

ADDICTA

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Interdisciplinary perspectives on migration and addiction

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Introduction

Human mobility has become one of the defining realities of the twenty-first century, reshaping societies, economies, identities, and public health systems across the globe. Forced displacement, labor migration, family reunification, and educational mobility increasingly influence not only demographic structures but also social cohesion, access to services, and patterns of vulnerability and resilience. According to international organizations, millions of people today live in conditions of displacement, uncertainty, and social precarity, while a significant proportion of these populations consist of children and young people. Migration therefore represents not merely a movement across borders, but also a complex social and psychological process that profoundly affects individuals' everyday lives, well-being, and future opportunities.

Within this broader context, the relationship between migration and addiction has emerged as a critical yet still underexplored field of inquiry. Refugees and other groups of migrants frequently encounter multiple vulnerabilities before, during, and after migration, including trauma exposure, family separation, discrimination, poverty, legal insecurity, social exclusion, interrupted educational trajectories, and limited access to healthcare and psychosocial support systems. Such experiences may increase susceptibility to substance use and other addictive behaviors while simultaneously limiting access to preventive and therapeutic services. Particularly among young migrants and refugees, the intersection of identity formation, social belonging, uncertainty, and post-migration stress creates additional risks that require closer scholarly and policy attention.

At the same time, migration should not be viewed solely through a deficit-oriented lens. Migrant communities also demonstrate remarkable resilience, adaptive capacities, agency, and social solidarity despite difficult living

conditions and structural barriers. Understanding addiction in migration contexts therefore requires a multidimensional and interdisciplinary perspective that considers not only risk factors and vulnerabilities, but also coping strategies, protective mechanisms, community support, social integration processes, and culturally sensitive interventions. Such an approach enables a more comprehensive understanding of migration-related addiction while also contributing to more inclusive, preventive, and evidence-based social policies and practices.

A Project and a Partnership of Three Countries

Today, migration constitutes one of the most significant social realities both globally and in Türkiye, with young people representing a substantial proportion of migrant populations. Migrant youth often encounter multiple challenges related to education, health, social inclusion, and access to support systems in the host societies. Particularly in cases of forced migration, experiences such as uncertainty, trauma, loneliness, displacement, discrimination, and socio-economic insecurity create important vulnerabilities for young people. These experiences, combined with cultural adaptation difficulties and mental health challenges, may increase susceptibility to substance use and other addictive behaviors. In Türkiye, which continues to host one of the world's largest refugee populations, these issues become especially critical due to the large number of young refugees and migrants living in urban and socially disadvantaged settings.

Within this context, the Erasmus+ KA220 project titled "Developing a Prevention Model Against Addiction for Migrant Youth" (Project No. 2023-2-TR01-KA220-YOU-000180027), funded by European Commission¹, develops a preventive and resilience-oriented approach aimed at supporting migrant youth. Implemented through the collaboration of partner

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institutions² from Türkiye, Norway, and Germany, the project seeks to strengthen the social participation, well-being, and protective capacities of migrant young people while addressing trauma-related vulnerabilities and addiction risks. The project promotes culturally sensitive, youth-centered, and socially inclusive prevention strategies designed to enhance awareness, reduce risky behaviors, and support the reintegration and empowerment of disadvantaged youth.

As one of the intellectual outputs of this international collaboration, this supplementary issue brings together interdisciplinary studies focusing on migration and addiction from diverse perspectives. The issue contributes to the growing literature by examining the structural, psychological, social, and cultural dimensions of addiction among migrant populations while also highlighting resilience, prevention, and community-based interventions. By disseminating open-access academic knowledge and comparative experiences, the supplementary issue contributes to evidence-based policymaking and supports national and international efforts aimed at protecting migrant youth and strengthening social cohesion.

The research landscape surrounding addiction among refugees and migrants is shaped by distinct national perspectives and traditions in each country. There is limited research in Norway concerning substance use and substance-related problems among refugees, asylum seekers, and individuals living in exile. Within the Norwegian context, research in this field remains relatively fragmented, with the primary focus historically directed toward trauma, mental health, and integration rather than the relationship between refugees' mental health and their own substance use (Solberg et al., 2020, 2021).

It is well documented that refugees and asylum seekers constitute a particularly vulnerable group with regard to mental health due to potentially traumatic experiences prior to and during forced migration, as well as post-migratory stressors associated with establishing life in a new country, including limited knowledge of the host society and linguistic barriers (Solberg et al., 2020, 2021). By contrast, research is more extensive in relation to criminality, narcotics-related offences, and processes of social marginalization (Ryan et al., 2024).

The consequences of social marginalization, including participation in irregular labour markets or involvement in criminal activities, have occupied a more prominent position in both political discourse and academic research. This is not necessarily because crime rates or narcotics-related offences are generally higher among refugees and asylum seekers, but because migration policy and immigration law are increasingly employed as mechanisms through which individuals holding legal residence permits may nevertheless be expelled from the country.

For the individual concerned, substance use primarily represents a risk to health and a matter of concern for public

health authorities. However, within the criminal justice system, possession and distribution of illicit substances directly affect opportunities for belonging, future prospects, and continued residence status. For this population, as for others involved in illicit substance use, drug-related practices constitute a nexus between health-related harms, social marginalization, and criminal prosecution. Yet for refugees and asylum seekers in particular, these consequences may additionally include the loss of the right to remain in the country.

Research on migration and addiction in Germany increasingly focuses on the mental health vulnerabilities, psychosocial stressors, and substance use risks experienced by asylum seekers and refugees. Since Germany has become one of the primary destinations for refugees in Europe following the 2015 refugee movements, scholars have paid growing attention to the relationship between forced migration, trauma, social exclusion, and addictive behaviors. Existing studies demonstrate that post-migration stressors such as uncertain legal status, discrimination, poor housing conditions, language barriers, and limited social integration significantly affect the psychological well-being of refugees and asylum seekers in Germany.

One of the major contributions in this field is the state-wide health monitoring study conducted by Biddle et al. (2019), which provides comprehensive data on the health conditions of asylum seekers and refugees in Germany. The study identifies high levels of chronic illness, depression, anxiety, and unmet healthcare needs among refugees, while also emphasizing structural barriers to healthcare access, particularly in collective accommodations and rural areas. Similarly, Hajak et al. (2021), through a systematic review, demonstrate that contextual post-migration factors play a crucial role in shaping refugees' mental health. Their findings indicate that uncertain asylum procedures, separation from family members, discrimination, and social isolation increase psychological distress, whereas employment and social integration function as protective factors.

Research specifically focusing on substance use among refugees highlights the role of trauma and coping mechanisms. Lindert et al. (2021), in their qualitative study with Syrian male refugees in Germany, reveal that substance use is often perceived as a way of escaping traumatic past experiences and coping with psychosocial difficulties in the present. The study also shows that differences in social norms and the wider availability of substances in Germany influence refugees' perceptions and behaviors regarding substance use. Likewise, Lorenz et al. (2023) examine professionals' perspectives on substance use among refugees living in shared accommodations and emphasize the need for culturally sensitive addiction prevention and intervention programs.

Overall, the German literature demonstrates that addiction among refugees and migrants should be understood within broader socio-ecological and structural contexts rather than solely as an individual issue. Existing studies underline

² Project coordinator: Turkish Green Crescent Society (Türkiye). Project partners: Marmara University (Türkiye), Universitätsklinikum Hamburg-Eppendorf (Germany), Velferdsetaten Oslo Kommune (Norway).

the importance of culturally appropriate prevention models, interdisciplinary cooperation, and trauma-informed mental health and addiction services for migrant populations in Germany.

Research on migration and addiction in Türkiye has increased in recent years; however, the literature remains relatively limited compared to the scale of migration experienced in the country. As Türkiye hosts one of the largest populations of migrants under temporary protection globally, the intersections of migration, mental health, social cohesion, and addiction have attracted growing scholarly attention. Existing studies emphasize that traumatic experiences, uncertainty, social exclusion, economic deprivation, and acculturation difficulties experienced by migrants constitute important risk factors for substance use and addictive behaviors (Güler & Demircan, 2022; Gülerce et al, 2022).

One of the most significant studies in the Turkish context is the qualitative research conducted by Taşdemir et al. (2020), which examines alcohol and substance addiction among Syrian migrants through the perspectives of addicted individuals, family members, and institutional actors. The study demonstrates that addiction among migrants cannot be understood solely at the individual level but must also be evaluated within broader environmental, social, and institutional contexts. The findings reveal that many migrants possess motivation to quit addiction but encounter major barriers in accessing support services and rehabilitation opportunities. Similarly, Demircan and Güler (2024) investigate smoking addiction and risky alcohol consumption among forcibly displaced Syrians and find that anxiety levels, psychological cohesion, and socio-cultural adaptation significantly predict addictive behaviors. Another important contribution is provided by Wanke et al. (2022), who focus on the stigmatization of drug addiction in South-East Türkiye. Their study reveals that substance use is heavily stigmatized within local communities and often concealed by families, making prevention efforts more difficult. This finding suggests that addiction interventions should address not only substance use itself but also the social stigma surrounding addiction. In a broader sociological context, Marufoğlu and Görür (2024) examine the relationship between migration, addiction, and crime rates, demonstrating a bidirectional relationship between migration and addiction-related social problems.

Overall, the literature in Türkiye primarily focuses on mental health vulnerabilities, social integration, and risk factors associated with migration, while relatively fewer studies address preventive and resilience-oriented models. This highlights the growing need for culturally sensitive, community-based, and youth-centered prevention approaches targeting migrant populations in Türkiye.

In conclusion, the experiences of Türkiye, Germany, and Norway demonstrate that migration and addiction are deeply interconnected phenomena shaped by trauma, social exclusion, structural inequalities, and post-migration challenges. At the same time, the literature from these countries also highlights the importance of resilience, social

participation, and culturally sensitive prevention approaches in strengthening migrant well-being. Despite growing academic interest, significant gaps remain in prevention-oriented, youth-centered, and comparative research concerning addiction among migrant populations. This supplementary issue therefore seeks not only to contribute to the existing literature, but also to encourage stronger interdisciplinary collaboration, evidence-based policymaking, and community-based interventions across different national contexts. Ultimately, addressing addiction among migrant youth requires approaches that move beyond stigmatization and recognize migrants not merely as vulnerable populations, but also as individuals and communities with agency, resilience, and the capacity for social transformation.

Diverse Perspectives Across Europe

The articles brought together in this supplementary issue of *Addicta* contribute to this growing body of scholarship by examining migration and addiction through sociological, psychological, public health, ecological, and practice-oriented approaches.

A significant group of contributions in this issue focuses on migrant and refugee youth, emphasizing how migration-related vulnerabilities intersect with developmental processes, identity formation, and social belonging. The review article "Substance use among refugee adolescents: A systematic review from a public health perspective" (Akyol Güner, 2026) provides a comprehensive synthesis of empirical evidence regarding substance use among refugee adolescents across multiple national contexts. The article highlights the central role of trauma exposure, acculturative stress, family disruption, psychological distress, and socioeconomic disadvantage in shaping addiction vulnerability. Importantly, the review also identifies school connectedness, family support, and social networks as protective factors that can strengthen resilience among refugee youth.

Closely related to this discussion, "Addiction vulnerability among immigrant youth: Psychosocial risk, protective processes, and intervention approaches" (Özler Ervüz et al., 2026) conceptualizes addiction risk among migrant youth through the framework of Ecological Systems Theory. The study demonstrates how migration-related stressors operate simultaneously at individual, family, educational, and societal levels. By emphasizing the importance of social integration, cultural continuity, and belonging, the article expands current debates beyond clinical treatment models and argues for holistic prevention strategies.

Similarly, "Addressing substance use and vulnerability among unaccompanied migrant youth in Spain: A narrative review" (Mc-Gragh et al., 2026) examines one of the most vulnerable groups within migration processes: unaccompanied migrant minors. The article draws attention to the compounded effects of legal precarity, social isolation, housing insecurity, and interrupted caregiving structures on addiction vulnerability. Together, these three contributions collectively underline the urgent need for trauma-informed, culturally sensitive, and

youth-centered prevention approaches that move beyond individualized understandings of addiction.

Building upon this preventive perspective, “A prevention model against addiction for migrant youth: Bavul” (Yaylacı et al., 2026) introduces the Bavul model, an innovative intervention framework developed specifically for migrant youth. Grounded in trauma-informed and strengths-based principles, the model combines experiential learning, resilience-building, identity development, and life skills education in a culturally sensitive format. The metaphor of the “Bavul” (suitcase) symbolically reflects the emotional, cultural, and experiential “bavul” carried by migrant youth throughout migration journeys. This contribution is particularly important because it translates theoretical discussions on vulnerability and resilience into a structured prevention model with practical applicability.

The supplementary issue also highlights the importance of community-based and outreach-oriented interventions. “Navigating power in outreach youth work: Relationship-based approaches to substance use prevention” (Chabchoub et al., 2026) emphasizes trust-building, relational engagement, and non-hierarchical communication in youth work practices. Rather than positioning young people merely as passive recipients of interventions, the article advocates participatory approaches that empower youth agency and social inclusion. In a similar vein, “Dealer raus: A retrospective case study of the Mothers Without Borders initiative in Berlin’s Kreuzberg” (Ağca-Varoğlu, 2026) demonstrates how grassroots community initiatives in an immigrant neighborhood can mobilize collective action against drug-related harms through the instrumentalization of motherhood. By focusing on women’s activism, the study illustrates the importance of community engagement, both as a form of struggle against addiction and as a means of protecting the neighborhood from spatial stigmatization.

Several articles in this issue also examine migration and addiction through broader structural, institutional, and transnational lenses. “Syrian refugees under temporary protection and the YEDAM Service Network in Türkiye: An ecological perspective on regional balance” (Vuraloğlu, 2026) provides a valuable ecological analysis of the relationship between refugee population density and addiction service provision in Türkiye. The findings reveal important regional disparities and raise critical questions concerning equitable access to counseling and rehabilitation services. The article contributes to policy discussions by highlighting how migration-related demographic transformations require adaptive and regionally responsive public health infrastructures. The contribution titled “Learnings from a German research network on substance use among refugees (PREPARE) with a focus on an intervention to improve emotion regulation” (Milin et al., 2026) similarly focuses on intervention development and implementation. By presenting insights from the PREPARE research network in Germany, the article demonstrates the significance of interdisciplinary collaboration, evidence-based programming, and emotional regulation strategies in refugee-focused addiction prevention. These articles illustrate how institutional responses to addiction among migrants increasingly require

coordinated approaches involving public health systems, academia, civil society, and local communities.

Another cluster of articles in this issue explores emerging and non-traditional forms of addiction and risk behaviors among migrant populations. “Problematic digital use among migrant adolescents in Türkiye: A PISA 2022 analysis of risk and protective factors” (Morgül, 2026) shifts attention toward digital dependency and problematic technology use among migrant adolescents. The article demonstrates how migration-related disadvantages may intersect with educational inequalities, psychosocial stressors, and digital environments, producing new forms of vulnerability that deserve greater scholarly attention. Likewise, “Gambling disorder among young migrants in Germany” (Şahinöz, 2026) expands the conceptual boundaries of addiction research by focusing on behavioral addictions among migrant youth. The article shows how social exclusion, economic insecurity, and identity struggles may shape gambling-related behaviors within migrant communities. Together, these two articles contribute to a broader understanding of addiction by moving beyond substance-centered perspectives and recognizing the growing importance of behavioral and digital addictions in migration contexts.

The issue also addresses migration and addiction through criminological and sociological perspectives. “Between borders and substances: Body packer cases among refugees in Van, Türkiye” (Tatlı & Sutaşır, 2026) investigates the intersection of irregular migration, trafficking routes, and substance transportation practices in a critical border region. By documenting body packer cases among refugees and irregular migrants, the study reveals the complex vulnerabilities that emerge at the intersection of migration governance, organized crime, and public health.

Meanwhile, “A sociological study of substance use among Turkish youth in Germany” (Yüksel & Hiçdurmaz, 2026) examines how migration histories, identity negotiations, discrimination, and transnational belonging influence substance use patterns among Turkish-origin youth in Germany. This contribution is particularly valuable because it situates addiction within broader sociological debates concerning diaspora experiences, social integration, and intergenerational transformation.

In a related manner, the article “Is rural-to-urban migration related to smoking, alcohol, and substance use: a cross-sectional study among medical students” (Torun et al., 2026) focuses on internal migration and its relationship with smoking, alcohol use, and substance use among medical students. The study demonstrates that migration experiences within national borders may also constitute an important yet often overlooked determinant of addiction-related behaviors. By identifying associations between migration history, childhood trauma, mental health, residential environments, and substance-related risks, the article broadens the scope of migration and addiction research beyond refugee and international migration contexts. Importantly, the findings suggest that internal migration processes and social

dislocation may interact with psychosocial vulnerabilities in shaping health-risk behaviors among young adults.

Taken together, the articles in this supplementary issue collectively demonstrate that addiction in migration contexts cannot be reduced to individual pathology alone. Instead, addiction emerges through the interaction of structural inequalities, displacement experiences, social exclusion, trauma exposure, policy environments, and community dynamics. The issue therefore calls for a multidimensional perspective that integrates public health, sociology, psychology, youth studies, migration studies, and social policy.

Conclusion

Migration and addiction emerge in this supplementary issue not as isolated or purely individual phenomena, but as deeply interconnected social, psychological, cultural, and structural processes. The studies brought together in this collection collectively demonstrate that experiences of forced displacement, uncertainty, trauma, discrimination, social exclusion, and disrupted social support systems significantly shape vulnerability to substance use and addictive behaviors among migrants and refugees. At the same time, the issue highlights that migrant communities are not defined solely by vulnerability; they also possess important capacities for resilience, adaptation, solidarity, and recovery.

One of the most important contributions of this supplementary issue lies in its multidimensional and comparative perspective. By bringing together research and experiences from Türkiye, Germany, Norway, Spain, and broader international contexts, the issue reveals both shared migration-related challenges and context-specific dynamics shaped by national policies, institutional structures, and social environments. The contributions consistently emphasize that addiction among migrant populations must be understood within broader socio-ecological frameworks that include trauma exposure, legal insecurity, social marginalization, poverty, discrimination, and barriers to healthcare and social participation.

Importantly, this collection also moves beyond problem-centered narratives by foregrounding prevention, resilience, and community-based responses. The studies underline the importance of culturally sensitive interventions, trauma-informed care, youth work, emotional regulation strategies, social cohesion, family support, and participatory approaches that strengthen migrant youths' sense of belonging and agency. In this respect, the Erasmus+ project "Developing a Prevention Model Against Addiction for Migrant Youth," implemented through the collaboration of institutions from Türkiye, Norway, and Germany, represents not only an academic partnership but also a practical effort to develop innovative and socially responsive prevention strategies for disadvantaged young people.

As migration continues to shape societies across Europe and beyond, understanding the intersections between migration and addiction becomes increasingly important for

researchers, policymakers, practitioners, and civil society actors. This supplementary issue contributes to this growing field by encouraging interdisciplinary dialogue, comparative research, and evidence-based policymaking while also emphasizing the ethical responsibility to support migrant populations through inclusive, humane, and prevention-oriented approaches. Ultimately, the issue calls for a shift from reactive and stigmatizing perspectives toward holistic models that recognize both the vulnerabilities and the strengths of migrants and refugees in increasingly complex social realities.

Data availability statement

Data sharing is not applicable to this article as no new datasets were generated or analyzed during this study.

Conflict of interest

The author declares that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Generative AI statement

The authors declare that no generative AI or AI-assisted technologies were used in the writing or preparation of this study.

References

- Ağca Varoğlu, F. G. (2026). "Dealer raus": A retrospective case study of the Mothers Without Borders initiative in Berlin's Kreuzberg. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 49-58. [\[Crossref\]](#)
- Akyol Güner, T. (2026). Substance use among refugee adolescents: A systematic review from a public health perspective. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 32-39. [\[Crossref\]](#)
- Biddle, L., Menold, N., Bentner, M., Nöst, S., Jahn, R., Ziegler, S., & Bozorgmehr, K. (2019). Health monitoring among asylum seekers and refugees: a state-wide, cross-sectional, population-based study in Germany. *Emerging Themes in Epidemiology*, 16, 3. [\[Crossref\]](#)
- Chabchoub, J., Jacobsen, C. S., & Haugstvedt, H. (2026). Navigating power in outreach youth work: Relationship-based approaches to substance use prevention. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 40-48. [\[Crossref\]](#)
- Demircan, D., & Guler, M. (2024). Factors affecting risky alcohol consumption, smoking addiction in forced Syrian migrants. *Addicta: The Turkish Journal on Addictions*, 11(3), 338-346. [\[Crossref\]](#)

- Güler, M., & Demircan, D. (2022). Zorunlu göç: Bağımlılık açısından riskli bir süreç. *İstanbul Aydın Üniversitesi Sosyal Bilimler Dergisi*, 14(1), 1-14. [\[Crossref\]](#)
- Gülerce, H., Şahin, H., & Hadi, A. (2022). Migration and obstacles to social cohesion: The perception of young people in Turkey. *HUMANITAS - Uluslararası Sosyal Bilimler Dergisi*, 10(20), 206-225. [\[Crossref\]](#)
- Hajak, V. L., Sardana, S., Verdelli, H., & Grimm, S. (2021). A systematic review of factors affecting mental health and well-being of asylum seekers and refugees in Germany. *Frontiers in Psychiatry*, 12. [\[Crossref\]](#)
- Lindert, J., Neuendorf, U., Natan, M., & Schäfer, I. (2021). Escaping the past and living in the present: a qualitative exploration of substance use among Syrian male refugees in Germany. *Conflict and Health*, 15, 26. [\[Crossref\]](#)
- Lorenz, M. H., Ensle, A., Taggart, J., Uricher, J., Heidenreich, T., & Laging, M. (2023). Professionals' perspectives on substance use among refugees in shared accommodations: A qualitative study. *Health & Social Work*, 48(3), 188-197. [\[Crossref\]](#)
- Marufoğlu, M., & Görür, Ç. (2024). Sosyoekonomik faktörlerin suç oranlarına etkisi: Ekonomik büyüme, göç ve bağımlılık. *R&S - Research Studies Anatolia Journal*, 7(4), 427-445. [\[Crossref\]](#)
- Mc-Gragh, B., López Atanes, M., Rico, R., Bari, M., Millin, S., Behrendt, M., Schäfer, I., & Erkoreka, L. (2026). Addressing substance use and vulnerability among unaccompanied migrant youth in Spain: A narrative review. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 26-31. [\[Crossref\]](#)
- Milin, S., Behrendt, M., Bari, M., López Atanes, M., Tekeli, M. R., Zurhold, H., Hiller, P., Lotzin, A., & Schäfer, I. (2026). Learnings from a german research network on substance use among refugees (PREPARE) with a focus on an intervention to improve emotion regulation. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 65-77. [\[Crossref\]](#)
- Morgül, E. (2026). Problematic digital use among migrant adolescents in Türkiye: A PISA 2022 analysis of risk and protective factors. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 78-86. [\[Crossref\]](#)
- Özler Ervüz, F., Ervüz, C., & Südüpak, Ş. (2026). Addiction vulnerability among immigrant youth: Psychosocial risk, protective processes, and intervention approaches. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 17-25. [\[Crossref\]](#)
- PMM. (2026). Temporary protection. <https://en.goc.gov.tr/temporary-protection27>
- Europa, R. T., Eide, K., Hjern, A., Manhica, H., & Dunlavy, A. (2023). Narcotic offences and drug use disorders among young refugees in Norway. *Scandinavian Journal of Public Health*, 52(8), 942-950. [\[Crossref\]](#)
- Solberg, Ø., Nissen, A., Cauley, P., & Andersen, A. J. (2020). *Mental health and quality of life among refugees from Syria after forced migration to Norway: Main findings from the REFUGE study*. (Rapport 1/2020).
- Solberg, Ø., Sengoelge, M., Nissen, A., & Saboonchi, F. (2021). Coping in limbo? The moderating role of coping strategies in the relationship between post-migration stress and well-being during the asylum-seeking process. *International Journal of Environmental Research and Public Health (IJERPH)*, 18(3), 1004. [\[Crossref\]](#)
- Şahinöz, C. (2026). Gambling disorder among young migrants in Germany. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 87-95. [\[Crossref\]](#)
- Taşdemir, M., Küçükali, H., Uçar, A., & Sur, H. (2020). Exploring alcohol and substance addiction among syrian migrants in Turkey: A qualitative study integrating perspectives of addicts, their relatives, local and national institutions. *Addicta: The Turkish Journal on Addictions*, 7(4), 253-276. [\[Crossref\]](#)
- Tatlı, M., & Sutaşır, M. N. (2026). Between borders and substances: Body packer cases among refugees in Van, Türkiye. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 96-101. [\[Crossref\]](#)
- Torun, H. O., Akdöner, B., Işık, M., & Kırılı, U. (2026). Is rural-to-urban migration related to smoking, alcohol, and substance use a cross-sectional study among medical students. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 113-122. [\[Crossref\]](#)
- Vuraloğlu, E. (2026). Syrian refugees under temporary protection and the YEDAM Service Network in Türkiye: An ecological perspective on regional balance. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 59-64. [\[Crossref\]](#)
- Wanke, M., Macit, R., & Gülerce, H. (2022). The stigmatization of drug addiction in South-East Turkey the case of drug abuse prevention programme for youth project in Turkey. *Addicta: The Turkish Journal on Addictions*, 9(2), 137-141. [\[Crossref\]](#)
- Yaylacı, F. T., Gülerce, H., Nişancı, A., Gülerce, R., Akpınar, B., Fidan, M., Korkmaz, Z., Çelebi, A. S., & Turan, E. (2026). A prevention model against addiction for migrant youth: Bavul. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 7-16. [\[Crossref\]](#)
- Yüksel, H., & Hiçdurmaz, Z. (2026). A sociological study of substance use among Turkish youth in Germany. *Addicta: The Turkish Journal on Addictions*, 13(Suppl. 1), 102-112. [\[Crossref\]](#)

A prevention model against addiction for migrant youth: Bavul

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Abstract

Migration-related stress, discrimination, and disrupted support systems increase vulnerability to addictive behaviors among youth. Despite this, few prevention programs address the intersection of migration, trauma, and identity development in culturally responsive ways. This article presents a prevention model against addiction for migrant youth, Bavul, grounded in a trauma-informed, rights-based, and youth-centered approach and built on a strengths-based framework. Designed to be low in language demand and high in experiential participation, the model integrates resilience-building, the normalization of stress responses, life skills development, identity formation, critical thinking, and well-being through accessible, youth-friendly coping and decision-making strategies. Structured in eight modules, the model combines interactive learning, reflective storytelling, and creative group activities. Core principles include non-judgmental facilitation, cultural sensitivity, and empowerment through agency. The article discusses Bavul model's contribution to preventive practice within multicultural contexts and its potential to inform future prevention and mental health frameworks targeting migrant youth.

Keywords: adolescent, migrants, addiction, prevention, psychological resilience, youth empowerment

Main points

- Bavul is a culturally responsive addiction prevention model designed specifically for migrant youth aged 13–18.
- The model aims to enhance well-being by leveraging the inherent resilience and agency of migrant youth.
- The program normalizes stress responses as adaptive mechanisms and aims to foster emotional regulation through experiential activities.
- The eight-module structure is intended to allow for flexible implementation across both formal and non-formal environments.
- The model integrates life skills and rights-based advocacy to empower youth in navigating complex social and structural challenges.

Introduction

The past decade has witnessed one of the largest displacement crises in modern history, with the Syrian civil war forcing over 14 million people to flee their homes since 2011. Türkiye currently hosts one of the world's largest populations of forced migrants, with nearly 2.4 million Syrians residing under "temporary protection status" as of March 2026 (Presidency of Migration Management, 2026). This migration movement marks an unprecedented demographic transformation, with nearly half of the population under 18, carrying profound

developmental and psychosocial implications. Although the temporary protection framework provides access to education and health services, its provisional and politically contingent nature perpetuates uncertainty and insecurity among families. Within this landscape, migrant youth in Türkiye grow up amidst structural instability, linguistic and cultural barriers, and experiences of marginalization that deeply shape their sense of safety and belonging (Yaylacı & Karali, 2024).

These complex conditions significantly increase the risk of mental health problems and maladaptive coping among

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migrant youth. Pre-migration exposure to war and violence, compounded by post-migration stressors such as poverty, discrimination, and child labor, heightens vulnerability to trauma-related disorders, depression, anxiety, and addictions. Family-level factors—including parental distress, shifts in parenting practices, and child parentification—further undermine emotional regulation and resilience processes in children. At the same time, migrant youth demonstrate notable adaptive capacities, drawing on protective factors such as social support, cultural continuity, and a strong sense of ethnic identity. This coexistence of vulnerability and resilience underscores the need for preventive interventions that address both psychosocial risks and existing strengths in culturally responsive ways (Yaylacı, 2018; Yaylacı & Karalı, 2024).

Despite increasing recognition of these needs, few prevention initiatives adequately address the intertwined realities of migration-related stress, trauma exposure, and identity development among youth. Existing mental health and addiction prevention programs often rely on language-heavy, Western-centric frameworks that overlook the lived experiences of displaced populations and the sociocultural meanings of coping, belonging, and resilience. Moreover, interventions targeting migrant youth frequently emphasize clinical treatment rather than prevention or community-based empowerment.

To bridge this gap, *Bavul*¹ model was conceived as a culturally responsive, trauma-informed, and strengths-based framework. By prioritizing the normalization of stress responses, creative reflection, and collective resilience-building, the model aims to enhance well-being, reduce vulnerability to addictive behaviors, and foster a sense of agency among migrant youth navigating complex cultural transitions. In this article, we first focus on how addiction looks in the context of migration, especially presenting the challenges faced by migrant youth as potential risk factors for the development of addiction. Second, we turn to discussing the prevention of addictions among migrant youth and the limitations of existing addiction prevention models. Third, we present the framework, purpose, and scope of *Bavul* model. Finally, we discuss this model in more detail, including its theoretical and methodological foundations, the general structure and design, and core values and principles.

Migration and addiction

Addiction is an important public health issue that is becoming increasingly visible among migrant communities. Studies show a significant relationship between migration and addiction, with migrants who often experience family separation, forced migration, and social difficulties being at high risk of addiction. However, this relationship is influenced by cultural, social, and individual factors, and not all migrant groups are

affected equally. Migration increases vulnerability, particularly to addictions. Migrants often face stressors such as discrimination, social exclusion, and adverse living conditions, which can increase their tendency to turn to chemical and behavioral addictions as coping mechanisms (Alessi et al., 2021; Jesline et al., 2021). The uncertainty, traumatic experiences, social integration problems, and economic difficulties that accompany the migration process increase vulnerability to mental health issues and the associated risk of addiction compared to that of citizens of the host country (López-Atanes et al., 2025).

A global systematic review reported wide-ranging rates of hazardous alcohol use (4%–36%), alcohol dependence (1%–42%), and drug dependence (1%–20%) among migrant groups, underscoring that displacement itself constitutes a significant risk factor (Horyniak et al., 2016; United Nations Office on Drugs and Crime [UNODC], 2023). National data align with these findings; for example, a large epidemiological study in Türkiye showed that lifetime use of tobacco, alcohol, and illicit substances varies considerably between refugee camps and urban districts, with cannabis emerging as the most frequently used substance (İlhan et al., 2020).

Migrant youth are particularly vulnerable due to limited awareness of prevention strategies and unfamiliarity with professional support services. Research focusing on adolescents indicates similarly heightened vulnerability, with studies reporting early exposure to tobacco, hookah, and illicit drugs among Syrian migrant youth, and problematic smartphone use emerging as a behavioral addiction associated with emotional distress, along with significant social, psychological, and health-related problems (Aleer et al., 2023; Rizk et al., 2023). Long-term consequences include disrupted family and social relationships, school dropout, involvement with the justice system, mental health issues, and serious physical health problems (Aleer et al., 2023).

Challenges faced by migrant youth

The high prevalence of addiction among migrant youth needs to be understood in the context of their experience of intertwined psychosocial and structural challenges that shape their developmental, educational, and mental health trajectories. Among these challenges, one of the most salient is language, which governs access to education, services, and peer belonging. Research across multilingual and migration contexts shows that limited host-language proficiency hinders academic achievement, participation, and emotional adjustment, especially when language support programs are fragmented or unevenly implemented (Özel & Erdur-Baker, 2023). In Türkiye, counselors working in schools with high migrant density describe how communication barriers restrict both instruction and psychosocial care, leaving many

¹ “Bavul” (Turkish for “suitcase”) serves as a central metaphor for the deeply personal journey of migration. Beyond material goods, migrants pack their culture, memories, and aspirations (Adıgüzel, 2017; Gülerce & Duman, 2021), effectively carrying their past, present, and future (Löfgren, 2016). The suitcase embodies both their rooted identity and the mobility of new beginnings. Ultimately, the *bavul* metaphor holistically captures how migrant youth transport their past to construct meaning in new environments.

adolescents unable to express distress or fully engage with their peers (Özel & Erdur-Baker, 2023).

These linguistic and institutional barriers intersect with trauma histories and ongoing uncertainty. Systematic reviews across Europe and other regions reveal high prevalence rates of post-traumatic stress, depression, and anxiety among forced migrant and asylum-seeking youth, particularly in the absence of stable and supportive resettlement environments (Daniel-Calveras et al., 2022). Many studies also demonstrate that exposure to violence, loss, and deprivation during migration contributes to high levels of post-traumatic stress disorder (PTSD) among these individuals (Bustamante et al., 2017; Ren & Jiang, 2021). A global meta-analysis found that nearly one-third of displaced children exhibit clinically significant mental health symptoms (Blackmore et al., 2020). Building on this, subsequent research has shown that acculturative stress is associated with internalizing symptoms such as anxiety and depression, especially among those facing rejection, racism, or discrimination in host societies (Thibeault et al., 2017). Such findings underscore what Fazel et al. (2012) term a “multilayered ecology of risk,” where pre-migration adversity, displacement, and post-migration discrimination compound vulnerabilities. Despite formal protection frameworks, unmet psychosocial needs remain widespread, reflecting a mismatch between migrant youth’s lived experiences and the institutional systems meant to support them.

Discrimination and social exclusion further undermine adaptation. Immigrant adolescents often report marginalization in schools and communities, contributing to diminished motivation, loneliness, and fragmented identity development (Plenty & Jonsson, 2017; Yükeşer & Celer, 2024). Exposure to perceived discrimination has well-established negative effects on health and well-being (Pascoe & Smart Richman, 2009). Qualitative research on European reception systems similarly highlights how educators and youth workers struggle in resource-constrained settings, resulting in fragmented and inconsistent support structures (Tachtler et al., 2020). Collectively, these findings indicate that the challenges faced by migrant youth are not merely individual vulnerabilities but products of broader structural conditions such as language policy, educational access, discrimination, and social recognition that interact dynamically across contexts. Recognizing these intersections provides the groundwork for assessing existing prevention frameworks.

Preventing addictions among migrant youth in multicultural contexts

Addiction reduction fundamentally relies on prevention, which promotes healthy behaviors, delays substance use, and lessens harm. Early prevention is consistently more cost-effective than treatment. While school initiatives are common globally, a comprehensive, unified model addressing multiple addictions (alcohol, tobacco, drugs, gambling, and technology) is still missing.

Research indicates that primary prevention efforts for migrant children and adolescents are limited, lacking truly universal programs and sufficient focus on social and emotional development (Beelmann et al., 2021). Existing models rarely address the everyday challenges migrant youth face, including issues of belonging, peer relationships, and emotional regulation. Heyeres et al. (2021) highlight that interventions for migrant youth that primarily focus on promoting well-being through social and creative activities strengthen social connections and foster a sense of belonging. Life skills programs targeting migrant populations have positive effects on depression, anxiety, stress reduction, coping skills, and social support, particularly when designed to reflect cultural needs and incorporate family or community participation (Eboime et al., 2024; Yankey & Biswas, 2019).

Frameworks that decrease access to drugs, counter delinquent peer influence, and strengthen academic engagement, family support, and prosocial peer relations have yielded meaningful outcomes (Kempf et al., 2017; Murray & Belenco, 2005). Positive Youth Development (PYD) approaches similarly emphasize cultivating developmental assets across family, school, and community settings (Lerner et al., 2015; Roth & Brooks-Gunn, 2003). School-based initiatives are a central component of global prevention efforts. Programs such as Project ALERT (Ellickson et al., 2003) and Project Towards No Drug Abuse (Sun et al., 2006) employ structured, multi-session curricula to build resistance to social pressures, increase knowledge, and strengthen decision-making skills. Interactive and skills-based models, including All Stars (Gottfredson et al., 2010) and Life Skills Training (Griffin & Botvin, 2004), further demonstrate that prevention is most effective when adolescents actively develop competencies such as communication, assertiveness, conflict resolution, and emotional regulation.

Despite their strengths, these widely implemented models were not originally designed for multicultural or migrant contexts. As a result, significant limitations emerge when they are transferred to culturally diverse populations. Many programs implicitly assume homogeneity in family dynamics, communication patterns, and help-seeking behaviors, reducing their adaptability in settings where migration-related stress, identity negotiation, and shifting family roles shape adolescents’ daily experiences. Language barriers may further hinder the extent to which migrant youth and their families understand or engage with program content, reducing perceived relevance and ownership. Research shows that identity formation among immigrant youth is shaped by the interaction of individual, familial, and societal influences (Schwartz et al., 2018), yet most prevention models do not incorporate mechanisms that support bicultural or multicultural identity development, thereby limiting cultural fit. Socioeconomic strain and the complexities of resettlement may also reduce families’ capacity to participate consistently, further constraining program impact (Ryzin et al., 2016).

School-based prevention models illustrate these limitations in similar ways. While school environments remain a critical

and effective avenue for reaching the 13–18 age group, the success of many global initiatives depends heavily on conditions—such as stable school attendance and readily accessible, culturally responsive content—that may not hold for many migrant adolescents. The Young People’s Gambling Harm Prevention initiative (YGAM & GamCare, 2025), for example, has successfully reached large numbers of youth, yet its implementation presupposes uninterrupted school access and linguistic accessibility. The Turkish Green Crescent Society’s Addiction Prevention Training Program (Türkiye Bağımlılıkla Mücadele Programı – TBM) presents a parallel case. Developed and implemented nationwide by the Turkish Green Crescent, TBM delivers structured, information-focused content addressing multiple forms of addiction; however, it is insufficiently adapted for migrant populations. Many Syrian adolescents have limited access to formal schooling, hindering their exposure to TBM. Moreover, while TBM effectively increases knowledge, it does not systematically incorporate skills-building components essential for migrant youth, such as stress management, trauma coping strategies, sociocultural adaptation, or emotional regulation.

Taken together, existing addiction prevention models, while effective for general youth, fail to address the unique psychosocial risks, linguistic, and cultural barriers of migrant adolescents. There is a critical need for culturally responsive, participatory models that integrate migration experiences, identity development, and life-skills training to deliver effective, accessible interventions in multicultural and non-formal settings.

With these considerations in mind, the flexible, modular Suitcase model is a preventive intervention designed to meet this need in both formal (schools) and non-formal (NGOs, community centers) settings, maximizing reach to diverse youth, including those with limited access to formal education. Bavul model uses a well-being perspective, integrating life skills training to build young people’s capacity and coping skills. Its culturally sensitive and participatory approach is vital for enhancing migrant adolescents’ well-being and improving mental health, resilience, and social communication.

Bavul model

The core aim of Bavul is to enhance the holistic well-being (socially, mentally, and physically) of migrant young people aged 13–18 by creating a targeted, culturally and trauma-informed, and comprehensive addiction prevention model. The intervention is built on contributions from a unique consortium designed to integrate diverse expertise and operational capacities across academic research, civil society action, and public service delivery, bringing together multifaceted,

complementary expertise in addiction prevention and migrant youth².

Bavul shifts the focus from problems or deficits to potentials, coping, and empowerment, as strengths-based approaches suggest (Lind et al., 2019). The content is designed around protective factors and emphasizes risk awareness, capacity building, resilience, problem-solving, self-determination, and empowerment. The model is designed to either leverage existing protective factors or proactively bolster them through resource-oriented modules. By de-centering the deficit-based narrative of addiction, the content fosters a sense of self-determination and empowers participants to exercise their agency in high-risk contexts. Instead of talking solely about the negative effects of addiction on health and well-being, the content shows how young people can effectively gain positive habits that replace or prevent risky behaviors.

The intervention modules contain life skills-building exercises that are considered protective against addictions. Also, informed by the unique strengths of migrant youth, the modules encourage exploring the richness of diverse experiences and identities (Pak et al., 2023). Instead of providing normative guidance, Bavul prioritizes the development of critical inquiry and evidence-based decision-making through youth-centric engagement. Accordingly, all activities in the modules are based on experiential and participatory learning. While learning about types of psychological trauma, young people discover their inner and outer support systems. As preventive measures are more effective when they address broader systems (Wanke et al., 2020), a separate module on advocacy and self-empowerment is included.

Bavul is designed in a developmentally sensitive way, tailored towards the target group aged 13 to 18. As suggested in youth addiction prevention literature (Kaminer, 2020), adolescence is a unique developmental period, and taking into account the biopsychosocial aspects of adolescent development is essential. During this period, a young person’s brain and body are still developing, which can lead to challenges in emotion regulation and heightened sensation seeking (Bernheim et al., 2013), as well as increased sleep needs and changes in sleep patterns (Logan et al., 2018). Adolescents’ social skills also require support, particularly to facilitate healthy peer relationships. Their identities remain in flux, continuously negotiated in relation to their immediate environments, particularly within peer networks and the complex dynamics of their migrant backgrounds. All these unique characteristics are viewed as developmental assets rather than deficits. Moreover, their cognitive abilities are advancing rapidly, underscoring the importance of supporting critical thinking. Developmentally, young people value autonomy and

² The Turkish Green Crescent Society contributes national civil society expertise in addiction prevention. Marmara University Institute of Population and Social Research provides a strong theoretical foundation through its research on the socio-cultural structure and demography of migrants in Türkiye, developmental psychopathology, and youth mental health. The Agency for Social and Welfare Services of the City of Oslo contributes field-based experience in reaching migrant youth and delivering local public services in Norway. The University Medical Center Hamburg-Eppendorf (UKE) provides academic expertise in trauma, addiction science, public health, intervention development, and research methodology. Together, this collaboration ensures that the addiction prevention model developed for migrant youth is scientifically grounded, locally relevant, and informed by practical field experience.

independence, which should be nurtured through life skills education and rights-based empowerment approaches.

Bavul is also trauma-informed. For young people coming from adverse life circumstances such as war and migration, trauma and stress might be natural human responses to overwhelming experiences rather than personal weaknesses or disorders (Olff et al., 2025). In the modules, young people learn that reactions such as intrusive thoughts, heightened alertness, or avoidance are part of the brain's survival system and are especially common in contexts shaped by loss, displacement, and uncertainty. Using simple metaphors and interactive activities, the module helps participants recognize how trauma affects the body, emotions, and behavior in everyday life. In the *Understanding Trauma and Stress* module, reactions are normalized and framed as adaptive responses that once served a protective function. At the same time, the intervention highlights that these responses are not permanent and can change as safety, skills, and supportive relationships improve. This understanding creates a foundation for the following *Building Resilience and Coping Skills* module, which focuses on strengthening young people's internal resources, social support, and sense of agency.

Guiding principles and core values

Bavul model is also guided by a set of pedagogical and ethical principles that shape facilitation style, language use, and youth engagement. These include cultural sensitivity, participatory facilitation, the use of accessible and non-clinical language, and the promotion of hope, resilience, and agency.

Cultural sensitivity and inclusivity

For young people navigating migration, culture becomes both a source of identity and a protective resource against the instability of displacement. Effective interventions should move beyond deficit-based perspectives that view migrant youth solely through the lens of vulnerability and instead emphasize their cultural strengths, community networks, and sense of agency, which support their adaptation and healing (Causadias et al., 2022).

In Bavul model, cultural sensitivity is embedded as a foundational ethic rather than a supplementary feature. Session design and facilitation actively accommodate participants' cultural, linguistic, and religious frameworks. Facilitators are expected to adopt cultural humility, avoid assumptions, and adapt metaphors, examples, and interactional norms to participants' lived contexts. This inclusive posture aligns with intercultural education frameworks that view diversity as a resource for collective learning rather than an obstacle to be managed.

