women's unique subjective experiences).

The conceptual framework methodologically adapts Zygmunt Bauman's theory of "liquid modernity" to the conditions of digital typing of coping strategies. Since war radicalizes sociocultural "liquidity" turning geographical borders, legal statuses, and social roles into diffuse and unstable substances the toolkit developed by the author is aimed at capturing processes of Ego stabilization within virtual alternatives. Within our design, the digital environment is viewed not merely as a communication channel but as a deterritorialized cyberpsychological ecosystem. Drawing on the classical approaches of John Suler and Mary Aiken, the research methodology treats cyberspace as a projective screen capable of compensating for the deficits of the physical world. Thus, the digital activity of respondents and their children is measured as a process of "virtual container" functioning, which maintains the personality's psychic integrity during a liminal crisis.

An important methodological component is the implementation of a systemic-family (intergenerational) approach, where the parameters of a child's adaptation act as a powerful predictor of the mother's mental health. In this context, children's activity in immersive platforms and Metaverse elements (e.g., Roblox and Minecraft) has been operationalized as a space for restoring a lost sense of agency. To capture manifestations of the "Proteus Effect" (following N. Yee and J. Bailenson), the research scales include indicators reflecting how the child's behavioral models and self-perception in virtual worlds are retransmitted into their real-world psychological resilience. Furthermore, the methodological apparatus captures the level of "digital co-presence" (following the concept by Shanhua Zhao). This variable is measured through the child's subjective feeling of being in a shared sociocultural space with peers in Ukraine, despite physical distance. In our analysis, this indicator acts as a key psychological buffer for the family system, directly impacting the dynamics of the mother's liminal state.

The research was conducted using an original digital survey instrument. This approach allowed for the inclusion of respondents located in various countries (primarily the USA and EU), ensuring a high level of psychological safety, anonymity, and confidentiality. The total target sample size consisted of 32 respondents selected based on strict inclusion criteria:

- Female gender, adult age (18+);
- Permanent residency in Ukraine prior to February 24, 2022;
- Forced displacement abroad after the onset of the full-scale invasion due to safety risks;
- Presence of minor children (school or preschool age) who are currently evacuating with the mother.

The sample is characterized by a high educational and intellectual status: over 75% of respondents hold higher education degrees or academic titles. Accounting for these parameters allows for a more accurate interpretation of the depth of liminal load, as high social status in Ukraine exacerbates the subjective perception of professional deskilling in emigration.

To form the theoretical and methodological framework, a systematic literature review was conducted according to the PRISMA criteria (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). Searches were carried out in international scientometric databases (Scopus, Web of Science, PubMed, Google Scholar) using key descriptors: *liquid modernity*, *transit identity*, *digital refuge*, *digital co-presence*, *generative AI in migration*, *liminality*. We included works that conceptualize migration psychological crises through the lens of cyberpsychology and evaluate the role of digital ecosystems as adaptive coping mechanisms.

Primary data collection was performed using a complex four-component authorial questionnaire, modified to measure digital and intergenerational adaptation parameters:

● **Block A. Socio-demographic characteristics, adaptation context, and children's digital integration:** This block captures the objective life context of respondents using retrospective-prospective analysis. Beyond basic demographic profiles, a submodule for assessing children's adaptation in virtual spaces was integrated, operationalizing the intensity of engagement in immersive environments (temporal and qualitative metrics of children's time in Roblox/Minecraft to compensate for real-life communication deficits), digital co-presence indices (frequency and emotional depth of the child's virtual contacts with Ukrainian peers via digital channels), and the educational component as a therapeutic space (tracking the child's parallel education in Ukrainian online schools, serving as a symbolic "digital home" for the family).

- **Block B. Transit Identity Scale (TIS):** A standardized scale with 20 items (5-point Likert scale). The mathematical operationalization of the liminal state ("between two realities") is achieved by measuring five latent factors, integrated with indicators of AI and virtual world interaction: 1. Spatial-temporal orientation crisis (measuring the Metaverse's role as an alternative space for overcoming geographic isolation); 2. Sociocultural integration and duality (assessing the effectiveness of using generative AI to overcome language barriers and decode host-culture codes); 3. Repatriation reflections (monitoring the homeland's information field and maintaining ties via virtual Ukrainian communities); 4. Post-traumatic personal growth (identity experiments such as virtual avatars, curating expert network profiles as an "ego-shield"); 5. Ethnocultural core (assessing the mother's sanctioning of the child's online communication with Ukraine as a tool for intergenerational identity transmission).