Non-hierarchical and participatory facilitation style

A key premise of the model is that prevention is more effective when implemented with young people rather than imposed on them. Accordingly, facilitators are conceptualized not as authoritative experts but as collaborative guides who cultivate

participatory learning environments. This non-hierarchical orientation draws on community psychology traditions that emphasize agency, trust, and shared knowledge-building (see, e.g., Miller et al., 2019). In contexts of migration and displacement, where youth may have experienced reduced agency or institutional marginalization, fostering co-agency and mutual reflection becomes particularly salient.

Use of accessible, non-clinical language and normalization of stress responses

The model deliberately employs accessible, non-pathologizing language. Emotional and behavioral reactions are framed not as diagnostic symptoms but as adaptive responses to adversity, displacement, or trauma. The trauma-informed care literature emphasizes the use of normalized language (e.g., "You are not broken; your body is protecting you") as a key strategy to reduce stigma, support engagement, and promote self-compassion (Miller et al., 2019). Moreover, lower linguistic demand facilitates inclusivity across heterogeneous linguistic backgrounds.

Promotion of hope, growth, resilience, and agency

The model emphasizes hope and agency as key protective factors, shifting from risk reduction to the enhancement of personal and social assets (Bonell et al., 2015). Integrating cultural identity and collective narratives builds dignity and self-efficacy, transforming vulnerability into resilience. Drawing on a strengths-based approach, activities cultivate competence through reflection on past successes. Resilience is viewed as dynamic adaptation supported by resources, not invulnerability (Gatt et al., 2020). This growth-oriented focus empowers youth toward constructive life paths.

By integrating these guiding principles, the model translates theoretical commitments—including trauma-informed care, rights-based participation, and strengths-oriented practice—into concrete pedagogical strategies, thereby offering a replicable, culturally responsive framework for promoting resilience among migrant youth within the field of prevention science.

Structure and modules

Adaptability was identified as a key design principle to ensure effective implementation across diverse contexts. In line with this, Bavul intervention's modular design allows professionals and practitioners to flexibly select and apply relevant components according to the specific needs and contexts of the groups they work with. When implemented with groups that can engage over an extended period, the modules can be delivered sequentially, allowing the model to evolve into a sustained preventive intervention that potentially promotes engagement and skill retention.

To address potential language barriers and maintain participants' engagement, the intervention was developed

using participatory and experiential learning methods, transforming sessions from lecture-style instruction into interactive, expressive, and co-creative activities that encourage active involvement and shared meaning-making. These activities also function as tools to strengthen group cohesion and foster solidarity among participants, creating a safe and supportive environment that facilitates both learning and mutual trust. In this sense, the interactive and relational nature of the sessions provides a containing space for migrant youth, offering psychological safety and a sense of belonging. Through the re-experiencing of group cohesion and collective identity, a micro-level, community-based dynamic can be fostered within the sessions, enabling participants to internalize the experience of belonging to a supportive social unit.

Here, we present an overview of the intervention modules (see Table 1). In each module, facilitators receive comprehensive guidance, ensuring consistent, high-quality implementation. This guidance offers detailed tips on group dynamics, adapting content for diverse needs, and handling sensitive topics.

The *Introduction to Addictions* module provides general information about addiction. It facilitates knowledge acquisition through participatory learning methods, enabling participants to engage actively and reflect on the topic rather than passively receive information. Using a social-ecological model of risk, the module addresses the environmental stressors and lack of support systems that shape vulnerability in migrant contexts rather than framing addiction as an individual failure. As a result, participants gain knowledge about addiction, develop awareness of environmental risk factors, and are better equipped to make informed choices that reduce engagement in maladaptive behaviors.

The *Understanding Trauma and Stress* module combines psychoeducational activities that introduce the concept of trauma and its psychological and physiological manifestations with experiential exercises that provide space for participants to share, process, and reflect on their own experiences. Using a trauma-informed approach, these activities aim to foster awareness of individual stress responses, promote emotional regulation, depathologize trauma responses, and create a

Table 1. Bavul intervention framework

Module	Core content	Theoretical approach	Expected outcomes	Intended long-term outcomes
1. Introduction to Addictions	Fundamental understanding of chemical and behavioral addictions; identifying personal and environmental risk factors	Social-Ecological Model of Risk	Knowledge about addiction and risk awareness; recognition of environmental risk factors	Reduced risk of maladaptive behaviors
2. Understanding Trauma and Stress	Normalizing trauma responses (hyperarousal, intrusion, avoidance); understanding impact on mind and body	Trauma-Informed Approach	Awareness of trauma & stress responses; improved emotional regulation	Trauma responses normalized; safer coping strategies
3. Building Resilience and Coping Skills	Strengthening inner and outer resources; practicing sensory-based grounding and healthy stress release strategies	Strengths-Based Approach	Identification of internal capacities and external resources; adaptive coping strategies used	Increased resilience and self-efficacy
4. Supporting Identity Development through Cultural Transition	Exploring the multidimensional nature of identity; normalizing adolescent identity-in-the-making; repositioning biculturalism as an asset	Developmental Identity Theory	Awareness of personal & cultural identity; positive identity integration	Enhanced self-confidence, adaptability, and empathy
5. Critical Thinking - Making Informed Decisions	Analyzing peer pressure and media influence; strengthening refusal skills and autonomous decision-making	Empowerment & Self-Advocacy Approach	Ability to evaluate information and options; deliberate, reflective decision-making	Reduced impulsivity; informed choices in risk-related situations
6. Health and Well-being	Connecting physical/mental health habits (sleep, digital balance, exercise) to overall resilience	Holistic Well-being Perspective	Awareness of holistic well-being and lifestyle patterns; adoption of healthier daily habits	Improved physical, mental, and social well-being
7. Life Skills	Developing executive functions: problem-solving, time management, assertive communication	Cognitive-behavioral approaches & Developmental Theory	Recognition of cognitive biases and emotional triggers; better self-regulation and social negotiation skills	Constructive problem-solving; improved social functioning
8. Knowing Your Rights	Understanding basic rights (CRC), recognizing discrimination, and advocating for fair treatment	Rights-Based Approach	Knowledge of rights and assertive strategies; self-advocacy in daily life	Empowerment; protection of self and others

supportive environment in which trauma narratives can be safely explored and normalized. Through these activities, participants increase their awareness of trauma and stress responses, strengthen emotional regulation skills, and develop adaptive coping strategies for managing the effects of adversity.

The *Building Resilience and Coping Skills* module focuses on strengthening participants' capacity to recognize and regulate emotional distress in adaptive ways. Through participatory activities, participants develop awareness of how intense emotions manifest in the body and explore strategies that help regulate these experiences before they escalate into impulsive or risk-related behaviors. By encouraging participants to identify their internal capacities and external resources through various activities, the module promotes a more flexible, resource-oriented approach to coping with stress and adversity. As a result, participants enhance their ability to use internal and external resources effectively, apply adaptive coping strategies, and build greater resilience in the face of stress and challenging situations.

The *Supporting Identity Development through Cultural Transition* module encourages participants to explore and express different aspects of their identity through creative and reflective activities. Drawing on a developmental perspective, these exercises invite youth to examine how cultural influences shape their personal identity, values, and behavior, while helping them reframe cross-cultural identity as a source of strength, adaptability, and empathy. Through this process, participants are supported in developing greater self-awareness and confidence as they navigate the dynamic and evolving nature of identity during adolescence and migration. Consequently, participants strengthen their self-awareness, integrate multiple cultural identities positively, and develop confidence, adaptability, and empathy as they navigate adolescence and migration.

The *Critical Thinking – Making Informed Decisions* module, grounded in empowerment and self-advocacy approaches, aims to strengthen participants' ability to evaluate information, reflect on potential consequences, and make informed decisions in situations involving addictive or risk-related behaviors. Through participatory activities, participants are encouraged to question assumptions, weigh potential benefits and harms, and recognize how external influences—such as peer pressure or persuasive media messages and advertisements—may shape their decisions. By developing practical critical thinking skills, the module supports young people in making more deliberate decisions and protecting their well-being. The expected outcomes of the module include enhanced critical thinking and decision-making skills, enabling participants to evaluate influences effectively, make deliberate choices, and safeguard their well-being in risk-related situations.

The *Health and Well-being* module encourages participants to view well-being holistically and to reflect on how everyday

habits, particularly those related to technology use, influence their physical and psychological well-being. Through brief participatory activities, participants explore both the positive and negative aspects of digital technologies and become more aware of how their daily routines shape their energy levels, mood, and overall functioning. In addition, group-based movement and discussion activities highlight the connection between bodily states, rest, and well-being, while also encouraging participants to reflect on habits that support healthier sleep routines. Overall, the module promotes greater awareness of lifestyle patterns and supports participants in developing small, practical changes that contribute to healthier digital and daily habits. The expected outcomes of the module include increased awareness of holistic well-being, improved understanding of how daily habits and technology use affect physical and psychological health, and the adoption of practical strategies that support healthier routines and overall functioning.

The *Life Skills* module, grounded in cognitive behavioral approaches and developmental theory, integrates psychoeducation on the adolescent brain with practical strategies for self-regulation and decision-making. By employing metaphors such as 'brain superpowers,' the curriculum highlights cognitive potential and adaptability while addressing the developmental tendency toward novelty-seeking. Participants learn to identify common cognitive biases and impulsive 'automatic thoughts' through scenario-based discussions, thereby shifting toward more reflective decision-making. The module introduces structured tools, such as priority matrices and spending plans, to illustrate the long-term consequences of emotionally driven behaviors. Furthermore, collaborative tasks and reflective communication exercises strengthen negotiation skills by emphasizing clarity, a respectful tone, and cooperative problem-solving. This approach enables youth to navigate complex social environments by balancing emotional awareness with assertive and constructive communication. Consequently, participants enhance their self-regulation, decision-making, and negotiation skills, enabling them to respond thoughtfully in complex social situations and apply practical strategies for constructive problem-solving.

The *Knowing Your Rights* module empowers participants to recognize and address rights violations through participatory activities and role-play. By practicing 'calling in' and 'calling out' strategies, youth develop assertive responses to bullying, discrimination, and peer pressure, guided by a rights-based approach. The curriculum integrates key legal frameworks, such as the UN Convention on the Rights of the Child (CRC), and applies them to everyday contexts. Through scenario-based reflections, the module fosters critical thinking and self-advocacy, enabling participants to protect their own well-being and stand up for the rights of others in real-world situations. As a result, participants strengthen their knowledge of rights, develop assertive self-advocacy skills, and are empowered to recognize, respond to, and prevent rights violations in everyday situations.

Conclusion and implications

This article introduced Bavul model, a culturally responsive and trauma-informed addiction prevention framework designed to enhance the resilience and holistic well-being of migrant youth aged 13–18. The model has several innovative aspects. First, it is designed specifically for migrant youth and explicitly incorporates migration-related risks while adopting a strengths-based approach. Similar to other preventive interventions, it focuses on well-being and life skills; however, it also directly addresses migrant youths' identity, potential trauma, and the specific multi-level challenges they face across individual, relational, and structural contexts. Second, unlike most preventive models, this model can be applied flexibly both in and out of school settings. By following the facilitator guidelines, modules can be selected and implemented based on the needs of the target group. Bavul is trauma-informed, developmentally sensitive, and attentive to the specific family and cultural contexts of migrant youth. A large part of the model aims to resource and empower young people through resilience-building, empowerment, and rights advocacy. Simple, accessible language is used throughout, and migrant youth identity development is approached holistically.

Bavul model also demonstrates significant scalability potential across diverse geographical and institutional contexts. The model's primary strength lies in its modular and flexible structure, which allows practitioners to adapt the intervention to varying time constraints and setting requirements. Unlike rigid curricula, the model can be implemented in non-formal learning settings, as a comprehensive semester-long course in schools, or as intensive workshops in youth centers and NGOs working with migrant youth. This adaptability addresses the structural fragmentation often observed in services for migrant youth. The open-access trainer materials further enhance scalability, enabling cost-effective dissemination and standardizing facilitator training.

From a policy perspective, this model fills a critical gap in public health and youth work strategies by shifting the focus from reactive clinical treatment to preventive, awareness-raising, and community-based empowerment. Policymakers are encouraged to integrate such trauma-informed, migrant-inclusive, and rights-based frameworks into national education and social integration policies. Institutionalizing this model within public youth services can provide a sustainable solution to the risk factors faced by migrant adolescents, transforming vulnerable transitions into opportunities for resilience and social cohesion (Gülerce et al., 2022).

Limitations and Future Directions

While the current manuscript establishes the theoretical framework and structural design of Bavul Model, it also identifies empirical benchmarks for subsequent research. For instance, as this phase focuses on program conceptualization, the empirical outcomes and longitudinal efficacy metrics are yet to be investigated. Similarly, while detailed feedback was received from migrant youth during the program development phase, further work is still needed to demonstrate the model's

scalability and cross-cultural adaptability at a larger scale. These elements need to be addressed in the next phases of the project, which involve broader implementation across diverse linguistic groups to test the model's effectiveness and institutional sustainability in real-world settings.

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Author contributions

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Data availability statement

Data sharing is not applicable to this article as no new datasets were generated or analyzed during this study.

Conflict of interest

The authors declare that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Generative AI statement

The authors declare that during the preparation of this study, the following AI-assisted technology was used: Grammarly, Gemini and ChatGPT on March & April 2026. Extent of Use: During the preparation of this study (March–April 2026), the authors utilized Grammarly, Gemini, and ChatGPT for linguistic

editing, translation assistance, and the structural formatting of the Theory of Change table. The authors maintained full control over the editorial process; all AI-assisted outputs were verified for accuracy, and the final manuscript reflects the authors' original work and judgment. The authors confirm that they have critically reviewed and edited any AI-generated content and take full responsibility for the integrity, accuracy, and originality of the publication. The authors certify that the original human contribution is maintained and that AI-assisted tools are not listed or cited as authors.

References

- Adigüzel, Y. (2017). *Göç sosyolojisi*. Nobel Yayınları.
- Aleer, E., Alam, K., Rashid, A., Mohsin M., & Eacersall D. (2023). Substance abuse amongst refugee youth: A scoping review. *Current Addiction Reports*, 10(3), 594-609. [Crossref]
- Alessi, E., Cheung, S., Kahn, S., & Yu, M. (2021). A scoping review of the experiences of violence and abuse among sexual and gender minority migrants across the migration trajectory. *Trauma, Violence, & Abuse*, 22(5), 1339-1355. [Crossref]
- Beelmann, A., Arnold, L. S., & Schulz, S. (2021). Buffering negative effects of immigration on cognitive, social, and educational development: A multinational meta-analysis of child and adolescent prevention programmes. *International Journal of Psychology*, 56(3), 478-490. [Crossref]
- Bernheim, A., Halfon, O., & Boutrel, B. (2013). Controversies about the enhanced vulnerability of the adolescent brain to develop addiction. *Frontiers in Pharmacology*, 4, 118. [Crossref]
- Blackmore, R., Gray, K. M., Boyle, J. A., Fazel, M., Ranasingha, S., Fitzgerald, G., Misso, M., & Gibson-Helm, M. (2020). Systematic review and meta-analysis: The prevalence of mental illness in child and adolescent refugees and asylum seekers. *Journal of the American Academy of Child & Adolescent Psychiatry*, 59(6), 705-714. [Crossref]
- Bonell, C., Hinds, K., Dickson, K., Thomas, J., Fletcher, A., Murphy, S., Melendez-Torres, G. J., Bonell, C., & Campbell, R. (2015). What is positive youth development and how might it reduce substance use and violence? A systematic review and synthesis of theoretical literature. *BMC Public Health*, 16(1), 135. [Crossref]
- Bustamante, L., Cerqueira, R., Leclerc, E., & Brietzke, E. (2017). Stress, trauma, and posttraumatic stress disorder in migrants: A comprehensive review. *Brazilian Journal of Psychiatry*, 40(2), 220-225. [Crossref]
- Causadias, J. M., Alcalá, L., Morris, K. S., Yaylaci, F. T., & Zhang, N. (2022). Future directions on BIPOC youth mental health: The importance of cultural rituals in the COVID-19 pandemic. *Journal of Clinical Child & Adolescent Psychology*, 51(4) 1-16. [Crossref]
- Daniel-Calveras, A., Baldaquí, N., & Baeza, I. (2022). Mental health of unaccompanied refugee minors in Europe: A systematic review. *Child Abuse & Neglect*, 133, 105865. [Crossref]
- Eboreime, E., Obi-Jeff, C., Orji, R., Ojo, T., Iyamu, I., Harri, B., Said, J., Oguntimehin, F., Ibrahim, A., Anjorin, O., Duke, A., Musami, U., Liebenberg, L., Crider, R., Wagami, L., Dahiru, A., Uneke, J., Yaya, S., & Agyapong, V. (2024). In-person vs mobile app facilitated life skills education to improve the mental health of internally displaced persons in Nigeria: protocol for the RESETTLE-IDPs cluster randomized hybrid type 2 effectiveness-implementation trial. *BMC Health Services Research*, 24, 1269. [Crossref]
- Ellickson, P. L., McCaffrey, D. F., Ghosh-Dastidar, B., & Longshore, D. L. (2003). New inroads in preventing adolescent drug use: Results from a large-scale trial of project ALERT in middle schools. *American Journal of Public Health*, 93(11), 1830-1836. [Crossref]
- Fazel, M., Reed, R. V., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in high-income countries: Risk and protective factors. *The Lancet*, 379(9812), 266-282. [Crossref]
- Gatt, A., Emond, R., Foster, M., Hadfield, L., Mason-Jones, A., Reid, G., Theron, L., Ungar, M., Woudes, T., & Wu, F. (2020). Trauma, resilience, and mental health in migrant and non-migrant youth: An international cross-sectional study across six countries. *Child and Adolescent Psychiatry and Mental Health*, 10, 997. [Crossref]
- Griffin, K., & Botvin, G. (2004). Life skills training: Empirical findings and future directions. *Journal of Primary Prevention*, 25(2), 211-232. [Crossref]
- Gottfredson, D. C., Cross, A., Wilson, D., Rorie, M., & Connell, N. (2010). An experimental evaluation of the All Stars prevention curriculum in a community after-school setting. *Prevention Science: The Official Journal of The Society for Prevention Research*, 11(2), 142-154. [Crossref]
- Gülerce, H., & Duman, G. (2021). Misafir işçilikten diasporaya: Göçmen bavlunun dönüşümü. B. Gündoğmuş (Ed.), *Göçün 60. yılında Avrupa'da Türk toplumu: Kimlik, uyum ve katılım* (ss. 165-185). Nobel Akademik Yayıncılık.
- Gülerce, H., Şahin, H., & Hadi, A. (2022). Migration and obstacles to social cohesion: The perception of young people in Turkey. *HUMANITAS - Uluslararası Sosyal Bilimler Dergisi*, 10(20), 206-225. [Crossref]
- Heyeres, M., Perera, N., Udah, H., Attakey, A., Whiteside, M., & Tsey, K. (2021). Interventions targeting the well-being of migrant youths: A systematic review of the literature. *Sage Open*, 11(3), 21582440211046942. [Crossref]
- Horyniak, D., Melo, J. S., Farrell, R. M., Ojeda, V. D., & Strathdee, S. A. (2016). Epidemiology of substance use among forced migrants: A global systematic review. *PloS One*, 11(7), e0159134. [Crossref]
- İlhan, M. N., Ertek, İ. E., Gözükar, M. G., Akil, Ö., Ursu, P., Ergüder, T., Polat, S., Şimşek, M. Y., Aktaş, M., Gazanfer, Ö. B., İlhan, S. Ö., & Kaptan, H. (2020). Substance use in refugee camps and local community: Şanlıurfa sample. *Noro Psikiyatri Arsivi*, 58(2), 121-127. [Crossref]
- Jesline, J., Romate, J., Rajkumar, E., & George, A. (2021). The plight of migrants during COVID-19 and the impact of circular migration in India: A systematic review. *Humanities and Social Sciences Communications*, 8, 231. [Crossref]
- Kaminer, Y. (2020). Youth addictive disorders: A call for a developmentally informed approach. *Psychiatric News*, 55(1). [Crossref]
- Kempf, C., Llorca, P. M., Pizon, F., Brousse, G., & Flaudias, V. (2017). What's new in addiction prevention in young people: A literature review of the last years of research. *Frontiers in Psychology*, 8, 1131. [Crossref]
- Lerner, R. M., Lerner, J. V., Bowers, E. P., & Geldhof, G. J. (2015). Positive youth development and relational-developmental-systems. In W. F. Overton & P. C. M. Molenaar (Eds.), *Handbook of child psychology and developmental science: Theory and method* (7th ed., Vol. 1, pp. 1-45). Wiley. [Crossref]
- Lind, C., Walsh, C., McCaffrey, G., Wardle, M. L., Johansson, B., & Juby, B. (2019). Youth strengths arise from the ashes of adversity. *International Journal of Adolescence and Youth*, 24(3), 274-281. [Crossref]

- Logan, R. W., Hasler, B. P., Forbes, E. E., Franzen, P. L., Torregrossa, M. M., Huang, Y. H., Buysse, D. J., Clark, D. B., & McClung, C. A. (2018). Impact of sleep and circadian rhythms on addiction vulnerability in adolescents. *Biological Psychiatry*, 83(12), 987-996. [\[Crossref\]](#)
- López-Atanes, M., Rosenkranz, M., Erkoreka, L., Recio-Barbero, M., Bari, M., Hiller, P., Penka, S., Lindert, J., Martens, M., & Schäfer, I. (2025). Special needs of refugees with substance use disorders from conflict-affected countries: A comparison with German-born individuals. *Social Psychiatry and Psychiatric Epidemiology*, 60, 1563-1572. [\[Crossref\]](#)
- Löfgren, O. (2016). Containing the past, the present and the future: Packing a suitcase. *Narodna Umjetnost*, 53(1), 59-74. [\[Crossref\]](#)
- Miller, K. K., Brown, C. R., Shramko, M., & Svetaz, M. V. (2019). Applying trauma-informed practices to the care of refugee and immigrant youth: 10 clinical pearls. *Children*, 6(8), 94. [\[Crossref\]](#)
- Murray, L. F., & Belenko, S. (2005). CASASTART: A community-based, school-centered intervention for high-risk youth. *Substance Use & Misuse*, 40(7), 913-933. [\[Crossref\]](#)
- Olf, M., Hein, I., Amstadter, A. B., Armour, C., Skogbrott Birkeland, M., Bui, E., Cloitre, M., Ehlers, A., Ford, J. D., Greene, T., Hansen, M., Harnett, N. G., Kaminer, D., Lewis, C., Minelli, A., Niles, B., Nugent, N. R., Roberts, N., Price, M., ... Vujanovic, A. A. (2025). The impact of trauma and how to intervene: A narrative review of psychotraumatology over the past 15 years. *European Journal of Psychotraumatology*, 16(1), 2458406. [\[Crossref\]](#)
- Özel, D., & Erdur-Baker, Ö. (2023). Struggles of refugee-receiving schools in Turkey. *Social Sciences*, 12(4), 231. [\[Crossref\]](#)
- Pak, J., Gurung, J., & Argenal, A. (2023). Refugee and immigrant youth leaders: Strengths, futurity, and commitment to community. *Social Sciences*, 12(11), 640. [\[Crossref\]](#)
- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, 135(4), 531-554. [\[Crossref\]](#)
- Plenty, S., & Jonsson, J. O. (2017). Social exclusion among peers: The role of immigrant status and classroom immigrant density. *Journal of Youth and Adolescence*, 46(6), 1275-1288. [\[Crossref\]](#)
- Presidency of Migration Management. (2026). *Temporary protection*. <https://en.goc.gov.tr/temporary-protection27>
- Ren, Q., & Jiang, S. (2021). Acculturation stress, satisfaction, and frustration of basic psychological needs and mental health of Chinese migrant children: Perspective from basic psychological needs theory. *International Journal of Environmental Research and Public Health*, 18(9), 4751. [\[Crossref\]](#)
- Rizk, Y., Hoteit, R., Khater, B., & Naous, J. (2023). Psychosocial well-being and risky health behaviors among Syrian adolescent refugees in South Beirut: A study using the HEEADSSS interviewing framework. *Frontiers in Psychology*, 14, 1019269. [\[Crossref\]](#)
- Roth, J. L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science*, 7(2), 94-111. [\[Crossref\]](#)
- Ryzin, M., Roseth, C., Fosco, G., Lee, Y., & Chen, I. (2016). A component-centered meta-analysis of family-based prevention programs for adolescent substance use. *Clinical Psychology Review*, 45, 72-80. [\[Crossref\]](#)
- Schwartz, S., Meca, A., Cano, M., Lorenzo-Blanco, E., & Unger, J. (2018). Identity development in immigrant youth. *European Psychologist*, 23(4), 336-349. [\[Crossref\]](#)
- Sun, W., Skara, S., Sun, P., Dent, C. W., & Sussman, S. (2006). Project towards no drug abuse: Long-Term substance use outcomes evaluation. *Preventive Medicine*, 42(3), 188-192. [\[Crossref\]](#)
- Tachtler, F., Michel, T., Slovák, P., & Fitzpatrick, G. (2020). Supporting the supporters of unaccompanied migrant youth: Designing for social-ecological resilience. *International Journal of Human-Computer Studies*, 138, 102412. [\[Crossref\]](#)
- Thibeault, M., Mendez, J., Nelson-Gray, R., & Stein, G. (2017). Impact of trauma exposure and acculturative stress on internalizing symptoms for recently arrived migrant-origin youth: results from a community-based partnership. *Journal of Community Psychology*, 45(8), 984-998. [\[Crossref\]](#)
- United Nations Office on Drugs and Crime. (2023). *Substance use disorders in humanitarian settings*. <https://www.unodc.org/>
- Wanke, M., Piejko-Plonka, M., & Deutschmann, M. (2020). Risk behavior of youth - social definition of risk. *Zeszyty Pracy Socjalnej*, 25(4), 269-282. [\[Crossref\]](#)
- Yankey, T., & Biswas, U. (2019). Impact of life skills training on psychosocial well-being of Tibetan refugee adolescents. *International Journal of Migration, Health and Social Care*, 15(4), 272-284. [\[Crossref\]](#)
- Yaylacı, F. T., & Karali, F. B. (2024). Suriyeli mülteci çocukların gelişimi ve ruh sağlığı. In H. Gülerce (Ed.), *Göç olgusunun toplumsal boyutları* (pp. 139-170). Nobel Publishing.
- Yaylacı, F. T. (2018). Trauma and resilient functioning among Syrian refugee children. *Development and Psychopathology*, 30(5), 1923-1936. [\[Crossref\]](#)
- Yükseker, D., & Celer, Z. (2024). Migrant integration in Turkey: Travels of a concept across borders and domains of knowledge production. *Migration Studies*, 12(2), mnae009. [\[Crossref\]](#)
- YGAM & GamCare. (2025). *Young people's gambling harm prevention programme: Evaluation report*. <https://ygam.org/wp-content/uploads/2025/07/YPGHPP-evaluation-final-report-FINAL.pdf>

Addiction vulnerability among immigrant youth: Psychosocial risk, protective processes, and intervention approaches

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Abstract

Addiction among immigrant youth is a phenomenon associated with individual experiences, family relationships, and social environment. The migration experience constitutes an important context shaping this phenomenon. Although the literature on this topic has expanded, comprehensive studies addressing addiction together with psychosocial risk factors, protective processes, and intervention approaches remain limited. This study aims to examine addiction among immigrant youth within these three dimensions. The study employs document analysis. In this context, studies indexed in Web of Science, Scopus, and Google Scholar were reviewed, and the findings were analyzed thematically. The findings indicate that three main domains shape addiction among immigrant youth. Psychosocial risk factors include trauma exposure, family disruption, and social exclusion. In contrast, protective processes such as family support, emotional regulation, cultural identity, and school connectedness mitigate these effects. Intervention approaches are primarily structured around family-based, culturally adapted, and psychosocial support-oriented models. Overall, addiction among immigrant youth emerges as a phenomenon that requires the joint consideration of psychosocial factors operating at different levels. These findings suggest that intervention approaches should be addressed within a contextual and multidimensional framework.

Keywords: immigrant youth, addiction, psychosocial risk factors, protective processes, intervention approaches, document analysis

Main points

- Addiction vulnerability among immigrant youth is shaped by interacting psychosocial, familial, and structural risk factors.
- Trauma exposure, social exclusion, and acculturation-related stressors emerge as major contributors to substance use risk.
- Family support, school connectedness, emotional regulation, and cultural identity function as key protective processes.
- The literature emphasizes family-based, culturally adapted, and trauma-informed intervention approaches for reducing addiction risk.
- Current research remains limited in providing integrated and context-sensitive models addressing addiction vulnerability among immigrant youth.

Introduction

Migration is one of the key factors that intensifies substance use and addiction vulnerability among young people. According to the International Organization for Migration (IOM), migration refers to the process of spatial mobility in which individuals move from their usual place of residence to another location, either temporarily or permanently, within a country or across international borders (International

Organization for Migration, 2024). This process involves not only physical relocation but also the disruption of social support networks, efforts toward cultural adaptation, and often confrontation with traumatic life experiences (Bronstein & Montgomery, 2011). Moreover, migration also constitutes a social encounter between migrant and host communities, in which processes of adaptation and conflict may emerge simultaneously (Gülerce & Bozkurt, 2022).

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According to the latest available data from the United Nations High Commissioner for Refugees (UNHCR), the number of forcibly displaced people worldwide has exceeded 120 million (United Nations High Commissioner for Refugees, 2024). Due to its geographical position, Türkiye is both a destination and a source country for migration. As of 2024, approximately 3.11 million Syrians under temporary protection reside in the country, and the total foreign population has reached approximately 4.7 million (Presidency of Migration Management, 2024). Current reports indicate that a significant proportion of this population consists of children and young people (UNICEF, 2024; United Nations High Commissioner for Refugees, 2024).

Psychosocial Vulnerability Processes in Youth

Adolescence and emerging adulthood are sensitive developmental periods characterized by identity formation, the search for belonging, and emotional regulation processes (Collins & Laursen, 2004; Erikson, 1968). During these periods, individuals' capacities to cope with stress are not yet fully developed, making them more vulnerable to environmental and social risk factors (Nash, 2025). Factors such as traumatic experiences, social exclusion, family dysfunction, and difficulties in cultural adaptation weaken young people's psychosocial resilience and deepen vulnerability processes (Wright et al., 2021). In this context, young people with migration experience are considered a particularly vulnerable group due to their exposure to multiple risk factors (Güler & Demircan, 2022; Taşdemir et al., 2020).

Substance Use and Addiction Risk among Immigrant Youth

Addiction is defined as a multidimensional condition characterized by the continued use of psychoactive substances despite adverse physical, psychological, and social consequences, often accompanied by tolerance and withdrawal symptoms, and is considered both a chronic brain disorder and a psychosocial maladjustment (American Psychiatric Association [APA], 2022; World Health Organization [WHO], 2020). Global data indicate an increasing trend in substance use; approximately 316 million people used drugs in 2023, representing a 28% increase over the past decade (United Nations Office on Drugs and Crime, 2025). Similarly, in Türkiye, drug-related deaths have increased, and treatment admissions remain at high levels (Presidency of Narcotics Crime Combat, 2024; Yeşilay, 2025).

Studies focusing on migrant and refugee populations show that substance use prevalence varies depending on context. In Türkiye, research has reported differences in substance and alcohol use rates between camp and non-camp settings, while among refugee adolescents, tobacco, alcohol, and cannabis use have been observed at notable levels (İlhan et al., 2021; Vasic et al., 2021). At the global level, hazardous alcohol use among forcibly displaced populations ranges between 4% and 36% (Horyniak et al., 2016). These findings suggest that immigrant youth may face increased risks in certain contexts

(European Monitoring Centre for Drugs and Drug Addiction & European Union Agency for Asylum, 2023).

The empirical literature indicates that substance use among immigrant youth is largely examined in relation to trauma, psychopathology, peer influence, and social environmental dynamics. Studies conducted in Türkiye show that psychological symptoms, family dysfunction, and peer influence are associated with substance use tendencies (Avcı, 2025; Düken & Kaplan, 2024; Şahin & Güngör, 2022). Michel et al. (2025) report that immigrant youth are exposed to more stressors but do not significantly differ from their native peers in terms of psychopathology, while Mendez and Kerig (2023) highlight that discrimination and contextual stressors shape both risk and resilience processes. These findings suggest that substance use is often addressed indirectly through psychosocial processes rather than through direct measurement (Uysal et al., 2022).

In the international literature, discussions of acculturation and the "immigrant paradox" indicate that substance use patterns vary across contexts. While a meta-analysis by Sirin et al. (2021) found a weak but significant association between acculturation and alcohol use, Marginean et al. (2023) argue that this relationship varies across contexts. Some studies point to lower levels of risk among immigrant youth, whereas others emphasize that trauma, social exclusion, and structural vulnerabilities may increase risk (Akello et al., 2026). Peer influence is consistently identified as a major risk factor, while parental closeness, emotional regulation, and school connectedness serve as protective factors (Rodríguez-Ruiz & Espejo-Siles, 2024; Watts et al., 2023).

Overall, the literature indicates that substance use among immigrant youth is not a unidimensional phenomenon but rather a context-dependent and multi-layered process. However, many studies are limited by small sample sizes and cross-sectional designs, and issues such as stigma and access to services remain insufficiently addressed.

Research Gap and Study Aim

Although the literature provides important insights into substance use and psychosocial vulnerability among immigrant youth, studies that address risk factors, protective factors, and intervention implications together within a multidimensional framework remain limited. Existing research often focuses on either risk or adaptation processes, without integrating these dimensions into a comprehensive perspective.

Therefore, this study aims to synthesize the literature on addiction vulnerability among immigrant youth by examining psychosocial risk factors, protective factors, and intervention approaches. Within this scope, social and structural processes associated with the migration experience do not consistently produce protective outcomes for immigrant youth; rather, under certain conditions, they may also generate risk. The literature discusses this complexity through the concept of the "immigrant paradox," suggesting that higher levels

of adaptation to the host society may be associated with increased engagement in risk behaviors such as alcohol use (Sirin et al., 2021; van Dorp et al., 2020). At the same time, processes characterized by social exclusion, discrimination, and lack of belonging may also increase substance use through alternative pathways (Salas-Wright et al., 2020; Sandberg et al., 2022). In contrast, social contexts such as school belonging, social acceptance, and supportive relationships are associated with stronger psychosocial resilience and a lower likelihood of substance use (Stathopoulou et al., 2025). From this perspective, migration-related social processes should be understood as dynamic mechanisms that can produce different outcomes depending on contextual conditions.

The following research questions guide the study:

- What are the main psychosocial risk factors associated with addiction vulnerability among immigrant youth?
- Which protective factors contribute to resilience against substance use in this population?
- How does the literature address intervention approaches aimed at reducing addiction among immigrant youth?

Method

This study was conducted as a narrative review, supported by a thematic document analysis. The literature search was conducted in a structured manner using the Web of Science, Scopus, and Google Scholar databases. The search process was conducted using combinations of the following keywords: "immigrant youth," "refugee adolescents," "migration," "substance use," "addiction," "psychosocial risk," and "protective factors."

Inclusion criteria comprised peer-reviewed studies published between 2000 and 2026 that focused on substance use, addiction, or related psychosocial processes among migrant or refugee youth. In addition, studies addressing trauma, mental health, acculturation, resilience, and social adaptation were included when they were conceptually linked to addiction vulnerability. Only studies published in English and Turkish were considered.

Exclusion criteria included studies not directly relevant to youth populations, studies with inaccessible full texts, and studies lacking conceptual relevance to addiction vulnerability.

A total of 140 studies were identified through database searches. Following a multi-stage screening process based on titles, abstracts, and full-text review, 35 studies met the inclusion criteria and were included in the final analysis. The selected studies were examined using thematic document analysis. The analysis was organized around three core themes: (1) psychosocial risk factors, (2) protective factors, and (3) intervention approaches. This framework enabled a systematic, conceptually informed synthesis of the literature.

Findings

The findings indicate that, based on a thematic document analysis of the literature, addiction vulnerability among immigrant youth is shaped by three main themes: psychosocial risk factors, protective factors and resilience processes, and intervention approaches.

Addiction Vulnerability and Psychosocial Risk Domains Among Immigrant Youth

Addiction vulnerability among young people in the migration process can be conceptualized as a psychosocial field shaped by the intersection of traumatic life experiences, uncertainties in identity development, tensions associated with cultural adaptation, weakened social support mechanisms, and structural exclusion dynamics (Cardoso, 2018; Fazel et al., 2005). This vulnerability deepens particularly through the interaction between early exposure to war, loss, and forced displacement and the social and cultural structures of the host society.

At the individual level, traumatic life histories, levels of psychological resilience, and self-regulation capacities constitute key factors shaping vulnerability to substance use (Cicchetti & Rogosch, 2002). Difficulties in emotional regulation and psychological symptoms emerging after trauma may lead to the functional use of substances as a coping strategy, particularly in the context of forced migration (Güler & Demircan, 2022; Şahin & Güngör, 2022). In this process, low self-efficacy, intolerance of uncertainty, and tendencies toward hopelessness increase the likelihood of engagement in risky behaviors (Najdini et al., 2025). A study by İlhan et al. (2021) indicates that substance use is more prevalent among young people aged 15-24 with lower educational levels and limited coping skills. This age group corresponds to a critical period of identity development, where developmental characteristics such as the search for belonging, need for social approval, and contact with risk-prone peer groups may increase vulnerability to addiction (Steinberg, 2008).

The abrupt environmental changes accompanying migration, disruptions in life trajectories, and weakening of social ties generate important contextual risks that further intensify these individual vulnerabilities. Such conditions may interrupt developmental continuity and lead young people toward maladaptive coping strategies, including substance use as a coping mechanism (Cardoso, 2018; Elder et al., 2003). In particular, the intersection of identity formation, belonging, and future planning processes with migration experiences increases vulnerability to substance use (UNICEF, 2023). Similarly, the literature identifies contextual stressors such as adaptation to the host society's cultural structure, language barriers, lack of social acceptance, uncertainty of legal status, loss of social capital, and disruptions in education as key risk factors for immigrant youth (Güler & Demircan, 2022; Şahin & Güngör, 2022).

Another important psychosocial risk domain deepening addiction vulnerability among immigrant youth is relational vulnerability, characterized by disruptions in family dynamics and the weakening of social networks. During the migration process, weakened parental roles, communication problems within the family, and disruptions in caregiving processes may increase young people's orientation toward peer groups and facilitate engagement in risky behaviors (Betancourt et al., 2015; Taşdemir et al., 2020). When protective family bonds weaken, young people may seek belonging within risky social environments, reinforcing social learning processes in which substance use becomes normalized.

At the social and structural level, social exclusion, discrimination, uncertainty of status, and barriers to accessing services constitute key risk areas that reinforce addiction vulnerability (Amaro et al., 2021). Young people experiencing social exclusion often struggle to develop a sense of belonging and may attempt to compensate for this gap through substance use (Höhne et al., 2022). Empirical findings from the Turkish context further indicate that immigrant youth often express a strong desire for social cohesion and acceptance, yet simultaneously encounter experiences of exclusion, discrimination, and limited psychosocial support (Gülerce & Çorlu, 2021). Social stress theory suggests that chronic stress accumulated under disadvantaged social conditions leads individuals toward maladaptive coping behaviors, thereby increasing the risk of substance use (Aneshensel, 1992). Furthermore, the cultural norms of the host society and adaptation processes may reshape young people's attitudes toward substance use, while the weakening of cultural values may accelerate this process (Horyniak et al., 2016; Manafe et al., 2024).

However, the literature indicates that addiction vulnerability among immigrant youth is not a unidimensional phenomenon but rather develops across multiple levels and contexts. The interaction of trauma, social exclusion, family dysfunction, and structural inequalities suggests that addiction risk emerges as a multi-layered process (Egger et al., 2025; Masten, 2014; Ungar, 2013). The findings of the document analysis were organized into thematic categories, as presented in Table 1.

Protective Processes Against Addiction Vulnerability Among Immigrant Youth

Protective processes against addiction vulnerability among immigrant youth are increasingly conceptualized in the literature as context-sensitive psychosocial mechanisms that extend beyond individual characteristics. These processes emerge through the interaction of individual, relational, and structural factors, forming a dynamic framework that constrains addiction risk through multiple pathways. From an ecological systems perspective, resilience is understood not merely as an individual capacity, but as an outcome of the interaction between the individual and their surrounding environment (Bronfenbrenner, 2005; Walker & Salt, 2006).

Within this framework, family relationships, emotional regulation skills, and identity development are consistently identified as key protective domains against substance use. Large-scale empirical studies demonstrate that strong family functioning and positive ethnic identity development are associated with reduced tendencies toward alcohol and substance use (Perreira et al., 2019). Similarly, family support and parent-child communication weaken the impact of adverse migration experiences on substance use intentions and limit the formation of risky behavioral norms (Miraç Yaman, 2014; Salas-Wright et al., 2020). Qualitative findings further suggest that parental involvement and family cohesion may operate differently under different contextual conditions (Frounfelker et al., 2026). In addition, emotional regulation skills and secure attachment patterns serve as important individual mechanisms that constrain substance use, while peer and family support strengthen resilience processes (Cole et al., 2022; Momeñe et al., 2021). Moreover, migration-related social networks function as important sources of social support by facilitating access to information, resources, and guidance through ties with relatives, friends, and co-ethnic communities, thereby strengthening young people's capacity to cope with migration-related challenges (Gülerce & Demir, 2021).

School connectedness, peer support, and a sense of community belonging also emerge as important protective domains that reduce engagement in risky behaviors. Empirical

Table 1. Thematic classification of psychosocial risk domains in addiction vulnerability among immigrant youth

Theme (Risk Area)	Description	Key Factors Identified in Literature	Example References
Individual Vulnerability	Risk factors related to psychological functioning and developmental processes	Trauma history, PTSD, emotional dysregulation, low resilience, hopelessness	Güler & Demircan (2022); Najdini et al. (2025)
Developmental Processes	Risks linked to identity formation and developmental sensitivity	Identity confusion, need for belonging, peer influence, risk-taking	Steinberg (2008)
Contextual Stressors	Risks emerging from migration-related environmental changes	Displacement, loss of social ties, uncertainty, and interrupted education	Elder et al. (2003); UNICEF (2023)
Family and Relational Vulnerability	Risks related to family dynamics and social relationships	Parental role disruption, family conflict, weak attachment, and peer pressure	Betancourt et al. (2015); Egger et al. (2025); Taşdemir et al. (2020)
Social and Structural Exclusion	Risks shaped by broader social conditions	Discrimination, poverty, marginalization, and access barriers	Amaro et al. (2021); Gülerce & Çorlu (2021); Manafe et al. (2024)

studies indicate that family and school support significantly decrease behavioral and health-related risks among immigrant youth, whereas low levels of school connectedness increase the likelihood of affiliation with risky peer groups, indirectly contributing to substance use (Borraccino et al., 2020; Ladis et al., 2021). Moreover, extended family structures have been found to play a protective role in certain migrant populations (Areba et al., 2018).

At the broader level, cultural values, religious norms, and community-specific socialization processes are also identified as key protective mechanisms against substance use. Systematic studies indicate that cultural and religious values function as protective factors (Kenin et al., 2025), while the “immigrant paradox” suggests that immigrant youth may initially exhibit lower levels of substance use (Marginean et al., 2023). These findings highlight that protective processes are not limited to individual characteristics but are also embedded within cultural and structural contexts. Accordingly, integrative models of immigrant youth adaptation emphasize that these mechanisms operate in a complementary manner, shaping resilience through interconnected processes (Suárez-Orozco et al., 2018).

Overall, the literature suggests that protective processes against addiction among immigrant youth do not emerge from isolated factors but through interrelated mechanisms that operate in combination. The thematic distribution of these processes across different contexts is presented in Table 2.

Psychosocial Intervention Approaches to Reduce Addiction Risk Among Immigrant Youth

Psychosocial intervention approaches aimed at reducing addiction risk among immigrant youth are increasingly conceptualized in the literature as structured and multi-dimensional strategies that operate across different domains. Rather than focusing solely on individual behavior change, these interventions address family dynamics, social environments, cultural context, and psychological processes simultaneously (Ögel et al., 2003).

Family-based interventions emerge as the most consistently supported approach in reducing substance use risk among

immigrant youth. Empirical and review studies demonstrate that strengthening parenting skills, enhancing parent-child communication, and increasing parental monitoring significantly delay the initiation of substance use and reduce risk behaviors (Li et al., 2024; Marsiglia et al., 2018). Randomized controlled trials further indicate that interventions involving active family participation produce stronger protective effects, particularly in reducing tobacco and alcohol use and improving psychosocial outcomes (Martinez et al., 2021). In addition, culturally adapted family-based models have been shown to enhance parental communication skills and increase awareness of substance-related risks across diverse migrant populations (Callak et al., 2022; Nagoshi et al., 2018).

Culturally adapted intervention models constitute another key domain in the literature. Meta-analytic and systematic review findings indicate that interventions tailored to cultural norms, language, and identity processes yield more sustainable outcomes than standard approaches (Contreras-Pérez et al., 2023; Hernandez Robles et al., 2018). School-based programs and group interventions that integrate cultural adaptation components have been found to generate stronger long-term behavioral effects (Montero-Zamora, 2023). Similarly, culturally sensitive interventions addressing both migration experiences and trauma exposure contribute to improved emotional regulation and indirectly reduce substance use risk (Lotzin et al., 2021).

Trauma-focused intervention approaches related to addiction among immigrant youth have emerged as an important domain in reducing addiction risk. Empirical findings indicate that trauma experiences constitute a risk mechanism that increases psychological symptom levels and, in turn, reinforces the tendency toward substance use (Yalch et al., 2024). In this context, these intervention approaches focus not on directly targeting substance use, but rather on reducing the underlying psychopathological processes that contribute to addiction risk. Systematic review and meta-analytic evidence suggest that trauma-focused intervention approaches related to addiction among immigrant youth are effective in reducing trauma-related symptoms; however, the findings should be interpreted with caution due to their heterogeneous nature (Turrini et al., 2017; Velu et al., 2025). Studies based on more limited samples also indicate that these intervention approaches weaken addiction-related risk

Table 2. Thematic classification of protective processes against addiction among immigrant youth

Theme	Protective Domain	Key Mechanisms	Representative Studies
Individual and Family-Based Processes	Family functioning and identity development	Parent-child communication, family support, ethnic identity, emotional regulation, secure attachment	Cole et al., 2022; Frounfelker et al., 2026; Gülerce & Demir, 2021; Momeñe et al., 2021; Perreira et al., 2019; Salas-Wright et al., 2020
Social and Relational Processes	Social relationships and belonging	School connectedness, peer support, sense of belonging, social support networks	Areba et al., 2018; Borraccino et al., 2020; Ladis et al., 2021
Cultural and Structural Processes	Cultural and societal protective factors	Cultural norms, religious values, socialization processes, and the immigrant paradox	Kenin et al., 2025; Marginean et al., 2023
Integrative Processes	Adaptation and interaction mechanisms	Interaction between individual, social, and structural processes	Suárez-Orozco et al., 2018

processes among immigrant youth (Chipalo, 2021). School- and community-based applications further demonstrate that trauma-focused intervention approaches related to addiction among immigrant youth enhance psychosocial functioning and reduce risk behaviors (Noyes et al., 2025). However, in Türkiye, studies examining intervention approaches for individuals with addiction have largely been conducted on general addicted populations, and the role of trauma-focused interventions in treatment processes has increasingly been emphasized (Erucar et al., 2018; Şeker et al., 2019). Nevertheless, empirical studies specifically examining intervention models for immigrant individuals with addiction remain highly limited. This highlights a clear need for more targeted and context-sensitive intervention research at the intersection of trauma, addiction, and migration.

In recent years, digital and accessibility-focused interventions have also gained prominence. Multilingual and culturally adapted digital health applications provide alternative support mechanisms, particularly for youth facing barriers to formal services. These interventions, often based on cognitive-behavioral techniques, offer early-stage support and help reduce substance use risk (Fischer et al., 2021). Their scalability and accessibility highlight their potential in reaching underserved migrant populations.

Despite these developments, the literature reveals significant limitations in the availability and accessibility of prevention programs for immigrant and refugee youth. Systematic reviews indicate that many young people are unaware of existing prevention services and may develop distrust of institutional structures (Aleer et al., 2024). This suggests that intervention strategies need to be reconsidered not only in terms of content but also in terms of accessibility, cultural relevance, and acceptability.

In the Turkish context, intervention strategies addressing addiction risk among immigrant youth are implemented through family-based, school-based, and psychosocially oriented intervention programs. National initiatives such as the Family Education Program and the ANKA Social Integration and Family Empowerment Program emphasize

strengthening family processes, increasing awareness, and supporting improved access to psychosocial support services. In addition, community-based services such as YEDAM incorporate psychosocial support and rehabilitation mechanisms. These practices indicate that intervention approaches in Türkiye are increasingly aligned with ecological and multi-level frameworks (Aile ve Sosyal Hizmetler Bakanlığı, 2021; Kahyaoğlu et al., 2020; Yeşilay, 2025).

Overall, intervention approaches targeting addiction risk among immigrant youth cannot be reduced to a single model; rather, they emerge as integrative structures that encompass family processes, cultural adaptation, social environments, and mental health dimensions. The effectiveness of these interventions depends on the combined functioning of these mechanisms across different contexts. The distribution of these intervention approaches by theme is presented in Table 3.

Conclusion

This study reconceptualizes addiction among immigrant youth by situating it within the intersection of psychosocial processes shaped by migration. The findings indicate that addiction cannot be understood solely as an individual-level problem; rather, it emerges as a multidimensional phenomenon shaped by the interaction of trauma, social environment, family processes, and structural conditions. Within this framework, risk factors increase the likelihood of addiction, while protective processes buffer these effects, and intervention approaches hold the potential to transform the dynamic relationship between these domains. This perspective frames addiction as a modifiable process that can be reshaped through multi-level and context-sensitive interventions.

At the same time, the analysis highlights important limitations in the existing literature. Addiction is often treated as a measurable outcome, while the subjective meanings attached to substance use and the psychosocial conditions under which these meanings evolve remain underexplored. Research

Table 3. Thematic classification of intervention approaches to reduce addiction risk among immigrant youth

Theme	Intervention Domain	Key Mechanisms	Representative Studies
Family-Based Interventions	Parenting and family processes	Parenting skills, communication, parental monitoring, and family participation	Callak et al., 2022; Kahyaoğlu et al., 2020; Li et al., 2024; Marsiglia et al., 2018; Martinez et al., 2021; Nagoshi et al., 2018;
Culturally Adapted Interventions	Cultural and identity-based processes	Cultural adaptation, language, identity reinforcement, and social norms	Contreras-Pérez et al., 2023; Hernández Robles et al., 2018; Lotzin et al., 2021; Montero-Zamora, 2023
Mental Health and Trauma-Based Interventions	Psychological processes	Emotional regulation, trauma-focused interventions	Chipalo, 2021; Erucar et al., 2018; Noyes et al., 2025; Şeker et al., 2019; Turrini et al., 2017; Velu et al., 2025
Digital and Accessibility-Based Interventions	Service access	Digital health tools, early intervention, multilingual support	Fischer et al., 2021
Structural Limitations and Access Barriers	System-level factors	Service awareness, accessibility, and institutional trust	Aleer et al., 2024

tends to prioritize risk factors, with limited attention to their interaction with protective processes, and intervention studies frequently focus on program effectiveness without sufficiently addressing the lived experiences and contextual realities of immigrant youth. These gaps point to the need for more comprehensive research approaches that conceptualize addiction vulnerability as a dynamic and multidimensional process.

Future research should prioritize intervention-based and context-sensitive designs that examine how addiction is shaped within the evolving social environments of immigrant youth. In particular, emerging domains such as digital environments, peer networks, and youth subcultures—including marginal groups and gang-related formations—represent critical yet underexplored contexts. Addressing these areas has the potential to deepen theoretical understanding and strengthen the development of more effective intervention strategies.

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Author contributions

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Data availability statement

Data sharing is not applicable to this article as no new datasets were generated or analyzed during this study.

Conflict of interest

The authors declare that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

Aile ve Sosyal Hizmetler Bakanlığı. (2021). *Aile Eğitim Programı (AEP) genel raporu*. ASHB Yayınları.

- Akello, S. R., Epuitai, J., Ayiasi, R. M., & Kakyo, T. A. (2026). Trauma led us to substance use: An interpretative phenomenological analysis of refugee youth experiences with substance use during the COVID-19 pandemic in Uganda. *BMJ Public Health*, 5(4), e003320. [\[Crossref\]](#)
- Aleer, E., Alam, K. & Rashid, A. (2024). A systematic literature review of substance-use prevention programs amongst refugee youth. *Community Mental Health Journal*, 60(6), 1151-1170. [\[Crossref\]](#)
- Amaro, H., Sanchez, M., Bautista, T., & Cox, R. (2021). Social vulnerabilities for substance use: Stressors, socially toxic environments, and discrimination and racism. *Neuropharmacology*, 188, 108518. [\[Crossref\]](#)
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing. [\[Crossref\]](#)
- Aneshensel, C. S. (1992). Social stress: Theory and research. *Annual Review of Sociology*, 18(1), 15-38. [\[Crossref\]](#)
- Areba, E. M., Eisenberg, M. E., & McMorris, B. (2018). Relationships between family structure, adolescent health status, and substance use: Does ethnicity matter? *Journal of Community Psychology*, 46(1), 44-57. [\[Crossref\]](#)
- Avci, M. (2025). Adolescents' experiences with substance use: Risks, protective factors, and interventions. *BMC Psychology*, 13, 802. [\[Crossref\]](#)
- Betancourt, T. S., Thomson, D., & Brennan, R. (2015). The intergenerational impact of war: Longitudinal relationships between caregiver and child mental health in postconflict Sierra Leone. *Journal of Child Psychology and Psychiatry*, 56(10), 1101-1107. [\[Crossref\]](#)
- Borraccino, A., Berchiella, P., Dalmasso, P., Sciannameo, V., Vieno, A., Lazzeri, G., Charrier, L., & Lemma, P. (2020). Connectedness as a protective factor in immigrant youth: Results from the Health Behaviours in School-aged Children (HBSC) Italian study. *International Journal of Public Health*, 65, 303-312. [\[Crossref\]](#)
- Bronfenbrenner, U. (Ed.). (2005). *Making human beings human: Bioecological perspectives on human development*. Sage Publications Ltd.
- Bronstein, I., & Montgomery, P. (2011). Psychological distress in refugee children: A systematic review. *Clinical Child and Family Psychology Review*, 14(1), 44-56. [\[Crossref\]](#)
- Callak, Y., Onat, M. B., Yilmaz, G., Yilmaz, B. N., & Akgür, S. (2022). Family-based prevention in youth's substance misuse in low- and middle-income countries: A review from Turkey and cultural adaptation of family-based interventions. *Journal of Ethnicity in Substance Abuse*, 23(4), 641-659. [\[Crossref\]](#)
- Cardoso, J. B. (2018). Running to stand still: Trauma symptoms, coping strategies, and substance use behaviors in unaccompanied migrant youth. *Children and Youth Services Review*, 92, 143-152. [\[Crossref\]](#)
- Chipalo, E. (2021). Is trauma-focused cognitive behavioral therapy (TF-CBT) effective in reducing trauma symptoms among traumatized refugee children? A systematic review. *Journal of Child & Adolescent Trauma*, 14(4), 545-558. [\[Crossref\]](#)
- Cicchetti, D., & Rogosch, F. A. (2002). A developmental psychopathology perspective on adolescence. *Journal of Consulting and Clinical Psychology*, 70(1), 6-20. [\[Crossref\]](#)
- Cole, E., Su, S., Díaz, A., & Zhang, M. (2022). Social support and resilience among Burmese adolescent refugees: Examining ethnic identity searching and belonging as moderators. *Children and Youth Services Review*, 142(1), 106647. [\[Crossref\]](#)
- Collins, W. A., & Laursen, B. (2004). Changing relationships, changing youth: Interpersonal contexts of adolescent development. *The Journal of Early Adolescence*, 24(1), 55-62. [\[Crossref\]](#)

- Contreras-Pérez, M. E., Morris, S., Hospital, M. M., & Wagner, E. (2023). Culturally sensitive treatment for underrepresented adolescents with substance use: A systematic review. *Journal of Evidence-Based Social Work*, 20(3), 404-424. [\[Crossref\]](#)
- Düken, M. E., & Kaplan, V. (2024). The effects of mental symptoms of refugee adolescents on their substance use proclivity: An example of South-Eastern Turkey. *Journal of Substance Use*, 29(6), 1137-1144. [\[Crossref\]](#)
- Egger, T., Buchheim, A., & Gander, M. (2025). The role of attachment in refugees with impaired mental health: A systematic review. *Brain Sciences*, 15(5), 495. [\[Crossref\]](#)
- Elder, G. H., Johnson, M. K., & Crosnoe, R. (2003). The emergence and development of life course theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 3-19). [\[Crossref\]](#)
- Erikson, E. H. (1968). *Identity: Youth and crisis*. W. W. Norton & Company.
- Eruyar, S., Maltby, J., & Vostanis, P. (2018). Mental health problems of Syrian refugee children: The role of parental factors. *European Child & Adolescent Psychiatry*, 27, 401-409. [\[Crossref\]](#)
- European Monitoring Centre for Drugs and Drug Addiction & European Union Agency for Asylum. (2023). *Professionals working in reception centres in Europe: an EMCDDA-EUAA joint study on substance use among applicants for international protection and persons granted protection*. EUAA.
- Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7,000 refugees resettled in western countries: A systematic review. *The Lancet*, 365(9467), 1309-1314. [\[Crossref\]](#)
- Fischer, L., Kölligan, V., Wieland, N., & Klein, M. (2021). Development and evaluation of a digital health intervention for substance use reduction in young refugees with problematic use of alcohol and/or cannabis-Study protocol for a single-armed feasibility trial. *Frontiers in Public Health*, 9. [\[Crossref\]](#)
- Frounfelker, R. L., Bromley, G., Blomkvist, K., Henckels, G., Child, K., & Mishra, T. (2026). "Stuck in between two worlds": Substance misuse among first-generation ethnic-Nepali Bhutanese youth and young adults with a refugee life experience. *SSM - Qualitative Research in Health*, 9, 100700. [\[Crossref\]](#)
- Güler, M. & Demircan, D. (2022). Zorunlu göç: Bağımlılık açısından riskli bir süreç. *İstanbul Aydın Üniversitesi Sosyal Bilimler Dergisi*, 14(1), 1-14. [\[Crossref\]](#)
- Gülerce, H., & Bozkurt, V. (2022). Globalization and forced migration: The case of Turkey. In M. Bimay & Ş. Şimşek (Eds.), *Ekonomik, sosyal, siyasal ve kültürel boyutlarıyla göçlerin geleceği* (pp. 197-210). Nobel Akademik Yayıncılık.
- Gülerce, H., & Çorlu, R. (2021). Social cohesion and conflict areas of Syrian asylum seeker students in higher education. *Üsküdar University Journal of Social Sciences*, (12), 71-106. [\[Crossref\]](#)
- Gülerce, H., & Demir, E. (2021). Zorunlu göç sürecinde sosyal ağlar: Şanlıurfa'daki Suriyeli sığınmacılar. *Journal of Social Policy Conferences*, 81, 185-211. [\[Crossref\]](#)
- Hernandez Robles, E., Maynard, B. R., Salas-Wright, C. P., & Todici, J. (2018). Culturally adapted substance use interventions for Latino adolescents: A systematic review and meta-analysis. *Research on Social Work Practice*, 28(7), 789-801. [\[Crossref\]](#)
- Horyniak, D., Melo, J., Farrell, N., & Ojeda, V. D. (2016). Prevalence and risk factors for substance use among refugees, internally displaced people, and asylum seekers: Findings from a global systematic review. *Annals of Global Health*, 82(3), 423-424. [\[Crossref\]](#)
- Höhne, E., van der Meer, A. S., Kamp-Becker, I., & Christiansen, H. (2022). A systematic review of risk and protective factors of mental health in unaccompanied refugee minors. *European Child & Adolescent Psychiatry*, 31(3), 425-442. [\[Crossref\]](#)
- International Organization for Migration. (2024). *World migration report 2024*. United Nations.
- İlhan, M. N., Ekmekçi Ertek, İ., Gözükar, M. G., Akıl, Ö., Ursu, P., Ergüder, T., Polat, S., Şimşek, M. Y., Aktaş, M., Bulut Gazanfer, Ö., Özger İlhan, S., & Kaptan, H. (2021). Göçmen kamplarında ve yerli nüfusta uyuşturucu kullanımı: Şanlıurfa örnekleme. *Archives of Neuropsychiatry*, 58(2), 121-127. [\[Crossref\]](#)
- Kahyaoglu, G., Dinç, M., Sultan, I., & Ögel, K. (2020). Effects of engaging family in addiction treatment for substance use and treatment compliance: A preliminary study. *Addicta: The Turkish Journal on Addictions*, 7(4), 229-233. [\[Crossref\]](#)
- Kenin, A., Dandy, J., Atorkey, P., Pelden, S., Adusei-Asante, K., & Zamboanga, B. L. (2025). Cultural values and practices in alcohol and other drug use among immigrant youth: A systematic review. *Journal of Ethnicity in Substance Abuse*, 21, 1-42. [\[Crossref\]](#)
- Ladis, B., Trucco, E., Huang, H., Thomlison, B., & Fava, N. M. (2021). Longitudinal effects of peer, school, and parenting contexts on substance use initiation in middle adolescence. *Journal of Evidence-Based Social Work*, 18(5), 566-584. [\[Crossref\]](#)
- Li, Y., Maina, G., Mousavian, G., Fang, Y., Twum-Antwi, B., Sherstobitoff, J., Amoyaw, J., & Pandey, M. (2024). Family-based interventions for preventing substance use among immigrant youth: A scoping review. *Substance Use: Research and Treatment*, 18. [\[Crossref\]](#)
- Lotzin, A., Lindert, J., Koch, T., Liedl, A., & Schäfer, I. (2021). STARC-SUD - Adaptation of a transdiagnostic intervention for refugees with substance use disorders [Special issue]. *Clinical Psychology in Europe*, 3, e5329. [\[Crossref\]](#)
- Manafe, N., Ismael-Mulungo, H., Ponda, F., Dos Santos, P. F., Mandlate, F., Cumbe, V. F. J., Mocumbi, A. O., & Oliveira Martins, M. R. (2024). Prevalence and associated factors of common mental disorders among internally displaced people by armed conflict in Cabo Delgado, Mozambique: Across-sectional community-based study. *Frontiers in Public Health*, 12, 1371598. [\[Crossref\]](#)
- Marginean, V., Sheth, P., Varma, A., & Vessie, A. J. (2023). A short review of acculturation and addiction among immigrant and refugee communities in the United States and abroad. *Journal of Nursing Scholarship*, 55(3), 584-589. [\[Crossref\]](#)
- Marsiglia, F., Ayers, S., Robbins, D. E., Nagoshi, J. L., Baldwin-White, A., & Castro, F. (2018). The initial assessment of a community-based intervention with Mexican-heritage parents in boosting the effects of a substance use prevention intervention with youth. *Journal of Community Psychology*, 47(2), 195-209. [\[Crossref\]](#)
- Martinez, J. E., Feldman, L. A., Feldman, M. J., & Cikara, M. (2021). Narratives shape cognitive representations of immigrants and immigration-policy preferences. *Psychological Science*, 32(2), 135-152. [\[Crossref\]](#)
- Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development*, 85(1), 6-20. [\[Crossref\]](#)
- Mendez, L., & Kerig, P. (2023). Newcomers to unwelcoming lands: A conceptual review of the dimensions of discrimination experienced by refugee youth and the processes imparting risk and resilience. *Journal of Child and Adolescent Trauma*, 16, 903-915. [\[Crossref\]](#)
- Michel, N., Tran, K. T., Visoki, E., Gataviņš, M. M., Ly, C., & Barzilay, R. (2025). Mental health, minority stressors, and resilience factors among early adolescent immigrant youth. *Journal of the American Academy of Child and Adolescent Psychiatry*. [\[Crossref\]](#)
- Miraç Yaman, Ö. (2014). Young drug addicts' perceptions of family relations: The case of Esenler-Bağcılar, İstanbul. *Addicta: The Turkish Journal on Addictions*, 1(1), 120-132. [\[Crossref\]](#)
- Momeñe, J., Estévez, A., Pérez-García, A. M., Jiménez, J., Chávez-Vera, M., Olave, L., & Iruarizaga, I. (2021). Substance abuse and its relationship to emotional dependence, attachment and emotional regulation in adolescents. *Anales De Psicología Annals of Psychology*, 37(1), 121-132. [\[Crossref\]](#)

- Montero-Zamora, P. (2023). Translating evidence-based substance use prevention interventions in Latin America and the Caribbean: The key role of cultural adaptation. *Journal of Adolescent Health, 73*(3), 401-402. [Crossref]
- Nagoshi, J. L., Nagoshi, C., Small, E., Okumu, M., Marsiglia, F., Dustman, P., & Than, K. (2018). Families preparing a new generation: Adaptation of an adolescent substance use intervention for Burmese refugee families. *Journal of the Society for Social Work and Research, 9*(4), 615-635. [Crossref]
- Najdini, M., Frigaux, A., Mathieu, J., Shadili, G., Guenoun, T., Vlachopoulou, X., Belot, R.-A., Bazan, A., Gressier, F., Robin, M., & Essadek, A. (2025). ATICC: A mixed-methods study on addiction, trauma, and immigration among vulnerable young adults in the Grand Est youth network: Study protocol. *BMC Psychology, 13*, 582. [Crossref]
- Nash, A. (2025). The landscape of substance use in youth-2024. *Journal of Pediatric Health Care, 39*(6), 990-1001. [Crossref]
- Noyes, A., Kubishyn, N., & Brown, J. (2025). A mixed systematic review of interventions to support the well-being of refugee youth in school and community settings. *Children and Youth Services Review, 176*, 108000. [Crossref]
- Ögel, K., Taner, S., & Yılmazçetin, C. (2003). *Ergenlerde madde bozukluklarına yaklaşım kılavuzu*. IQ Kültür Sanat Yayıncılık.
- Perreira, K., Marchante, A. N., Schwartz, S., Isasi, C., Carnethon, M., Corliss, H. L., Kaplan, R., Santisteban, D. A., Vidot, D. C., Horn, L., & Delamater, A. (2019). Stress and resilience: Key correlates of mental health and substance use in the Hispanic Community Health Study of Latino Youth. *Journal of Immigrant and Minority Health, 21*, 4-13. [Crossref]
- Presidency of Migration Management. (2024). *2024 annual activity report*. Republic of Türkiye Ministry of Interior. <https://www.goc.gov.tr/kurumlar/goc.gov.tr/Kurumsal/Stratejik-Yonetim/Faaliyet-Raporu/2024/2024-Yili-Faaliyet-Raporu.pdf>
- Presidency of Narcotics Crime Combat. (2024). *Türkiye drug report*. [https://www.narkotik.pol.tr/kurumlar/icisleri.gov.tr/duyurular\(1\)/2024_uyus_raporu.pdf](https://www.narkotik.pol.tr/kurumlar/icisleri.gov.tr/duyurular(1)/2024_uyus_raporu.pdf)
- Rodríguez-Ruiz, J., & Espejo-Siles, R. (2024). What moderates the link between peers' and individuals' substance use in adolescence? A systematic scoping review. *Adolescent Research Review, 10*, 285-307. [Crossref]
- Salas-Wright, C. P., Schwartz, S., Cohen, M., Maldonado-Molina, M., Vaughn, M., Sánchez, M., Rodríguez, J., AbiNader, M., John, R., Oliveros, K., & Andrade, P. (2020). Cultural stress and substance use risk among Venezuelan migrant youth in the United States. *Substance Use & Misuse, 55*(13), 2175-2183. [Crossref]
- Sandberg, S., Saasa, S. K., & Yirenya-Tawiah, A. (2022). Social exclusion and substance use among African immigrants: The role of discrimination. *Journal of Human Behavior in the Social Environment, 33*(4), 502-520. [Crossref]
- Sirin, S. R., Choi, E., & Sin, E. J. (2021). Meta-analysis on the relation between acculturation and alcohol use among immigrant youth. *Journal of Adolescent Health, 70*(3), 361-377. [Crossref]
- Stathopoulou, T., Bourazas, K., Hatzinikolaou, K., Adamopoulou, E., Ziranou-Kazolea, L., Cavounidis, J., Spyropoulou, N., Nicolais, G., Panter-Brick, C., & Mollica, R. (2025). Belonging, discrimination, and risk in displacement: Bayesian variable selection in predicting mental health and resilience among refugee adolescents in Greece. *SSM - Mental Health, 9*, 100574. [Crossref]
- Steinberg, L. (2008). A social neuroscience perspective on adolescent risk-taking. *Developmental Review, 28*(1), 78-106. [Crossref]
- Suárez-Orozco, C., Motti-Stefanidi, F., Marks, A., & Katsiaficas, D. (2018). An integrative risk and resilience model for understanding the adaptation of immigrant-origin children and youth. *American Psychologist, 73*(6), 781-796. [Crossref]
- Şahin, M., & Güngör, F. (2022). Göç ve bağımlılık: Suriyeli göçmenlerin madde kullanım süreçlerine dair nitel bir araştırma [Special issue]. *İçtimaiyat Sosyal Bilimler Dergisi, 6*, 319-337. [Crossref]
- Şeker, B. Ç., Dinç, M., Işık, S., & Ögel, K. (2019). Incidence and characteristics of psychological trauma in alcohol and substance use disorder. *Addicta: The Turkish Journal on Addictions, 6*(2), 315-336. [Crossref]
- Taşdemir, M., Küçükali, H., Uçar, A., & Sur, H. (2020). Exploring alcohol and substance addiction among Syrian migrants in Turkey: A qualitative study integrating perspectives of people with an addiction, their relatives, local and national institutions. *Addicta: The Turkish Journal on Addictions, 7*(4), 253-276. [Crossref]
- Turrini, G., Purgato, M., Ballette, F., Nosè, M., Ostuzzi, G., & Barbui, C. (2017). Common mental disorders in asylum seekers and refugees: Umbrella review of prevalence and intervention studies. *International Journal of Mental Health Systems, 11*, 51. [Crossref]
- UNICEF. (2023). *Strengthening parenting and community support for refugee and host families in Türkiye*. UNICEF Türkiye Temsilciliği.
- UNICEF. (2024). *Humanitarian situation report no. 22*. <https://www.unicef.org/tr/media/167361/file/Turkiye-Humanitarian-Situation-Report-No.22-Year-End-31-December-2024.pdf>
- United Nations High Commissioner for Refugees. (2024). *Global trends report: Forced displacement in 2024*. <https://www.unhcr.org/>
- United Nations Office on Drugs and Crime. (2025). *World drug report 2025*. United Nations Publication. <https://www.unodc.org/unodc/en/data-and-analysis/index.html>
- Ungar, M. (2013). Resilience, trauma, context, and culture. *Trauma, Violence, & Abuse, 14*(3), 255-266. [Crossref]
- Uysal, B., Yanık, M., Taştekin, F., Tuzgen, E., Altınışık, E., & Acarturk, C. (2022). Psychological problems and resilience among Syrian adolescents exposed to war. *European Journal of Trauma & Dissociation, 6*(3), 100258. [Crossref]
- Van Dorp, M., Boon, A., Spijkerman, R., & Los, L. (2020). Substance use prevalence rates among migrant and native adolescents in Europe: A systematic review. *Drug and Alcohol Review, 40*(2), 325-339. [Crossref]
- Vasic, J., Grujicic, R., Toskovic, O., & Pejovic Milovancevic, M. (2021). Mental health, alcohol, and substance use of refugee youth. *Frontiers in Psychiatry, 12*, 713152. [Crossref]
- Velu, M. E., Kuiper, R. M., Schok, M., Sleijpen, M., de Roos, C., & Mooren, T. (2025). Effectiveness of trauma-focused treatments for refugee children: A systematic review and meta-analyses. *European Journal of Psychotraumatology, 16*(1), 2494362. [Crossref]
- Walker, B., & Salt, D. (2006). *Resilience thinking: Sustaining ecosystems and people in a changing world*. Island Press.
- Watts, A. L., Watson, D., Heath, A. C., & Sher, K. J. (2023). Alcohol use disorder criteria exhibit distinct comorbidity patterns. *Addiction, 118*(8), 1457-1468. [Crossref]
- World Health Organization. (2020). *International standards for the treatment of drug use disorders*. <https://iris.who.int/server/api/core/bitstreams/82b4508a-c1ad-4561-9a4c-de29e43a70f9/content>
- Wright, A. C., Cather, C., Farabaugh, A., Terechina, O., Pedrelli, P., Nyer, M., Fava, M., & Holt, D. J. (2021). Relationship between cannabis use and psychotic experiences in college students. *Schizophrenia Research, 231*, 198-204. [Crossref]
- Yalch, M. M., Arnold, E. M., Christodoulou, J., Swendeman, D. T., Kerin, T., Nielsen-Saines, K., & Rotheram-Borus, M. J. (2024). Influence of trauma on longitudinal association between depressive symptoms and use of alcohol and cannabis among young people. *Psychological Trauma: Theory, Research, Practice, and Policy*. [Crossref]
- Yeşilay. (2025). *Bilimsel çalışmalar bülteni no:2*. Türkiye Yeşilay Cemiyeti.

Addressing substance use and vulnerability among unaccompanied migrant youth in Spain: A narrative review

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Abstract

Spain's geographic position has made it a key entry point for forced migrants, including unaccompanied minors (UMs), from regions such as North Africa and the Middle East. These minors often face pre-migration trauma and post-migration stressors—including social isolation, economic hardship, and administrative insecurity—significantly increasing their risk of mental health disorders and substance use as a maladaptive coping mechanism. Given the specific focus on youth in migration contexts, this narrative review evaluated existing psychosocial and treatment interventions for forced migrants with substance use disorders in Spain. The analysis of available literature reveals significant regional disparities in protection systems for UMs, exacerbating vulnerabilities such as emotional distress and migratory grief, while substance use was consistently identified as a symptom of deeper systemic and psychological issues rather than a primary disorder. A key finding was the notable absence of specific intervention models for this population. In light of this gap, a community-based participatory action research (CBPAR) model emerged as a promising, though yet to be adapted, framework for developing culturally sensitive interventions that could address structural drivers of risk. The review concludes that effective intervention requires a dual approach: policy reforms to standardize equitable, trauma-informed care across regions, and investment in the development and implementation of participatory, community-driven programs prioritizing holistic healing and integration. It also underscores the urgent need for a paradigm shift toward culturally competent, empowerment-focused strategies in Spain and to inform international responses to the complex needs of forced migrant youth.

Keywords: unaccompanied minors, substance use disorders, mental health, migration trauma, health equity, Spain

Main points

- Unaccompanied migrant minors in Spain use substances primarily as a maladaptive coping mechanism for profound psychosocial distress and migratory grief, not as a primary disorder.
- A significant gap exists in Spain, with no specific, documented intervention models addressing substance use disorders for this vulnerable youth population.
- Community-Based Participatory Action Research (CBPAR) is proposed as a highly promising framework to develop culturally sensitive, empowerment-focused interventions.

Introduction

In recent years, increased psychosocial difficulties and violent conflicts in several countries in North Africa and the Middle East have given rise to multiple waves of migration. Spain's strategic geographical location in the Mediterranean Sea,

close to Africa, has made it a key point in migration routes for people fleeing countries such as Morocco, Western Sahara, Mauritania, Senegal, and Gambia. In fact, according to provisional data, Spain is the first-ranked country in the European Union for adult asylum applications and the third-ranked for applications from unaccompanied minors

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(European Commission, 2025). This indicates a shift in the patterns of asylum petitions compared to the previous decade, a period during which countries such as Germany dominated the rankings. Another salient trend is the migration of individuals from Latin America to Spain, which has the largest number of migrants due to the absence of a language barrier, as well as Spain's historical ties to Latin America.

Young migrants, particularly unaccompanied minors (UMs), face significant vulnerabilities during migration, including exposure to stress, uncertainty, exploitation, and discrimination (Derluyn & Broekaert, 2008). Their status as minors navigating the complex migration process without parental or guardian support creates particular risks for psychological distress and mental health challenges. However, research demonstrates that these vulnerabilities coexist with remarkable resilience and numerous protective factors that can mitigate adverse outcomes. Strong social support networks, both formal and informal, emerge as crucial protective factors that buffer against psychological distress while fostering adaptive coping strategies (Keles et al., 2018; Sleijpen et al., 2016). Furthermore, educational engagement and the development of future orientation have been identified as key resilience factors that promote positive adaptation and reduce vulnerability to substance use (Betancourt et al., 2015). This dual perspective—acknowledging both the specific vulnerabilities and the substantial potential for resilience through protective factors—provides a comprehensive foundation for designing balanced interventions that address risks while building upon existing strengths within this population.

The vulnerability of unaccompanied minors stems not only from their status as children without parental care, but also from the fragmented and non-linear nature of their transition to adulthood under conditions of transnational mobility (Robertson et al., 2017). Within this framework, the transition to adulthood can be understood as unfolding across three intersecting domains—economic opportunities, social relations, and citizenship practices—which are often shaped and constrained by migration-related factors. In the case of unaccompanied minors, existing literature suggests that these domains may be significantly challenged, for instance through barriers to labor market access, disruptions in family and support networks, and precarious or exclusionary legal statuses. The convergence of these constraints with the developmental vulnerabilities associated with being young and unaccompanied may create a structural context of heightened psychosocial risk, in which maladaptive coping strategies, including substance use, can emerge.

Forced migrants encounter a multitude of risk factors that predispose them to mental health disorders, which in turn significantly elevate their vulnerability to substance abuse (Bogic et al., 2012; Teodorescu et al., 2012). This trajectory often begins with exposure to pre-migration trauma, including violence and persecution, and is compounded by post-migration stressors such as economic hardship, social isolation, exclusion, insecure residency status, and lack of access to employment or education (López-Atanes et al., 2025). The high prevalence of conditions like anxiety,

depression, and post-traumatic stress disorder within this population is directly related to these cumulative adversities (Betancourt et al., 2017). It is precisely this heightened burden of psychological distress that serves as a critical pathway to substance use, as substances are often employed as a maladaptive coping mechanism (Harris et al., 2019; Horyniak et al. 2016; Teodorescu et al., 2012).

This link is well-documented empirically. For instance, a systematic review by Horyniak et al. (2016) identified notable rates of risky alcohol use among refugee populations. While pre-existing psychiatric history and traumatic exposure are established risk factors, the role of post-migration challenges is paramount (Teodorescu et al., 2012). Research illustrates that refugees frequently resort to alcohol and other substances not only to manage trauma-related symptoms but also to alleviate the profound boredom, frustration, and daily stressors inherent in situations of social displacement and idleness (Hewlett et al., 2015; López-Atanes et al., 2025; Posselt et al., 2015; Teodorescu et al., 2012). Consequently, the strong association between post-migration stressors and adverse psychiatric outcomes directly encompasses substance-related disorders, creating a comorbid cycle that is difficult to break without targeted interventions.

Given the high rate of substance abuse in this population and the increasing number of forced migrants in Spain, this issue remains a primary focus of research. The present narrative review aims to evaluate the psychosocial features of forced migrant youth in Spain, with a specific focus on substance use. The synthesis of available evidence is intended to facilitate the identification of salient risk and protective factors. Furthermore, innovative community-driven approaches will be highlighted, and lessons will be derived to contribute to evidence-based policy and culturally sensitive practices within Spain and comparable international contexts.

Materials and methods

To synthesize the evidence for this narrative review, we conducted a comprehensive review of existing literature on interventions for substance use disorders (SUDs) in forced migrants in Spain. For this, a search strategy was designed using three sets of key terms related to the population (e.g., "unaccompanied minors", "forced migrant", "asylum seeker"), the intervention (e.g., "substance use", "addiction"), and the geographical context ("Spain"), combined with Boolean logic to search for relevant papers.

Searches were performed across three databases in English (Scopus, MEDLINE PubMed, and Web of Science) and one in Spanish (Dialnet) to capture relevant English and Spanish literature. Grey literature was identified through manual searches of Spanish governmental and institutional websites. A narrative review methodology was selected due to the emergent and fragmented nature of the literature on this specific topic, allowing for a thematic synthesis of diverse sources, including grey literature, to provide a comprehensive overview. As this was a narrative search, one researcher (BM)

selected the relevant papers non-systematically from title and abstract screening. The non-systematic selection by a single researcher is acknowledged as a limitation of this narrative approach; however, consolidation and thematic analysis were conducted by multiple researchers to ensure robustness.

Study selection was based on predefined inclusion criteria: studies focusing on forced migrants in Spain or providing transferable theoretical frameworks from other European contexts, addressing SUDs, and describing a psychosocial or psychotherapeutic treatment intervention. Given the limited evidence base specifically from Spain, we adopted this broader inclusion strategy to capture relevant conceptual models and intervention frameworks that could inform the Spanish context.

The selected articles were carefully analyzed by three researchers (BM, ML, RR), and the information was consolidated and presented under the following thematic headings: Sociodemographic Profile and Migration Journeys of Forced Migrant Youth in Spain; Risk and Protective Factors for SUDs: Trauma, Grief, and the Search for Support; and A Promising Framework: Community-Based Participatory Research as a Culturally Sensitive Intervention.

Results

Sociodemographic Profile and Migration Journeys of Forced Migrant Youth in Spain:

Unaccompanied minors (UMs) in Spain are predominantly male adolescents aged 15–18, primarily from Morocco, Algeria, Mali, Nigeria, and Guinea (UNICEF & Consejo General de la Abogacía Española, 2009). Their migration patterns are shaped by Spain's geographic position, with most arrivals occurring through Ceuta, Melilla, the Canary Islands, Andalusia, and the Basque Country (Fuentes, 2014). As noted in the introduction, provisional data states that Spain has become a major entry point for asylum seekers in the EU, ranking third in first-time asylum applications from unaccompanied minors in 2025 with 24,855 applications (European Commission, 2025).

The motivations driving their migration are complex and multifaceted, encompassing economic aspirations, family expectations, and escaping from conflict situations (Quiroga et al., 2005; UNICEF & Fundación Pere Tarrés, 2010). Despite often being perceived as a homogeneous group, UMs possess unique migration journeys and personal circumstances that challenge this oversimplification (Bravo & Santos-González, 2017).

A critical challenge they face is encountering a protection system that, despite providing essential services, frequently fails to adapt to their specific needs and circumstances (Fuentes, 2014). Understanding this foundational context of their journey and profile is essential for comprehending the

subsequent vulnerabilities and systemic challenges explored in the following sections.

Substance Use as a Symptom of Psychosocial Distress in Unaccompanied Minors:

Substance use among unaccompanied minors (UMs) in Spain is best understood not as a primary disorder, but as a symptomatic manifestation of profound psychosocial distress and unmet mental health needs (Cristóbal-Narváez et al., 2024). The literature indicates that these youths may initiate or increase their consumption of alcohol and other addictive substances as a maladaptive coping mechanism in response to the chronic stress and precarious situations they endure throughout the migration cycle. This is particularly prevalent among those who acquired consumption habits in contexts of exclusion and non-schooling in their countries of origin.

The pattern of use is deeply intertwined with the “unrealistic pre-migration expectations” many UMs carry, which can clash sharply with the post-migration reality of administrative barriers and social challenges (Cristóbal-Narváez et al., 2024). While this dissonance can create significant vulnerability, it is crucial to recognize that it coexists with remarkable resilience and agency. For these adolescents, substances may serve to alleviate feelings of frustration and psychological distress, yet many simultaneously develop profound coping strategies and actively navigate their new environments.

This psychological distress is strongly linked to post-migration daily stressors. Longitudinal evidence demonstrates that chronic material hardships (e.g., lack of food, money, housing) and social stressors (e.g., social isolation, discrimination) have a more profound impact on the anxiety and depression levels of unaccompanied young refugees over time than past traumatic events alone (Behrendt et al., 2022). It is within this context of persistent distress that substance use emerges as a maladaptive, yet understandable, coping mechanism.

However, it is important to note that large-scale national surveys such as ESTUDES systematically underrepresent unaccompanied migrant minors, as these surveys are conducted in mainstream educational settings where many of these young people are not present (Campaña Martínez, 2025). Consequently, there is a notable absence of robust epidemiological data on substance use prevalence among this population in Spain. Available evidence, though limited to small-scale studies, suggests distinctive patterns: for example, unaccompanied minors begin using benzodiazepines at earlier ages (12–13 years) than the general population, with high rates of concurrent daily cannabis use (84%) and frequent daily benzodiazepine use (24%) (Campaña Martínez, 2025) in a small-scale sample (N=25). This lack of robust data underscores the urgent need for specific, methodologically sound research to accurately quantify the magnitude and patterns of substance use among unaccompanied minors, and to inform targeted interventions.

Risk and Protective Factors for SUD: Trauma, Grief, and the Search for Support

Selected studies provide a multi-faceted understanding of the vulnerabilities of UMs in Spain and present a relevant methodological approach for intervention. There are regional disparities in the protection models for UMs across Spain (Bravo & Santos-González, 2017; Fuentes, 2014). In their study, Bravo and Santos-González (2017) conducted interviews with professionals and minors, which highlighted the adolescents' specific needs in education, health, housing, and social support, which are fundamental points of intervention to prevent substance use. Additionally, a critical finding was the urgent need to strengthen support for their transition to adult life and to address their widespread emotional distress, a key risk factor for maladaptive coping mechanisms.

Another study (Markez & Pastor, 2010) specifically established the heightened vulnerability of UMs to substance abuse. It identified migratory grief, the clash of expectations, their status as adolescents, and the lack of emotional referents as underlying factors in this vulnerability. The study concluded that substance abuse is a symptom of a difficult and painful migratory process and must be addressed early with integrated psychotherapeutic, educational, cultural, and medical support measures.

Further supporting this, longitudinal research highlights specific structural drivers of this distress. For instance, the persistent lack of secure legal residency and the absence of contact with family have been identified as significant predictors of deteriorating mental health in unaccompanied young refugees (Behrendt et al., 2022). This underscores that substance use cannot be addressed in isolation; it is fundamentally linked to systemic failures in providing safety, stability, and family reunification.

A Gap in Evidence and a Proposed Framework for Future Intervention:

A critical finding of this review is the notable absence of documented, specific intervention models for substance use disorders among unaccompanied minors and young migrant adults in Spain. No studies meeting our inclusion criteria described a psychosocial or treatment intervention specifically designed and implemented for this group.

Given this gap in the literature, we identified a study by Miranda et al. (2019) that, while focused on the Roma population in Seville, offers a potentially transferable methodological framework. This study presents a Community-Based Participatory Action Research (CBPAR) model designed to address health inequities by identifying community assets, fostering sociopolitical awareness, building alliances, and creating a common agenda for health justice.

We propose this model as a viable blueprint for future intervention with UMs, while acknowledging significant differences between the Roma population and unaccompanied minors that require careful consideration.

The Roma community in Seville, while marginalized, consists primarily of Spanish nationals (or long-term residents) who are accompanied by their families and have a different legal status. In contrast, UMs are minors, unaccompanied, and often lack regular residency status, which creates distinct legal vulnerabilities and barriers to accessing care. Furthermore, the original CBPAR model was designed to address health inequities in access to services, whereas substance use among UMs involves additional dimensions of addiction treatment and mental health care. Despite these differences, the model's core principles—cultural adaptation, community empowerment, and addressing structural drivers of risk—remain highly relevant. However, adapting it for UMs would require: (a) integrating trauma-informed approaches specific to unaccompanied minors, (b) addressing legal and administrative barriers to residency and care, and (c) involving specialized addiction and mental health professionals alongside community members.

Discussion

The findings from selected studies collectively paint a concerning picture of the structural and individual vulnerabilities faced by unaccompanied foreign minors in Spain, while also pointing to a viable pathway for intervention. The identification of significant regional disparities in protection models reveals a fragmented system that fails to provide uniform support (Bravo & Santos-González, 2017; Fuentes, 2014), potentially exacerbating existing trauma and feelings of instability. This lack of a standardized, national approach directly contradicts the principle of equity and likely contributes to the varied outcomes observed among this population.