- **Block C. Return Intention Scale (RIS):** Contains 16 items identifying the motivational, cognitive, and behavioral readiness of respondents for repatriation or final assimilation. A significant criterion here is the child's adaptation: the instrument measures how a high level of digital co-presence with Ukraine hinders the processes of irrevocable family assimilation abroad.

- **Block D. Psychometric tools for AI-based coping:** To assess AI as a "cognitive prosthesis" under conditions of institutional helplessness, indicators were introduced tracking the frequency and modality of using generative AI assistants (ChatGPT, Claude) for legal, medical, and educational issues; the evaluation of AI as a therapeutic subject/stress-reduction tool; and the subjective sense of regaining agency over life circumstances due to technological solutions.

Quantitative data were processed using descriptive statistics methods. For the systematization of data, frequency distribution analysis and calculations of central tendency (median, mode, mean) were applied, allowing for the identification of stable digital co-presence profiles and patterns of generative AI usage. Qualitative data from open-ended text fields were analyzed using thematic content analysis, where subjective narratives were aggregated into semantic categories for conceptual interpretation.

3. Results

The empirical study of transit identity formation encompassed Ukrainian women who were forced to leave Ukraine following the full-scale invasion on February 24, 2022. As of the time of the survey (**June 2026**), the majority of respondents reside in the United States, having had prior transit experience in EU countries (notably Poland and the Czech Republic).

Despite their significant human capital (78.2% are university-educated specialists or scholars who held stable positions in public service, business, or academia in Ukraine), these women face acute professional deskilling. Due to linguistic barriers and legal status uncertainty, former executives and professionals are forced into low-skilled sectors (cleaning, retail, beauty industry, elder care). Economic stress is confirmed by the fact that nearly half of the sample has sought assistance from Food Banks, and 62.5% receive state social benefits. This has triggered a profound identity crisis and high emotional burden: 65.6% of women felt a clear need for psychological support, and 46.9% have sought professional therapy. The basic sociodemographic parameters of the sample are presented in Table 1.

Table 1. Sociodemographic Profile of Ukrainian War Migrant Women

Parameter	Key Categories	Percentage
Age Range	Active working age: 26–35 (34.4%), 36–45 (53.1%)	87.5%
Education Level	Higher education (71.9%), PhD/Candidate of Sciences (6.3%)	78.2%
Marital Status & Children	Married (65.6%), divorced (21.9%). With minor children	81.3%
Work Experience in Ukraine	Extensive: 11–20 years (53.1%), 20+ years (15.6%)	68.7%
Legal Status	Temporary protection / Humanitarian parole	91.7%

Frequency analysis confirmed that mothers exist in a state of "classic liminality"—a dissolution of former life constructs without the formation of new, stable foundations. This state is determined by three clusters:

- **"Between worlds" effect:** 66% feel caught between two realities, and 53% cannot clearly define where their "true home" is.
- **Chronic uncertainty:** 78% report total uncertainty in life, and 69% are unable to predict their place of residence in the coming years.
- **Ambivalence of return:** Although for 84%, Ukraine remains their only mental home, 50% choose "hard to answer" regarding specific repatriation plans after the war.

In contrast to this maternal crisis, the children demonstrate a paradoxically high level of adaptation: 69% of children adapted "well" or "very well". Analysis of intergenerational trends shows that this adaptation breakthrough is directly linked to the children's integration into the digital dimension as an alternative space for stabilizing the family system. For displaced Ukrainian children, immersive digital spaces function as a therapeutic environment and a space for digital co-presence. Mothers consciously sanction and encourage children's entry into Ukrainian online spaces, which perform three critical functions:

- **Emotional buffer:** Online games (Roblox, Minecraft) and video calls with peers protect children from acute depression and feelings of alienation. It is a "safe zone" where they do not need to overcome language barriers or migration stereotypes.
- **Transmission of cultural code:** Through virtual interaction, children maintain colloquial Ukrainian, local humor, and memories of pre-war life, which blocks the processes of irrevocable assimilation.
- **Ecological effect for the mother:** Seeing their child "rooted" in their familiar digital circle provides mothers with a crucial psychological resource, mitigating the chronic guilt complex associated with the forced evacuation. Parallel online schooling serves as an additional "anchor of stability," perceived by the child as a symbolic space of the homeland.

Comparative analysis of two subgroups of children with high digital co-presence versus those completely cut off from the Ukrainian digital context shows that maternal adaptation anxiety and guilt complexes are significantly lower in the first group. The key difference between adult and child migration experiences lies in the speed of constructing a "New Self". While mothers experience painful deskilling and use digital avatars as a passive "ego-shield" to protect their former status, children demonstrate a proactive technological leap. Data analysis confirms a direct correlation between children's agency and their use of generative AI as a "cognitive accelerator".

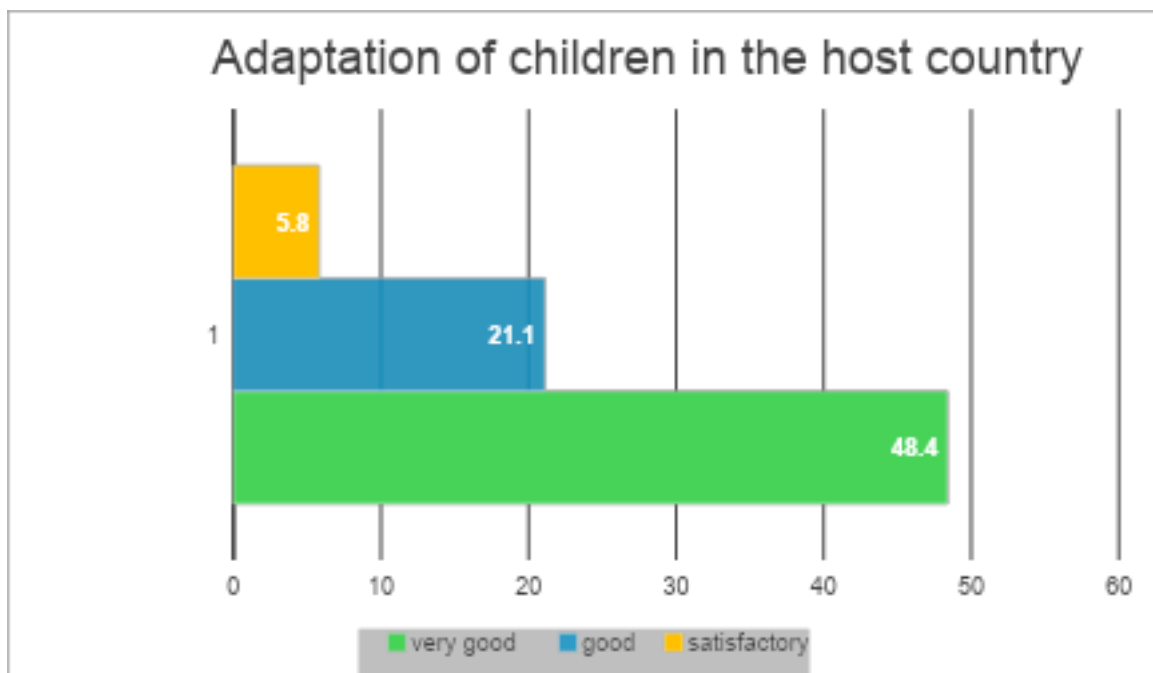


Fig.1. Adaptation of children in the host country

Furthermore, the study examined the effect of mothers using generative AI (ChatGPT, Claude) as a "cognitive prosthesis" to overcome institutional helplessness. Comparisons revealed significant differences:

- **Active AI users:** Demonstrate significantly lower levels of institutional helplessness and higher autonomy in solving legal, medical, and educational issues.
- **Non-AI users:** Report high levels of adaptation stress, disorientation, and feelings of helplessness before foreign social institutions.

The empirical analysis thus reveals deep polarization within migrant family systems: mothers remain in a state of prolonged liminal ambivalence, whereas the younger segment demonstrates high adaptive indicators. Digital co-presence acts as an intergenerational stabilizer that reduces maternal guilt and stress. Through immersive platforms and generative AI, the digital dimension compensates for the loss of a physical home, transforming the trauma of displacement into a space for technological self-realization, autonomy, and the construction of a resilient, adaptive identity.