The profound emotional distress and migratory grief identified as core characteristics of this group are of critical importance (Derluyn & Broekaert, 2008). Longitudinal evidence confirms that it is often the chronic, daily stressors—such as material hardship, legal insecurity, and social isolation—rather than single traumatic events, that most severely impact the mental health of unaccompanied youth over time (Behrendt et al., 2022). It is within this complex context that substance abuse emerges not as a primary pathology, but rather as a maladaptive coping mechanism—a symptom of a deeper, unaddressed pain and a failed integration process (Cristóbal-Narváez et al., 2024). This understanding fundamentally shifts the intervention paradigm from one of mere substance prohibition to one that requires holistic, trauma-informed care.

Given the limited evidence base of interventions specifically designed for this population in Spain, the community-based participatory action research model reviewed in this study offers a promising framework for addressing these complex needs. Its emphasis on empowering the community itself, building alliances, and creating a common agenda aligns perfectly with the need to address not just the individual symptoms but the structural drivers of risk (Miranda et al., 2019). Shifting the focus from deficits to assets, the CBPAR model leverages the inherent resilience of migrant youth and provides a potentially valuable blueprint for developing

culturally competent, bottom-up interventions. This approach moves beyond top-down, paternalistic models that have proven ineffective and instead fosters agency and self-determination among vulnerable youth. Longitudinal research shows that factors such as strong social support and cultural competence are associated with more positive mental health trajectories over time (Keles et al., 2018).

Ultimately, we would like to highlight that effective interventions are not solely focused on the treatment of substance use; they are about healing the whole person within their social context. This requires a dual commitment: first, to a more equitable and supportive national protection system; and second, to the funding and implementation of grassroots, participatory programs that can address deep-seated trauma and empower unaccompanied minors to build healthier futures.

The Spanish case study presented here offers critical insights for a broader European and global context, while conversely, international models of good practice could offer valuable lessons for Spain (Behrendt et al., 2022; Horyniak et al., 2016). The regional disparities mirror the 'postcode lottery' of care faced by migrants in other EU countries. The promising CBPAR model, while requiring further adaptation, provides a conceptually transferable framework for developing culturally sensitive prevention and intervention in diverse settings. These findings call for a concerted international effort to standardize trauma-informed care and invest in participatory approaches, aligning national policies with the need for a global response to addiction in migrant populations.

Conclusions

This review, focused on the Spanish context, illuminates the complex interplay between forced migration, youth, and substance use. It underscores the severe and multifaceted vulnerability of unaccompanied foreign minors in Spain to SUDs, which is fundamentally rooted in systemic failures, migratory trauma, and profound emotional distress. The findings indicate that substance abuse within this population is not a primary issue but a symptomatic manifestation of deeper, unaddressed psychological pain and a flawed integration process.

A critical conclusion is that current intervention models are insufficiently equipped to address this complexity. The significant regional disparities in care create a postcode lottery of support (Fuentes, 2014), violating principles of equity and likely worsening outcomes for many. Furthermore, this review reveals a significant gap in interventions specifically tailored for this population in Spain. Therefore, a paradigm shift in intervention strategy is urgently required.

Effective support must move beyond traditional, top-down substance abuse prevention and embrace an integrated approach that addresses both the psychological needs of unaccompanied minors and the structural barriers they face. As Derluyn and Broekaert (2008) argue, there is often

a glaring contrast between the legal perspective—which focuses on immigration status, asylum procedures, and residence permits—and the psychological perspective, which emphasizes the child's developmental and emotional needs. This contrast results in reception and care systems that prioritize migration control over appropriate psychosocial support (Derluyn & Broekaert, 2008). Therefore, addressing the root causes of substance use among unaccompanied minors requires bridging this gap: working not only with mental health services, but also with legal bodies and local governments to resolve administrative barriers, secure residency status, and facilitate family reunification where possible. Only by adopting a psychological perspective as the foundational framework for care and reception—rather than a purely legal one—can interventions move beyond symptom management toward truly holistic care.

In this context, the community-based participatory action research framework emerges as a highly promising model for this shift. Its core principles of empowerment, collaboration, and addressing structural drivers of risk align perfectly with the needs identified. Although further research is needed to adapt it specifically for unaccompanied minors, this approach represents a viable pathway forward. By doing so, we can move beyond merely treating symptoms and towards co-creating environments that nurture the resilience and well-being of young, forced migrants across Europe and beyond.

Author contributions

Conception and design: B.M., M.L.A., S.M., M.B., I.S., L.E.; Data acquisition: B.M., R.R., M.B., M.B.; Data interpretation: B.M.; Drafting of the manuscript: B.M., M.L.A., M.B., M.B., I.S., L.E.; Critical revision of the manuscript: M.L.A., R.R., M.B., S.M., M.B., I.S., L.E. All authors reviewed the results, approved the final version of the manuscript, and agreed to be accountable for all aspects of this study.

Data availability statement

Data sharing is not applicable to this article as no new datasets were generated or analyzed during this study.

Conflict of interest

The authors declare that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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The authors declare that no generative AI or AI-assisted technologies were used in the writing or preparation of this study.

References

- Behrendt, M., Pfeiffer, E., Devlieger, I., Adeyinka, S., Rota, M., Uzureau, O., & Derluyn, I. (2022). The impact of daily stressors on unaccompanied young refugees' mental health: A longitudinal study. *American Journal of Orthopsychiatry*, 92(6), 681-692. [\[Crossref\]](#)
- Betancourt, T. S., Abdi, S., Ito, B. S., Lilienthal, G. M., Agalab, N., & Ellis, H. (2015). We left one war and came to another: Resource loss, acculturative stress, and caregiver-child relationships in Somali refugee families. *Cultural Diversity and Ethnic Minority Psychology*, 21(1), 114-125. [\[Crossref\]](#)
- Betancourt, T. S., Newnham, E. A., Birman, D., Lee, R., Ellis, B. H., & Layne, C. M. (2017). Comparing trauma exposure, mental health needs, and service utilization across clinical samples of refugee, immigrant, and U.S.-origin children. *Journal of Traumatic Stress*, 30(3), 209-218. [\[Crossref\]](#)
- Bogic, M., Ajdukovic, D., Bremner, S., Franciskovic, T., Galeazzi, G. M., Kucukalic, A., Lecic-Tosevski, D., Morina, N., Popovski, M., Schützwohl, M., Wang, D., & Priebe, S. (2012). Factors associated with mental disorders in long-settled war refugees: Refugees from the former Yugoslavia in Germany, Italy and the UK. *The British Journal of Psychiatry*, 200(3), 216-223. [\[Crossref\]](#)
- Bravo, A., & Santos-González, I. (2017). Menores extranjeros no acompañados en España: Necesidades y modelos de intervención [Unaccompanied foreign minors in Spain: Needs and intervention models]. *Psychosocial Intervention*, 26(1), 55-62. [\[Crossref\]](#)
- Campaña Martínez, A. (2025). *Infancias medicalizadas. La invisibilidad del consumo de psicofármacos hipnosedantes en jóvenes no acompañados en exclusión social: La prevención como reto pendiente* [Medicalised childhoods. The invisibility of hypnosedative drug use among unaccompanied young people in social exclusion: Prevention as an unresolved challenge]. Episteme Social. https://www.epistemesocial.org/news/medicalised_childhoods/
- Cristóbal-Narváez, P., Febas-Fernandez, M., Rueda, M. J., & Aparicio-Pareja, L. (2024). Invisible youths? Future health and social care challenges of unaccompanied minor migrants in Spain. In M. P. del R. F. R. Gómez & I. S. R. R. Gutiérrez (Eds.), *Health and social care for migrants: A new approach* (pp. 67-85). Springer. [\[Crossref\]](#)
- Derluyn, I., & Broekaert, E. (2008). Unaccompanied refugee children and adolescents: The glaring contrast between a legal and a psychological perspective. *International Journal of Law and Psychiatry*, 31(4), 319-330. [\[Crossref\]](#)
- European Commission. (2025). *Asylum applicants by type, citizenship, age and sex - annual aggregated data*. Eurostat. [\[Crossref\]](#)
- Fuentes, R. (2014). Menores extranjeros no acompañados (MENA) [Unaccompanied foreign minors]. *Revista Internacional de Trabajo Social y Bienestar*, 3, 105-111.
- Harris, S., Dykxhoorn, J., Hollander, A. C., Dalman, C., & Kirkbride, J. B. (2019). Substance use disorders in refugee and migrant groups in Sweden: A nationwide cohort study of 1.2 million people. *PLOS Medicine*, 16(11), e1002944. [\[Crossref\]](#)
- Hewlett, M., Merry, L., Mishra, A., Islam, A. R., Wali, R., & Gagnon, A. (2015). Alcohol use among Bhutanese refugees in Nepal. *International Journal of Migration, Health and Social Care*, 11(3), 158-168. [\[Crossref\]](#)
- Horyniak, D., Melo, J. S., Farrell, R. M., Ojeda, V. D., & Strathdee, S. A. (2016). Epidemiology of substance use among forced migrants: A global systematic review. *PLOS ONE*, 11(7), e0159134. [\[Crossref\]](#)
- Keles, S., Friborg, O., Idsøe, T., Sirin, S., & Oppedal, B. (2018). Resilience and acculturation among unaccompanied refugee minors. *International Journal of Behavioral Development*, 42(1), 52-63. [\[Crossref\]](#)
- López-Atanes, M., Rosenkranz, M., Erkoreka, L., Recio-Barbero, M., Bari, M., Hiller, P., Sarrionandia, A., & Schäfer, I. (2025). Special needs of refugees with substance use disorders from conflict-affected countries: A comparison with German-born individuals. *Social Psychiatry and Psychiatric Epidemiology*, 60(7), 1563-1572. [\[Crossref\]](#)
- Markez, I., & Pastor, F. (2010). Menores Extranjeros no acompañados (MENA), un colectivo especialmente vulnerable ante las drogas [Unaccompanied foreign minors, a group especially vulnerable to drugs]. *Zerbitzuan*, 48, 71-85.
- Miranda, D. E., Garcia-Ramirez, M., Balcazar, F. E., & Suarez-Balcazar, Y. (2019). A community-based participatory action research for Roma health justice in a deprived district in Spain. *International Journal of Environmental Research and Public Health*, 16(19), 3722. [\[Crossref\]](#)
- Posselt, M., Procter, N., Galletly, C., & Crespigny, C. (2015). Aetiology of coexisting mental health and alcohol and other drug disorders: Perspectives of refugee youth and service providers. *Australian Psychologist*, 50(2), 130-140. [\[Crossref\]](#)
- Quiroga, V., Alonso, A., & Armengol, C. (2005). *Rutas de pequeños sueños: Menores Migrantes No Acompañados en Europa* [Routes of little dreams: Unaccompanied Migrant Minors in Europe]. Fundación Pere Tarrés.
- Robertson, S., Harris, A., & Baldassar, L. (2017). Mobile transitions: A conceptual framework for researching a generation on the move. *Journal of Youth Studies*, 21(2), 203-217. [\[Crossref\]](#)
- Sleijpen, M., Haagen, J., Mooren, T., & Kleber, R. J. (2016). Growing from experience: An exploratory study of posttraumatic growth in adolescent refugees. *European Journal of Psychotraumatology*, 7(1), 28698. [\[Crossref\]](#)
- Teodorescu, D. S., Heir, T., Hauff, E., Wentzel-Larsen, T., & Lien, L. (2012). Mental health problems and post-migration stress among multi-traumatized refugees attending outpatient clinics upon resettlement to Norway. *Scandinavian Journal of Psychology*, 53(4), 316-332. [\[Crossref\]](#)
- UNICEF & Consejo General de la Abogacía Española. (2009). *Ni ilegales ni invisibles: Realidad jurídica y social de los Menores Extranjeros en España* [Neither illegal nor invisible: Legal and social reality of foreign minors in Spain]. UNICEF España.
- UNICEF & Fundación Pere Tarrés. (2010). *Menores Migrantes No Acompañados/as en España. Sueños de bolsillo* [Unaccompanied Migrant Minors in Spain. Pocket dreams]. UNICEF España.

Substance use among refugee adolescents: A systematic review from a public health perspective

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Abstract

Refugee children and adolescents represent one of the most vulnerable populations in terms of health and psychosocial well-being due to exposure to war, forced displacement, family separation, poverty, discrimination, and acculturation-related stressors. This review aims to examine substance use among refugee adolescents within the context of migration from a public health perspective and to synthesize current empirical evidence on associated risk and protective factors. A systematic literature review of studies published between 2015 and 2024 was conducted using PubMed, Scopus, Web of Science, Google Scholar, and national Turkish databases. The review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines. Eight empirical studies conducted in Türkiye, Australia, Sweden, Palestine, Jordan, and Serbia met the inclusion criteria. The findings indicate that, in a limited number of studies including direct comparisons, substance use among refugee adolescents tends to be higher than among their non-refugee peers. Tobacco use emerged as the most prevalent behavior, while alcohol and illicit substance use were more prominent in resettlement contexts characterized by acculturative stress. Key risk factors included trauma exposure, psychological distress, disrupted family functioning, peer influence, low socioeconomic status, and limited access to education and psychosocial support. Substance use frequently co-occurred with mental health problems such as anxiety, depression, and post-traumatic stress disorder, increasing vulnerability to violence, victimization, and other high-risk behaviors. Conversely, school connectedness, supportive family relationships, and social support networks functioned as important protective factors. Overall, the findings suggest that substance use among refugee adolescents should be conceptualized as a multidimensional public health concern shaped by the interaction of developmental sensitivity and displacement-related adversity. Culturally sensitive, community-based prevention and intervention strategies targeting refugee adolescents are urgently needed.

Keywords: refugee adolescents, migration, substance use, public health, addiction risk, systematic review

Main points

- Refugee adolescents show elevated substance use risk compared to non-refugee peers in studies with direct comparisons.
- Tobacco use is the most prevalent behavior, while alcohol and illicit substance use vary across migration contexts.
- Substance use is strongly associated with trauma exposure, psychological distress, and socioeconomic disadvantage.
- Family dynamics and peer influences are key determinants of substance use behaviors.
- School connectedness and social support act as important protective factors.

Introduction

Forced displacement has reached unprecedented levels globally, driven by escalating armed conflicts and sociopolitical instability. These conditions continue to uproot millions of individuals every year, including large numbers of children and adolescents who are disproportionately affected by the consequences of forced migration (Güntay, 2023; Özaslan, 2023). According to the United Nations, a refugee

is defined as “a person who, owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality and is unable or unwilling to return” (United Nations High Commissioner for Refugees [UNHCR], 2018). Beyond the immediate act of relocation, refugees must navigate significant social, economic, cultural, and psychological challenges that complicate settlement and adaptation in host countries (Akgün, 2023).

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Migration is therefore not merely the movement of individuals across borders but a complex public health phenomenon with profound implications for physical, mental, and social well-being. During the pre-migration and transit phases, refugees are often exposed to insecurity, trauma, infectious diseases, malnutrition, and disruptions in access to essential services (Daher et al., 2021; Morales-Muñoz et al., 2020). Following resettlement, socioeconomic deprivation (Gollopeni, 2020), educational discontinuity (Akgün, 2023), and cultural adaptation difficulties (Yaman, 2022) remain prevalent. According to the UNHCR Global Report, one in every seventy-four people worldwide has been forcibly displaced, and nearly half of this population consists of children and adolescents (UNHCR, 2022, 2023). These figures underscore that the health and well-being of refugee youth represent a critical dimension of global public health.

Adolescence is a developmental period marked by rapid biological, cognitive, and psychosocial change, during which individuals are particularly sensitive to environmental stressors (Alpaslan, 2012). Developmental tasks such as identity formation, increasing autonomy, and evolving peer relationships heighten emotional vulnerability. During this stage, adverse experiences associated with forced migration may disrupt key developmental processes, including identity formation, impulse control, emotional regulation, and executive functioning. As a result, mental health problems—including depression, anxiety, suicidal ideation, and substance use—frequently emerge or intensify during adolescence (Sharp et al., 2018). National data indicate that the average age of first substance use among the general youth population in Türkiye is approximately 15–17 years; however, nationally representative data specific to refugee adolescents are currently unavailable.

For refugee adolescents, the combined effects of war, forced migration, and ongoing stressors further amplify developmental risks. Evidence shows that traumatic experiences significantly increase vulnerability to anxiety disorders, adjustment problems, major depressive disorder (MDD), and post-traumatic stress disorder (PTSD), all of which are associated with heightened likelihood of substance use (Pfeiffer et al., 2022; Uygün et al., 2023). Additionally, persistent adversities such as discrimination, loss, and cultural alienation may lead adolescents to adopt maladaptive coping mechanisms, including substance use as a form of self-medication or psychological escape (Bilecik, 2019; Kara & Nazik, 2018; Vasic et al., 2021).

Given the increasing prevalence of substance use among refugee adolescents and the complex interplay between forced migration and adolescent development, a comprehensive and evidence-informed understanding of this issue is urgently needed. Existing reviews on refugee mental health have primarily focused on psychological problems such as depression, anxiety, and post-traumatic stress disorder, often treating substance use as a secondary outcome. Moreover, the interaction between migration-related stressors

and adolescence-specific developmental vulnerabilities has received limited attention. This review addresses this gap by synthesizing empirical evidence on substance use among refugee adolescents from a public health and developmental perspective, thereby conceptualizing substance use as a multidimensional public health concern shaped by displacement-related adversity and developmental sensitivity.

Methods

Search Strategy

A systematic literature search was conducted in PubMed, Scopus, Web of Science, Google Scholar, and Turkish national databases (TR Dizin). The search covered all studies published between January 2015 and October 2024. Boolean operators were applied, and database-specific search strings were customized separately for each platform. Searches were performed between 28 and 31 October 2024 and included both English- and Turkish-language sources. A detailed list of all database-specific search strings, including the Turkish-language terms, is provided in Supplementary Table 1.

Eligibility Criteria

To enhance developmental precision and ensure methodological consistency, adolescence was defined as ages 10–19 years in accordance with the World Health Organization and UNICEF classifications. Studies were eligible for inclusion only if they reported data specifically for participants within this age range. Studies including mixed-age samples (e.g., participants younger than 10 years or older than 19 years) were included only when adolescent-specific data (10–19 years) could be clearly extracted from the results. Studies were excluded if age-disaggregated data for adolescents were not available, if the sample consisted exclusively of younger children or older youth/young adults, or if age groups were not clearly specified. This approach ensured that all included evidence directly pertained to adolescents within the intended developmental period.

Study Selection

All records retrieved from the database searches were imported into EndNote, and duplicate entries were removed before screening. The selection process was conducted by the single author of this review. To minimize potential selection bias, the author carried out the screening procedure twice at different times, first reviewing the titles and abstracts and then examining the full texts of potentially eligible studies. The reasons for excluding studies at the full-text stage were documented to ensure transparency and reproducibility.

PRISMA Flow Diagram

The study selection process followed PRISMA 2020 guidelines. The complete PRISMA Flow Diagram is presented in Figure 1.

Risk of Bias Assessment

Risk of bias was assessed using the Joanna Briggs Institute (JBI) Critical Appraisal Checklists suitable for each study design: cross-sectional, qualitative, or cohort. Each study was evaluated across sampling adequacy, measurement validity, confounder control, clarity of data analysis, and outcome reliability. Studies were rated as low, moderate, or high risk of bias. A full summary is presented in Table 1.

Ethical Considerations

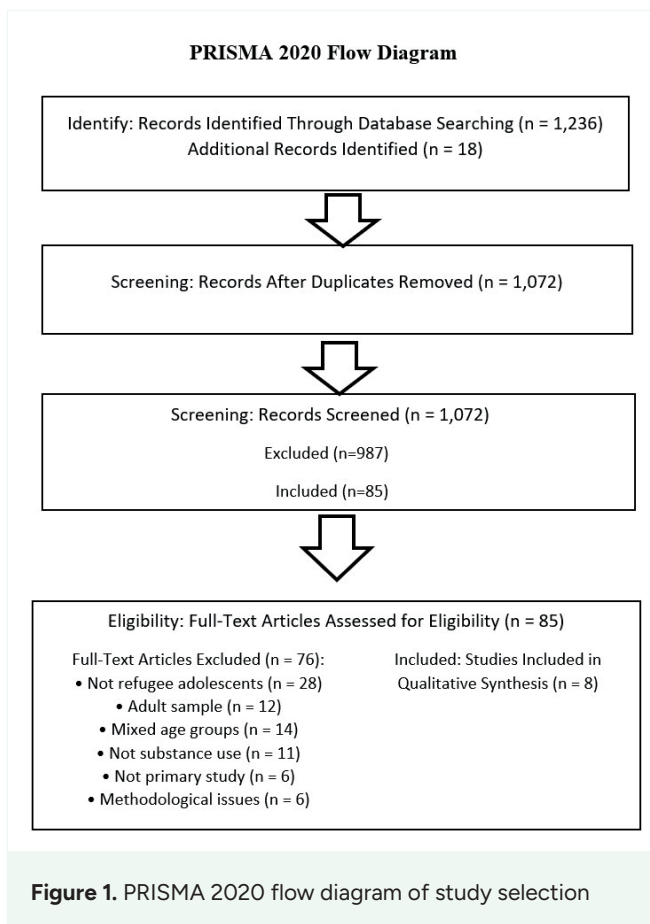
As this study does not involve any human participants or primary data collection, ethical approval was not required. The research was conducted in accordance with general principles of research and publication ethics.

Results

Study Characteristics

A total of eight studies met the inclusion criteria. These studies were conducted in Türkiye (n = 2), Australia (n = 2), Sweden (n = 1), Palestine (n = 1), Jordan (n = 1), and Serbia (n = 1). Six studies used a cross-sectional design, one used a registry-based cohort design, and one employed a qualitative design. Sample sizes ranged from 48 to 1,159 adolescents, and all studies focused specifically on refugee adolescents aged 10–19 years, or provided adolescent-specific analyses. A detailed summary of study features is presented in Table 2.

Across the selected studies, tobacco use emerged as the most frequently reported substance-related behavior. Higher cigarette and waterpipe smoking rates were consistently observed among male adolescents, particularly in Middle Eastern contexts (İlhan et al., 2021; Kheirallah et al., 2020). Waterpipe use was notably prevalent among adolescents exposed to displacement-related trauma and living in resource-limited environments (Kheirallah et al., 2020).



High-risk drug use was reported among Palestinian refugee adolescents residing in refugee camps, where socioeconomic stressors and peer influence played a central role (Snoubar et al., 2023). Alcohol-related health issues were also documented, with young refugees in Sweden experiencing significantly higher alcohol-related hospitalizations compared to native peers (Manhica et al., 2017). Patterns of illicit drug use, though less frequently measured, were more common among unaccompanied boys and adolescents exposed to prolonged migration stress or insecure housing arrangements (Vasic et al., 2021).

Table 1. Risk of Bias Assessment (JBI)

Study	Design	Sampling Adequacy	Measurement Validity	Confounder Control	Data Analysis Clarity	Outcome Reliability	Overall Bias
Kheirallah et al., 2020	Cross-sectional	Moderate	Moderate	Moderate	Clear	Moderate	Moderate
Snoubar et al., 2023	Cross-sectional	Moderate	Moderate	Low	Clear	Moderate	Moderate
Manhica et al., 2017	Cohort	High	High	High	Clear	High	Low
Posselt et al., 2017	Qualitative	High	High	N/A	Clear	High	Low
Hirani et al., 2018	Cross-sectional	Moderate	Moderate	Low	Clear	Moderate	Moderate
İlhan et al., 2021	Cross-sectional	Moderate	Moderate	Low	Clear	Moderate	Moderate
Vasic et al., 2021	Cross-sectional	Moderate	Moderate	Low	Clear	Moderate	Moderate
Taylan & Barış, 2017	Cross-sectional	Moderate	Low	Low	Moderate	Moderate	Moderate

Table 2. Characteristics of the included studies

Authors (Year)	Country	Sample	Study Design	Substance Type	Key Measures	Key Findings	Risk of Bias
Kheirallah et al., 2020	Jordan	1,159 Syrian refugee adolescents 12-18	Cross-sectional	Tobacco, waterpipe	Trauma exposure, PTSD, mental health, smoking patterns, social support	Trauma exposure and low social support significantly increased tobacco and waterpipe use; boys smoked more	Moderate
Snoubar et al., 2023	Palestine	427 Palestinian refugee adolescents aged 13–18	Cross-sectional	High-risk drug use, tobacco, energy drinks	Substance use behaviors, socioeconomic stressors, peer influence, family stress	High-risk drug use linked to poverty, family stress, and peer influence; boys reported higher use	Moderate
Manhica et al., 2017	Sweden	Young refugees arriving at ages 13–19 (national cohort)	Registry-based cohort	Alcohol-related disorders	Hospital admission records, migration age, follow-up data	Higher risks of alcohol-related admissions than native peers; risk varied by origin and migration age	Low
Posselt et al., 2017	Australia	48 refugee-background adolescents/youth (majority 15–19)	Qualitative (interviews, focus groups)	Alcohol, illicit drugs	Settlement stress, trauma, peer/family influence	Substance use as coping with trauma, discrimination, acculturation stress	Moderate
Hirani et al., 2018	Australia	233 refugee adolescents aged 12–19	Cross-sectional	Cigarettes, alcohol, other substances	Psych distress, acculturative stress, family functioning, social support	Distress, acculturative stress, poor family functioning increased substance use	Moderate
İlhan et al., 2021	Türkiye	356 Syrian refugee adolescents aged 12–18	Cross-sectional	Cigarettes, alcohol, volatile substances	Peer deviance, school connectedness, family conflict	Peer deviance and family conflict showed significant associations with substance use, while school connectedness was inversely associated with substance involvement.	Moderate
Vasic et al., 2021	Serbia	512 refugee/migrant adolescents aged 11–19	Cross-sectional	Cigarettes, alcohol, marijuana	Trauma history, migration stress, family separation	Substance use associated with trauma, family separation; unaccompanied boys at higher risk	Moderate
Taylan & Barış, 2017	Türkiye	302 Syrian refugee adolescents aged 12–17	Cross-sectional	Cigarettes, alcohol	Social integration, neighborhood safety, peer influence	Low social integration, unsafe neighborhoods increased substance use	Moderate

Several interrelated risk factors contributed to substance use among refugee adolescents. Exposure to war-related trauma and psychological distress was frequently linked with tobacco, alcohol, and drug use, suggesting that substances were sometimes used as maladaptive coping strategies (Hirani et al., 2018; Snoubar et al., 2023; Vasic et al., 2021). This was further supported by qualitative findings that identified coping with trauma, discrimination, and acculturative stress as primary drivers of substance use in resettled youth (Posselt et al., 2017). Acculturative stress, social isolation, and perceived discrimination were also associated with increased risk of substance use, particularly in settings where adolescents struggled with integration challenges (Hirani et al., 2018).

Family-related determinants were prominent across the studies. Low parental monitoring, family conflict, and weakened family cohesion were consistently associated with a higher likelihood of substance use (Hirani et al., 2018; İlhan et al., 2021). Peer influence emerged as one of the strongest predictors of substance use; adolescents with substance-using or deviant peers demonstrated substantially elevated risk (İlhan et al., 2021; Snoubar et al., 2023). Environmental factors, including unsafe neighborhoods, overcrowded living conditions, and limited access to structured recreational activities, further heightened vulnerability to substance use among refugee adolescents (Taylan & Barış, 2017; Vasic et al., 2021).

Despite the range of identified risks, several protective factors were also documented. Strong parental monitoring, supportive family relationships, school connectedness, and structured educational environments were identified as critical buffers that reduced substance use risk (Hirani et al., 2018; İlhan et al., 2021). Additionally, social support networks and a sense of community belonging were reported as protective influences that enhanced resilience and discouraged substance use among adolescents adjusting to new environments (Hirani et al., 2018; Taylan & Barış, 2017).

Finally, the risk of bias assessment indicated that most cross-sectional studies exhibited moderate methodological limitations, primarily related to sampling procedures and limited control for confounders. In contrast, the cohort study conducted in Sweden demonstrated low risk of bias, and the qualitative study showed strong methodological rigor (Manhica et al., 2017; Posselt et al., 2017). Overall, evidence quality was considered acceptable, though findings should be interpreted with attention to the predominance of cross-sectional designs (Table 2).

Discussion

This systematic review synthesizes evidence from eight empirical studies conducted across diverse sociocultural and displacement contexts. The findings consistently demonstrate that substance use is associated with a constellation of psychosocial, environmental, and migration-related stressors. However, because most included studies employed cross-sectional designs, these relationships cannot be interpreted as causal and instead reflect co-occurring vulnerabilities that require longitudinal validation.

Across settings such as Türkiye, Jordan, Sweden, Australia, Palestine, and Serbia, tobacco use including cigarette and waterpipe smoking emerged as the most frequently documented behavior. Tobacco and waterpipe use were associated with trauma exposure, psychological distress, limited social support, and socioeconomic hardship. Alcohol-related harms were more prominent in high-income resettlement contexts, where acculturation difficulties and integration challenges were linked with higher levels of alcohol consumption. Although less commonly assessed, illicit drug use was related to family separation, unaccompanied minor status, and unstable living arrangements, highlighting the compounded risks faced by highly vulnerable subgroups.

Trauma exposure and daily stressors stemming from forced displacement were among the most pervasive correlates of substance use. Several studies reported that higher levels of trauma were associated with increased involvement in tobacco, alcohol, or drug use. Qualitative findings further suggested that substances may serve as maladaptive coping strategies for managing discrimination, loss, and acculturative tension; nonetheless, such interpretations remain speculative without temporal evidence. Only one longitudinal study (Pfeiffer et al., 2022) demonstrated that cumulative traumatic events and ongoing stressors may predict changes in mental

health symptoms over time, which were subsequently linked with substance use. Despite this contribution, research directly examining predictive pathways to substance use among refugee adolescents remains limited.

Family and peer dynamics constituted another major domain influencing substance use. Weak parental monitoring, family conflict, and disrupted caregiving arrangements were strongly associated with higher substance use, whereas supportive family relationships and engaged parenting functioned as protective factors. Peer influences displayed similarly robust patterns: engagement with deviant, substance-using, or high-risk peer groups was consistently related to increased substance involvement. These findings align with developmental research indicating that peer affiliation becomes especially influential during adolescence—a process intensified in displacement contexts where social belonging is both urgently needed and difficult to secure.

Structural and environmental conditions further shaped vulnerability. Limited access to education, poverty, unsafe neighborhoods, and unstable housing were associated with elevated substance use. Unaccompanied minors were consistently identified as a high-risk subgroup; across studies, their substance use levels were linked with the absence of stable adult supervision, disrupted social environments, and heightened exposure to stress. These patterns underscore the intersection of developmental sensitivity, displacement-related adversity, and structural inequities.

Despite these risks, several protective mechanisms emerged. School connectedness, community belonging, structured recreational activities, and supportive peer relationships were associated with lower levels of substance use. These findings highlight the importance of strengthening multi-level protective systems tailored to adolescents' developmental needs and displacement experiences.

Methodologically, the evidence base exhibited considerable heterogeneity. The reliance on cross-sectional designs and non-probability sampling limits both temporal interpretation and generalizability. Substantial variation in measurement tools, substance categories, and migration-related variables further complicates comparative analysis. Only one longitudinal and one qualitative study demonstrated stronger methodological rigor, underscoring an urgent need for more robust designs.

Taken together, the reviewed evidence suggests that substance use among refugee adolescents is associated with the cumulative interaction of trauma exposure, psychosocial distress, peer and family dynamics, and structural disadvantages. While consistent correlational patterns were identified, causal mechanisms cannot be inferred. Future research should prioritize longitudinal and mixed-methods approaches to clarify temporal pathways, examine developmental variations (early vs. middle vs. late adolescence), explore gender differences, and investigate mechanisms underlying substance use vulnerability,

particularly among unaccompanied minors and adolescents living in camp-based or highly insecure environments.

Developmentally Sensitive Interpretation of Findings

Beyond these general patterns, integrating developmental science provides a more nuanced understanding of why substance use vulnerability varies across refugee adolescents. Adolescence encompasses distinct biological and psychosocial phases, and displacement-related hardship may intersect differently with each stage.

Early adolescents (10–13) experience heightened emotional reactivity and limited regulatory capacity, which may intensify the impact of trauma, family disruption, and environmental instability (Lustig et al., 2004; Steinberg, 2014). Middle adolescents (14–16), who show peak sensitivity to peer influence and social belonging (Somerville, 2013), may be particularly affected by deviant peer networks, consistent with findings linking peer deviance to substance use (İlhan et al., 2021; Snoubar et al., 2023). Late adolescents (17–19), undergoing identity exploration and autonomy seeking, may be more likely to experiment with alcohol and tobacco, especially in high-income host settings where substance availability and social exposure are greater (Patton et al., 2016).

Gender-specific pathways further shape vulnerability. Male refugee adolescents frequently demonstrate higher tobacco and substance use—patterns often linked to impulsivity and externalizing behaviors (Moffitt, 2018). Female adolescents may exhibit higher internalizing symptoms such as anxiety and depression (Vatansever & Erden, 2018), which could increase susceptibility to coping-related substance use. In addition, gender-based acculturative pressures—such as restrictions on girls' mobility or expectations on boys to adopt host-country masculine norms—may reinforce distinct behavioral pathways (Hirani et al., 2018).

Pubertal timing represents another underexamined but influential factor. Early pubertal onset, associated with increased sensation seeking and greater responsiveness to peer influence, is a strong predictor of substance use across populations (Casey et al., 2016; Delevich et al., 2021). For refugee adolescents, chronic stress and adversity may alter pubertal trajectories (Felitti et al., 1998; Pfeiffer et al., 2022), potentially heightening risk. None of the included studies assessed pubertal timing, indicating an important gap for future research.

Finally, caregiving status distinguishes risk profiles across refugee youths. Unaccompanied minors—lacking parental monitoring and support—experience higher distress and more frequent substance use, consistent with prior research (Vasic et al., 2021). Accompanied adolescents generally benefit from emotional stability and supervision (Manhica et al., 2017), although these protective factors may diminish under camp or overcrowded living conditions.

Public Health Implications

The findings of this review point to several evidence-based public health implications. First, the consistent association between trauma, psychological distress, and substance use across multiple studies (e.g., Pfeiffer et al., 2022; Vatansever & Erden, 2018) highlights the need for trauma-informed mental health programs targeting refugee adolescents. Second, evidence showing that school connectedness is protective (İlhan et al., 2021; Snoubar et al., 2023) suggests that strengthening school engagement and retention should be a priority in prevention efforts. Third, studies identifying weakened parental monitoring and disrupted caregiving as risk factors (Manhica et al., 2017; Vasic et al., 2021) indicate that family-focused interventions may reduce substance use vulnerabilities.

Peer influence emerged as a strong correlate of substance use (İlhan et al., 2021; Snoubar et al., 2023), underscoring the need for programs that promote prosocial peer networks and safe community spaces. Additionally, evidence of heightened risk among unaccompanied minors (Vasic et al., 2021) supports prioritizing specialized services such as safe housing, mentorship programs, and tailored psychosocial support. Finally, structural determinants including poverty, unsafe neighborhoods, and unstable housing were associated with increased substance use involvement, emphasizing the importance of integrating public health strategies with broader social policies addressing social determinants of health.

Together, these implications call for multilevel interventions that address individual, family, peer, and environmental factors to reduce substance-related harms among refugee adolescents.

Conclusion

This review indicates that substance use among refugee adolescents is associated with multiple psychosocial, developmental, and structural factors across diverse displacement settings. Tobacco use was the most frequently reported behavior, while alcohol and illicit substance use appeared more prominently in resettlement contexts marked by acculturative stress. These patterns were consistently linked with trauma exposure, psychological distress, weakened family supervision, and deviant peer networks, whereas school connectedness and supportive relationships were associated with lower substance involvement.

Due to the predominance of cross-sectional designs, these relationships should not be interpreted as causal. Only one longitudinal study offered preliminary evidence that cumulative trauma may predict changes in mental health that are related to substance use. More rigorous longitudinal and mixed-methods studies are needed to clarify temporal pathways, developmental differences, and mechanisms of vulnerability, particularly among unaccompanied minors.

Overall, the findings of this review suggest that substance use among refugee adolescents should be conceptualized as a multidimensional public health concern shaped by displacement-related adversity and developmental sensitivity. It is recommended that prevention and intervention strategies be designed to strengthen protective systems and reduce risk in this highly vulnerable population. This review makes a unique and original contribution by integrating empirical evidence across diverse displacement contexts and highlighting the combined influence of trauma, psychosocial stressors, and structural vulnerabilities on substance use among refugee adolescents.

Limitations and Future Directions

Although this review provides a comprehensive synthesis of the literature on substance use among refugee adolescents, several limitations should be noted. Most included studies employed cross-sectional designs, limiting causal inference between risk factors and substance use behaviors. In addition, the evidence base is largely derived from high-income Western countries, whereas data from low- and middle-income host settings remain limited, constraining the generalizability of the findings.

Further limitations include substantial heterogeneity across studies in terms of refugee populations, migration contexts, age, gender, and cultural background, as well as the underrepresentation of female adolescents and inconsistent use of standardized measurement tools.

Future research should prioritize longitudinal and mixed-method approaches to better elucidate temporal pathways linking trauma exposure, acculturative stress, and substance use. Greater integration of biological, psychological, and sociocultural perspectives is needed, alongside intervention-based studies evaluating culturally adapted prevention and treatment programs. Strengthening cross-national research collaboration will be essential to inform evidence-based public health responses to substance use among refugee adolescents.

Author contributions

Conception and design: T.A.G.; Data acquisition: T.A.G.; Data analysis: T.A.G.; Data interpretation: T.A.G.; Drafting of the manuscript: T.A.G.; Critical revision of the manuscript: T.A.G. The author reviewed the results, approved the final version of the manuscript, and agreed to be accountable for all aspects of this study.

Data availability statement

Data sharing is not applicable to this article as no new datasets were generated or analyzed during this study.

Conflict of interest

The author declares that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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The author declares that during the preparation of this study, the following AI-assisted technology was used: ChatGPT (OpenAI) on 2025–2026. Extent of Use: AI-assisted tools were used for language editing, grammar correction, and improving the clarity and readability of the manuscript. The author confirms that she has critically reviewed and edited any AI-generated content and takes full responsibility for the integrity, accuracy, and originality of the publication. The author certifies that the original human contribution is maintained and that AI-assisted tools are not listed or cited as authors.

References

- Akgün, A. (2023). A historical framework on the educational problems of migrant children in Turkey. *Turkish Journal of Social Research*, 27(2), 395–406. <https://izlik.org/JA99JW24AK>
- Alpaslan, A. H. (2012). Ergen ruh sağlığı ve spor. *Kocatepe Tıp Dergisi*, 13(3), 181–185. <https://izlik.org/JA57TH62RW>
- Bilecik, S. (2019). A quantitative study on the social skills of refugee children based on peer perceptions. *Journal of Divinity Faculty of Hitit University*, 18(35), 287–314. [\[Crossref\]](#)
- Casey, B. J., Galván, A., & Somerville, L. H. (2016). Beyond simple models of adolescence to an integrated circuit-based account: A commentary. *Developmental Cognitive Neuroscience*, 17, 128–130. [\[Crossref\]](#)
- Daher, B., Hamie, S., Pappas, K., Karim, M. N., & Thomas, T. (2021). Toward resilient water-energy-food systems under shocks: Understanding the impact of migration, pandemics, and natural disasters. *Sustainability*, 13(16), 9402. [\[Crossref\]](#)
- Delevich, K., Klinger, M., Okada, N. J., & Wilbrecht, L. (2021). Coming of age in the frontal cortex: The role of puberty in cortical maturation. *Seminars in Cell & Developmental Biology*, 118, 64–72. [\[Crossref\]](#)
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245–258. [\[Crossref\]](#)
- Golopeni, B. (2020). Socio-economic situation of Kosovan migrants before and after migration. *Traektoriâ Nauki*, 6(10), 3001–3009. [\[Crossref\]](#)
- Güntay, N. (2023). Analyzing the new war concept within the context of the September 11 attacks and terrorism. *Firat University Journal of Social Sciences*, 33(2), 889–905. [\[Crossref\]](#)

- Hirani, K., Cherian, S., Mutch, R., & Payne, D. N. (2018). Identification of health risk behaviours among adolescent refugees resettling in Western Australia. *Archives of Disease in Childhood*, 103(3), 240-246. [\[Crossref\]](#)
- İlhan, M. N., Ekmekçi Ertek, İ., Gözükar, M. G., Akıl, Ö., Ursu, P., Ergüder, T., Polat, S., Şimşek, M. Y., Aktaş, M., Gazanfer, Ö. B., Özger İlhan, S., & Kaptan, H. (2021). Substance use in refugee camps and local community: Şanlıurfa sample. *Archives of Neuropsychiatry*, 58, 121-127. [\[Crossref\]](#)
- Kara, P., & Nazik, E. (2018). Effect of migration on women and children's health. *Gümüşhane University Journal of Health Sciences*, 7(2), 58-69. <https://dergipark.org.tr/en/download/article-file/505816>
- Kheirallah, K. A., Cobb, C. O., Alsulaiman, J. W., Alzoubi, A. H., Kana'an, H., & Mzayek, F. (2020). Trauma exposure, mental health and tobacco use among vulnerable Syrian refugee youth in Jordan. *Journal of Public Health*, 42(3), e343-e351. [\[Crossref\]](#)
- Lustig, S. L., Kia-Keating, M., & Knight, W. G. (2004). Review of child and adolescent refugee mental health. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43(1), 24-36. [\[Crossref\]](#)
- Manhica, H., Gauffin, K., Almquist, Y. B., Rostila, M., Berg, L., Rodríguez García de Cortázar, A., & Hjern, A. (2017). Hospital admissions due to alcohol-related disorders among young adult refugees who arrived in Sweden as teenagers: A national cohort study. *BMC Public Health*, 17, 644. [\[Crossref\]](#)
- Moffitt, T. E. (2018). Male antisocial behaviour in adolescence and adulthood: Developmental trends and explanations. *Nature Human Behaviour*, 2, 177-186. [\[Crossref\]](#)
- Morales-Muñoz, H., Jha, S., Bonatti, M., Alff, H., Kurtenbach, S., & Sieber, S. (2020). Exploring connections—environmental change, food security and violence as drivers of migration—a critical review of research. *Sustainability*, 12(14), 5702. [\[Crossref\]](#)
- Özaslan, K. (2023). Dış'tan iç'e evrilen bir kitlesel göç: Türkiye'nin Suriyelileri. *Akademik Yaklaşımlar Dergisi*, 14(1), 115-143. [\[Crossref\]](#)
- Patton, G. C., Sawyer, S. M., Santelli, J. S., Ross, D. A., Afifi, R., Allen, N. B., Arora, M., Azzopardi, P., Baldwin, W., Bonell, C., Kakuma, R., Kennedy, E., Mahon, J., McGovern, T., Mokdad, A. H., Patel, V., Petroni, S., Reavley, N., Taiwo, K., ...Viner, R. M. (2016). Our future: A Lancet commission on adolescent health and wellbeing. *The Lancet*, 387(10036), 2423-2478. [\[Crossref\]](#)
- Pfeiffer, E., Behrendt, M., Adeyinka, S., Devlieger, I., Rota, M., Uzureau, O., Verhaeghe, F., Lietaert, I., & Derluyn, I. (2022). Traumatic events, daily stressors and posttraumatic stress in unaccompanied young refugees during their flight: A longitudinal cross-country study. *Child and Adolescent Psychiatry and Mental Health*, 16(1), 26. [\[Crossref\]](#)
- Posselt, M., McDonald, K., Procter, N., de Crespigny, C., & Galletly, C. (2017). Improving the provision of services to young people from refugee backgrounds with comorbid mental health and substance use problems: Addressing the barriers. *BMC Public Health*, 17(1), 280. [\[Crossref\]](#)
- Sharp, C., Vanwoerden, S., & Wall, K. (2018). Adolescence as a sensitive period for the development of personality disorder. *Psychiatric Clinics of North America*, 41(4), 669-683. [\[Crossref\]](#)
- Snoubat, M., Kasim, S., Badawi, M., Shaban, Q., AbuAlrub, I., Hunjul, M., Khelfeh, N., Abuhassan, A., Hanani, A., Bilbeisi, S., & Damiri, B. (2023). High-risk drug use among Palestinian adolescent refugees in the North West Bank Palestine. *Journal of Ethnicity in Substance Abuse*, 24(1), 3-22. [\[Crossref\]](#)
- Somerville, L. H. (2013). The teenage brain: Sensitivity to social evaluation. *Current Directions in Psychological Science*, 22(2), 121-127. [\[Crossref\]](#)
- Steinberg, L. (2014). *Age of opportunity: Lessons from the new science of adolescence*. Houghton Mifflin Harcourt.
- Taylan, H. H., & Barış, İ. (2017, January). Göç sürecindeki Diyarbakır'da çocuklarda madde kullanım eğilimleri [Paper presentation]. Transnational Press London.
- United Nations High Commissioner for Refugees. (2018). 1951 Convention relating to the status of refugees and its 1967 Protocol: Definition of "refugee". <https://www.unhcr.org/about-unhcr/who-we-protect/refugees/>
- United Nations High Commissioner for Refugees. (2022). *Global report 2022*. <https://reporting.unhcr.org/global-report-2022>
- United Nations High Commissioner for Refugees. (2023). *Figures at a glance*. <https://www.unhcr.org/us/about-unhcr/who-we-are/figures-glance>
- Uygun, S. D., Temeltürk, R. D., Efe, A., Canlı, M., Çetinkaya, M., & Çakmak, F. H. (2023). A retrospective analysis of the demographic and clinical characteristics of migrant children and adolescents. *Journal of Adnan Menderes University Faculty of Health Sciences*, 7(3), 662-673. [\[Crossref\]](#)
- Vasic, J., Grujicic, R., Toskovic, O., & Pejovic Milovancevic, M. (2021). Mental health, alcohol and substance use of refugee youth. *Frontiers in Psychiatry*, 12, 713152. [\[Crossref\]](#)
- Vatansever, M., & Erden, G. (2018). Mülteci çocuklar ve ergenler ile yapılan psikolojik görüşme üzerine bir derleme. *Journal of Child and Adolescent Mental Health*, 25(2), 175-186. <https://cogepderg.com/tr/makaleler/multeci-cocuklar-ve-ergenler-ile-yapilan-psikolojik-gorusme-uzerine-bir-derleme/27691>
- Yaman, F. (2022). The Euro-Turks' sense of belonging and perceived othering scale: A validity and reliability study. *İçtimaiyat: Journal of Social Sciences*, 6, 213-228. [\[Crossref\]](#)

Navigating power in outreach youth work: Relationship-based approaches to substance use prevention

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Abstract

Outreach youth work, defined as relationship-based social work conducted in young people's own environments, aims, among other things, to identify and prevent substance use by building relationships and connecting individuals to relevant services. This is critical when engaging marginalized groups, such as migrant and refugee youth, who may face vulnerabilities related to resettlement, trauma, and social exclusion, as well as youth in open drug scenes, with a high prevalence of adverse childhood experiences. The task has an inherent tension between providing support and exerting varying degrees of professional power, which may shape how outreach youth workers sustain their relevance in contexts where substance use holds meaning for youth. This article draws on two qualitative studies based on semi-structured interviews and focus groups with 12 outreach youth workers from a large outreach service in a major Norwegian city. Both studies explored relationship-building in marginalized urban environments, and the combined analysis examined how power influences outreach youth workers' ability to prevent substance use.

The analysis indicates that outreach youth workers are well-positioned to reach and build relationships with youth, such as youths involved in buying, selling, and using illegal substances. Power dynamics play a significant role in this interaction. Enduring rejection, professional transparency, and professional reflection may reduce the impact of power when building relationships. Finally, we propose how the article's findings can be integrated into practice and recommend future research.

Keywords: outreach youth work, relationships, youth in marginalized environments, power

Main points

- Consistent presence in youths' environments reduces power imbalances and fosters trust compared to office-based settings.
- Balancing supportive roles with necessary control measures is critical, as interventions like mandatory reporting can undermine trust unless handled with integrity and clear communication.
- Enduring rejection is important for getting into a position to reach youth. It requires understanding why rejection occurs, while remaining patient, because building relationships takes time.
- Substance use often holds personal and social meaning for youth. Acknowledging this when meeting rejection enables more equitable and dialogical relationships.
- Professional integrity and continuous reflection on power dynamics are essential for maintaining trust and ethical practice.
- Organizational support and culturally sensitive strategies are needed to help practitioners manage power-related dilemmas and strengthen outreach work and prevent marginalization.

Introduction

In response to growing concerns about substance use among youth in urban areas, outreach youth work (OYW)

was established in Norway in 1969. The initiative aimed to address emerging needs that the traditional support system was not equipped to meet. OYW has a long-standing tradition of facilitating contact between services and hard-to-reach

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youth, aiming to counteract social exclusion (Crimmens et al., 2004; Erdal, 2006). OYW is often directed towards youth who are at risk of, or already facing, challenges related to addiction, substance use and criminal behavior, or youth in challenging life situations, such as newly arrived unaccompanied minor refugees. The purpose of OYW is to identify and support individuals at an early stage, preventing negative development (Erdal, 2006), often by connecting individuals to relevant services, and functioning as bridge builders (Chabchoub et al., 2024). OYW is described with three modes of practice (Skjesol et al., 2026): outreach, follow-up and mapping. In the outreach mode, social workers engage with a broad range of the youth population. In the follow-up mode, they bridge the gap between youth and a diverse selection of support systems. In the mapping mode, they inform decision-makers about youth culture and trends. OYW begins with presence in youth environments to assess needs and approaches, where visibility and continuity foster recognition, predictability, and openness to change (Erdal, 2006, pp. 137-139). Contact is typically initiated by workers approaching youth where they spend time, a process potentially marked by rejection, distrust, or hostility, which outreach workers must be prepared for and, in some cases, respond to by withdrawing for safety reasons (Davidson, 2020; Erdal, 2006; Henningsen, 2009; Strømfor, 2006). Targeting youth based on challenges or risk factors may shape interpretations and reinforce stereotypes, highlighting the need for critical reflection on categorization (Henningsen, 2009). Trust is fundamental to relationship-building, yet particularly complex for youth with histories of broken relationships, placing outreach youth workers in an ongoing tension between relational work and elements of social control (Davidson, 2020; Walsh, 2021).

Both Norwegian and international research emphasizes the importance of relationship-building in OYW (Åkerblom et al., 2026; Andersson, 2013; Connolly & Joly, 2012; Oldeide et al., 2020a). Previous studies have mainly examined trust-building, access to hard-to-reach youth, and the supportive role of OYW (Crimmens et al., 2004; Davidson, 2020). While these studies highlight the value of flexible and voluntary approaches, they pay less attention to how outreach workers handle tension related to rejection, professional authority, and social control in everyday practice. Consequently, there is limited knowledge about how power dynamics shape relationship-building in OYW when working with substance use in marginalized environments.

This article explores how OYW facilitates relationship-building with youth in marginalized environments to prevent substance use, as well as other issues, and how power and control dynamics influence this process. We draw on two qualitative studies (Chabchoub, 2022; Jacobsen, 2022) with overlapping findings, and we reanalyze the data with a focus on methodological and organizational aspects of OYW and how these are shaped by power and control. The purpose of the original studies was:

1. To explore how outreach youth workers experience relational work with youth in high-risk urban environments

2. To understand how OYW can initiate and build relationships between marginalized youth and the helping systems.

This article reanalyzes both studies with a shared focus on methodological and organizational aspects of OYW, examining how these are shaped by power and control, and with an explicit focus on youth with substance-use challenges and youth with refugee and migrant backgrounds. Through this reanalysis, we gain insights that were not explicitly addressed in the original studies. It provides a more critical and structural understanding of how OYW is shaped by different forms of power and organizational conditions. The findings offer insights into improving preventive efforts targeting vulnerable youth.

OYW is a suitable approach for working towards, establishing contact with, and engaging marginalized groups. One of the studies implies that youths from ethnic minority backgrounds were overrepresented among marginalized individuals in contact with that outreach service. Short duration of residency in Norway, language barriers, and cultural differences were identified as risk factors (Chabchoub, 2022).

From the mid-1970s to 2025, Norway has received refugees fleeing war and conflict from different parts of the world. Unaccompanied minors have also been a significant group. Today, Norway has about 965,000 immigrants and 230,000 Norwegian-born with immigrant parents, representing roughly 21% of the population (Statistics Norway, 2025). Norway has become increasingly diverse, with immigrant and refugee youth forming a significant part of this demographic shift. Many of them face unique vulnerabilities in their integration into Norwegian society (Norozi, 2025). In Norway, refugee work is based on a combination of national programs, municipal programs, local initiatives and NGO support. Refugees participate in the *Introduction Programme*, which provides language training, education, and work-related activities (IMDi, 2024). After this initial phase, refugees have access to the same public services as residents, supplemented by targeted support from NGOs and community-based projects that offer cultural adaptation, mentoring, and social inclusion activities (Norozi, 2025). The latter services and projects often also target Norwegian youth who have developed, or are in the process of developing, substance abuse. Research into unaccompanied minors and youth struggling with substance abuse has found that both groups have a high prevalence of trauma and dysfunctional stress regulation (Daniel-Calveras et al., 2022; Hoffmann & Hoffmann, 2025; Vasic et al., 2021). These vulnerabilities may influence how authority, trust, and support are perceived, making power dynamics particularly relevant in relationships with these groups.

Hence, the research question guiding this article is: *How do power and control influence outreach youth workers' substance use prevention practices through relationship-building with youth in marginalized environments?*

We use the term *youth in marginalized environments*, which acknowledges that vulnerability may stem from poverty,

crime, substance use, violence, or other structural factors (Lid et al., 2022). Our perspective is grounded in the view that these youth are in difficult life situations, not inherently difficult themselves. From this standpoint, we examine the scope of opportunity for outreach youth workers to build relationships, with particular attention to the role of power.

Theoretical framework: Critical Youth Studies, Power and Cultural Capital in Substance Use Prevention and Outreach Youth Work

Critical Youth Studies (CYS) is characterized by a critical engagement with theories of individualization and risk that have been influential in youth research (Merchant, 2013; Woodman et al., 2020). Rather than assuming that youths' life chances are primarily shaped by individual choice, CYS emphasizes the continuing significance of structural inequalities in shaping youth trajectories (Furlong, 2016). It provides a theoretical framework that challenges individualized and deficit-oriented understandings of youth by situating young people's lives within broader social, cultural, and structural power relations. From this perspective, CYS aligns with Bourdieusian analyses of power and capital, while offering a critical lens on how youth are governed, represented, and engaged within welfare and outreach contexts.

Power is a fundamental aspect of social life, with both positive and negative implications (Payne, 2006). Various theorists highlight the diverse ways power manifests and the importance of its distribution within relationships (Engelstad, 2005). Social work services inherently involve power, as they aim to meet needs, such as housing, financial support, or assessments of care capacity. The social worker's role, discourse, and context shape how power dynamics unfold and influence relationships (Payne, 2006). Those seeking help are often in vulnerable positions, implicitly holding less power (Engelstad, 2005). Power also influences how youth are perceived and treated, for instance, by categorizing them in specific ways (Henningsen, 2009).

Power exists in all relationships, though it may be negligible in everyday interactions. In more meaningful relationships, vulnerability increases, making individuals more susceptible to powerlessness (Engelstad, 2005). To avoid such positions, people often seek control over situations. Bourdieu (1995) emphasized that social and cultural resources, which he termed cultural capital, determine one's position within a given context. Those possessing valued knowledge or assets tend to occupy higher positions in social hierarchies (Bourdieu, 1995).

The purpose of substance use can be connected to power and powerlessness. Skjælaaen (2019) explains that there are multiple perspectives on the meaning of substance use. What represents joy and a sense of community for some may be seen as deviance and criminality by others. Although substance use is a subjective experience, it is important to consider the social and cultural surroundings, as they influence the individual's own meaning-making. The act of using substances to escape, often referred to as getting high to get away, rather than to

feel good, reflects a psychological and social dimension of substance use. It can come from a desire to escape from themselves and from others, seeking relief from emotional distress, social isolation, or the monotony of everyday life (Edland-Gryt et al., 2025).

Methods

Design and Approach

This article is based on two master's theses written by the first and second authors. Both studies explored outreach youth workers' experiences with relationship-building in marginalized urban environments: one through two focus groups, each with four participants, and the other through four individual interviews. Due to overlapping findings, we reanalyzed the data sets from the original studies to examine how power and control influence relational work when working with substance use and youth. The reanalysis followed an inductive approach, where themes related to power and control emerged from the data. Relevant theoretical concepts were subsequently introduced to interpret the findings.

Participants and Data Collection

Participants were recruited through purposive sampling, targeting individuals with direct experience in outreach youth work. Inclusion criteria required a professional background as a social worker, child welfare worker, social educator, or peer support worker, and a minimum of three years of experience. The total sample consisted of 12 participants. All participants were employed in a large outreach service in a major Norwegian city. Data were collected through semi-structured individual interviews and focus groups using comparable interview guides covering methods, dilemmas, power dynamics, and relational perspectives in OYW (Chabchoub, 2022; Jacobsen, 2022). Interviews and focus groups lasted between 45 and 90 minutes and were conducted in person. The sample consisted of four women and eight men, reflecting a gender imbalance skewed towards men compared to the broader population of social workers in Norway (Statistics Norway, 2024).

Ethical Considerations

Both studies were approved by Sikt, the Norwegian agency for shared services in education and research, and conducted in accordance with submitted protocols (ref. nos. 918630 and 439669). Participants' anonymity was ensured throughout the research process and informed consent was obtained.

Data Analysis

We applied Malterud's (2012) method of systematic text condensation in both the original studies and the reanalysis. Systematic text condensation is a stepwise, cross-case thematic analysis aimed at identifying, condensing, and synthesizing meaning across qualitative data (Malterud, 2012). The method involves four main steps: gaining an overall

impression, identifying meaning units, condensing these into thematic codes, and synthesizing them into analytical descriptions. It provides a structured and transparent analytical procedure and is particularly suited for descriptive, practice-oriented research. It was chosen because it facilitates systematic comparison across datasets and supports the development of shared categories in reanalysis. An overview of the analytical process, from initial coding to synthesis and presentation of findings, is provided in Table 1.

Audio recordings were transcribed before analysis. Data from focus groups and individual interviews were analyzed using the same analytical procedure and treated as complementary sources in the cross-case comparison. Each dataset was first analyzed separately, followed by a comparison that identified similarities and differences between themes. Overlapping themes related to power, control, and relationship-building were merged into shared analytical categories, which formed the basis for the combined interpretation. The reanalysis led to the emergence of new themes and subgroups, particularly related to power and control. An overview of the main themes, subgroups, and analytical codes identified in the analysis is presented in Table 2.

Results

OYW, like other forms of relational work, is shaped by power structures, among other things, by influencing trust, openness, and how youth interpret professionals' authority. This is particularly evident as practitioners must navigate

the tension between relationship-building and social control (Davidson, 2020; Henningsen, 2009), hold information that may trigger interventions (Erdal, 2006), and operate within problem-oriented frameworks that risk reinforcing stereotypical interpretations of youth unless they are critically reflected upon (Henningsen, 2009). Our analysis shows that several aspects of the practice can contribute to reducing the influence of these power dynamics.

Influencing Power Dynamics through Presence and Contact on Youths' Arenas

The outreach youth workers describe being present in youths' own environments as a cornerstone of outreach practice, shaping both how relationships begin and how power is experienced:

"The fact that we are on their turf, I believe, has a significant impact on power structures and the experience of powerlessness. For the youth, meeting someone where they hang out, compared to entering an office... it provides a completely different starting point for building relationships and trust." (Participant 1, individual interview)

Consistent presence is seen as essential for accessibility and trust. Spending time where youth are, makes outreach workers recognizable and approachable: *"It can help us get to know someone who has been difficult to even say hi to."* (Participant 2, individual interview). Visibility also reduces

Table 1. The analytical process from overall impressions to results

THEME	SUBGROUP	CONDENSATION	PRESENTATION WITH QUOTE
Relational work and power	Exercising power and control	<i>Some outreach youth workers described the control aspect of their role as challenging and potentially damaging to their ability to build relationships. At the same time, they emphasized that control can be necessary in acute situations, particularly when young people place themselves in potentially dangerous circumstances and need immediate help. It was important for them to assess what required urgent referrals and what could wait.</i>	Some outreach youth workers described the control aspect of their role as challenging and potentially damaging to their ability to build relationships. At the same time, they said that control can be necessary in acute situations, particularly when youth place themselves in potentially dangerous circumstances and need immediate help. It was important for them to assess what required urgent referral and what could wait: <i>"How much are we really helping the youth if we call the police right away? What if we could get them into a dialogue and have them tell us what might make life a little better for them?"</i> (Participant 3, individual interview)
Examples of meaning units under codes powerlessness, power balance, help vs control and integrity:			
<i>"I also believe that being on their turf has a significant impact on the power structure and the experience of powerlessness. For the youth, meeting someone where they hang out - compared to walking into an office - is a huge difference. It creates a completely different starting point for building relationships and trust."</i>			
<i>"We're supposed to build trust and create relationships, right? But at the same time, we also have to exercise a form of control, which can be quite painful for that person's life."</i>			
<i>"There was a person we met who we thought was 19... It turned out he was 16, and then the duty to report to child welfare applies. He wanted support in a court case, a school placement, a job offer, but after the report of concern, he cut off contact."</i>			
<i>"How much are we really helping the youth if we call the police right away? What if we could get them into a dialogue and have them tell us what might make life a little better for them?"</i>			Another outreach youth worker explained the tension between support and control with the following example: <i>"There was a person we met who we thought was 19... It turned out he was 16, and then the duty to report to child welfare applies. He wanted support in a court case, a school placement, a job offer, but after the report of concern, he cut off contact."</i> (Participant 3, focus group 1)

Table 2. Overview of themes, subgroups and codes

Theme	Subgroups	Codes
Relational Work and Power	Influencing Power Dynamics through Presence and Contact on Youth Arenas	Presence over time
		Observation
		Arena flexibility
	Exercising Power and Control	Power balance
		Powerlessness
		Integrity
		Help vs. control
	Enduring Rejection to Build Relationships?	Power dynamics
		Patience
		Systematic effort
		Accepting rejection

the likelihood of being mistaken for police and creates opportunities for spontaneous contact:

"We also need to be visible where they are and make ourselves approachable. So that the youth can talk to us. These things are important to break the ice. It's important that, for them to trust us, we who are out doing outreach youth work are trustworthy adults." (Participant 4, focus group 1)

Being present over time in the youths' environments is considered to contribute to a more balanced power dynamic between youth and social workers:

"The power balance is perhaps more equal when I work out on the street with relationships than if, for example, I were a caseworker or worked in a child protection institution. That automatically creates a different kind of power dynamic. So those kinds of structural conditions tied to the professional role... they can have an impact." (Participant 3, individual interview).

Although the outreach youth workers stress the importance of presence and continuity for building relationships, some also point to challenges. These included the risk that some youth might feel surveilled by constant presence: *"You've already assessed that this might be a vulnerable youth or young adult. So, there's a reason why you're initiating contact."* (Participant 3, individual interview). If outreach youth workers observe without engaging, their presence may be misinterpreted. Some reflected on their professional power to define and frame what they see: *"We have the power to define, and the ability to frame young people's challenges to the broader support system or to society in general."* (Participant 1, individual interview). These reflections describe how participants considered both the possibilities and the challenges associated with being present in young people's environments.

Exercising Power and Control

Some outreach youth workers describe the control aspect of their role as challenging and potentially damaging to their ability to build relationships. At the same time, they say that

control can be necessary in acute situations, particularly when youth place themselves in potentially dangerous circumstances and need immediate help. It is important for them to assess what needs urgent referral and what can wait: *"How much are we really helping the youth if we call the police right away? What if we could establish a dialogue with them and have them tell us what might make life a little better for them?"* (Participant 3, individual interview)

Another outreach youth worker explains the tension between support and control with the following example:

"There was a person we met who we thought was 19... It turned out he was 16, and then the duty to report to child welfare applies. He wanted support in a court case, a school placement, a job offer, but after the report of concern, he cut off contact." (Participant 3, focus group 1)

The impact of such acute control interventions is described by several outreach youth workers, though with differing perspectives. One explains that in some cases, building a strong relationship was not necessarily part of their role, and they instead relied on the trust placed in the broader support system: *"In that moment, I may not have defined my professional role as building a strong relationship, and therefore I leaned on the trust in the rest of the system."* (Participant 3, focus group 2)

This highlights a core dilemma in the control role, deciding what constitutes the best form of help at a given moment. Is immediate intervention necessary, or is it better to allow time to work toward change through the relationship? The outreach youth worker in the case of the 16-year-old reflects: *"I understand the duty to report, but at the same time, I wonder whether it might have been better if I could have continued working based on the relationship I had established."* (Participant 3, focus group 1). Another outreach youth worker explains how control can lead to rejection and a lost opportunity to help:

"I've experienced rejections where I never gained access again because the first contact was dramatic. That's a dilemma for the entire system's ability to gain a foothold, because the rest of the system doesn't always manage to fix these young people's lives." (Participant 3, focus group 2)

Other outreach youth workers describe how setting clear boundaries does not have to conflict with relationship-building. In some cases, it could even strengthen the relationship. One says: *"We have to work together. I've experienced that it works, to both have a control role and build a relationship."* (Participant 2, individual interview), emphasizing the importance of involving the youth in the process. Because the outreach role involves power and control functions, clarifying expectations and maintaining transparency is seen as essential: *"It's a lot about integrity, not promising things you can't deliver, and not doing things behind the youths' backs."* (Participant 4, individual interview). This helps reduce the risk of broken trust and prevents misunderstandings later.

Enduring Rejection to Build Relationships?

Being rejected by youth is a common part of outreach youth work. Such rejection may reflect previous negative experiences with the support system and a sense of powerlessness.

The outreach youth workers describe the importance of understanding that rejection does not necessarily mean something has been done wrong. They highlight how negative past experiences, low trust in services, and the use of defense mechanisms are common in youth environments. When discussing rejection, it becomes clear that being able to tolerate it is essential for building relationships over time: *"Tolerating rejection and still trying to say hello again and again... We must not give up. We must see them. A simple 'hello' can change someone's life one day."* (Participant 4, focus group 1)

They stress that outreach youth workers must be able to endure rejection over time and think systematically:

"The way we got in touch with them was by spending a lot of time on the streets. We spent a lot of time with others in that environment... with repeated attempts to make contact... We can spend three weeks getting there." (Participant 2, individual interview)

The quote shows that repeated and prolonged efforts are used to initiate contact, including spending time and approaching the same youth multiple times.

Discussion

Our analysis shows that OYW provides a distinct framework for gaining access to youth who struggle with substance use, particularly by being positioned in youths' own environments and allowing time for trust to develop. Across the dataset, individual interviews and focus groups revealed similar themes, but with different emphases. Individual interviews highlighted personal dilemmas related to power, while focus groups produced more collective reflections on shared practices and organizational norms. Together, these perspectives show how power is experienced both individually and collectively within OYW. The findings, viewed through a CYS perspective (Merchant, 2013; Woodman et al., 2020), challenge individualized and risk-oriented understandings of youth access and engagement by emphasizing relational and contextual processes.

The study contributes to existing literature by demonstrating how these practices not only facilitate contact but also shape power dynamics at play in everyday interactions between outreach youth workers and young people. Through presence, availability, flexibility, and continuity, relationship-building becomes possible. Yet these same features also structure how authority, influence, and vulnerability are negotiated in practice. These findings build on and extend earlier research and literature on OYW (Andersson, 2014; Crimmens et al., 2004; Davidson, 2020; Erdal, 2006) by showing how relational

access and power are intertwined in specific outreach encounters.

Physical presence is central to relationship-building. Outreach youth workers describe how the ability to spend time in youth environments allows trust to develop gradually, which aligns with previous research (Chabchoub et al., 2024). However, in high-risk situations, such as hard substance use or abuse by minors, time may not always be available, requiring that outreach youth workers to balance patience with the need for immediate intervention. This tension can be understood as navigating unequal power relations by seeing presence as symbolic capital, while acute situations can lead to reinforcing youths' vulnerability and powerlessness (Bourdieu, 1995; Engelstad, 2005). From a CYS perspective (Furlong, 2016; Woodman et al., 2020), this can illustrate how relational access is shaped by power relations, and not necessarily by individual motivation for change.

Being present in youths' own environments can reduce feelings of powerlessness by shifting the interaction into an arena where young people hold greater cultural capital. In Bourdieusian terms, outreach youth workers temporarily move from an institutional field, characterized by professional authority, into youth-defined fields where knowledge of local norms and networks constitutes valued capital. However, such presence may also be perceived as surveillance or intrusion, especially in communities with strong skepticism toward authority, like environments characterized by trade in and use of illegal substances. While visibility can foster familiarity and trust (Erdal, 2006), it must be carefully balanced and adapted to the context. Maintaining transparency about roles and intentions is therefore essential to avoid reinforcing power dynamics. Youth emphasize that it's important not to be judged for their actions but rather to be recognized for who they are (Oldeide et al., 2020b, p. 3).

Our findings confirm that early assessments influence how youth are understood and supported. Potentially differing perspectives on substance use (Skjælaaen, 2019) can influence the power dynamics between outreach youth workers and youth who find meaning in their use. We see connections between substance use and a way to turn the feeling of powerlessness into power. In environments affected by illegal drug use and trade, substance use may also serve to gain a sense of control and belonging. From a Bourdieusian perspective, such practices can function as symbolic or cultural capital within specific youth fields, where participation in substance-related activities may provide recognition, status, and inclusion. This reframes substance use not only as risk behavior but also as a strategy for negotiating position and agency within marginalized social spaces. This aligns with CYS by reframing substance use as a socially situated practice rather than solely an individual risk behavior (Merchant, 2013; Woodman et al., 2020). A problem-oriented approach to substance use may unintentionally reinforce hierarchical relationships that limit the youth's voice and agency. Conversely, acknowledging the subjective and contextual meanings of substance use can open space for more equitable and dialogical relationships. In such

relationships, power is not only exercised but also negotiated, allowing youth to participate actively in shaping the support they receive.

While Henningsen (2009) warns against the risks of categorization, other research shows that youth often perceive outreach youth workers as supportive and resource-oriented (Oldeide et al., 2020b). Our findings support this view, suggesting that even when power is exercised, it can be done in ways that youth experience as empowering. Henningsen's (2009) concept of the "gaze of concern" highlights the definitional power reflected in our findings, where youth are often viewed through a lens of risk. At the same time, Bergheim (2019) emphasizes tacit knowledge and professional experience as counterbalances, ensuring that outreach efforts remain focused on those with genuine needs. This interplay between critical reflection and structured supervision is essential to prevent this gaze from dominating (Gunnarsdóttir & Haugstvedt, 2023), reinforcing outreach workers' role as bridge-builders (Chabchoub et al., 2024). Such tensions reflect a key concern within CYS regarding how care-oriented practices can produce categorization (Furlong, 2016; Woodman et al., 2020). Linked to the power perspective, this suggests that outreach youth workers can exercise institutional and symbolic power in ways experienced as empowering by youth through the use of professional knowledge and cultural capital, while also risking the reproduction of categorization and powerlessness if such power is not exercised with awareness and caution.

Our findings show that the control function in OYW is both necessary and challenging. It often conflicts with the helper role and can undermine trust (Crimmens et al., 2004). Outreach youth workers must balance their structural responsibility to facilitate interventions with the ethical need to maintain trust. As Henningsen (2009) argues, this balancing act is essential yet difficult. Integrity was highlighted as key to maintaining relationships while exercising power. Integrity can also empower youth by giving them greater control over the content of conversations (Bukhari et al., 2021). This approach signals that their perspectives are valued, helping to build more sustainable and empowering relationships.

Rejection is a common and expected part of OYW (Erdal, 2006; Henningsen, 2009). From a CYS perspective, rejection may be understood as an expression of resistance to asymmetrical power relations (Furlong, 2016; Woodman et al., 2020). Migrants, who may distrust Norwegian public institutions due to negative experiences with authorities in their countries of origin, and those struggling with substance use, can be more likely to reject outreach youth workers. Rejection can be a way for youth to regain agency in a relationship marked by asymmetry (Engelstad, 2005) and may be interpreted as resistance to the definitional power held by social workers. Davidson (2020) notes that initial contact is often marked by mistrust or hostility, reflecting the youth's perception of professional authority. Accepting clear rejection is both

a safety measure and a recognition of youth's right to set boundaries (Strømfors, 2006). Our findings suggest that managing rejection requires patience and systematic effort, as it often reflects ongoing negotiations of power and control.

Rejection can also be culturally motivated, linked to shame associated with substance use. Drawing on Bourdieu (1995), it may serve as a strategy to maintain social status and avoid "losing face" within peer environments. Outreach youth workers must therefore be attuned to the cultural norms of the environments they work in and adjust their strategies accordingly. In some contexts, continued substance use can represent cultural capital and a way to escape (Edland-Gryt et al., 2025). The meaning of substance use can be intertwined with feelings of both power and powerlessness, where escaping through substances represents a reclaiming of agency and a response to structural exclusion. Our findings indicate that recognizing these underlying dynamics enables outreach youth workers to tolerate and manage rejection, which is essential for gaining access and engaging in long-term processes of change.

Nevertheless, critical reflection remains essential. These findings demonstrate, through a CYS lens (Furlong, 2016; Merchant 2013), how OYW holds the potential to reduce power imbalances and amplify youths' voices, but only when social workers remain aware of how their roles, actions, and assumptions shape the relationships they seek to build.

Limitations, Recommendations, and Future Research

This study highlights key challenges in OYW, particularly related to power and control. Greater awareness of these dynamics can strengthen professional understanding and improve relationship-building with youth. Social workers play a role in shaping how youth are perceived and categorized, which underscores the need for critical reflection. We recommend that responsibility for addressing power-related issues lie with professional management, not individual practitioners, to ensure consistent and informed practice across services.

Some limitations should be noted. The sample is relatively small and relies on secondary analysis of data, which may limit the depth and scope of the interpretations. Since all participants worked within the same local outreach service, organizational norms may have shaped the perspectives expressed. These factors should be considered when assessing the transferability of our findings.

The study is based on a large outreach service in a major Norwegian city. To broaden the knowledge base, we recommend similar research in smaller communities and services. We also encourage studies that explore refugee and migrant youths' own experiences and what they value in their encounters with outreach youth workers. These perspectives can enrich our understanding of effective outreach practices.

Conclusion

OYW is a well-established and effective strategy for reaching and building trust-based relationships with youth in marginalized environments, including those from migrant backgrounds and those with substance use issues, who may face multiple vulnerabilities. This study examined how power influences substance use prevention through relationship-building. While power can challenge trust, we identified several practices that help reduce power imbalances. Among these are continued presence and enduring rejection. Integrity and reflection also support outreach youth workers in managing the tension between support and control, showing that control does not necessarily undermine relationships. A patient approach can strengthen orientation toward youths' own perspectives and priorities, thereby challenging the power imbalance in the relationship and enabling a deeper understanding of the meaning that substance use may hold for them, which is essential for effective prevention.

Our findings indicate that it is crucial for outreach youth workers to reflect on and remain aware of the situations in which they exercise power, how they do so, and how this may affect the relationships they build. As we have demonstrated, within this complex and demanding landscape lies the potential to reduce power disparities between youth, society, and the support system, ultimately giving this group a stronger voice. The complex situations that outreach youth workers encounter require high professional competence, ethical awareness, and a professional community that continuously develops the field of practice.

Author contributions

Conception and design: J.C., C.S.J.; Data acquisition: J.C., C.S.J.; Data interpretation: J.C., C.S.J., H.H.; Drafting of the manuscript: J.C., C.S.J., H.H.; Critical revision of the manuscript: J.C., C.S.J., H.H. All authors reviewed the results, approved the final version of the manuscript, and agreed to be accountable for all aspects of this study.

Ethical approval

This study was approved by the SIKT – The Norwegian Agency for Shared Services in Education and Research (Date: October 2020, Decision/Protocol No: 918630 and 439669). Informed consent was obtained from all participants involved in this study.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of interest

The authors declare that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Generative AI statement

The authors declare that during the preparation of this study, the following AI-assisted technology was used: Microsoft Copilot has been used since 15.11.2025 and throughout the process with writing the article. Extent of Use: It has been used to get proposals and help when translating our original Norwegian article to English. The authors confirm that they have critically reviewed and edited any AI-generated content and take full responsibility for the integrity, accuracy, and originality of the publication. The authors certify that the original human contribution is maintained and that AI-assisted tools are not listed or cited as authors.

References

- Åkerblom, K. B., Ness, O., Solhaug, S., Berteussen, L. E., Jensen, M. R. & Heimburg, D. V. (2026). *Oppsøkende tjenester for barn og unge: En kunnskapsoppsummering* (Report No. 16). <https://www.forebygging.no/Kunnskapsoppsummeringer/2026/opptak-kunnskapsoppsummering-oppsokende-arbeid/>
- Andersson, B. (2013). Finding ways to the hard to reach – considerations on the content and concept of outreach work. *European Journal of Social Work*, 16(2), 171–186. [\[Crossref\]](#)
- Andersson, B. (2014). How do detached youth workers spend their time? Considerations from a time study in Gothenburg, Sweden. *Youth & Policy*, 18–34.
- Bergheim, B. (2019). Accessing tacit knowledge: A street level method. *Journal of Social Work Practice*, 35(1), 51–61. [\[Crossref\]](#)
- Bourdieu, P. (1995). *Distinksjonen. En sosiologisk kritikk av dømmekraften*. Pax Forlag.
- Bukhari, F., AlKetbi, R., Rashid, S., Ahmed, A., Shakir, K. & Serpa, S. (2021). Challenges in dealing with involuntary clients. *Cogent Social Sciences*, 7(1), 1918856. [\[Crossref\]](#)
- Chabchoub, J. (2022). *Oppsøkende sosialt arbeid - brobyggeren mellom marginaliserte unge og hjelpeapparatet* [Master's thesis, VID University College In Oslo].
- Chabchoub, J., Kvamme, E. & Johansen, H. R. (2024). Oppsøkende sosialarbeidere som brobyggere i møtet med unge i marginaliserte posisjoner. *Fontene Forskning*, 17(2), 4–17.
- Connolly, J. A., & Joly, L. E. (2012). Outreach with street-involved youth: A quantitative and qualitative review of the literature. *Clinical Psychology Review* 32(6), 524–534. [\[Crossref\]](#)
- Crimmens, D., Factor, F., Jeffs, T., Pitts, J, Pugh, C., Spence J., & Turner P. (2004). *Reaching socially excluded young people. A national study of street-based youth work*. National Youth Agency.
- Daniel-Calveras, A., Baldaquí, N., & Baeza, I. (2022). Mental health of unaccompanied refugee minors in Europe: A systematic review. *Child Abuse & Neglect*, 133, 105865. [\[Crossref\]](#)

- Davidson, E. (2020). Social justice or social control? An ethnographic study of detached youth work in Scotland. *Scottish Affairs*, 29(2), 254-276. [Crossref]
- Edland-Gryt, M., Skjælaaen, Ø., & Sandøy, T. A. (2025). Ruse seg utover, innover eller bort? *Tidsskrift for Samfunnsforskning* 66(1), 1-15. [Crossref]
- Engelstad, F. (2005). *Hva er MAKT?* Universitetsforlaget.
- Erdal, B. (2006). *Ute-Inne. Oppsøkende sosialt arbeid med ungdom*. Gyldendal Akademisk.
- Furlong, A. (2016). The changing landscape of youth and young adulthood. In A. Furlong (Ed.), *Routledge handbook of youth and young adulthood* (2nd ed., pp. 3-11). Routledge. <https://eprints.gla.ac.uk/118069/7/118069.pdf>
- Gunnarsdóttir, H. M., & Haugstvedt, H. (2023). Tilpasning innenfor kjente rammer: Oppsøkende sosialarbeideres erfaring med og tilpasning av arbeidet under COVID-19 i Norge. *Tidsskriftet Forebygging.no*, (3). [Crossref]
- Henningsen, E. (2009). Bekymringsblikket. *Tidsskrift for Ungdomsforskning*, 9(2), 3-23.
- Hoffmann, J. P., & Hoffmann, C. S. (2025). Childhood trauma and adolescent substance use: an integrative perspective. *Future science OA*, 11(1), 2557763. [Crossref]
- IMDi. (2024). *Information about the Introduction Programme and language training: For persons with temporary collective protection*. https://www.imdi.no/globalassets/brosjyrer-og-handboker/en-imdi_introduksjonsprogram230524.pdf
- Jacobsen, C. S. (2022). *Profesjonelt relasjonsarbeid - en kvalitativ studie av erfaringene til oppsøkende sosialarbeidere med relasjonsarbeid inn mot ungdom i et belastet storbymiljø* [Master's thesis, VID University College In Oslo].
- Jacobsen, C. S., Chabchoub, J. & Haugstvedt, H., (2024). Oppsøkende sosialt arbeid og relasjonsarbeid på ungdommers egen arena - avvisning, kontrollfunksjoner og makt. *Tidsskriftet Forebygging.no* [Crossref]
- Lid, S., Rosten, M. G., Dullum, J. V., Hyggen, C., & Andersen, P. L. (2022). *Forebyggende tiltak mot ungdomskriminalitet i Oslo kommune* (Report No. 8). <https://konflikttraadet.no/publikasjon/forebyggende-tiltak-mot-ungdomskriminalitet-i-oslo-kommune-folgeforskning-og-evaluering/>
- Malterud, K. (2012). Systematic text condensation: A strategy for qualitative analysis. *Scandinavian Journal of Public Health*, 40(8), 795-805. [Crossref]
- Merchant, J. (2013). Troubled youth: Risk, individualisation and social structure. In J. Kearney, S. T. Fitzgerald, & A. C. Davidson (Eds.), *Constructing risky identities in policy and practice* (pp. 91-106). Palgrave Macmillan. [Crossref]
- Norozi, S. A. (2025). Integration and belonging through relationships: Immigrant youths' experiences of community-based mentoring in Norway. *Genealogy*, 9(4), 115. [Crossref]
- Oldeide, O., Holsen, I., & Fosse, E. (2020a). Local drug prevention strategies through the eyes of policy makers and outreach social workers in Norway. *Health and Social Care in the Community*, 29(2), 376-384. [Crossref]
- Oldeide, O., Holsen, I., & Fosse, E. (2020b). Youth perspective on outreach service: A safety net for at-risk youth in a municipality. *Children and Youth Services Review*, 116, 105234. [Crossref]
- Payne, M. (2006). *What is professional social work?* Policy Press. [Crossref]
- Skjesol, I., Ørjasæter, K. B., Henriksen, C., & Øydgard, G. (2026). 'We are the eyes on the streets' - modes of proactive youth outreach. *Child & Family Social Work*. [Crossref]
- Skjælaaen, Ø. (2019). *Meningen med rus*. Res Publica.
- Statistics Norway. (2024). *Helse- og sosialpersonell*. <https://www.ssb.no/arbeid-og-lonn/sysselsetting/statistikk/helse-og-sosialpersonell>
- Statistics Norway. (2025). *Immigrants and Norwegian-born to immigrant parents*. <https://www.ssb.no/en/befolkning/innvandrere/statistikk/innvandrere-og-norskfodte-med-innvandrerforeldre>
- Strømfors, G. (2006). Oppsøkere som profesjonelle personligheter. I. B. Erdal, (Ed.), *Ute/Inne - oppsøkende sosialt arbeid med ungdom* (pp. 169-191). Gyldendal Akademisk.
- Vasic, J., Grujicic, R., Toskovic, O., & Pejovic Milovancevic, M. (2021). Mental health, alcohol and substance use of refugee youth. *Frontiers in Psychiatry*, 12, 713152. [Crossref]
- Walsh, J. (2021). Relationship ruptures. I. J. Walsh (Ed.), *The dynamics of the Social Worker-Client Relationship* (pp. 62-85). Oxford University Press. [Crossref]
- Woodman, D., Shildrick, T., & Macdonald, R. (2020). Inequality, continuity and change: Andy Furlong's legacy for youth studies. *Journal of Youth Studies*, 23(1), 1-11 [Crossref]

“Dealer raus”: A retrospective case study of the Mothers Without Borders Initiative in Berlin’s Kreuzberg

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Abstract

This article presents a retrospective case study of community-based responses to substance use and street-level distribution in Kottbusser Tor, known as “Little Istanbul,” a neighborhood in Berlin’s Kreuzberg with a high concentration of immigrants from Türkiye and their descendants. The study examines the Mothers Without Borders (*Mütter ohne Grenzen*) initiative, active in the early 2000s under the leadership of second-generation immigrant Turkish women. It is based on a document analysis of media coverage from 2005 to 2013, including news reports, interviews, blog posts, social media content, and institutional brochures. These are examined thematically to explore how the experience of Mothers Without Borders can be interpreted in the context of media representations and these women’s statements. Conceptually, the study engages with debates concerning migration, motherhood, and neighborhood space, and draws notably on perspectives that understand addiction as embedded within broader socio-spatial and political processes rather than just as an individual or purely medical issue. The findings show that the women, as long-term Kreuzberg residents, mobilized to disrupt the emerging cycle of substance use and street-level distribution among younger generations. Instead of seeing the neighborhood solely as a site of anti-drug activism, they reconceptualized it as a space where belonging and intergenerational care could be rearticulated. Their experience indicates that efforts to address the conditions fostering substance use and distribution can also be viewed as resistance to the stigmatization of immigrant neighborhoods. In this context, the women’s positionality is constructed through “dual positioning,” in which motherhood is strategically mobilized as both a tool for activism and for neighborhood protection. By emphasizing grassroots mobilization, the article contributes to migration, space, and addiction studies by foregrounding immigrant women’s agency against addiction as relationally constituted within intersecting power relations and socio-spatial inequalities.

Keywords: community-based case study, dual positioning, immigrant motherhood, spatial stigmatization, urban activism against addiction

Main points

- Substance use and drug economies are shaped by broader socio-spatial inequalities, exclusion, and limited institutional support in marginalized urban areas.
- The Mothers Without Borders Initiative instrumentalized motherhood as both a form of activism and a means of protecting their neighborhood, while also challenging the racialized stigmatization of immigrant communities as inherently “dangerous” spaces. This dual positioning (motherhood and spatial protection) reveals how immigrant women negotiate within intersectional power relations.
- The initiative demonstrates how immigrant women can exercise agency through collective urban activism, transforming motherhood into a public, community-centered practice of care, resistance, and neighborhood belonging.

Introduction

Migrants encounter various domains spanning social, political, historical, and economic contexts. These domains are interconnected at micro, mezzo, and macro levels and influence their lives. In migration studies, the link between migration and addiction has increasingly gained scholarly relevance. Social

scientists particularly examine this connection in relation to trauma and stress linked to (post-)migration, integration challenges, identity crises, stigmatization, culture shock, sense of belonging, the racialization of addiction, access to services, and structural inequalities (De Kock, 2020; Demircan & Guler, 2024; Emen & Mercan, 2024; Grüsser et al., 2005; Heimann et al., 2007; Şahin & Güngör, 2022; Taşdemir et al., 2020;

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Wanke et al., 2022). Establishing a link between migration and addiction enables analysis of intersectional experiences and offers researchers a distinctive analytical window, particularly in comparative work that situates diverse migrant experiences alongside those of local populations. Addiction is not just an individual health issue but also underpins broader discussions about crime, deviance, integration challenges, stigmatization, and ghettoization, all of which shape perceptions of migrants' experiences and, thereby, the prevention and rehabilitation approaches, highlighting addiction's social aspect (see Wanke et al., 2022). Grasping the relationality between immigrants and addiction requires critically examining the socio-spatial dynamics of drug economies and the processes that lead to racialized labeling and exclusion.