4. Discussion

The empirical findings allow for a profound theoretical and psychological interpretation of transit identity as a specific dynamic state of the personality amidst forced war-related displacement. The data reveal the systemic therapeutic role of the digital environment, which transforms from a pragmatic communication tool into a vital adaptation space for the entire family system.

4.1. The "Between Two Worlds" Phenomenon and Digital Co-presence

The primary psychological characteristic of the surveyed women is a state of cognitive and emotional dissociation, which correlates with Zygmunt Bauman's concept of "liquid modernity". While respondents' physical reality demonstrates signs of high forced adaptation (employment, daily logistics, language integration), their internal psychic space remains locked in a liminal state—a condition of chronic uncertainty where the classical construct of "home" is destructively compromised. When reality becomes hyper-liquid and threatens Ego disintegration, the personality's cyberpsychological ecosystem begins to function as a "digital refuge".

In the context of John Suler's work on cyberspace as a projective screen and Mary Aiken's view on compensating for physical world deficits, virtual communities and digital networks liberate the category of "home" from geographic anchors. It has been empirically proven that this process is intergenerational: maternal stabilization occurs through a dynamic reduction of anxiety, facilitated by the child's "digital co-presence". Comparative analysis of subgroups provides robust evidence that a child's subjective sense of being in a shared sociocultural field with peers in Ukraine acts as a psychological buffer for the entire family. Shanhua Zhao's concept of digital co-presence is validated by the correlation identified: the more intense the child's emotional connection to home via immersive channels, the lower the mother's depressive burden and adaptation stress. Digital space thus becomes a virtual container for the migrant mother's traumatized Ego.

4.2. Professional Deskilling, Identity Crisis, and the Digital "Ego-Shield"

A significant factor deepening the maternal liminal crisis is the forced "descent" through social ladders (deskilling), observed in the majority of highly educated participants. The loss of professional confidence leads to acute intrapersonal conflict and a decline in self-esteem. To defend against psychic degradation, women unconsciously deploy an "ego-shield" within the digital contour. Curating an expert profile on professional networks (e.g., LinkedIn) or creating a positive digital footprint allows the woman to artificially decouple her traumatized, deskilled "real-world Self" from her authentic, high-status "virtual Self," thereby maintaining an expert identity at least within the digital environment.

Simultaneously, overcoming institutional helplessness in the host country is now mediated by generative AI. Our analysis demonstrates that using AI as a "cognitive prosthesis" allows women to successfully compensate for language deficits and navigate local bureaucracy, significantly reducing adaptation anxiety and restoring a sense of agency.

4.3. Child Well-being as a Mediator of Maternal Adaptation

Child-rearing in liminal conditions takes on a distinct virtual character. Encouraging the child's entry into the Ukrainian online space acts as a powerful stabilizer for the family system through three critical functions:

- **Historical and Emotional Buffer:** Involvement in immersive platforms (Roblox, Minecraft) protects children from depression and feelings of alienation, providing a "safe zone" free from migration-related stereotypes.

- **Cultural Code Transmission:** Virtual interaction allows children to naturally maintain their native language, local humor, and ethnocultural core, shielding the family from irrevocable assimilation.
- **Therapeutic Effect for the Mother:** Viewing the child as "rooted" in their familiar social circle (even if digital) dramatically reduces the maternal "guilt complex" regarding the evacuation, freeing cognitive resources for the mother's own adaptation.

Existential fear of the future is articulated through the "dilemma of return," where repatriation is perceived as a "fear of another death"—the need to destroy life foundations for a second time. However, the processes of overcoming this paralysis and constructing a "New Self" differ across the generational dimension, forming a two-level model:

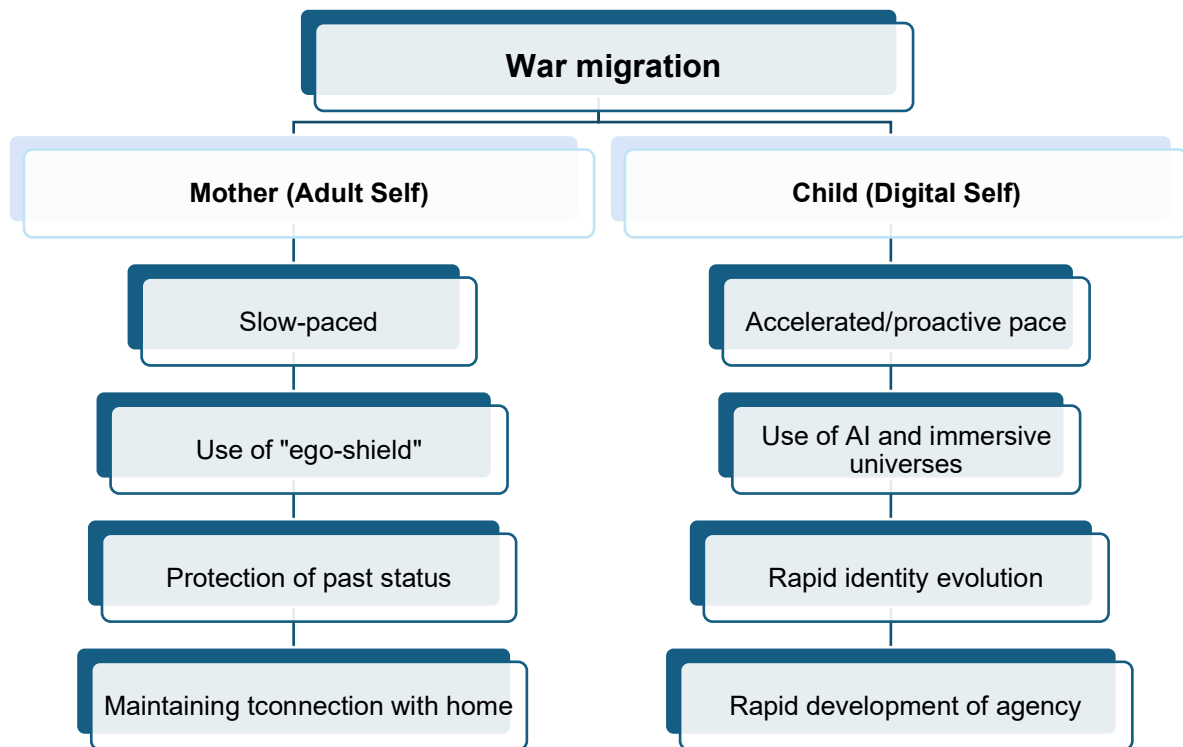


Fig. 2. Model of "New Self" formation following war migration

4.4. Psychological Blocks and the Intergenerational Model of the "New Self"

Existential fear of the future is articulated through the "dilemma of return," where repatriation is perceived as a "fear of another death"—the need to destroy life foundations for a second time. However, the processes of overcoming this paralysis and constructing a "New Self" differ across the generational dimension, forming a two-level model:

Balancing Digital Support for Different Age Groups

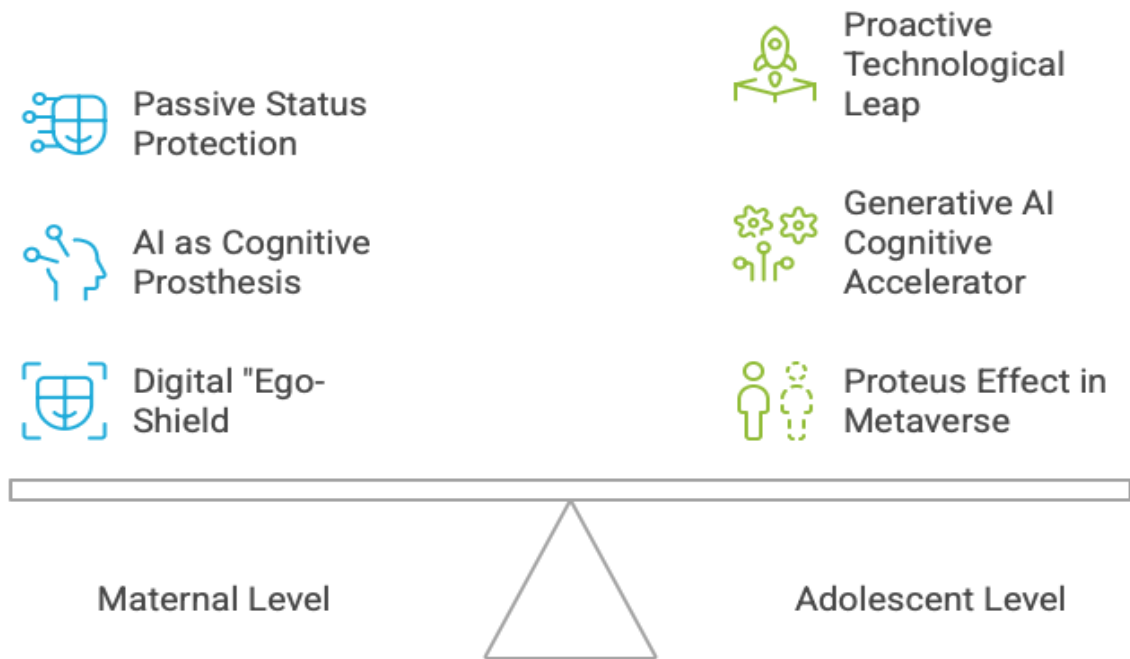


Fig. 3. Model of "New Self" formation following war migration

Mathematical and statistical analysis confirms that the child's model of constructing a "New Self" is proactive. Children lack the trauma of losing high social/professional status; thus, their identity is more flexible. They instantly integrate generative AI as a "cognitive and linguistic accelerator". Through virtual worlds, where the "Proteus Effect" (N. Yee and J. Bailenson) unfolds, the child ceases to be a "refugee" and becomes an active architect of worlds. This restores their sense of control over life in reality, allowing for the construction of a resilient, hybrid identity faster than their parents.

4.5. Limitations of the Study

Despite the theoretical and practical significance of the findings, this study has several limitations that must be considered:

- **Sample Size and Specificity:** The research is based on a purposive sample of 32 respondents. While sufficient for qualitative thematic analysis and descriptive statistics in a specialized pilot study, it limits the generalizability of the findings to the broader population of Ukrainian migrant women.
- **Geographic and Socio-Economic Homogeneity:** The sample is characterized by a high educational and intellectual threshold, with the majority of respondents residing in the USA. These findings may not fully reflect the experiences of Ukrainian women with different educational backgrounds or those who relocated to countries with different social policies and digital infrastructures.
- **Self-Report Bias:** The reliance on self-reported data via a questionnaire may involve subjective bias, particularly in the assessment of children's adaptation and the emotional impact of digital co-presence.
- **Temporal Dynamics:** The study captures a specific "snapshot" of the migration experience during Feb 2022 - June 2026. Given the fluid nature of war-related migration and the rapid evolution of generative AI tools, the long-term sustainability of the identified coping mechanisms requires longitudinal verification.
- **Focus on Specific Digital Ecosystems:** The study focuses on immersive platforms (Roblox, Minecraft) and common AI assistants (ChatGPT, Claude). While these represent dominant trends, they do not account for other emerging digital environments or varying levels of digital literacy among different cohorts of migrants.

5. Conclusions

1. Liminal Identity & Digital Realignment: Forced migration forms a specific state of "transit identity," characterized by a prolonged existence "between two realities," the erosion of the sense of home, and high psycho-emotional load. When unmediated, the discrepancy between high educational levels (78.2%) and current low-skilled status triggers severe structural crises.

2. AI as an Instrument of Agency: Generative AI acts effectively to reduce institutional helplessness. For adult cohorts, it serves as a defensive "cognitive prosthesis" to navigate bureaucratic frameworks; for younger generations, it acts as a proactive "cognitive accelerator," accelerating integration metrics.

3. The Intergenerational Digital Refuge: The digital environment functions as a systemic family structure: it stabilizes the mother's psyche directly through the child's well-being. Digital co-presence (Roblox, Minecraft, online schooling) serves as an emotional buffer, preserving the native cultural core and significantly reducing maternal guilt.

4. The Two-Level Identity Construct: The digital ecosystem accommodates two distinct identity paths: a passive strategy (the defensive "ego-shield" used by mothers for status preservation) and a proactive strategy (the avatar-driven "Proteus Effect" reinforcing child agency and accelerating hybrid identity formation).

Scientific Novelty

The study synthesizes "liquid modernity" liminality with cyberpsychological and intergenerational approaches. It is the first to validate the "Digital Refuge" by providing empirical proof that virtual spaces (AI, Metaverse) transform from leisure tools into existential, therapeutic containers for migrant families. It verifies the mitigation mechanism detailing how maternal stress and guilt are reduced through the child's virtual co-presence with their original sociocultural environment. Finally, it conceptualizes a two-level model of identity construction where the mother utilizes a digital "ego-shield" for status preservation, while the child acts as a proactive technological locomotive for family adaptation.

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