Representations of addiction are evident through media coverage, political debates, and security-focused discourse in urban settings in Germany (Bürk et al., 2016). Recently, the drug flow in Kreuzberg's Görlitzer Park and Kottbusser Tor (Kotti) has sparked significant public and scholarly debate, especially within urban studies. Critics argue that public debates on these areas perpetuate racialized security discourse, labeling, and the criminalization of migrants (see Bhimji, 2026; Blokland, 2021; Ciaux, 2025). Kreuzberg, a symbolic representation of Berlin's multicultural cityscape with its diverse communities, especially in the Kottbusser Tor area known as Little Istanbul, has historically been a hub for residents of Turkish origin, embodying transnational spatiality (see Atasü Topçuoğlu & Akbaş, 2011; Çağlar, 2001; Dell, 2021; Güney & Akbaş, 2017; Kil & Silver, 2006; Mandel, 2008; Wolf, 2011). At the same time, the neighborhood has become a prominent example of spatial stigmatization, with media representations associated with crime. This portrayal fosters a view of the area as socially dangerous, not only because of the real or perceived drug-related issues but also due to the stigmatizing labels that accompany such representations (see Blokland, 2021). In this regard, the territorial stigmatization of immigrant neighborhoods like Kreuzberg as "dangerous areas" (Autor*innenkollektiv Gras & Beton, 2018; Dell, 2021; Keller, 2024), or, as in the case of the Berlin Interior Minister's 2014 statement, as "crime-burdened places" or "danger zones" (Bürk et al., 2016, p. 7), contributes to the perception of these areas as racialized problematic spaces (Ciaux, 2025). This perception, in turn, serves to legitimize, from an administrative perspective, state-driven gentrification policies, displacement, and surveillance systems targeting immigrants in Kreuzberg (see Barry, 2025; Bürk et al., 2016; Hamann & Türkmen, 2020; Hinze, 2013). According to Eksner (2013), since the early 2000s, Kreuzberg and Neukölln have experienced two interconnected processes: the territorial stigmatization and ghettoization of the neighborhoods and their residents, mainly immigrants and their descendants, as well as gentrification trends. Stehle (2006) argues that historical debates on Kreuzberg reveal how questions of

integration and urban containment strategies have shaped racialized and exclusionary narratives in Europe, highlighting both continuities and counter-narratives. Thus, this article draws attention to these ongoing debates, particularly to a period when public discomfort with substance use and street-level distribution in Kottbusser Tor became increasingly visible. Accordingly, this community-based case study focuses on Mothers Without Borders (*Mütter ohne Grenzen*), a civil initiative active in the early 2000s.

This study analyzes open documents to shed light on the initiative that has largely gone unnoticed in Berlin's history of urban activism. Because substance use and street-level distribution in Kreuzberg remain urgent issues, Mothers Without Borders offers a retrospective view for future urban activism against addiction, particularly highlighting the agency of immigrant women. The study focuses on the following question: How can the experience of Mothers Without Borders be interpreted in the context of media representations and the statements of these women? To explore this, the study examines how motherhood is mobilized by second-generation immigrant women, bridging sociology of space and migration studies through an analysis of urban activism against addiction.

Mothers Without Borders

Mothers Without Borders was an independent, non-governmental initiative established in 2005 in Berlin's Kreuzberg district, specifically in the Kottbusser Tor neighborhood, by a group of second-generation immigrant Turkish women aged 25 to 60 (Baumann, 2007). Led by social worker Güner Arkiş, the initiative arose from growing concerns about increasing substance use among youth, with some starting as young as twelve, and the sale of drugs on streets and in front of schools (Lehmann, 2012). Arkiş, who was the group's spokesperson, described the motivation for starting the initiative as follows:

It was when we witnessed a twelve-year-old child being used as a drug courier. At that moment, we understood that we could no longer stand by and watch children and young people being exploited by dealers. That is why we came together and decided to take action against the drug dealers. (Lehmann, 2012)

According to information on the initiative's social media account¹, these developments left families deeply distressed. Over time, parents took punitive actions to safeguard their children, such as enforcing strict restrictions, blaming schools and social settings, sending children to Türkiye, or even arranging early marriages. The group adopted the motto "A society that cannot protect its children cannot protect its future." On the website², the initiative summarized its goals

¹ The group's Facebook account appears to date back to 2008. However, because the account was inaccessible and no response was received to emails sent to the associated address, the group was considered inactive on social media. For the Facebook account, see: <https://www.facebook.com/groups/30179573172/>

² The website is not accessible. Information was retrieved from the site (muetter-ohne-grenzen.eu) using the Wayback Machine on <https://archive.org>.

as: (1) preventing drug trafficking in the neighborhood, (2) providing supervised spaces for drug use, (3) stopping children from being used as drug couriers, (4) increasing awareness among families, (5) encouraging greater sensitivity from parents and residents regarding children's welfare, (6) improving communication between families and authorities, and (7) working toward a safe and harmonious environment for everyone.

To achieve their goals, Mothers Without Borders mobilized as "disturbing mothers" by organizing petitions and information sessions, holding gatherings with families, and patrolling streets, parks, and courtyards often used by drug dealers, carrying small lamps to keep dealers visible during night patrols. As a result, the initiative's efforts resonated strongly at the time and attracted considerable media attention. They are also believed to have inspired director Andreas Schmidt's play *"Zebramütter"* (Pauly, 2009), which depicts a group of mothers from Kreuzberg who jointly fight against drug dealers in their neighborhood (Slevogt, 2009). However, this momentum proved short-lived. They continued their activities at *Mehrgenerationenhaus* after 2008, holding regular breakfast meetings with 25 to 40 women and organizing occasional informational events (Lehmann, 2012). Moreover, the initiative organized aerobics and jewelry-making courses for women and children, especially for immigrant women who faced barriers to participating in sports. It also offered educational seminars and individual counseling on family- and drug-related issues (Wawzyniak, 2012). The Initiative was also involved in the *Elternforschungsgruppe*, which seeks to develop perspectives on the challenges of parenthood and its social context (Beber, n.d.). The financial and spatial difficulties the women encountered emphasize that, although the initiative began voluntarily, it struggled to maintain its previous level of activity. Halina Wawzyniak's (Wawzyniak, 2012) blog post explains the initiative's decline in visibility by highlighting the challenges the women faced in achieving their goals, noting in particular that they received financial support for only three of their seven years:

Since their activities have come almost to a standstill, the women have become increasingly reflective. Recalling how they were portrayed by politics and the media, they state that 'the group's impact was merely instrumentalized.' For example, MWB received the "Berliner Tulpe³" award in 2008, which aims to promote German-Turkish civic solidarity. Yet today, their quiet disappearance is largely ignored, and no support is provided. (Wawzyniak, 2012)

Methodology

This research relies on document analysis, which involves a systematic review of materials such as newspaper reports, blogs, social media content, and institutional reports in digital formats (Bowen, 2009; Morgan, 2022). As Bowen (2009) explains, documents provide access to historical and current information about the context, allowing researchers to interpret the phenomenon's historical circumstances and content. Thus, document analysis is particularly useful when researchers are unable to employ other qualitative methods for their studies (Morgan, 2022). Historical research, in particular, relies on pre-existing materials because it is not possible to interview or observe individuals from the distant past (Morgan, 2022). In this regard, information from documents is vital for establishing the conceptual framework that guides and enriches the study (Bowen, 2009). The initial step in document analysis is identifying and collecting the relevant documents for the research (Morgan, 2022). Unlike other qualitative data collection methods, like interviews, researchers do not generate data through document analysis. However, they actively participate by selecting, organizing, and determining which data to include or exclude in their analysis (Morgan, 2022). Challenges in reaching out to initiative members via social media and to the Neighborhood Management (*Quartiersmanagement*⁴) offices in Kreuzberg, as well as the absence of archival documents from the FHXB Friedrichshain-Kreuzberg Museum Archive and Das feministische Archiv FFBIZ⁵, necessitated an analytical approach based primarily on a limited number of available documents. Consequently, all relevant pre-existing documents related to the case were considered. No additional data beyond the period when the women's activities significantly influenced the neighborhood's agenda were identified. This limited access to material on the initiative constitutes a constraint of the study. Nevertheless, given the originality of the women's activism and forms of engagement, interpreting this case retrospectively is particularly important. Therefore, the study draws on 14 news reports and interviews from outlets including taz, Der Standard, Der Spiegel, Hürriyet, International Business, Tagesspiegel, Berliner Morgenpost, and BBC Turkish, published in German, English, and Turkish, covering the period from 2005 to 2013, when the initiative was most prominent. It also includes a blog page, three institutional brochures, the community's inactive website, accessed through web archives from the same period, and its inactive social media accounts.

This study adopts a reflexive approach (Braun & Clarke, 2019) in thematic analysis to provide a detailed interpretation of the pre-existing documents. In reflexive thematic analysis,

³ In 2008, the initiative received the "Berliner Tulpe," a prize awarded in Germany to individuals, initiatives, and projects that promote German-Turkish relations, community engagement, and social cohesion. For more information about the Berliner Tulpe award and the recognition of Mothers Without Borders in 2008, see the brochure: 2011- Fünf Jahre Berliner Tulpe: Für den Deutsch-Türkischen Gemeinsinn in <https://digital.zlb.de/viewer/index/>.

⁴ Neighborhood Management offices were established as part of the Social City Program in Germany. For a detailed, empirically grounded article on the program's interventions in Berlin's disadvantaged neighborhoods—including empowering migrant women and children, improving families' access to social services, and raising awareness of substance addiction—and the structural challenges that prevent migrant women with fewer opportunities from participating in the program, see Başaran Uysal (2016).

⁵ In August 2025, the FHXB archive was visited in person, and in November, a written application was submitted to the museum archive to request additional information; however, no details about the initiative could be obtained. Moreover, in May 2026 a written response was received from the FFBIZ, yet this also yielded no relevant information regarding the initiative.

the researcher actively integrates their insights into data interpretation to develop a layered analysis and achieve versatility. As a result, the coding process is not preset but can develop over time (Braun & Clarke, 2019). Initial codes are derived from the texts and then grouped into themes. Instead of simply summarizing the data, the themes are continuously examined and refined to reveal subtle and unexpected insights (Braun & Clarke, 2019; Morgan, 2022). This study's analysis follows an abductive approach that seeks to develop plausible explanations through an iterative process, moving between data and theory rather than testing pre-existing theories (Thompson, 2022). Therefore, the analysis is organized around key thematic categories: the founding process of the initiative, its public visibility and activities, (self-)representation through motherhood, interactions with state institutions, and a sense of spatial belonging. Since addiction is not just an individual or medical issue but also involves structural and socio-spatial factors, the Mothers Without Borders initiative serves as a unique case in neighborhood transformation and the integration debate concerning immigrants and their descendants in Kreuzberg. In this case study, the reflexive thematic approach enables retrospective interpretation and helps uncover the invisible experiences of Mothers Without Borders.

Findings

Mothers Without Borders demonstrates how second-generation Turkish women's activism in Berlin engages with issues such as care, addiction, state critique, and spatial belonging. The initiative also offers migration and urban studies an alternative perspective for analyzing an immigrant neighborhood, which is often associated with safety concerns and spatial stigmatization. The findings show that the initiative, motivated by motherhood, played a key role in presenting Kreuzberg not as a "problematic dangerous neighborhood" but as a space of belonging and intergenerational care. The thematic categories are examined under two main headings: "Instrumentalizing Motherhood for Activism" and "Protecting the Neighborhood," underscoring the women's dual positioning, a concept further elaborated in the discussion section.

Instrumentalizing Motherhood for Activism

The initiative positioned itself and received media attention as a form of civil resistance that foregrounded motherhood. During the petition campaign, men were also reported to support the initiative. However, their participation declined significantly afterwards, and the night patrols were primarily carried out by women (Woltersdorf, 2005). İsmail Aydın, one of the few men in the group, observed: "Most fathers think that solving the drug problem is solely the responsibility of the state." (Loy, 2005). Conversely, the women framed this perspective through the lens of motherhood. The initiative

members noted, "Mothers just have a greater sense of responsibility when it comes to protecting the quarter's children and their own children." (Gerson & Ataman, 2005) The women's efforts are not just about shielding their own children from drugs but also about fighting for the right to a safe environment. Blokland (2021, p. 30), in her thought-provoking study on perceived safety at Kottbusser Tor, highlights that households with children view neighborhood safety differently, mainly due to concerns about their children. Similarly, in their interactions with neighborhood residents, the initiative members stated that many people were dissatisfied with the situation, that families believed Kottbusser Tor was no longer a suitable place for children, and that even schoolyards were not perceived as safe⁶.

Critical motherhood studies often emphasize how social expectations construct a sense of responsibility in individuals. However, these expectations also obscure the structural problems that Mothers Without Borders directly addressed in their public statements and activities. Therefore, they present an alternative mode of urban activism against drug dealing in Kreuzberg. Öztan's (2010) insightful research on immigrant women in the Netherlands reveals that challenges faced through motherhood can enhance internal empowerment and enable collective agency rooted in autonomy. This focus shows that the women viewed their activism as a form of "home-making" (see Erensoy, 2024; Hinze, 2013). Consistent with this view, the initiative emphasized that the problem could not be reduced to parental attitudes and caregiving. As a result, the activist women focused their efforts on building solidarity with educational institutions and created the Mothers Without Borders working group to raise awareness among families, alongside their activism (Lehmann, 2012). According to Öztan (2010), forming relationships with spatially embedded welfare institutions, such as schools and community centers, enables "good motherhood practices" that meet expectations of integration and social conformity, thereby aligning with gendered roles. Hays (1996) argues, through the concept of intensive mothering, that in neoliberal societies, mothers are expected to work in the labor market and serve as caregivers, striving to meet ideals of perfection. This ideology of "good mother" produces classifications and sharpens the distinction between good and bad mothers, increasing pressure on women as caregivers. One of the main points where motherhood is highlighted and used instrumentally is in the group's choice of name. The focus on being borderless exemplifies this positioning. Arkış, the group's spokesperson, explained their choice:

Most of our group consisted of mothers, and because there are no limits when it comes to a mother's concern for the well-being of her child, we called ourselves Mothers Without Borders. Of course, we were also inspired by Doctors Without Borders. (Lehmann, 2012).

⁶ In 2002, another civil effort to protect the school environment from drug-related issues took place in Dortmund. According to Kenji (2012), based on newspaper reports, Turkish immigrant mothers mobilized to create safe spaces for their children. After collecting more than 100 injection needles from a school playground, they launched a petition campaign and gathered 1,000 signatures. Simultaneously, they organized a large demonstration to attract the attention of local authorities.

Therefore, women's activism is driven by "borderless motherhood" and concerns for future generations' well-being, both of which are connected to ambiguous gendered expectations about what constitutes perfect care. These gender-related expectations do not only affect activist women opposing drug dealing. They also particularly affect women who use substances, as they tend to face harsher judgment than men because gender norms often position them as primary caregivers. As a result, women with substance dependence are often labeled as bad women, which causes them to lose social respectability (Agoff et al., 2022).

Media representations also highlight the focus on motherhood and responsibility for future generations. Douglas and Michaels (2004) note how the media consistently reproduce the imagery associated with the good mother ideology. The concerns and anxieties expressed in media outlets generate pressure on mothers to achieve perfection. Under this ideology, the mother-child relationship is viewed as a series of performative expectations, and a mother's devotion to her child emerges as a form of boundarylessness. In this regard, Dean et al. (2022) argue that the mental load of mothers involves both cognitive and emotional labor. It is performed in ways that transform this combination from merely a form of (cognitive) labor into a "load" that "operates within families and society through three characteristics: invisible, boundaryless, and enduring" (Dean et al., 2022, p. 2). This situation leaves the structural conditions surrounding mothers and children unaddressed, as inequalities arising from access to resources are rendered invisible through the performative presentation of motherhood. While Mothers Without Borders demonstrate agency by highlighting social problems and the lack of institutional support, made visible through instrumentalized motherhood, their actions can also be interpreted as an embodied critique of the emotional labor and responsibilities imposed on mothers.

Protecting the Neighborhood

Mothers Without Borders criticized municipal, security, and educational institutions and called upon them to cooperate for neighborhood safety. The initiative first organized petition campaigns with the slogan "*Dealer Raus*"⁷ in response to a case in which a twelve-year-old child was found under the influence of drugs in a park. Every weekend at Kottbusser Tor, they informed residents about the situation and conducted awareness-raising activities in public spaces (Lehmann, 2012). Through night patrols, petition campaigns, and press statements, the women highlighted the inadequacy of the neighborhood's formal security networks. Anderson (1999), in his ethnographic research on inner-city youths in African American neighborhoods, describes the code of the street as an adaptation that arises from distrust towards the police, the judicial system, and other actors expected to ensure urban security. The police may not respond when called, leading many residents to feel they must be prepared to protect themselves and their loved ones. In this context, Arkış mentioned that they sometimes felt left to handle it on their

own (Ataman, 2005). The women pointed out the lack of engagement by political actors, including the District Mayor of Friedrichshain-Kreuzberg at the time, Cornelia Reinauer, who reportedly told them, "We are afraid something might happen to you" (Aydin, 2005). Members of the initiative also noted: "When we call the police, they either do not come at all or only arrive hours later" (Ataman, 2005). Anderson explains this situation as follows:

Lack of police accountability has in fact been incorporated into the local status system: the person who is believed capable of 'taking care of himself' is accorded a certain deference and regard, which translates into a sense of physical and psychological control. The code of the street thus emerges where the influence of the police ends and where personal responsibility for one's safety is felt to begin. (Anderson, 1999, p. 34)

The activist women further criticized the police for requiring permits for their night patrols and actions, stating, "What kind of permit should we obtain? Do they ask dealers in the parks and courtyards for a permit? They poison, and we are trying to protect" (Aydin, 2005). Drawing on Anderson's perspective, the women pursued their struggle by entering spaces not assigned to them and engaging in activities, such as night patrols, that went beyond the patriarchal gender roles embedded in the street code. In other words, they rearticulated the street codes through their own critical practices. Therefore, the positionality of these women, conceptualized in this article as dual positioning, is shaped not only by motherhood but also by racialized labeling, drug economies, and feelings of insecurity arising from insufficient support mechanisms within an immigrant neighborhood.

In migration contexts, various forms of motherhood are shaped by intersections of ethnicity and class as immigrant women navigate regulatory and surveillance mechanisms (Öztaş, 2010). This view helps interpret the diverse experiences embedded within power relations. Intersectionality provides an analytical framework that shows women's experiences cannot be understood in a single context. Crenshaw (1989) emphasizes that not all individuals within a racial or gender category experience discrimination and disadvantage in the same way. The dominant understanding of discrimination often presumes that disadvantage arises from a single category, thereby overlooking the intricate power relations and complex structures that reproduce it, and marginalizing those who are multiply burdened (Crenshaw, 1989). Similarly, Collins (1998) argues that race, class, and gender are interconnected social hierarchies that mutually constitute one another and reproduce complex social inequality. Power relations within these intertwined categories can only be understood through an analysis of the intersecting systems of oppression (Collins, 2000, 2015). In this framework, it can be argued that these women have established an intersectional presence in the media through their activism, which is shaped by the interplay of race and gender.

⁷ Eng. Dealer, out!

Newspaper coverage adopts headlines that highlight motherhood. Framed in media as “brave mothers,” these women expressed their criticisms of state institutions and dominant discourse through motherhood. Examples include: “Brave Mothers Shine for Kreuzberg” (Baumann, 2007), “Mothers Against Drug Dealers: Turkish Women in Berlin Confront Junkies” (Gerson & Ataman, 2005), “Mothers Want to Set Boundaries” (Woltersdorf, 2005), “The Boundary-Defying Turkish Mothers of Kreuzberg” (Aydın, 2005), “Drug Hotspot Kreuzberg: The Courage of the Mothers” (Ataman, 2005), “Mothers’ Night” (Kaiser, 2005) and “Shining Directly into the Conscience: Patrolling with Flashlights – How Turkish Mothers Confront Kreuzberg’s Drug Scene” (Loy, 2005). Notably, the media amplifies the themes of being a Turkish mother and an immigrant in a disadvantaged neighborhood.

Reports highlight the women’s bravery, dedication, and commitment, while framing Kreuzberg as an area that attracts drug dealing (Baumann, 2007; Ghosh, 2013; Kaiser, 2005; Sey, 2005a, 2005b). For example, Gerson & Ataman (2005) report that “a group of Turkish mothers organized to take back the street.” During night patrols, they chased drug dealers in parks, courtyards, and other dark areas of the neighborhood, shining flashlights into dark corners. Arkiş stated on night patrols: “All we do is shine a light on them and tell them, ‘Get lost!’” (Ataman, 2005) In the newspaper report, Kaiser recounts his observations while accompanying the women on a night patrol:

Günseli Boğa walks down the stairs leading to a basement. “Hello?” she calls out, carefully pushing the door open with her foot. “Günseli,” a woman at the bottom of the stairs pleads, “don’t go alone.” (Kaiser, 2005)

Their use of the bat as a symbolic emblem is linked to these experiences. Activist Günseli Boğa, working at a youth center, explained this symbolism: “She [bat] is like us: active at night and blind, yet she perceives everything around her. Her habitat has been destroyed by humans, just like ours” (Ataman, 2005). Newspaper reports indicate that the women on night patrols were confronted by young Turkish and Arab men from the neighborhood (Aydın, 2005; Gerson & Ataman, 2005; Ghosh, 2013; Kaiser, 2005; Sey, 2005b). Gerson and Ataman (2005), in their detailed report, note that local Turkish youth mocked the women during a night patrol, saying, “So these are the people who are going to rescue Kreuzberg.” Similarly, Kaiser (2005) observes that the women were verbally assaulted by a driver during the night patrol, who rolled down his window and shouted in Turkish, “Fuck off, you whores!”, and notes that two weeks earlier, stones had been thrown at them. The threats and harassment they faced during these night patrols did not deter the women. Arkiş mentioned that she was also threatened through their children because the dealers knew them from the neighborhood. However, according to her, because her own sons were already grown, the real concern should be for the younger children in the neighborhood (Ataman, 2005). The women emphasized that their efforts were for all children and youth in the neighborhood: “It is not a problem of immigrants, Turks, or Germans but of all children

and young people. We live here, and this is our concern” (Aydın, 2005). Kaiser describes one moment in his report as follows:

When they hear voices on a playground, they direct their flashlights at figures in the darkness. ‘We want to talk to you,’ the women call out in Turkish. ‘Come here if you want to talk to us,’ the figures shout back before fleeing. (Kaiser, 2005)

He highlights that the women’s interactions with young men during their night patrols were not motivated by a desire to fight, but by an effort to disrupt this cycle in the neighborhood. Social worker Ercan Yaşaroglu, who was involved in informing fathers in Kotti and supported the Mothers Without Borders initiative when it was founded, shared a similar perspective that women tended to act more prudently and avoid provoking conflict (Wierth, 2009). Deniz Kılıç, a member of the initiative, noted that in the early periods of their night patrols, they encountered 20 to 25 dealers known to them from the neighborhood (Ataman, 2005). According to the women, these youth initially started as drug users and later became couriers to obtain substances or earn money. Their focus on the cycle linking substance use and distribution underscores how starting as a user can lead to racialized perceptions of the neighborhood and its migrant-origin youth as being associated with drug dealing. On the other hand, they noted that Turkish girls from the neighborhood were rarely used as couriers due to local ghetto norms and that, as a result, German girls were often preferred (Aydın, 2005). This shows how race and gender intersect in street-level drug distribution, showing that masculinity is negotiated within ghetto norms. Anderson (1999) uses the concept of “manhood” to illustrate how masculinity, respect, and social status are interconnected within the code of the street. He explains that, among street men, masculinity significantly shapes their attitudes towards possession and identity. Performing masculinity serves as a way to gain privilege and respect. The street code also delineates differences in how men and women behave. Those who are not male or not deemed “masculine enough” under the code of the street are often devalued. In this context, girls engaging in street acts traditionally associated with “men” can be seen as a form of masculinization, through which they seek recognition (Anderson, 1999, pp. 66-107). Besides the fact that Turkish girls in the neighborhood were not actively involved in drug dealing, the activist women’s negative experiences with young people during night patrols can also be explained by the code of the street. These cases share a common feature: they contrast with street codes about where, when, and how women are expected to be visible in the neighborhood.

Public debates, political discourse, and media representations of Kreuzberg contribute to the reproduction of the racialized perception. Meanwhile, the women also made it clear that “Our Kreuzberg has become a drug market. You can hardly walk 100 meters without being offered everything under the sun” (Gerson & Ataman, 2005). For these women, who had lived in the neighborhood for thirty years and expressed their deep sense of belonging (Ataman, 2005; Kaiser, 2005), the phrase “our Kreuzberg” does not merely signal an individual

sense of belonging. It also carries a specific meaning in the context of Berlin's migration history. As a "diasporic space" (Kil & Silver, 2006, p. 98), the neighborhood has historically been a battleground over identity and spatial belonging for Turkish communities in Berlin (see Dell, 2021; Hinze, 2013; Kaya, 2001; Mandel, 2008). In her detailed ethnographic research with second-generation immigrant women in Kreuzberg and Neukölln, Hinze (2013) suggests that women's spatial and everyday practices, deeply intertwined with the neighborhood, create a connection between place and immigrant identity. She underlines that "the immigrants' life practices within the neighborhood represent a reaction as well as an alternative to the political debate, which often creates or enhances the (exclusionary) conditions under which immigrant enclaves form in the first place." (Hinze, 2013, p. 83) In this regard, for example, the slogan *Dealer raus*, used by the initiative, can be interpreted in relation to historically used racist slogans in Germany, such as *Ausländer raus*⁸ or *Türken raus*⁹ (Alexopoulou, 2019; Mandel, 2008). However, from the activist women's discursive perspective, their slogan does not portray immigrants and their descendants as inherently threatening or undesirable. Instead, it shifts the grammar of exclusion by highlighting dealers as threats to the neighborhood's perceived safety and as indicators of drug economies, while also emphasizing limited institutional support and structural challenges. This discursive positionality, therefore, opens a critical intersectional praxis. Following Collins's (2015) formulation, Mothers Without Borders' activism can also be defined as a form of "critical praxis" in which "social actors use intersectionality for social justice projects." In this sense, intersectionality offers an analytical framework for understanding their experiences and serves as a repertoire for revealing their dual positioning between motherhood and spatial protection. Thus, the women claim the right to safety while resisting racism and the racialized framing of immigrant neighborhoods as inherently problematic.

Discussion

This study retrospectively explores the Mothers Without Borders initiative, a group of second-generation immigrant Turkish women in Berlin's Kreuzberg district that emerged in response to increasing substance use and street-level distribution in the early 2000s. Their struggle to shield their children from drugs also opposed the cycle of drug dealing, which was driven by the transition of local youth from users to dealers. Although data on the initiative is limited, existing documents illustrate how motherhood is instrumentalized to foster collectivity and to draw attention to the structural dimensions of social inequalities and systemic problems. As Anderson (1999) states, underground economies mirror the structural changes caused by economic shifts in the global economy. He suggests that factors such as alienation intersecting with race relations, unemployment, dislocation, and poverty can create social conditions that lead individuals to become drug dealers. This focus on the role of structural

inequalities in these dynamics questions the notion that crime is an inherent part of immigrant neighborhoods and challenges racialized security narratives. Research on the urban securitization and transformation of Kreuzberg indicates that the primary justification for gentrification policies is the labeling of a neighborhood as criminal (Barry, 2025; Ciaux, 2025; Keller, 2024). According to Eksner (2013), young people from marginalized areas who are educated in local schools and obtain diplomas marked by the territorial stigma attached to the ghetto are explicitly constructed by ghetto discourse as ethno-cultural and social others. Such processes of othering and racialized labeling reinforce the cycle of substance use and street-level distribution. Although the women's activism might seem to support the main argument for gentrification, their discourse on the cycle of drug dealing implicitly challenged the gentrification process targeting their neighborhood. Media narratives emphasize that the women advocate for collective responsibility, often expressed through motherhood, thereby constructing a sense of community based on spatial belonging rather than supporting spatial displacement. Kadioglu Polat's (2020) insightful analysis of gentrification in Berlin demonstrates that it can give rise to complex forms of social exclusion closely connected to pre-existing racism and discrimination. The women's focus on "our Kreuzberg" offers a rooted, belonging-based alternative to the racialized stigmatization of the neighborhood.

A clear generational shift can also be seen within the immigrant community. The women leading the initiative, in particular, drew on their insider youth work experience in their everyday interactions with local youth and families, while also using their social, cultural, and linguistic capital in press statements and in their engagement with public institutions. Günseli Boğa highlights this situation by comparing their generation to their "guestworker" parents: "Our parents had to work hard. All they had were their hands, and they did not know the language. We want more. We want to live here." (Kaiser, 2005) Therefore, the neighborhood, experienced as a lived space, functions as a home for intersectional, fragmented immigrant identities within the transnational setting and becomes a site of *Kreuzberger* identity (Hinze, 2013). In this regard, Çağlar (2001) argues that transterritorial spaces such as Kreuzberg become arenas where the sense of belonging to Berlin is redefined and negotiated beyond the categories of ethnicity and community. She argues that the form of belonging in these spaces extends beyond a diasporic collectivity and instead positions one as a local member of an unbounded community. Recognizing immigrants' claims to these spaces, which encompass various civil, socio-economic, and cultural rights in the public sphere, is essential to understanding what constitutes belonging. Additionally, the performative aspect challenges the given meanings and practices of belonging, revealing new forms of membership. Collective identities are woven through multiple affiliations and positionings (Çağlar, 2001). This illustrates the complex social location of immigrant women involved in activism within marginalized urban areas. It

⁸ Eng. Foreigners, out!

⁹ Eng. Turks, out!

challenges the neighborhood's negative label by promoting a different narrative of belonging, care, and collectivity, often shaped by motherhood. In this sense, their struggle unfolds through two interconnected dimensions: motherhood and spatially embedded critical practice. Therefore, the women's positionality and lived experience open up the possibility of conceptualization. By identifying substance distribution and use as a significant social problem and taking action through instrumentalized motherhood, while also offering an implicit critique of the racialization of both the phenomenon and the neighborhood due to their intersectional social location, the women's positionality is constructed as a form of dual positioning.

Their actions blurred the lines between private and public life by turning motherhood into a collective and spatialized critical practice. By patrolling at night, confronting dealers, and engaging directly with public institutions, the women created an alternative bottom-up form of urban governance. According to the newspapers, by making themselves visible in the public sphere, the women challenged prevailing gendered codes, such as domesticity, passivity, and isolation, that typically linked earlier-generation Turkish women (Aydın, 2005; Daldrup, 2006; Gerson & Ataman, 2005; Ghosh, 2013). As Hinze (2013) suggests, immigrant women are aware of the visibility produced through ethnocultural markers of difference and the symbolic roles attributed to them. For the women, the neighborhood offers a space to escape this visibility and integrate into a shared neighborhood identity. By occupying the streets at night, Mothers Without Borders blurred the gendered boundaries between the codes of the street (uncanny/street) and motherhood/home. In this way, through women's solidarity, they challenged socially imposed markers of difference and moved beyond the given gendered space and time. Consequently, this initiative also opposed the narrative that portrays immigrant women solely as victims of oppression. Instead, they demonstrated agency through urban activism against addiction.

The dual positioning of these women, as discussed in this study, is deeply integrated into their activist performances. Their activism demonstrates how motherhood can serve as a form of collective action, not limiting their agency but enhancing it, and granting their critiques of the state moral authority in public debates. By diagnosing the problem, mobilizing local residents' support, and directing criticism toward state apparatuses, these women also resisted the stigmatization of their neighborhood. This dual positioning becomes particularly visible in the slogan *Dealer Raus*. It repurposes a familiar linguistic form associated with the racist slogan *Ausländer Raus*. The women, however, rearticulated the slogan within the neighborhood in a new discursive context. Rather than targeting an ethnic "other," it is redirected toward an anti-dealer stance, while also refusing to shy away from naming the problem of substance use and distribution.

This article contributes to critical migration and addiction studies by arguing that addiction cannot be reduced to the

domains of substance use, public health, and social networks alone. As this case illustrates, drug economies may also generate indirect and often unforeseen effects, particularly for disadvantaged groups. Micro-level analyses that foreground narratives and lived experiences are especially valuable, as they illuminate the forms of agency and negotiation within intersecting power relations. Future qualitative research, particularly ethnographic and community-based studies, would therefore benefit from further examining new urban settings while also taking into account the positionality of different actors within broader structures of inequality and exclusion.

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Author contributions

Conception and design: F.G.A.V.; data acquisition: F.G.A.V.; data analysis: F.G.A.V.; data interpretation: F.G.A.V.; drafting of this study: F.G.A.V.; critical revision of this study: F.G.A.V. The author reviewed the results, approved the final version of this study, and agreed to be accountable for all aspects of this study.

Ethical approval

Ethics committee approval and informed consent were not required for this study.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of interest

The author declares that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Generative AI statement

The author declares that during the preparation of this study, the following AI-assisted technology was used: ChatGPT-5, Grammarly. Extent of Use: AI tools were used during the preparation of this study to improve linguistic fluency, correct grammatical errors, and assist with translation. The author

reviewed and finalized all revisions. The author confirms that he/she has critically reviewed and edited any AI-generated content and takes full responsibility for the integrity, accuracy, and originality of the publication. The author certifies that the original human contribution is maintained and that AI-assisted tools are not listed or cited as authors.

References

- Agoff, C., Fondevila, G., & Sandberg, S. (2022). Cultural stigmatization and police corruption: Cannabis, gender, and legalization in Mexico. *Drugs: Education, Prevention and Policy*, 29(4), 373-381. [Crossref]
- Alexopoulou, M. (2019). "Ausländer" - A racialized concept? "Race" as an analytical concept in contemporary German immigration history. In M. Arghavan, N. Hirschfelder, L. Kopp, & K. Motyl (Eds.), *Who can speak and who is heard/hurt?: Facing problems of race, racism, and ethnic diversity in the humanities in Germany* (pp. 45-68). transcript Verlag. [Crossref]
- Anderson, E. (1999). *Code of the street: Decency, violence, and the moral life of the inner city*. W.W. Norton & Company.
- Ataman, F. (2005, September 10). *Drogenbrennpunkt Kreuzberg: Der Mut der Mütter*. Der Spiegel. <https://www.spiegel.de/politik/deutschland/drogenbrennpunkt-kreuzberg-der-mut-der-muetter-a-373861.html>
- Atasü Topçuoğlu, R., & Akbaş, E. (2011). An attempt to see the soul of the change: Kreuzberg from margins into the center. *Sosyoekonomi*, 15(15), 69-80.
- Autor*innenkollektiv Gras & Beton. (2018). *Gefährliche Orte: Unterwegs in Kreuzberg*. Assoziation A.
- Aydın, G. (2005, October 10). *Kreuzberg'in sınır tanımayan Türk anneleri*. Hürriyet. <https://www.hurriyet.com.tr/kelebek/kreuzbergin-sinir-tanimayan-turk-anneleri-3460163>
- Barry, C. (2025). Kreuzberg is a construction site: A grounded theory in pictures. In L. Bernroider, A. M. Born, C. Kulz, & S. U. Gang (Eds.), *Intersectionality and the city* (p. 18). Routledge.
- Başaran Uysal, A. (2016). Sosyal şehir programı ve yerel katılım: Berlin örneği. *Çağdaş Yerel Yönetimler*, 25(4), 27-47.
- Baumann, B. (2007, October 11). *Mutige Mütter leuchten für Kreuzberg*. Der Standard. <https://www.derstandard.at/story/3045334/mutige-muetter-leuchten-fuer-kreuzberg>
- Beber, K. (n.d.). *Elternsein in Europa: Die Stimme der europäischen Elternforschungsgruppen* [Report]. http://die-werkstatt-gemeinsam-denken.de/downloads/Eltern_sein_in_Europa.pdf
- Bhimji, F. (2026). 'Our Görli remains open': Racialization, enclosures and resistance at an urban park in Berlin. *Journal of Race, Ethnicity and the City*, 7(1), 63-83. [Crossref]
- Blokland, T. (2021). *Leben zwischen Dreck und Drogen. Sicherheitsempfinden am Kottbusser Tor, Berlin*. Logos Verlag Berlin. [Crossref]
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. [Crossref]
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589-597. [Crossref]
- Bürk, T., Hohne, S., Thelle, M., Fabian, L., Nielsen, M., Rakovsky, L., Viil, L., & Melson Gregersenn, K. (2016). *URO Lab Report #2: Governing the narcotic city: Discourse on drug use, dealers and migration around the Görlitzer Park in Berlin-Kreuzberg*. Urban Orders Research Network (URO) Aarhus University.
- Ciax, K. (2025). Park patrol: Urban securitisation, racialised policing, and the everyday struggle for Görlitzer Park. *Ambiances*. [Crossref]
- Collins, P. H. (1998). It's all in the family: Intersections of gender, race, and nation. *Hypatia*, 13(3), 62-82. [Crossref]
- Collins, P. H. (2000). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment* (2nd ed.). Routledge.
- Collins, P. H. (2015). Intersectionality's definitional dilemmas. *Annual Review Sociology*, 41(1), 1-20. [Crossref]
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 1989, 8.
- Çağlar, A. S. (2001). Constraining metaphors and the transnationalisation of spaces in Berlin. *Journal of Ethnic and Migration Studies*, 27(4), 601-613. [Crossref]
- Daldrup, M. (2006, March 17). *Die Zeit der weißen Westen ist vorbei*. taz. <https://taz.de/Die-Zeit-der-weissen-Westen-ist-vorbei/!460092/>
- Dean, L., Churchill, B., & Ruppanner, L. (2022). The mental load: Building a deeper theoretical understanding of how cognitive and emotional labor overload women and mothers. *Community, Work & Family*, 25(1), 13-29. [Crossref]
- De Kock, C. (2020). *Responding to drug-related problems among migrants, refugees and ethnic minorities in Europe*. European Monitoring Center for Drugs and Drug Addiction.
- Dell, A. C. (2021). The Turkish-German bridge: A unique socio-spatial construction in Kreuzberg. *Turkish Journal of Diaspora Studies*, 1(2), 19-36. [Crossref]
- Demircan, D., & Guler, M. (2024). Factors affecting risky alcohol consumption, smoking addiction in forced migrants. *Addicta: The Turkish Journal on Addictions*, 11(3), 338-346. [Crossref]
- Douglas, S. J., & Michaels, M. W. (2004). *The mommy myth: The idealization of motherhood and how it has undermined all women*. Free Press.
- Eksner, H. J. (2013). Revisiting the 'ghetto' in the New Berlin Republic: Immigrant youths, territorial stigmatisation and the devaluation of local educational capital, 1999-2010. *Social Anthropology Sociale*, 21(3), 336-355. [Crossref]
- Emen, T., & Mercan, S. (2024). Migration trauma and substance addiction. In E. Öztürk (Ed.), *Migration psychology* (pp. 91-102). Türkiye Klinikleri. [Crossref]
- Erensoy, S. F. (2024). Experiences of migration from Turkey to Germany: The female guest worker in contemporary documentaries. *Studies in Documentary Film*, 18(1), 18-33. [Crossref]
- Gerson, D., & Ataman, F. (2005, October 5). *Mothers against drug dealers: Turkish women in Berlin go head to head with the junkies*. Der Spiegel. <https://www.spiegel.de/international/mothers-against-drug-dealers-t...sh-women-in-berlin-go-head-to-head-with-the-junkies-a-378115.html>
- Ghosh, P. (2013, August 28). *German MPs worry about Neo-Nazis, but Turkish drug gangs may pose greater threat*. International Business Times. <https://www.ibtimes.com/german-mps-worry-about-neo-nazis-turkish-drug-gangs-may-pose-greater-threat-1400995>
- Grüsser, S. M., Wölfling, K., Mörsen, C. P., Albrecht, U., & Heinz, A. (2005). Immigration-associated variables and substance dependence. *Journal of Studies on Alcohol*, 66(1), 98-104. [Crossref]
- Güney, S., & Kabaş, B. (2017). Migrant spaces and childhood: Growing up in Kreuzberg. *Urbana*, 18(1), 1-23.

- Hamann, U., & Türkmen, C. (2020). Communities of struggle: The making of a protest movement around housing, migration and racism beyond identity politics in Berlin. *Territory, Politics, Governance*, 8(4), 515-531. [\[Crossref\]](#)
- Hays, S. (1996). *The cultural contradictions of motherhood*. Yale University Press.
- Heimann, H. M., Penka, S., & Heinz, A. (2007). Explanatory models for addiction among migrants: A study in ethnic German migrants from the former Soviet Union, migrants from Turkey and native Germans. *Suchttherapie*, 8(2), 57-62. [\[Crossref\]](#)
- Hinze, A. M. (2013). *Turkish Berlin: Integration policy and urban space*. University of Minnesota Press. [\[Crossref\]](#)
- Kadioglu Polat, D. (2020). 'Now the German comes': The ethnic effect of gentrification in Berlin. *Ethnicities*, 20(1), 155-176. [\[Crossref\]](#)
- Kaiser, M. (2005, December 22). *Müternacht: Ortstermin: In Berlin-Kreuzberg machen Türkische Frauen mit Taschenlampen Jagd auf Drogendealer*. Der Spiegel. <https://www.spiegel.de/panorama/muetternacht-a-0c505b04-0002-0001-0000-000044943918>
- Kaya, A. (2001). *Sicher in Kreuzberg: Constructing diasporas; Turkish hip-hop youth in Berlin*. Transcript Verlag. [\[Crossref\]](#)
- Keller, N. (2024). "Stärker als das, was uns trennt": Kriminalisierungen und Solidarität am "gefährlichen Ort" Kottbusser Tor in Berlin Kreuzberg. Verlag Westfälisches Dampfboot. [\[Crossref\]](#)
- Kenji, Y. (2012). *People's power against drug abuse in public spaces in Dortmund, Germany*. Society of Political Economy, Kyushu University. [\[Crossref\]](#)
- Kil, W., & Silver, H. (2006). From Kreuzberg to Marzahn: New migrant communities in Berlin. *German Politics and Society*, 24(4), 95-121. [\[Crossref\]](#)
- Lehmann, N. (2012). „Eltern forschen“ im Sozialraum. Das europäische Projekt „Elternforschungsgruppen“ in Berlin. Sozialraum.de. <https://www.sozialraum.de/eltern-forschen-im-sozialraum.php>
- Loy, T. (2005, August 22). *Berlin Leuchten direkt ins Gewissen*. Tagesspiegel. <https://www.tagesspiegel.de/berlin/leuchten-direkt-ins-gewissen-1250200.html>
- Mandel, R. (2008). *Cosmopolitan anxieties: Turkish challenges to citizenship and belonging in Germany*. Duke University Press. [\[Crossref\]](#)
- Morgan, H. (2022). Conducting a qualitative document analysis. *The Qualitative Report*, 27(1), 64-77. [\[Crossref\]](#)
- Öztan, E. (2010). Göçmen kadınlar ve anneliğin düzenlenmesi: Amsterdamlı Türkiye kökenli kadınların annelik deneyimleri. *Toplum ve Bilim*, 119(119), 111-140.
- Pauly, K. (2009, March 29). *Mütter sagen Dealern den Kampf an*. Berliner Morgenpost. <https://www.morgenpost.de/printarchiv/kultur/article104002621/Muetter-sagen-Dealern-den-Kampf-an.html>
- Sey, C. (2005a, August 26). *Almanya'daki Türklerin uyuşturucu mücadelesi*. BBC Turkish. https://www.bbc.co.uk/turkish/fooc/story/2005/08/050826_fooc_cem.shtml
- Sey, C. (2005b, August 2). *Gegenwind für türkische Drogendealer*. taz. <https://taz.de/Gegenwind-fuer-tuerkische-drogendealer/!567138&s=kreuzberg%2Bdrogen%2Bmuetter/>
- Slevogt, E. (2009, March 24). *Esther Slevogt betrachtet das Treiben auf Berlins Bühnen*. taz. <https://taz.de/Esther-Slevogt-betrachtet-das-Treiben-auf-Berlins-Buehnen/!694987/>
- Stehle, M. (2006). Narrating the ghetto, narrating Europe: From Berlin, Kreuzberg to the banlieues of Paris. *Westminster Papers in Communication and Culture*, 3(3), 48-70. [\[Crossref\]](#)
- Şahin, M., & Güngör, F. (2022). Göç ve bağımlılık: Suriyeli göçmenlerin madde kullanım süreçlerine dair nitel bir araştırma [Special issue]. *İçtimaiyat*, 6, 319-337. [\[Crossref\]](#)
- Taşdemir, M., Küçükali, H., Uçar, A., & Sur, H. (2020). Exploring alcohol and substance addiction among Syrian migrants in Turkey: A qualitative study integrating perspectives of addicts, their relatives, local and national institutions. *Addicta: The Turkish Journal on Addictions*, 7(4), 253-276. [\[Crossref\]](#)
- Thompson, J. (2022). A guide to abductive thematic analysis. *The Qualitative Report*, 27(5), 1410-1421. [\[Crossref\]](#)
- Wanke, M., Macit, R., & Gülerce, H. (2022). The stigmatization of drug addiction in South-East Turkey the case of drug abuse prevention programme for youth project in Turkey. *Addicta: The Turkish Journal on Addictions*, 9(2), 137-141. [\[Crossref\]](#)
- Wawzyniak, H. (2012, April 16). *Mütter ohne Grenzen*. Halina Wawzyniak Blog. <https://blog.wawzyniak.de/mutter-ohne-grenzen/#comment-3160>
- Wierth, A. (2009, March 17). *Drogenszene am Kottbusser Tor: Der Zorn der Migranten*. taz. <https://taz.de/Drogenszene-am-Kottbusser-Tor/!5166174/>
- Wolf, M. (2011). *Is multiculturalism really dead? A closer look at the multiculturalism debate within the context of Berlin's district of Kreuzberg*. Honors Projects. <https://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article=1083&context=honorsprojects>
- Woltersdorf, A. (2005, August 15). *Mütter wollen Grenzen setzen*. taz. <https://taz.de/Muetter-wollen-Grenzen-setzen/!561293/>

Syrian refugees under temporary protection and the YEDAM Service Network in Türkiye: An ecological perspective on regional balance

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Abstract

This study aimed to examine, at an ecological level, the relationship between the regional distribution of Syrian refugees under temporary protection across Türkiye and the numerical distribution of Green Crescent Counseling Centers (YEDAM). This descriptive and cross-sectional study was conducted using publicly accessible data from the Presidency of Migration Management of the Republic of Türkiye Ministry of Interior and YEDAM, obtained in October 2025. For each province and region, the number of registered Syrians under temporary protection, the ratio of registered Syrians to the total provincial population, and the number of YEDAM centers constituted the study variables. The Kruskal–Wallis H test, Bonferroni-corrected Dunn multiple comparison test, and Spearman correlation analysis were applied for statistical analyses. A statistically significant positive correlation was found between the number of registered Syrians and the number of YEDAM centers nationwide ($p = 0.015$). The number of Syrians per YEDAM center was significantly higher in the Mediterranean and Southeastern Anatolia regions compared with the Black Sea and Eastern Anatolia regions ($p < 0.01$). The findings indicate that YEDAM has established a strong foundation with its nationwide service network; however, increasing the number of centers in regions with high immigrant density could further enhance equity in service provision.

Keywords: counseling, health services accessibility, refugees

Main points

- This study is the first ecological analysis examining the regional distribution of YEDAM centers and Syrian refugees in Türkiye.
- A significant positive correlation was found between the number of registered Syrians and YEDAM centers nationwide.
- Increasing YEDAM capacity in regions with higher migrant density may improve accessibility and service equity.

Introduction

Migration is a phenomenon that has persisted for centuries and whose effects have increasingly expanded on a global scale, profoundly influencing the demographic structure of societies and the dynamics of public health (Goldenberg & Fischer, 2023). Wars, poverty, discrimination, and adaptation difficulties leading to forced displacement constitute significant risk factors for mental disorders and addictive behaviors through multidimensional stressors (Cuadrado et al., 2023; López-Atanes et al., 2025). Refugees represent a group that is more vulnerable to addiction, as they are exposed to factors such as trauma, uncertainty, and social exclusion at every stage of the migration process (Aleer et al., 2023; López-

Atanes et al., 2025; Vasic et al., 2021). In addition, a systematic review on forced migrants has demonstrated that substance use may increase as a maladaptive coping response to trauma, post-migration stressors, and social inequities (Horyniak et al., 2016).

As of October 2025, Türkiye is one of the countries hosting the largest number of refugees in the world, with approximately 2.5 million Syrians under temporary protection (T.C. İçişleri Bakanlığı Göç İdaresi Başkanlığı, 2025). The high proportion of the migrant population creates additional demands and an increasing need for mental health and addiction services; however, access to these services remains limited for these groups due to various cultural, linguistic, and structural

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barriers (Bilican et al., 2025; Fuhr et al., 2019; Schoenberger et al., 2024; Stylianopoulos et al., 2024). Supporting this observation, a systematic review reported that refugees and asylum seekers have high mental health needs but underutilize mental health services in European host countries (Satinsky et al., 2019). On the other hand, Türkiye has a well-established national structure addressing addiction within the general population. The Green Crescent Counseling Center (YEDAM), founded by the Turkish Green Crescent Society, provides free, accessible, and evidence-based counseling services across the country within the scope of addiction prevention and treatment, playing a significant role in promoting preventive and rehabilitative approaches throughout all segments of society (Yeşilay Danışmanlık Merkezi, 2025). However, the geographical distribution and number of these centers have not yet been systematically examined in relation to the size and density of the migrant population.

This study aims to analyze the relationship between the number of Syrians under temporary protection and the distribution of YEDAM centers across Türkiye's seven geographical regions. As one of the first ecological-level investigations addressing the interaction between migration and addiction in Türkiye from a service accessibility perspective, the study seeks to raise awareness regarding migration-based regional planning of addiction counseling services and to provide scientific evidence on the inclusiveness of YEDAM's field infrastructure.

Methods

Study Design

This study was designed as an ecological, descriptive, and cross-sectional research that examines, at the regional level, the relationship among the number of Syrians under temporary protection in Türkiye, the ratio of registered Syrians to the total provincial population, and the distribution of YEDAM centers. The study does not include individual-level data and was conducted solely based on publicly available statistical indicators.

Data Sources

Two primary data sources were used in this study. The first dataset was obtained from the publicly accessible database of the Presidency of Migration Management under the Ministry of Interior of the Republic of Türkiye, which presents, as of October 9, 2025, the number of Syrians under temporary protection by province and their ratios to the total provincial population (T.C. İçişleri Bakanlığı Göç İdaresi Başkanlığı, 2025). The second dataset was derived from the official website of YEDAM, which provides the provincial numerical distribution of YEDAM centers (Yeşilay Danışmanlık Merkezi, 2025). Both datasets were compiled by the researcher to include all 81 provinces and were classified according to Türkiye's seven geographical regions (Marmara, Aegean, Mediterranean, Central Anatolia, Black Sea, Eastern Anatolia, and Southeastern Anatolia). Accordingly, for each province and region, the number of registered Syrians under temporary protection, the

ratio of registered Syrians to the total provincial population (%), and the number of YEDAM centers were obtained as study variables.

Statistical Analysis

All statistical analyses were performed using SPSS 27.0 software. Descriptive statistics (mean, standard deviation, median, minimum, and maximum values) were calculated for all variables. The distribution characteristics of the data were evaluated using the Shapiro–Wilk test, and non-parametric tests were preferred for variables not showing normal distribution. To evaluate differences among Türkiye's seven geographical regions in terms of the ratio of registered Syrians to the total provincial population (%) and the ratio of registered Syrians to the number of YEDAM centers, the Kruskal–Wallis H test was applied. When significant differences were detected, the Bonferroni-corrected Dunn multiple comparison test was used to determine the source of the difference. In addition, Spearman's rank correlation analysis was conducted to assess relationships between variables. A p-value of < 0.05 was considered statistically significant in all analyses.

Ethical Considerations

This study was conducted exclusively using publicly available statistical data obtained from the official websites of the Presidency of Migration Management of the Republic of Türkiye and YEDAM. The study does not include any individual-level human or patient data. Therefore, it is not classified as "human subjects research" and does not require ethical committee approval.

Results

Number of Registered Syrians and YEDAM Data

This ecological and cross-sectional study was conducted using data obtained from 81 provinces across Türkiye. The total number of Syrians under temporary protection registered in the country was 2,419,425. The mean ratio of Syrians under temporary protection to the total population was $1.77\% \pm 3.48$ nationwide. In contrast, there were a total of 104 YEDAM centers across the 81 provinces. The average number of registered Syrians per YEDAM center was calculated as $23,205 \pm 55,316$ individuals.

Distribution of Variables by Geographical Regions

An analysis of regional distribution across Türkiye revealed that the Southeastern Anatolia Region had the highest number of Syrians under temporary protection, with 692,230 registered individuals and 10 YEDAM centers. The Marmara Region ranked second, hosting 642,695 Syrians and 29 YEDAM centers. The Mediterranean Region had 599,300 Syrians and 8 YEDAM centers, while Central Anatolia had 275,441 Syrians and 16 YEDAM centers. In the Aegean Region, there were 151,184 Syrians and 9 YEDAM centers; the Black

Sea Region had 23,485 Syrians and 18 YEDAM centers; and the Eastern Anatolia Region had 35,090 Syrians and 14 YEDAM centers. Table 1 presents a comparison of the ratio of registered Syrians to the total provincial population (%) and the number of registered Syrians per YEDAM center across Türkiye's geographical regions.

When examining the ratio of registered Syrians to the total provincial population, the Southeastern Anatolia Region had the highest Syrian density, with a mean Syrian ratio of 6.39% and an average of 75,778 Syrians per center. The Black Sea Region had the lowest Syrian density, with a mean ratio of 0.25% and 1,305 Syrians per center. The difference in Syrian ratios among regions was statistically significant (Kruskal–Wallis $H = 41.30$; $p < 0.001$). According to the Bonferroni-corrected Dunn multiple comparison test, the Southeastern Anatolia and Mediterranean regions had significantly higher ratios compared to the Black Sea and Eastern Anatolia regions ($p < 0.01$). Differences between the other regions were not statistically significant ($p > 0.05$).

The ratio of registered Syrians to the number of YEDAM centers was also analyzed across the seven geographical regions. The difference in the number of Syrians per YEDAM center among regions was statistically significant ($H = 39.21$; $p < 0.001$). According to the Bonferroni-corrected Dunn multiple comparison test, the Mediterranean and Southeastern Anatolia regions had significantly higher numbers of Syrians per YEDAM center than the Black Sea and Eastern Anatolia regions ($p < 0.01$). No significant differences were found between the remaining regions ($p > 0.05$).

Correlation Analyses

The statistical relationships among the number of registered Syrians, the ratio of registered Syrians to the total population,

and the number of YEDAM centers are presented in Table 2. Nationwide, without regional distinction, the Spearman correlation analysis revealed a weak but significant positive relationship between the number of Syrians and the number of YEDAM centers ($p = 0.27$; $p = 0.015$). This finding suggests that YEDAM planning partially responds to the absolute number of migrants. A very strong positive correlation was identified between the Syrian ratio and the ratio of Syrians per YEDAM center ($p = 0.961$; $p < 0.001$), indicating that as the proportion of migrants increases across Türkiye, the service load per YEDAM center also rises. In regional-level correlation analyses, the variance of the YEDAM variable was found to be zero in some geographical regions where all provinces had a fixed number (one) of YEDAM centers; therefore, correlations could not be statistically calculated for those regions.

Discussion

This study represents one of the first ecological analyses to examine the relationship between the number of Syrians under temporary protection, the ratio of registered Syrians to the total population, and the regional distribution of YEDAM centers across Türkiye. The findings indicate that the migrant population is particularly concentrated in the Southeastern Anatolia and Mediterranean regions, whereas YEDAM centers are generally evenly distributed across the country but show potential for capacity expansion in provinces with higher migrant density. A strong positive correlation was observed between the proportion of Syrians and the ratio of migrants per YEDAM center nationwide, suggesting that while YEDAM's existing structure demonstrates broad coverage, establishing new centers in regions with higher migrant populations could further enhance service accessibility.

Previous research has shown that the YEDAM model provides a strong framework in terms of clinical effectiveness for

Table 1. Comparison of the ratio of registered Syrians to the total provincial population (%) and the number of registered Syrians per YEDAM Center across geographical regions of Türkiye

Geographical region	Ratio of registered Syrians to the total provincial population (%) (Mean $\pm$ SD)	Kruskal–wallis p-value	Number of registered Syrians per YEDAM Center (Mean $\pm$ SD)	Kruskal–wallis p-value
Southeastern Anatolia	6.39 $\pm$ 8.35	<0.001	75,778 $\pm$ 97,925	<0.001
Mediterranean	4.70 $\pm$ 3.24		74,913 $\pm$ 65,352	
Marmara	1.18 $\pm$ 1.26		19,850 $\pm$ 42,512	
Central Anatolia	1.41 $\pm$ 1.43		16,999 $\pm$ 28,376	
Aegean	0.90 $\pm$ 0.62		12,551 $\pm$ 17,382	
Eastern Anatolia	0.40 $\pm$ 0.67		2,506 $\pm$ 5,759	
Black Sea	0.25 $\pm$ 0.22		1,305 $\pm$ 1,636	

Mean $\pm$ SD: Mean and Standard Deviation; $p < 0.05$ was considered statistically significant.

Table 2. Spearman correlation analyses between the number and ratio of registered Syrians and the number of YEDAM Centers across regions of Türkiye

	Registered Syrians and number of YEDAM Centers (p , p)	Ratio of registered Syrians and ratio of registered Syrians per YEDAM Center (p , p)
Overall (Türkiye)	$p = 0.27$; $p = 0.015$	$p = 0.961$; $p < 0.001$

p = Spearman correlation coefficient; $p < 0.05$ was considered statistically significant.

addiction treatment. A study conducted with 554 clients reported that YEDAM is an effective national model in the treatment of alcohol and substance addiction, characterized by high treatment retention rates, prolonged abstinence duration, and high client satisfaction (Simsek et al., 2019). Studies examining the interaction between psychological trauma and addiction among clients applying to YEDAM have shown that a history of trauma is a critical determinant in understanding addictive behaviors. In a study conducted with 322 YEDAM clients, 97.5% of participants were found to have experienced at least one traumatic event, and 21.7% met the risk criteria for Post-Traumatic Stress Disorder (PTSD) (Şeker et al., 2019). In the PTSD risk group, higher levels of addiction severity, functional impairment related to substance use, and impulsivity were identified. These findings highlight the importance of trauma-informed approaches in addiction treatment centers; considering the high trauma burden observed among migrant populations, they also emphasize the necessity for YEDAM to develop service models strengthened by trauma awareness. Our study, however, complements these individual-based findings on the YEDAM model not in terms of clinical outcomes or client characteristics, but rather from the perspective of regional distribution and service inclusiveness of the centers.

Previous studies have demonstrated that post-migration factors such as daily stressors, anxiety, acculturation processes, and perceived social support play an important role in shaping substance use behaviors among forced migrants. For example, a study conducted among Syrian migrants in Türkiye found that general anxiety predicted cigarette dependence, while psychological and socio-cultural adaptation processes were significant predictors of risky alcohol consumption, highlighting the complex interplay between psychological and social determinants of addiction (Demircan & Guler, 2024). Taşdemir et al. (2020) examined risk factors for alcohol and substance use disorders among migrants using a multidimensional approach and demonstrated that, at the individual level, young age, low educational attainment, unemployment, a history of trauma, and separation from family members, and, at the environmental level, illicit trade, insecurity, harsh working conditions, and social exclusion are key factors increasing the risk of addiction. The same study emphasized that migrants with substance dependence often possess awareness and motivation to quit substance use yet encounter significant environmental and structural barriers to accessing services. These findings indicate that not only individual factors but also the spatial and structural characteristics of service provision play a decisive role in combating addiction. In this context, our study makes an important contribution to the literature by jointly examining the regional distribution of YEDAM centers in Türkiye and the distribution of the Syrian population under temporary protection.

Recent studies in the literature have shown a significant imbalance between migrant density and healthcare service capacity. A field study conducted in Sultanbeyli, Istanbul, reported that there were marked spatial and institutional disparities in Syrian refugees' access to mental health and

addiction-related healthcare services, and that these services were not sufficiently located in regions with high migrant density (Fuhr et al., 2019). In a review study published by Uwishema et al. in 2025, it was emphasized that access to healthcare services for refugees in Türkiye is unequal due to factors such as location, language, and legal status; moreover, the increasing number of refugees has deepened these inequalities, highlighting the need for capacity expansion and comprehensive systemic reforms (Uwishema et al., 2025). Similarly, the international literature also reports spatial and institutional limitations in access to mental health and addiction services in regions with high refugee and migrant density. A study conducted in Germany indicated that refugees' access to addiction treatment services is limited and that their needs are not adequately met within the system; this situation was suggested to be associated with insufficient service capacity and lack of integration (López-Atanes et al., 2025). Another study conducted in Germany reported that refugees face institutional barriers to accessing addiction treatment services, including language difficulties, cultural mismatches, limited system capacity, and shortages of qualified personnel (Saleh et al., 2023). A study conducted in the United States showed that migrant workers have limited spatial access to healthcare services and that, particularly in rural areas, available services remain inadequate to meet the needs of this population (Decicco et al., 2025). Another study conducted in the United States demonstrated that refugees face various barriers to accessing addiction treatment services and that existing services are inadequate to meet the specific needs of this group (McCleary et al., 2016). Furthermore, it has been emphasized that the lack of healthcare system capacity complicates the referral process for treatment. In line with the existing literature, our study also found a positive correlation between the ratio of registered Syrians to the total provincial population and the service load per YEDAM center. These findings indicate that capacity expansion and regional planning strategies sensitive to migrant density could further strengthen the inclusiveness of the YEDAM model.

This study has several limitations. As it is based on an ecological and cross-sectional design, causal relationships at the individual level cannot be established. Ecological analyses reflect relationships at the collective level and do not directly represent individual-level service accessibility or utilization behaviors. Such ecological assessments, however, serve as a fundamental tool for evaluating the responsiveness of national service planning to the dynamics of the migrant population. In addition, the data were obtained exclusively from publicly available sources, and individual service applications or center-based performance indicators were not included in the analysis. Therefore, the results reflect general regional trends but remain limited in explaining micro-level service differences. It should also be noted that, in Türkiye, the fight against addiction involves not only YEDAM but also centers affiliated with the Ministry of Health and various other governmental and non-governmental organizations. While this is acknowledged, the present study aimed not to include all institutions working in addiction services, but to examine the regional distribution of the YEDAM model at an ecological level. YEDAM was chosen because it is a civil-society-based

organization with a widespread presence and a standardized data system within the national addiction response framework.

In future studies, the inclusion of reliable and accessible data from other addiction treatment centers could provide a more comprehensive overview of national service capacity and regional disparities. This would contribute to the development of a broader and more in-depth literature on the holistic structure of addiction services in Türkiye. Although the present ecological study provides an initial overview of the relationship between the regional distribution of the Syrian population under temporary protection and the number of YEDAM centers across Türkiye, future studies incorporating more detailed center-level data such as personnel numbers, service capacity and volume, application numbers and types among individuals under temporary protection, and center-based performance indicators could contribute to a more comprehensive evaluation of service adequacy and equity. A major strength of this study lies in its ecological approach, being the first to jointly examine the distribution of the population under temporary protection and the regional numerical capacity of YEDAM in Türkiye. In this respect, it provides an important reference for service planning and regional capacity-building strategies, while also offering scientific evidence on potential areas where the accessibility and inclusiveness of the YEDAM model can be further enhanced. The findings demonstrate that YEDAM has established a strong foundation with its nationwide service network; however, capacity expansion in regions with high migrant density could further promote equity in service delivery.

Conclusion

This study examined, at an ecological level, the relationship between the regional distribution of the Syrian population under temporary protection and the number of YEDAM centers across Türkiye. The analyses revealed a statistically significant positive correlation between the number of registered Syrians and the number of YEDAM centers, indicating that the service infrastructure of YEDAM aligns with the dynamics of the Syrian population.

The study also found that the number of Syrians per YEDAM center was significantly higher in the Mediterranean and Southeastern Anatolia regions compared with the Black Sea and Eastern Anatolia regions. At this stage, our study serves as a reference model that may guide regional planning and diversification efforts within YEDAM's strong and extensive service network. It is anticipated that increasing the numerical capacity and enhancing regional diversity of YEDAM centers, particularly in the Mediterranean and Southeastern Anatolia regions, could further improve accessibility for the Syrian population.

Author contributions

Conception and design: E.V.; Data acquisition: E.V.; Data analysis: E.V.; Data interpretation: E.V.; Drafting of the

manuscript: E.V.; Critical revision of the manuscript: E.V. The author reviewed the results, approved the final version of the manuscript, and agreed to be accountable for all aspects of this study.

Ethical approval

Ethics committee approval and informed consent were not required for this study.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of interest

The author declares that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Generative AI statement

The author declares that during the preparation of this study, the following AI-assisted technology was used: ChatGPT-5 on 15 October 2025. Extent of Use: Artificial intelligence tools were used in a limited manner solely for language editing and improving clarity of expression during the manuscript preparation process. The study design, data collection, statistical analyses, interpretation of the findings, and all scientific conclusions were entirely performed by the author. The author confirms that he/she has critically reviewed and edited any AI-generated content and takes full responsibility for the integrity, accuracy, and originality of the publication. The author certifies that the original human contribution is maintained and that AI-assisted tools are not listed or cited as authors.

References

- Aleer, E., Alam, K., Rashid, A., Mohsin, M., & Eacersall, D. (2023). Substance abuse amongst refugee youth: A scoping review. *Current Addiction Reports*, 10(3), 594-609.
- Bilican, S., Irfan, M., Cox, A., Salaets, H., Sabbe, M., & Schoenmakers, B. (2025). Access to mental healthcare for refugees, asylum seekers and migrants: An umbrella review of barriers. *BMJ Open*, 15(6), e096267. [\[Crossref\]](#)
- Cuadrado, C., Libuy, M., & Moreno-Serra, R. (2023). What is the impact of forced displacement on health? A scoping review. *Health Policy Plan*, 38(3), 394-408. [\[Crossref\]](#)
- Decicco, P., Prakash, J., Nelson, E., Martínez de Vedia, G., & Stoklosa, H. (2025). Migrant workers' access to medical service providers in Pennsylvania. *Journal of Migration and Health*, 11, 100335. [\[Crossref\]](#)

- Demircan, D., & Guler, M. (2024). Factors affecting risky alcohol consumption, smoking addiction in forced syrian migrants. *Addicta: The Turkish Journal on Addictions*, 11(3), 338-346. [\[Crossref\]](#)
- Fuhr, D. C., Acarturk, C., McGrath, M., Ilkkursun, Z., Sondorp, E., Sijbrandij, M., Ventevogel, P., Cuijpers, P., McKee, M., & Roberts, B. (2019). Treatment gap and mental health service use among Syrian refugees in Sultanbeyli, Istanbul: A cross-sectional survey. *Epidemiology and Psychiatric Sciences*, 29, e70. [\[Crossref\]](#)
- Goldenberg, S. M., & Fischer, F. (2023). Migration and health research: Past, present, and future. *BMC Public Health*, 23(1), 1425. [\[Crossref\]](#)
- Horyniak, D., Melo, J. S., Farrell, R. M., Ojeda, V. D., & Strathdee, S. A. (2016). Epidemiology of substance use among forced migrants: A global systematic review. *PLoS One*, 11(7), e0159134. [\[Crossref\]](#)
- López-Atanes, M., Rosenkranz, M., Erkoreka, L., Recio-Barbero, M., Bari, M., Hiller, P., Penka, S., Lindert, J., Martens, M., & Schäfer, I. (2025). Special needs of refugees with substance use disorders from conflict-affected countries: A comparison with German-born individuals. *Social Psychiatry and Psychiatric Epidemiology*, 60(7), 1563-1572. [\[Crossref\]](#)
- McCleary, J. S., Shannon, P. J., & Cook, T. L. (2016). Connecting refugees to substance use treatment: A qualitative study. *Soc Work Public Health*, 31(1), 1-8. [\[Crossref\]](#)
- Saleh, E. A., Klapprott, F., Heinz, A., & Kluge, U. (2023). Challenges in substance use treatment as perceived by professionals and Arabic-speaking refugees in Germany. *Substance Abuse Treatment, Prevention, and Policy*, 18(1), 69. [\[Crossref\]](#)
- Satinsky, E., Fuhr, D. C., Woodward, A., Sondorp, E., & Roberts, B. (2019). Mental health care utilisation and access among refugees and asylum seekers in Europe: A systematic review. *Health Policy*, 123(9), 851-863. [\[Crossref\]](#)
- Schoenberger, S. F., Schönenberg, K., Fuhr, D. C., Nesterko, Y., Glaesmer, H., Sondorp, E., Woodward, A., Sijbrandij, M., Cuijpers, P., Massazza, A., McKee, M., & Roberts, B. (2024). Mental healthcare access among resettled Syrian refugees in Leipzig, Germany. *Cambridge Prisms: Global Mental Health*, 11, e25. [\[Crossref\]](#)
- Simsek, M., Akturk, I., Dinc, M., Isik, S., & Ogel, K. (2019). Evaluating the treatment effectiveness of an addiction counseling center. *ADDICTA: The Turkish Journal on Addictions*, 6(3), 797-801. [\[Crossref\]](#)
- Stylianopoulos, P., Hertner, L., Heinz, A., Kluge, U., Schäfer, I., & Penka, S. (2024). Good practice in reaching and treating refugees in addiction care in Germany - A Delphi study. *BMC Public Health*, 24(1), 30. [\[Crossref\]](#)
- Şeker, B. Ç., Dinç, M., Işık, S., & Ögel, K. (2019). Incidence and Characteristics of Psychological trauma in alcohol and substance abuse disorder. *ADDICTA: The Turkish Journal on Addictions*, 6(2), 315-336. [\[Crossref\]](#)
- Taşdemir, M., Küçükali, H., Uçar, A., & Sur, H. (2020). Exploring alcohol and substance addiction among Syrian migrants in Turkey: A qualitative study integrating perspectives of addicts, their relatives, local and national institutions. *ADDICTA: The Turkish Journal on Addictions*, 7(4), 253-276. [\[Crossref\]](#)
- T.C. İçişleri Bakanlığı Göç İdaresi Başkanlığı. (2025). *Geçici koruma*. <https://www.goc.gov.tr/gecici-koruma5638>
- Uwishema, O., Kwan Su Huey, A., Sengar, A. S., Patel, R. P., Kazan, Z., & Choudhary, K. (2025). Addressing the health needs of refugees and migrants in Türkiye: A literature review. *Health Science Reports*, 8(2), e70442. [\[Crossref\]](#)
- Vasic, J., Grujicic, R., Toskovic, O., & Pejovic Milovancevic, M. (2021). Mental health, alcohol and substance use of refugee youth. *Front Psychiatry*, 12, 713152. [\[Crossref\]](#)
- Yeşilay Danışmanlık Merkezi. (2025). *YEDAM – Yeşilay Danışmanlık Merkezi*. <https://www.yedam.org.tr/>

Learnings from a German research network on substance use among refugees (PREPARE) with a focus on an intervention to improve emotion regulation

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Abstract

Refugees face a unique constellation of pre-, peri-, and post-migration stressors that can increase vulnerability to hazardous substance use while simultaneously limiting access to appropriate care. To address this gap, the PREPARE consortium was established as the first coordinated German research network on substance use among refugees, combining empirical assessment, diagnostic innovation, and intervention development. This article provides an overview of the network and synthesizes cross-project learnings with a particular focus on Subproject 4 (STARC-SUD), an emotion-regulation-based group intervention adapted for refugees with hazardous alcohol or drug use.

Across multiple sites, PREPARE identified substantial barriers to recruitment and engagement, including stigma, legal insecurity, language difficulties, and the structural conditions of communal accommodation. The adaptation and translation of screening instruments improved diagnostic accuracy, while iterative modifications of STARC-SUD enhanced cultural fit and feasibility. Early implementation experiences highlight the importance of trust-building, flexible delivery formats, and close cooperation with community actors. The Sucht-und-Flucht.de platform (<https://www.sucht-und-flucht.de/en/>) emerged as a central dissemination tool, providing multilingual materials, diagnostic instruments, and project information to practitioners and supporting long-term knowledge transfer.

The preliminary observations from the ongoing trial underscore the need for integrated, culturally sensitive, and trauma-informed approaches within European addiction-care systems. PREPARE demonstrates the potential of emotion-regulation interventions for refugee populations and points to the importance of sustained, multi-level strategies involving research, practice, and policy to improve access and outcomes for displaced individuals affected by substance use.

Keywords: addictions to alcohol, addictions to drugs, alcohol, germany, mental health, prevention, refugees

Main points

- PREPARE is a multi-site German research consortium integrating complementary subprojects across institutions to advance understanding, assessment, and care of substance use among refugees.
- Across subprojects, refugees with hazardous substance use emerged as a highly underserved and hard-to-reach group due to stigma, legal insecurity, language barriers, and unstable living conditions.
- Culturally adapted screening tools and multilingual materials are essential for improving diagnostic accuracy and access to addiction care for refugee populations.
- STARC-SUD provides a culturally sensitive, trauma-informed group intervention linking emotion regulation with substance-use behavior in refugees with hazardous alcohol or drug use.
- The Sucht-und-Flucht.de platform facilitates sustainable knowledge transfer by offering multilingual resources, diagnostic instruments, and practice-oriented materials for professionals.

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Introduction

Refugee Migration and Substance Use: The German Context

While refugee migration to Germany had already been rising in the years before, 2015 marked a significant increase, particularly among people from Syria, Afghanistan, and Iraq. This demographic shift has drawn attention to the complex health needs of these populations, including the often-overlooked domain of substance use. Research indicates that forced migrants are exposed to a combination of pre-migration traumatic events, stressful displacement trajectories, and post-migration stressors – such as legal uncertainty, unemployment, social marginalization, and discrimination – which jointly contribute to elevated vulnerability for mental health problems and risk-related behaviors (Chen et al., 2017; Hajak et al., 2021).

Despite these risks, population-level data on substance use patterns among refugees in Germany remain scarce. Studies consistently highlight diagnostic challenges, limited culturally validated screening tools, and significant heterogeneity across refugee subgroups, making it difficult to establish reliable prevalence estimates (Ezard, 2012). Qualitative research suggests that substance use among displaced populations may serve as a maladaptive coping response to trauma and ongoing stressors, yet it also reflects culturally embedded meanings, social norms, and gendered expectations (Lindert et al., 2021).

At the same time, refugees access addiction services at significantly lower rates than the general population, a phenomenon repeatedly described as one of the core structural challenges in German addiction care (Schwarzkopf et al., 2023; von Glahn-Middelmenne, 2023). Structural barriers include complex administrative requirements, language barriers, limited availability of interpretation services, lack of knowledge about the health system, and the separation between psychiatric/trauma services and addiction treatment sectors (Boettcher et al., 2021; Kiselev et al., 2020).

Taken together, the available evidence underscores both the relevance and urgency of developing targeted, culturally sensitive approaches to better understand and address substance use among refugees in Germany. It also highlights the substantial knowledge gaps, particularly regarding prevalence, assessment, and pathways into care—gaps which the PREPARE research network seeks to address.

Unaccompanied Young Refugees

Young refugees entering adulthood face a range of vulnerabilities. The Council of Europe defines “young refugees in transition to adulthood” as those who arrived as children and have since reached adulthood, emphasizing their heightened exposure to exclusion, violence, and unmet rights if adequate support structures are lacking (Council of Europe, 2019).

Research across disciplines, including psychological and ethnographic perspectives, has shown that young refugees—especially when unaccompanied or separated from caregivers—constitute a subgroup frequently described as particularly vulnerable due to their exposure to traumatic events, uncertainty, and precarious living conditions. At the same time, studies also document their resilience and agency, highlighting that vulnerability and capability coexist and shape the experiences of young people on the move (Lems et al., 2020; Müller-Funk et al., 2023; Uzureau et al., 2024).

Research consistently shows high burdens of mental health problems among unaccompanied young refugees. Meta-analytic and systematic evidence indicates an elevated prevalence of post-traumatic stress, depression, and anxiety disorders in this group, driven by both traumatic exposures and daily post-migration stressors (Blackmore et al., 2020; Pfeiffer et al., 2022). Other studies point to profound risks of loneliness and social isolation, which are exacerbated when young people are separated from their families or lack stable social networks in the host country (Garcia & Birman, 2022; Nguyen et al., 2024).

These stressors can overwhelm coping capacities and increase susceptibility to maladaptive coping behaviors, including problematic substance use (Aleer et al., 2023). This is particularly problematic for young people who are still in development (Sweeney et al., 2018). Evidence suggests that although alcohol use among migrant youth is often lower than among their native-born peers, patterns for tobacco and illicit drugs vary across groups and contexts (van Dorp et al., 2021).

Taken together, these findings underline the particular importance of developing culturally sensitive, developmentally informed prevention and intervention strategies for young refugees—especially those who arrived unaccompanied—to address their unique combinations of resilience, risk, and unmet service needs.

Need for Culturally Sensitive and Integrated Approaches

Research demonstrates that mainstream addiction services in Europe often fail to reach refugees and other people with migration backgrounds. Early German literature criticized a deficit-oriented perspective, which tended to attribute low uptake of addiction services to refugees’ “otherness” rather than to systemic factors. In a monograph that helped shape the debate, Penka argues that such a view overlooks how fear of stigma, mistrust of Western health systems, unfamiliarity with available services, and divergent explanatory models of addiction discourage migrants from seeking help (Penka, 2004). Subsequent studies across Europe have documented additional structural and socio-cultural barriers, including inadequate funding for interpretation, cumbersome administrative processes, discriminatory attitudes, and the fact that entitlement to addiction treatment varies by legal status and federal state (Kiselev et al., 2020; Penka et al., 2015).

Qualitative studies with Syrian male refugees in Germany echo these findings, noting that negative perceptions of psychiatry, lack of trust in clinicians, and uncertainty about their rights reduce the likelihood of accessing addiction services (Lindert et al., 2021).

These barriers are compounded by the limitations of existing screening tools and interventions. Standardized instruments for substance use assessment are typically developed and validated in Western populations. As a result, they may not capture culturally specific expressions of distress, explanatory models, or idioms of substance use. Penka and colleagues describe how differences in conceptualizing suffering and addiction can lead to misunderstandings in clinical encounters and misclassification of symptoms (Penka et al., 2012). International frameworks for cultural adaptation stress that effective interventions must modify language, content, and delivery to align with the target group's cultural patterns and values; such adaptation significantly improves acceptability and outcomes (Bernal et al., 2009). Empirical work with refugees further highlights the need for trauma-informed approaches that integrate substance-use and mental-health treatment, rather than importing Western models unchanged (Penka et al., 2015).

Beyond clinical practice, the political and health-system relevance of culturally sensitive approaches is widely acknowledged. A Europe-wide Delphi study found broad consensus that migrants and refugees should have equal access to health insurance, interpretation services, and non-discriminatory care, but revealed disagreement over how health systems should engage with cultural differences (Devillé et al., 2011). Calls for "intercultural opening" have circulated in Germany since the 1990s, advocating organizational change, multilingual outreach, and recruitment of staff with migration backgrounds to ensure equitable access to addiction services (Penka et al., 2015). Yet national data indicate that people with migration backgrounds remain underrepresented in addiction care, and usage statistics often fail to record refugees as a separate category, limiting the visibility of their needs (Kuhn et al., 2018; Leicht & Köhnlein, 2018). These findings underscore the imperative for integrated, culturally adapted prevention and treatment models – an imperative that the PREPARE research network seeks to meet.

Aim of This Article

This article has three interlinked aims, corresponding to the overarching logic of the PREPARE consortium and the current state of implementation across its subprojects: (1) to present the structure of the PREPARE-network, (2) to summarize early cross-project learnings from implementation, coordination, recruitment, and cultural adaptation, and (3) to highlight the subproject STARC-SUD as a key component of PREPARE, focusing on emotion regulation in forced migrants with substance use problems.

The PREPARE Research Network

Background and Funding Context

The German Federal Ministry of Education and Research (BMBF) responded to the large influx of refugees in 2015/2016 by launching the funding call "Forschungsverbünde zur psychischen Gesundheit geflüchteter Menschen" ("Research networks on the mental health of refugees"). This program, initiated in late 2016, emphasized the need for patient-oriented, interdisciplinary consortia to develop culturally sensitive assessment, prevention, and treatment approaches for refugees. The funded networks were intended to produce evidence-based solutions for mental health care and to collaborate across disciplines and regions.

PREPARE – "Prevention and Treatment of Substance Use Disorders in Refugees" – was selected as one of seven consortia. While the BMBF call addressed refugee mental health broadly, PREPARE specifically targets the intersection of forced migration and substance use. It is coordinated by the Center for Interdisciplinary Addiction Research (ZIS) at the University Medical Center Hamburg-Eppendorf (UKE), with partners in Berlin, Cologne, Emden/Leer, and the German Centre for Addiction Issues (DHS). Together with multiple addiction counselling and treatment facilities in Hamburg, Bremen, Berlin, Hanover, Frankfurt, and Munich, PREPARE integrates epidemiological surveys, qualitative studies, and intervention trials.

The consortium pursues four core objectives: (1) to provide systematic evidence on substance-use problems among refugees in Germany; (2) to identify principles of good practice for addiction care and develop culturally adapted assessment instruments; (3) to test innovative interventions for indicated prevention, and (4) to evaluate an integrative, emotion-regulation-based group treatment for refugees with traumatic experiences and substance-use disorders. The findings and materials generated by PREPARE are already disseminated via a national web-based resource center hosted by the German Centre for Addiction Issues.

Network Structure and Partnerships

The PREPARE consortium is a multi-institutional network that brings together research, clinical, and practice partners across Germany. The core academic members are the Center for Interdisciplinary Addiction Research (ZIS) at the University of Hamburg, which houses the overall coordination; the Department of Psychiatry and Psychotherapy at Charité – Universitätsmedizin Berlin; the Faculty of Social Work and Health at the University of Applied Sciences Emden/Leer; the German Institute on Addiction and Prevention Research at the Catholic University of Applied Sciences in Cologne; and the Distributed Artificial Intelligence Laboratory at Technical University Berlin. In addition, the German Centre for Addiction Issues (Deutsche Hauptstelle für Suchtfragen,

DHS) acts as a dissemination partner by cooperating with ZIS in developing the nationwide platform for practice integration and knowledge transfer. These academic and dissemination partners work closely with practice organizations and service providers in a range of metropolitan regions – including Berlin, Hamburg, Hanover, Bremen, Cologne, Nuremberg, Stuttgart, Frankfurt, and Munich.

Overview of the Four Subprojects

TP1 – Prevalence, Service Use and Good Practice

The first subproject, based at Charité – Universitätsmedizin Berlin (Prof. Dr. Dr. A. Heinz, Dr. S. Penka) aims to quantify how many refugees in Germany meet criteria for hazardous or dependent substance use, identify groups with heightened risk, and assess whether existing services reach them. Employing the World Health Organization's Rapid Assessment and Response (RAR) methodology, the team assembled contextual data, established local networks, and conducted 108 semi-structured interviews with staff from refugee facilities, addiction services, and community organizations; findings were validated through focus groups and a consensus-driven Delphi process involving 22 experts. This process yielded a handout outlining 39 “good practice” strategies across nine domains (e.g. organizational structures, multilingual information, outreach, and staff training) to help addiction services better engage refugees. The project addresses the longstanding observation that prevalence estimates of substance use among refugees vary widely and that systematic data on service utilization have been scarce.

TP2 – Assessment and Cultural Adaptation of SUD Instruments

The second subproject, led by the University of Applied Sciences Emden/Leer (Prof. Dr. J. Lindert), responds to the lack of culturally validated screening tools for substance use in refugee populations. Its goals are to conduct a systematic review of existing instruments, identify a measure judged valid by experts and refugees, and then adapt this instrument to the cultural and linguistic context of Syrian refugees. The adaptation process follows established guidelines for cross-cultural translation and psychometric equivalence, using Delphi panels and focus groups to ensure semantic and conceptual alignment. An initial product is a collection of multilingual diagnostic instruments, already publicly accessible on the web-based platform.

TP3 – Smartphone-Based Indicated Prevention

The third subproject, carried out by the German Institute on Addiction and Prevention Research (Prof. Dr. M. Klein) and the Distributed Artificial Intelligence Laboratory at TU Berlin (Prof. Dr. Dr. S. Albayrak), develops BePrepared, a smartphone app designed for young refugees from Syria, Iraq, and

Afghanistan who engage in risky alcohol or cannabis use. The app combines four core modules – (1) a consumption diary for self-monitoring, (2) motivational exercises to support change, (3) cognitive-behavioral techniques (e.g. refusal-skills training) and (4) relaxation and affect regulation—plus optional psychoeducation and information about local services. This design is informed by evidence that personalized digital interventions can reduce hazardous drinking and cannabis use as effectively as face-to-face programs.

TP4 – Emotion-Regulation Group Treatment (STARC-SUD)

The fourth subproject, coordinated by the Center for Interdisciplinary Addiction Research (ZIS) in Hamburg (Prof. Dr. I. Schäfer, Prof. Dr. A. Lotzin), adapts the Skills Training in Affect Regulation – a Culture-Sensitive Approach (STARC) for refugees with substance-use problems and trauma-related distress. The original STARC program combines cognitive-behavioral therapy with narrative techniques and culturally resonant metaphors and has shown positive effects on emotion regulation in young Afghan refugees. STARC-SUD extends this model by adding modules on substance-use psychoeducation, motivational enhancement, self-reflection, and relapse prevention, developed in close collaboration with refugees and clinicians. A multi-site randomized controlled trial will compare STARC-SUD to treatment as usual among male refugees with hazardous substance use and trauma exposure, with outcomes including psychological distress, emotion regulation, and substance-use behavior.

Early Cross-Project Learnings from PREPARE

Recruitment Barriers Across Sites

The earliest and most comprehensive assessment of recruitment challenges within the PREPARE network comes from the multi-site rapid assessment conducted by Penka and colleagues (Hertner et al., 2023). Across 108 key-informant interviews and 10 focus groups, the authors showed that refugees with hazardous or dependent substance use constitute an extremely hard-to-reach population. Direct recruitment attempts repeatedly failed because individuals feared negative legal consequences, including repercussions for their asylum procedure, and because substance use carries a dual stigma – both as a refugee and as someone who uses alcohol or drugs. Due to these barriers, the study relied heavily on snowball sampling and gatekeeper-mediated access, and noted that recruitment outside large cities was particularly difficult, as expertise and service structures were far less developed.

These barriers quickly became apparent across all other PREPARE subprojects as well. The assumption – common in early project planning – that young refugees could be reached efficiently through digital means proved overly optimistic. In TP3 (BePrepared), many participants had unstable phone access, limited data plans, or insufficient digital literacy, and

promotional campaigns did not translate into spontaneous self-enrollment. Recruitment ultimately required trained cultural brokers who conducted in-person outreach and mobilized peer networks, demonstrating that smartphone affinity alone is insufficient to reach this group.

TP4 (STARC-SUD) also encountered difficulties in recruiting. Pandemic-related restrictions delayed all early activities, but even after restrictions were lifted, it remained extremely difficult to persuade men living in shared accommodation to join a ten-session group therapy program. Many had unstable daily routines, limited privacy, responsibilities towards family members abroad, or were overwhelmed by the bureaucratic burden of asylum procedures. These realities made it difficult to commit to weekly sessions or to reliably attend. Furthermore, the chaotic and often noisy living environment in reception centers – lack of sleep, overcrowded rooms, ongoing conflicts, persistent uncertainty – left little psychological space for proactive help-seeking.

Across the network, it became evident that recruitment challenges had been systematically underestimated. Structural barriers – fragmented services, limited interpretation resources, lack of multilingual staff, mobility restrictions, and legal uncertainties – combined with personal and social barriers such as stigma, mistrust, and fear of institutional contact. PREPARE's experience underscores that future interventions must invest far more in outreach, cultural brokerage, trust-building, and tailored recruitment strategies that address the living conditions of refugees in collective accommodation. Digital solutions, while promising, cannot substitute for sustained personal engagement, relationship-building, and community-based recruitment infrastructures.

Language, Interpretation, and Communication Challenges

Language and communication barriers emerged as a central challenge across several PREPARE subprojects. A nationwide survey of German addiction services showed that institutions rarely implement resource-intensive strategies such as multilingual information, interpreter use, or employment of staff with migration backgrounds. Instead, many services restrict themselves to low-cost measures that require no additional resources, such as offering general information without translation, because interpreter services and multilingual materials are too costly for most facilities (Stylianopoulos et al., 2023). Respondents consistently identified lack of funding for interpreters and the organizational workload involved in coordinating language mediation as major obstacles to adequate care (Stylianopoulos et al., 2023). These findings are reflected in the PREPARE Delphi study, in which experts again emphasized that interpreter costs and organizational burden significantly limit both access and treatment quality.

The case-control study on addiction-service usage highlighted that refugees face language, monetary, and social barriers, often compounded by limited knowledge of the German health system. As a result, refugees struggle to understand

available services and frequently do not access addiction treatment at all (Lopez-Atanes et al., 2025).

Cultural Considerations and Adaptation Needs

Cultural norms, gender expectations, and community-based attitudes toward substance use shaped both participants' help-seeking behaviors and the feasibility of implementing PREPARE interventions. Qualitative research on Syrian male refugees demonstrates that substance use is embedded in culturally specific understandings of masculinity, strength, and emotional restraint. In this context, emotional vulnerability may be difficult to accept, while anger can be a more socially acceptable expression of distress (Lindert et al., 2021). The same study highlights the role of honor, shame, and social reputation, which strongly influence whether individuals admit substance use or participate in treatment.

These patterns were directly relevant for the adaptation of the STARC-SUD intervention. As described in the adaptation process, the team needed to restructure materials to include culturally resonant metaphors, reduce direct confrontation of emotional topics, and integrate examples reflecting participants' lived experiences—such as displacement-related stress, family obligations abroad, and culturally normed emotional suppression. Focus groups revealed that men often associated emotional expression with weakness, making psychoeducation about emotion regulation especially important (Lotzin et al., 2021).

Across PREPARE sites, shame and stigma emerged as key cultural barriers. Many participants feared negative judgement within their ethnic or religious communities, particularly in cases of alcohol use (prohibited in Islam), which created pressure to conceal substance-related problems. These dynamics were also identified in the Delphi study, where experts noted that refugees' fear of social sanctions, moral judgement, and loss of status within family or community reduced both treatment engagement and participation in preventive interventions. Where appropriate, cultural and religious frameworks, including Islamic beliefs, were considered in the adaptation of intervention materials and communication strategies to enhance acceptability and relevance.

This dynamic is further complicated by the widespread anti-immigrant sentiment and anti-Muslim racism in Germany, adding another layer of stigmatization. This affects not only everyday social interactions but also shapes encounters with care providers (Dumke & Neuner, 2023) and needs to be considered when implementing any intervention in this context.

For future interventions, PREPARE's experience underscores the importance of culturally grounded adaptation – including flexible session structures, sensitive handling of emotion-focused content, and the integration of narratives reflecting gender roles, stigma, and community norms. Without such adaptation, interventions risk missing their target group or failing to address the deeper cultural dynamics that shape substance use and recovery.

The Emotion-Regulation-Based Intervention STARC-SUD

Rationale for Combining SUD and Emotion Regulation

The rationale for viewing emotion regulation as a core mechanism in trauma-related substance use derives from a substantial body of evidence showing that individuals exposed to trauma frequently use alcohol or drugs to down-regulate overwhelming negative affect. Meta-analytic research demonstrates that difficulties in emotion regulation occur across numerous mental disorders and significantly contribute to the onset and maintenance of substance-use disorders (Aldao et al., 2010). This mechanism aligns with the self-medication hypothesis, which proposes that substances are used to dampen sadness, anger, fear, or intrusive trauma-related emotions. Additional reviews confirm that emotion-regulation impairments are strongly associated with both craving and relapse risk (Weiss et al., 2022). Among refugees, this mechanism is intensified by ongoing post-migration stressors—uncertainty in asylum procedures, discrimination, unemployment, and social isolation—which elevate emotional distress and increase reliance on substances as maladaptive coping (Schäfer et al., 2022).

Evidence from prior STARC trials underscores why emotion-regulation treatment forms a strong empirical foundation for STARC-SUD. The original STARC approach, developed by Koch and Liedl, was designed as a culturally sensitive 14-session group intervention teaching emotion recognition, cognitive and behavioral regulation strategies, and coping with specific emotion categories such as anger and fear. A pilot randomized controlled trial with young Afghan refugees demonstrated that STARC significantly improved emotion regulation and reduced psychological distress and PTSD symptoms (Koch et al., 2020). However, the original STARC did not address substance-use behavior directly. The PREPARE consortium therefore expanded the model into STARC-SUD, integrating SUD-specific psychoeducation, motivational components and relapse-prevention elements – while preserving the core transdiagnostic focus on emotional processes of STARC (Lotzin et al., 2021).

The relevance of an emotion-regulation-based intervention for male refugees is particularly well supported by qualitative evidence. A study of Syrian male refugees in Germany found that many participants used alcohol, cannabis, or sedatives to manage intrusive memories, anxiety, anger, and daily stress, and that these patterns were deeply shaped by cultural scripts (Lindert et al., 2021). Emotional suppression was described as a normative expectation, making adaptive regulation strategies unfamiliar or inaccessible. Substance use therefore frequently served as a culturally sanctioned alternative to showing vulnerability. Beyond these cultural dynamics, epidemiological work shows that young men from conflict-affected regions experience disproportionate trauma exposure and elevated risk for both PTSD and SUD. By teaching culturally sensitive strategies for articulating, understanding, and regulating emotions, STARC-SUD targets both the psychological mechanisms that drive trauma-related

substance use and the gendered cultural norms that shape help-seeking behavior.

This evidence supports the adaptation of the original STARC intervention for refugees with substance-use disorders by embedding SUD-specific psychoeducation and coping strategies into its established emotion-regulation model. Emotion dysregulation is a central mechanism linking trauma to substance use; STARC has demonstrated feasibility and clinical impact in refugee populations; and qualitative research highlights the specific vulnerability – and specific needs – of male refugees. For these reasons, STARC-SUD represents a theoretically grounded and culturally responsive intervention within the PREPARE research network.

Development and Cultural Adaptation of STARC-SUD

The development of STARC-SUD followed a structured cultural adaptation process grounded in established frameworks for modifying psychological interventions for refugee populations (Heim & Kohrt, 2019). The team conducted five focus groups with Syrian male refugees to explore cultural understandings of substance use, emotional expression, and help-seeking. Themes derived from inductive content analysis informed an expert panel's adaptation proposals, which were refined through consensus discussions. A preliminary version of the adapted manual was then piloted in two therapy groups, and therapist feedback guided further revisions (Lotzin et al., 2021). These steps resulted in several structural adjustments – notably the reduction from 14 to 10 sessions, the retention and simplification of cultural metaphors (Koch & Liedl, 2019), and the addition of introductory psychoeducation on group-therapy principles to address initial unfamiliarity with Western therapeutic formats.

Further adaptations targeted cultural norms and gender-specific preferences. Focus-group participants identified certain activities in the original STARC manual as culturally incongruent for male groups, prompting the inclusion of alternatives more aligned with participants' expectations. Because emotional distress was managed in diverse ways, the program now offers both active (e.g., physical movement, singing) and passive (e.g., breathing exercises, grounding) regulation techniques, allowing facilitators to tailor exercises to individual and cultural preferences. The manual also advises therapists to incorporate religious or spiritual elements only upon request, acknowledging the diversity of religious identities among Syrian refugees (Lotzin et al., 2021).

A major innovation of STARC-SUD was the introduction of content specific to substance use. Psychoeducation on addiction as a mental health condition, motivational elements, and relapse-prevention strategies were added to enhance relevance for participants with hazardous use or diagnosed SUD. Sessions now explore risk and protective factors – including trauma, discrimination, family separation, and community support. Throughout the program, SUD-related examples reinforce the core principle that substance use often functions as maladaptive emotion regulation. To make these

patterns visible, participants learn to break down situations step by step – identifying what happened before the urge to use, which emotions and thoughts were involved, and how this led to substance use. This step-by-step reconstruction, often referred to as chain analysis, helps them understand where alternative coping strategies can be applied (Lotzin et al., 2021).

These adaptations transformed STARC into a culturally attuned and clinically relevant intervention for refugees with substance-use disorders, maintaining the program's central focus on emotion regulation while integrating language, metaphors, and therapeutic elements that reflect the lived experiences of the target population.

Structure and Content of the Intervention

STARC-SUD is delivered as a manualized group intervention, typically involving six to eight participants with an interpreter present when needed. Each weekly session lasts around 90 minutes and follows a clearly structured sequence designed to foster predictability and a sense of safety for participants (Lotzin et al., 2021). The intervention is organized around four thematic elements derived from the original STARC program: building emotional awareness, learning and practicing regulation strategies, working with specific emotions, and concluding with consolidation and planning (Koch & Liedl, 2019).

The adapted manual integrates these elements with content specific to substance use, making clear connections between emotional distress and consumption patterns. Participants receive psychoeducation on addiction as a mental health condition and discuss how trauma, discrimination, and separation from family can influence both emotions and substance use (Lotzin et al., 2021). They practice cognitive and body-based regulation techniques, explore culturally familiar coping alternatives, and work with examples illustrating how maladaptive emotion regulation can lead to use. In several sessions, participants break down real-life situations step by step – examining triggers, thoughts, feelings, and behaviors – to better understand the pathways leading to substance use; this stepwise reconstruction is introduced as chain analysis (Lotzin et al., 2021). The manual also includes motivational elements and relapse-prevention strategies informed by evidence from group therapy for SUD.

Therapists delivering STARC-SUD receive dedicated training to ensure consistent implementation. Before leading groups, they complete an intensive training conducted by the program developers, covering the manual, cultural considerations, and the integration of SUD-related content (Schäfer et al., 2022). Ongoing supervision and regular team meetings support fidelity throughout the intervention. Interpreters, who play a central role in facilitating communication, are briefed before sessions and receive written instructions to ensure accurate and culturally appropriate translation of key concepts (Lotzin et al., 2021). They also assist during assessment procedures to maintain consistency and comprehension (Schäfer et al., 2022).

These elements make STARC-SUD a structured, accessible, and culturally responsive intervention that combines emotion-regulation training with components specific to substance use tailored to the needs of refugee men with hazardous or dependent use.

Study Design of the Ongoing RCT

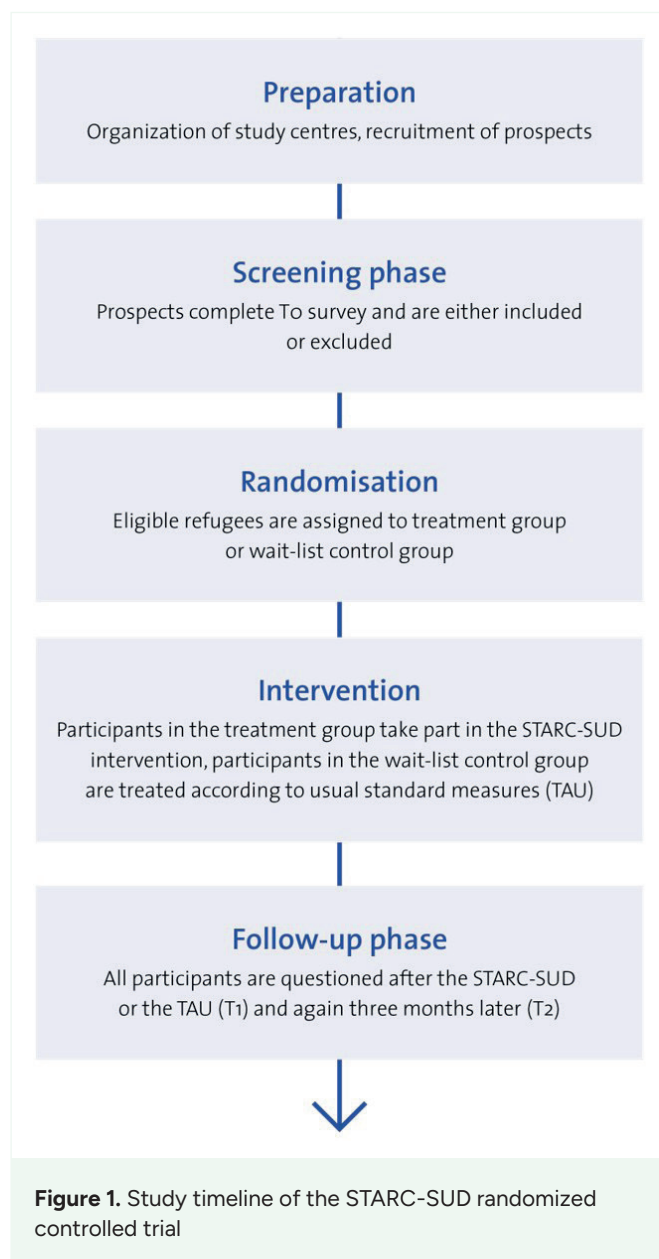
The effectiveness of STARC-SUD is currently being examined in a multicenter, randomized controlled trial conducted across different German metropolitan regions. The trial started in Hamburg, Bremen, Berlin, Hanover, Frankfurt, and Munich (Schäfer et al., 2022). Later, sites in Nuremberg, Stuttgart and Essen joined it. The study aims to recruit 286 male refugees who exhibit psychological distress and hazardous substance use or a substance-use disorder (Schäfer et al., 2022). Participants must be asylum seekers or refugees from countries such as Afghanistan, Syria, or Iraq, and must have experienced war, persecution, or flight-related trauma (Schäfer et al., 2022). A brief screening interview assesses these criteria; men with acute psychosis or acute suicidality are excluded. Eligible individuals are randomly assigned to either the STARC-SUD intervention or a treatment-as-usual control group. Randomization takes place in blocks to ensure balanced allocation across sites.

The trial is designed as a feasibility and effectiveness study. STARC-SUD is delivered in group sessions at addiction-counselling and treatment centers, with therapists supported by interpreters. Participants attend a baseline assessment (t_0), complete the intervention over several weeks, and are re-assessed at the end of treatment and three months later. Each assessment includes measures of general psychological distress, emotion-regulation difficulties, substance use, and post-traumatic stress symptoms (Schäfer et al., 2022). These assessment points and the overall study flow are shown in Figure 1, which illustrates the timeline from preparation to recruitment, randomization, and completion of the intervention.

The trial does not collect biological samples and permits participants to access routine medical and counselling services alongside the study (Schäfer et al., 2022). Materials are provided in simplified Arabic, Farsi, and English, informed consent is carefully explained and documented, and participants can withdraw at any time (Schäfer et al., 2022). Severe symptoms during the study allow for immediate referral or discontinuation. Therapists receive intensive training and ongoing supervision to ensure fidelity, and interpreters support both intervention and assessment with preparatory briefings to ensure accurate and culturally attuned translation (Lotzin et al., 2021).

Early Learnings from STARC-SUD Implementation

The implementation of STARC-SUD across different metropolitan regions offered valuable insights into the practical realities of delivering a culturally adapted group intervention to refugees with hazardous substance use.



These learnings concern recruitment, engagement, linguistic mediation, group dynamics, and the development of therapeutic relationships. Recruitment proved much more difficult than anticipated. The rapid assessment underlying PREPARE showed that refugees who misuse substances form a particularly hard-to-reach group, partly because of fears about legal consequences, stigma and mistrust of institutions (Hertner et al., 2023). Outreach through shelters was often ineffective, while approaches through trusted community members and informal networks were more promising (Hertner et al., 2023). Unstable living conditions, frequent relocations and the stressful realities of asylum procedures further reduced predictability for participants.

Engagement and retention required flexibility and adaptation. Pilot groups and focus-group feedback highlighted that participants sometimes found conventional psychotherapy practices unfamiliar. Some preferred direct and activity-oriented sessions over ice-breaker exercises, while others needed culturally familiar emotion-regulation strategies rather than relaxation techniques that felt foreign (Lotzin et al., 2021). Retention was strongly influenced by daily stressors, with scheduling flexibility and active follow-up proving essential.

Working with interpreters required particular attention. Emotion-regulation concepts did not always translate easily, and metaphors or idioms sometimes led to confusion when interpreters were unprepared (Lotzin et al., 2021). Pre-session briefings, simplified language, and adjustments to pace helped maintain fidelity.

Group composition and logistics posed recurring challenges. Cultural norms influenced how openly men were willing to discuss emotions, and practical barriers such as room availability, shared accommodation, and competing obligations led to fluctuating attendance. Ensuring gender- and language-appropriate groups and close cooperation with local services supported smoother delivery.

The therapeutic alliance across cultural boundaries became a central success factor. Many participants initially approached the program with skepticism, associating therapy with stigma or weakness. Clear explanations, acknowledgment of cultural norms around honor and masculinity, and a respectful atmosphere fostered trust and encouraged sustained participation.

In later stages of the project, social media became an increasingly important complementary recruitment tool. Short reels in Arabic, Farsi, and other relevant languages were developed to reach refugees outside formal settings. A key lesson was that translation alone was insufficient; each clip required culturally acceptable visual cues, platform-appropriate communication styles, and presenters perceived as authentic by the target group (Figure 2). Metrics such as views, follower increases, and engagement (comments, direct messages) indicated moderate reach through organic posting, while paid promotion produced a noticeable increase in visibility. However, it was not possible to determine a precise "conversion rate," since most participants reported learning about STARC-SUD through combined channels (flyers, direct contact, and social media). Early monitoring suggests that the expanded campaign may have reached additional subgroups not accessed through traditional recruitment.

These process learnings underscore that implementing STARC-SUD requires more than manualized delivery. Effective outreach, flexible engagement strategies, careful linguistic mediation, sensitivity to group dynamics and strong therapeutic alliances are essential contributors to feasibility.



Figure 2. Example of a multilingual social-media reel used for recruitment in the STARC-SUD project

Sucht-und-Flucht.de – A Cross-Project Resource Hub on Addiction and Forced Migration (www.sucht-und-flucht.de)

Within the PREPARE consortium, the platform Sucht-und-Flucht.de was developed as a national, web-based resource hub dedicated to the intersection of substance use and forced migration. The platform is developed at the Center for Interdisciplinary Addiction Research (ZIS) at the University Medical Center Hamburg-Eppendorf (UKE) and hosted at the German Centre for Addiction Issues (DHS). Its purpose is to function as an online resource center that disseminates findings, tools, and good-practice materials generated across the different subprojects of the consortium during its funding period. The platform is aimed at researchers, counsellors, therapists, and frontline workers involved in refugee support and addiction services.

Throughout the project, written and audiovisual materials relevant to practitioners were systematically collected, curated, and bibliographically documented. These include psychoeducational brochures, practice-oriented guides, and psychometric screening instruments in languages frequently used by refugees in Germany. Initial efforts focused on Arabic, Farsi/Dari, Kurdish, and Tigrinya. As new displacement contexts emerged – particularly the arrival of refugees from

Ukraine in 2022 – the platform was expanded to include Ukrainian and Russian resources, ensuring that the materials remained aligned with current needs.

Sucht-und-Flucht.de also serves as a continuously updated dissemination interface for the PREPARE consortium. Each of the subprojects contributes summaries of current activities, methodological developments, training materials, and newly published articles. In addition, the platform functions as a repository for culturally adapted instruments and practice examples developed in PREPARE, facilitating access for practitioners nationwide. By integrating outputs from all subprojects, the website provides a coherent, interdisciplinary, and multilingual knowledge base that supports evidence-based work with refugees affected by substance use.

The establishment of Sucht-und-Flucht.de reflects PREPARE's commitment to sustainable knowledge translation. Beyond presenting academic results, the platform enables direct transfer into practice and public health, ensuring that the insights developed during the project remain accessible and useful to professionals across Germany and internationally. It is not a static publication but a dynamic, evolving digital resource (Figure 3).

Integrating Learnings Across PREPARE

Synergies Between Subprojects

From the outset, the PREPARE consortium was designed so that its subprojects would mutually inform each other rather than operate in isolation. The rapid assessment (TP1) provided the foundational empirical insights into patterns of substance use among refugees, highlighting which groups were especially affected and which barriers shaped access to care.

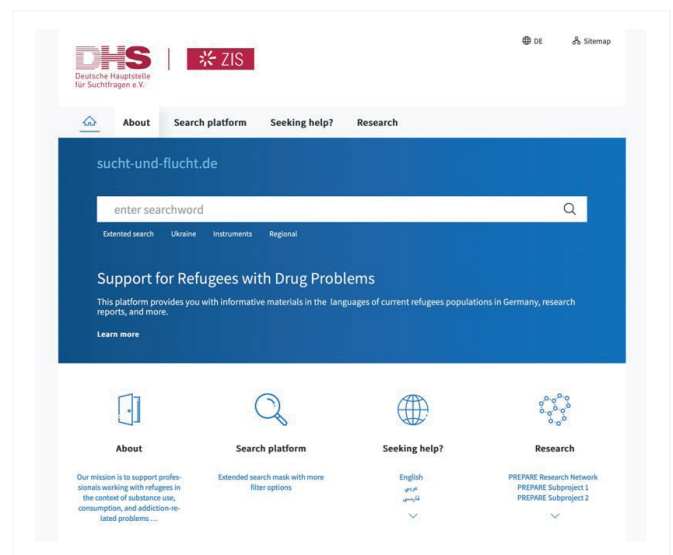


Figure 3. Sucht-und-Flucht.de – A Cross-Project Resource Hub on Addiction and Forced Migration

Qualitative and quantitative findings consistently showed that refugees who use alcohol or drugs were exceptionally difficult to reach due to fear of legal consequences, stigma, and low levels of trust toward formal services. Many lived in collective accommodation where insecurity, lack of privacy, overcrowding, and administrative pressure contributed to both psychological distress and elevated risk of substance use (Hertner et al., 2023). These findings strongly shaped the design of TP4 (STARC-SUD), which adopted outreach strategies grounded in personal contact, community trust, cultural mediation, and flexible scheduling.

At the same time, TP2, which focused on the translation and cultural adaptation of screening and assessment tools, provided essential methodological support for the wider PREPARE program. Many established diagnostic instruments were linguistically or conceptually unsuitable for refugees, requiring careful adaptation to Arabic and Farsi/Dari, including simplified wording and culturally meaningful symptom phrasing. The resulting instruments, based on a systematic review of available translations and their psychometric properties, were disseminated via the Sucht-und-Flucht.de platform, providing broader access for practitioners across Germany. Thus, TP2 directly contributed to strengthening diagnostic capacity within and beyond PREPARE.

The work of TP4 itself was influenced by insights from both TP1 and TP2. The emotion-regulation-based intervention was shaped by TP1 findings on stressors specific to refugee life – such as disrupted sleep, noise, bureaucratic pressure, and social isolation – and by TP2's diagnostic work, which made it possible to screen participants in culturally appropriate ways. Additionally, TP4's iterative adaptation process benefited from PREPARE's broader knowledge-sharing structure, in which experiences from fieldwork, assessment, therapeutic delivery, and recruitment were continuously discussed across sites and disciplines.

The Sucht-und-Flucht platform integrates outputs from all subprojects into a shared national resource, facilitating cross-project exchange and access to key materials for practitioners, policymakers, and researchers.

Insights for Future Multi-Site Refugee SUD Projects

The PREPARE consortium offers several important lessons for designing and scaling multi-site interventions addressing substance use among refugees. One of the clearest insights is that robust baseline data are indispensable. Findings from the rapid assessment demonstrated that patterns of substance use vary considerably between sites and subgroups, and that stigma, fear of legal consequences, and structural barriers strongly inhibit participation. These realities highlight that multi-site projects must adapt recruitment strategies, outreach channels, and intervention framing to local conditions rather than assuming uniform applicability (Hertner et al., 2023).

A second lesson concerns the value of openly accessible, culturally adapted tools. PREPARE's work on translating

and validating screening instruments showed that reliable assessment across sites requires language-appropriate and culturally meaningful measures. By making these tools publicly available through the Sucht-und-Flucht platform, the consortium created a shared diagnostic basis that can be immediately used by practitioners in different regions. This reduces entry barriers for future projects and allows harmonized assessment across settings.

Third, PREPARE demonstrated that centralized dissemination infrastructures support both feasibility and long-term sustainability. The Sucht-und-Flucht platform evolved into a national hub for practice materials, diagnostic instruments, and project outputs. It was continuously updated with new languages, tools, and summaries of ongoing activities, enabling knowledge transfer beyond PREPARE's internal network. Because the platform pools materials from multiple subprojects, it allows new initiatives to build directly on existing resources rather than starting from scratch.

A further consideration concerns the technical sustainability of the Sucht-und-Flucht platform itself. Through the recent upgrade of its content-management system, the platform is now secured for reliable, low-cost operation until at least 2029, supported by an affordable annual maintenance option offered by the hosting provider. At the same time, the upgrade ensures that the system can be smoothly updated to future versions and adapted to new devices, browsers, and accessibility standards well into the 2030s. For future multi-site refugee SUD projects, such long-term digital planning – both technically and financially – should be integrated from the very beginning to safeguard essential infrastructure and avoid costly redevelopment later on.

Additionally, PREPARE illustrates the importance of integrated workflows. Insights from needs assessment (TP1), diagnostic adaptation (TP2), and intervention development (TP4) reinforced one another and contributed to implementation strategies that were more culturally sensitive, realistic, and site-responsive. For future multi-site refugee SUD projects, such integrative structures – where data, tools, interventions, and dissemination mechanisms are interconnected – will be essential for achieving scalability without compromising contextual fit. Finally, future projects should consider the specific needs of migrants in transit. In contexts with heightened mobility, interventions that span several sessions may not be feasible, and more research is needed to understand how the barrier to adequate care can be overcome under these particular circumstances.

PREPARE shows that multi-site SUD interventions for refugees can be scaled effectively when projects build on high-quality local data, accessible diagnostic tools, robust dissemination platforms and long-term technical planning.

Implications for European Policy and Practice

The PREPARE program demonstrates that addiction care systems across Europe must integrate the specific circumstances of refugees if they aim to provide effective

and equitable services. The rapid assessment conducted in TP1 showed that systematic data on substance use among refugees are largely absent. It identified which groups are particularly affected, which substances are used, and what environmental and structural factors influence consumption and help-seeking. Such baseline information is essential for meaningful policy development: without it, national and European decision-makers cannot allocate resources effectively or monitor intervention outcomes (Hertner et al., 2023). European member states could benefit from coordinated monitoring systems that collect comparable data across countries, allowing refugee-related substance-use trends to be understood more systematically.

A further central insight from PREPARE is the necessity of cultural and linguistic adaptation. TP2 demonstrated that existing screening instruments often fail to capture the needs and experiences of refugees because they rely on unfamiliar terminology, unvalidated translations, or culturally inappropriate symptom descriptions. By adapting tools such as the AUDIT and DUDIT to Arabic and Farsi/Dari, PREPARE showed how reliable assessment becomes possible when language and cultural context are taken seriously. European addiction-care frameworks should therefore emphasize investment in multilingual assessment tools, interpreter services, and cultural mediators to prevent misdiagnosis and exclusion.

In addition, PREPARE highlights the importance of integrated mental-health and substance-use care. Refugees often experience trauma, uncertainty, and daily stressors alongside hazardous alcohol or drug use. Separate treatment pathways for mental health and addiction, common in many European systems, can therefore be difficult to navigate and may fragment care. TP4's emotion-regulation-based approach illustrates how linking trauma-related stress with substance-use mechanisms can create interventions that reflect refugees' lived experiences (Lotzin et al., 2021). European policymakers could support integrated care pathways that merge trauma-informed and addiction-focused approaches instead of treating them as separate domains.

The Sucht-und-Flucht.de platform further demonstrates PREPARE's commitment to sustainable knowledge transfer. As a national repository of multilingual practice materials, adapted diagnostic tools, and project outputs, it provides practitioners across Germany — and potentially Europe — with direct access to evidence-based resources. European initiatives could replicate this model by funding similar centralized hubs for refugee-specific materials, strengthening cross-country knowledge exchange and reducing duplication of work.

Finally, PREPARE underscores the need for targeted engagement and outreach strategies. Refugees who use substances face stigma, legal insecurity, and distrust of formal institutions, making them difficult to reach through standard services. Effective outreach requires collaboration with trusted community members, culturally resonant communication, and flexible scheduling. Psychoeducation that normalizes help-

seeking and explains the purpose of services also plays a critical role. European policy could support these approaches by funding training programs for cultural mediators, outreach teams in refugee shelters, and low-threshold access points for addiction care.

Overall, PREPARE calls for addiction-care systems across Europe to adopt a data-informed, culturally sensitive, integrated, and sustainable approach. Investing in culturally adapted tools, integrated treatment models, accessible digital platforms, and long-term planning can enable more inclusive and effective responses to substance use among refugees.

Conclusion

The PREPARE consortium has filled a gap in the understanding of substance use among refugees in Germany. By combining empirical needs assessment, culturally adapted diagnostic tools, and an emotion-regulation-based intervention, the network demonstrated how different methodological strands can reinforce one another and produce a more accurate and practice-relevant picture of the challenges faced by displaced populations. The rapid assessment highlighted structural and contextual barriers to care, while the development of multilingual instruments enabled more reliable identification of individuals with hazardous substance use. STARC-SUD, as the therapeutic component of the program, showed the potential of interventions that link emotion regulation with substance-use behavior—an approach that aligns well with the psychological realities of many refugees.

Across all subprojects, PREPARE revealed that reaching refugees with substance-related problems requires persistent engagement, cultural sensitivity, and strong cooperation with community actors. Many of the barriers encountered in the recruitment and implementation phases reflect broader structural issues that will not be resolved by single interventions alone. At the same time, PREPARE's outputs — particularly the Sucht-und-Flucht platform — illustrate how digital infrastructures can support practitioners by providing accessible, multilingual materials, diagnostic tools, and summaries of project activities.

Looking forward, the lessons from PREPARE point to the need for long-term, multi-level strategies within European addiction-care systems. These include sustained data collection, culturally informed diagnostics, integrated mental health and substance use treatment, and the development of digital tools that make knowledge widely available. By strengthening these components, health systems can respond more effectively to the needs of refugees and build the foundations for more inclusive and responsive addiction care across Europe.

Author contributions

Conception and design: S.M., P.H., A.L., I.S.; Data acquisition: S.M., H.Z., P.H., A.L., I.S.; Data interpretation: S.M., M.B., M.B., M.L.A., M.R.T., H.Z., P.H., A.L., I.S.; Drafting of the manuscript:

S.M., A.L., I.S.; Critical revision of the manuscript: S.M., M.B., M.B., M.L.A., M.R.T., H.Z., P.H., A.L., I.S. All authors reviewed the results, approved the final version of the manuscript, and agreed to be accountable for all aspects of this study.

Ethical approval

This study was approved by the Ethics Committee of the Medical Association Hamburg (Ethik-Kommission der Ärztekammer Hamburg) (Date: December 2, 2019, Decision/Protocol No: PV7132). Informed consent was obtained from all participants involved in this study.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of interest

The authors declare that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Generative AI statement

The authors declare that during the preparation of this publication, the following AI-assisted technology was used: ChatGPT (OpenAI) on 01/11/2025 – 28/11/2025. Extent of Use: ChatGPT (OpenAI) was used occasionally for language editing and sentence-level refinement, particularly to improve clarity and conciseness (e.g., shortening sentences in the abstract). The tool was not used for data analysis, interpretation of results, or generation of scientific content. All content was written, critically reviewed, and approved by the authors. The authors confirm that they have critically reviewed and edited any AI-generated content and take full responsibility for the integrity, accuracy, and originality of the publication. The authors certify that the original human contribution is maintained and that AI-assisted tools are not listed or cited as authors.

References

- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, 30(2), 217–237. [Crossref]
- Aleer, E., Alam, K., Rashid, A., Mohsin, M., & Eacersall, D. (2023). Substance abuse amongst refugee youth: A scoping review. *Current Addiction Reports*, 10(3), 594–609. [Crossref]
- Bernal, G., Jiménez-Chafey, M. I., & Domenech Rodríguez, M. M. (2009). Cultural adaptation of treatments: A resource for considering culture in evidence-based practice. *Professional Psychology: Research and Practice*, 40(4), 361–368. [Crossref]
- Blackmore, R., Boyle, J. A., Fazel, M., Ranasinha, S., Gray, K. M., Fitzgerald, G., Misso, M., & Gibson-Helm, M. (2020). The prevalence of mental illness in refugees and asylum seekers: A systematic review and meta-analysis. *PLOS Medicine*, 17(9), e1003337. [Crossref]
- Boettcher, V. S., Nowak, A. C., & Neuner, F. (2021). Mental health service utilization and perceived barriers to treatment among adult refugees in Germany. *European Journal of Psychotraumatology*, 12(1), 1910407. [Crossref]
- Chen, W., Hall, B. J., Ling, L., & Renzaho, A. M. (2017). Pre-migration and post-migration factors associated with mental health in humanitarian migrants in Australia and the moderation effect of post-migration stressors: Findings from the first wave data of the BNLA cohort study. *Lancet Psychiatry*, 4(3), 218–229. [Crossref]
- Council of Europe. (2019). *Supporting Young Refugees in Transition to Adulthood. Recommendation CM/Rec(2019)4 adopted by the Committee of Ministers of the Council of Europe on 24 April 2019*. Retrieved August 15, 2025 from <https://rm.coe.int/recommendation-cm-2019-4-supporting-young-refugees-transition-adulthood/168098e814>
- Devillé, W., Greacen, T., Bogic, M., Dauvin, M., Dias, S., Gaddini, A., Jensen, N. K., Karamanidou, C., Kluge, U., Mertaniemi, R., i Riera, R. P., Sárváry, A., Soares, J. J. F., Stankunas, M., Straßmayr, C., Welbel, M., & Priebe, S. (2011). Health care for immigrants in Europe: Is there still consensus among country experts about principles of good practice? A Delphi study. *BMC Public Health*, 11(1), 699. [Crossref]
- Dumke, L., & Neuner, F. (2023). Othering refugees: Psychotherapists' attitudes toward patients with and without a refugee background. *Psychotherapy Research*, 33(5), 654–668. [Crossref]
- Ezard, N. (2012). Substance use among populations displaced by conflict: A literature review. *Disasters*, 36(3), 533–557. [Crossref]
- Garcia, M. F., & Birman, D. (2022). Understanding the migration experience of unaccompanied youth: A review of the literature. *American Journal of Orthopsychiatry*, 92(1), 79–102. [Crossref]
- Hajak, V. L., Sardana, S., Verdeli, H., & Grimm, S. (2021). A systematic review of factors affecting mental health and well-being of asylum seekers and refugees in Germany. *Frontiers in Psychiatry*, 12, 643704. [Crossref]
- Heim, E., & Kohrt, B. A. (2019). Cultural adaptation of scalable psychological interventions: A new conceptual framework. *Clinical Psychology in Europe*, 1(4). [Crossref]
- Hertner, L., Stylianopoulos, P., Heinz, A., Kluge, U., Schafer, I., & Penka, S. (2023). Substance (mis)use among refugees as a matter of social ecology: Insights into a multi-site rapid assessment in Germany. *Conflict and Health*, 17(1), 1. [Crossref]
- Kiselev, N., Pfaltz, M., Haas, F., Schick, M., Kappen, M., Sijbrandij, M., De Graaff, A. M., Bird, M., Hansen, P., Ventevogel, P., Fuhr, D. C., Schnyder, U., & Morina, N. (2020). Structural and socio-cultural barriers to accessing mental healthcare among Syrian refugees and asylum seekers in Switzerland. *European Journal of Psychotraumatology*, 11(1), 1717825. [Crossref]
- Koch, T., & Liedl, A. (2019). *STARK: Skills-Training zur Affektregulation – ein kultursensibler Ansatz. Therapiemanual für Menschen mit Flucht- und Migrationshintergrund*. Klett-Cotta.

- Koch, T., Ehring, T., & Liedl, A. (2020). Effectiveness of a transdiagnostic group intervention to enhance emotion regulation in young Afghan refugees: A pilot randomized controlled study. *Behaviour Research and Therapy*, 132, 103689. [\[Crossref\]](#)
- Kuhn, S., Zurhold, H., Lehmann, K., & Verthein, U. (2018). Drogenkonsum und Hilfebedarfe von Geflüchteten in Deutschland [Drug use and special needs of refugees in Germany]. *Suchttherapie*, 19(03), 140-147. [\[Crossref\]](#)
- Leicht, A., & Köhnlein, R. (2018). „Niemanden zurücklassen“ – migrierte Menschen in der Drogen- und Suchthilfe [“Leaving no one behind” – Migrants in drug helping systems]. *Suchttherapie*, 19(03), 119-125. [\[Crossref\]](#)
- Lems, A., Oester, K., & Strasser, S. (2020). Children of the crisis: Ethnographic perspectives on unaccompanied refugee youth in and en route to Europe. *Journal of Ethnic and Migration Studies*, 46(2), 315-335. [\[Crossref\]](#)
- Lindert, J., Neuendorf, U., Natan, M., & Schäfer, I. (2021). Escaping the past and living in the present: A qualitative exploration of substance use among Syrian male refugees in Germany. *Conflict and Health*, 15(1), 26. [\[Crossref\]](#)
- Lopez-Atanes, M., Rosenkranz, M., Erkoreka, L., Recio-Barbero, M., Bari, M., Hiller, P., Penka, S., Lindert, J., Martens, M., & Schafer, I. (2025). Special needs of refugees with substance use disorders from conflict-affected countries: A comparison with German-born individuals. *Social Psychiatry and Psychiatric Epidemiology*, 60(7), 1563-1572. [\[Crossref\]](#)
- Lotzin, A., Lindert, J., Koch, T., Liedl, A., & Schafer, I. (2021). STARC-SUD - adaptation of a transdiagnostic intervention for refugees with substance use disorders [Special issue]. *Clinical Psychology in Europe*, 3, e5329. [\[Crossref\]](#)
- Müller-Funk, L., Üstübeci, A., & Belloni, M. (2023). Daring to aspire: Theorising aspirations in contexts of displacement and highly constrained mobility. *Journal of Ethnic and Migration Studies*, 49(15), 3816-3835. [\[Crossref\]](#)
- Nguyen, T. P., Al Asaad, M., Sena, M., & Slewa-Younan, S. (2024). Loneliness and social isolation amongst refugees resettled in high-income countries: A systematic review. *Social Science & Medicine*, 360, 117340. [\[Crossref\]](#)
- Penka, S. (2004). *Migration und Sucht: Notwendigkeit einer "interkulturellen Selbsthilfe"?* Leipziger Universitätsverlag. <https://books.google.de/books?id=21HGAAAIAAJ>
- Penka, S., Faißt, H., Vardar, A., Borde, T., Mösko, M., Dingoyan, D., Schulz, H., Koch, U., Kluge, U., & Heinz, A. (2015). Der Stand der interkulturellen Öffnung in der psychosozialen Versorgung-Ergebnisse einer Studie in einem innerstädtischen Berliner Bezirk. *Psychotherapie - Psychosomatik - Medizinische Psychologie*, 65, 353-362. [\[Crossref\]](#)
- Penka, S., Schouler-Ocak, M., Heinz, A., & Kluge, U. (2012). Interkulturelle Aspekte der Interaktion und Kommunikation im psychiatrisch/psychotherapeutischen Behandlungssetting. *Bundesgesundheitsblatt - Gesundheitsforschung - Gesundheitsschutz*, 55(9), 1168-1175. [\[Crossref\]](#)
- Pfeiffer, E., Behrendt, M., Adeyinka, S., Devlieger, I., Rota, M., Uzureau, O., Verhaeghe, F., Lietaert, I., & Derluyn, I. (2022). Traumatic events, daily stressors and posttraumatic stress in unaccompanied young refugees during their flight: A longitudinal cross-country study. *Child and Adolescent Psychiatry and Mental Health*, 16(1), 26. [\[Crossref\]](#)
- Schäfer, I., Hiller, P., Milin, S., & Lotzin, A. (2022). A multicenter, randomized controlled trial to compare the effectiveness of STARC-SUD (Skills Training in Affect Regulation – a Culture-sensitive approach) versus treatment as usual in trauma-exposed refugees with substance use problems. *Trials*, 23(1), 915. [\[Crossref\]](#)
- Schwarzkopf, L., Künzel, J., Murawski, M., & Riemerschmid, C. (2023). *Suchthilfe in Deutschland 2022. Jahresbericht der deutschen Suchthilfestatistik (DSHS)*. IFT Institut für Therapieforschung, München.
- Stylianopoulos, P., Hertner, L., Schäfer, I., Heinz, A., & Penka, S. (2023). Erleichterter Zugang zur ambulanten Suchthilfe für Geflüchtete. *Sucht*, 69(5), 224-234. [\[Crossref\]](#)
- Sweeney, M. M., Rass, O., DiClemente, C., Schacht, R. L., Vo, H. T., Fishman, M. J., Leoutsakos, J.-M. S., Mintzer, M. Z., & Johnson, M. W. (2018). Working memory training for adolescents with cannabis use disorders: A randomized controlled trial. *Journal of Child & Adolescent Substance Abuse*, 27(4), 211-226. [\[Crossref\]](#)
- Uzureau, O., Lietaert, I., Senovilla Hernández, D., & Derluyn, I. (2024). Multi-layered mobilities: Unaccompanied minors' trajectories, decision-making and mobility after arrival in Italy. *Children's Geographies*, 22(3), 431-446. [\[Crossref\]](#)
- van Dorp, M., Boon, A., Spijkerman, R., & Los, L. (2021). Substance use prevalence rates among migrant and native adolescents in Europe: A systematic review. *Drug and Alcohol Review*, 40(2), 325-339. [\[Crossref\]](#)
- von Glahn-Middelmenne, C. (2023). *Bericht 2023 des nationalen REITOX-Knotenpunkts an die EMCDDA. Workbook Treatment*. Deutsche Hauptstelle für Suchtfragen (DHS).
- Weiss, N. H., Kiefer, R., Goncharenko, S., Raudales, A. M., Forkus, S. R., Schick, M. R., & Contractor, A. A. (2022). Emotion regulation and substance use: A meta-analysis. *Drug and Alcohol Dependence*, 230, 109131. [\[Crossref\]](#)

Problematic digital use among migrant adolescents in Türkiye: A PISA 2022 analysis of risk and protective factors

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Abstract

This study examined the demographic, social-behavioural, and psychosocial determinants of problematic digital use among migrant adolescents in Türkiye using data from the PISA 2022 migration subsample. The sample included 7,137 first- and second-generation migrant students. Problematic digital use was measured using students' self-reports about their digital habits, while bullying experiences, perceptions of school safety, weekend digital activity, and levels of teacher support, family support, and emotional control were assessed through established background questionnaire scales. Analyses included t-tests, correlations, and hierarchical binary logistic regression.

Results showed that males and older students reported significantly higher levels of problematic digital use. Problematic use was positively associated with bullying, perceived lack of school safety, and intensive weekend digital activity, and negatively associated with teacher support, family support, and emotional control. The regression model explained 22.8% of the variance, with weekend digital use emerging as the strongest risk factor and emotional control as the strongest protective factor.

Overall, the study findings show that problematic digital engagement among migrant adolescents reflects an interplay of social stressors and self-regulatory resources. Interventions targeting both emotional regulation and supportive school-family environments may help promote healthier digital behaviours in this migrant population.

Keywords: problematic digital use, migrant adolescents, risk and protective factors, emotional regulation, school safety

Main points

- Problematic digital use among migrant adolescents in Türkiye is shaped by both individual vulnerabilities (e.g., emotional control) and contextual stressors (e.g., bullying, unsafe school climate).
- Weekend digital activity, bullying exposure, and perceived school insecurity are the strongest risk factors associated with high problematic digital use.
- Teacher and family support, together with stronger emotional regulation, are associated with lower levels of problematic digital use.
- Gender and grade-level differences exist, with males and older students reporting higher problematic digital use.
- Findings highlight the need for prevention efforts that strengthen both emotional self-regulation and social connectedness in migrant youth.

Introduction

In recent years, digital technologies have become central to adolescents' identity development, learning, and communication. While digital media can promote social connections and access to information, excessive or uncontrolled use of digital media can have negative psychological and behavioral effects, often conceptualized as problematic digital use (Boer et al., 2021; Kardefelt-Winther,

2014). Loss of control, obsessive checking, and disruption of daily functioning are characteristics of this type of problematic use (Fujita et al., 2022). Prior studies have linked problematic digital use to poorer academic performance, loneliness, anxiety, and sleep issues (Twenge, 2019).

Digital engagement can have special meanings and purposes for adolescent migrants. Language barriers, cultural identity formation, and preserving family ties are all frequently

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facilitated by digital environments (Mazzucato & van Geel, 2022). However, according to a systematic review, these online spaces can also serve as coping mechanisms for social isolation, discrimination, or acculturation stress (Mehjabeen et al., 2023). The likelihood of problematic use may rise when digital technology is used as the main tool for emotional control or escape. In order to understand how digital behaviors among migrant youth reflect both adaptation and vulnerability, it is imperative to examine problematic digital use within the migration context.

Differences in the digital behaviors of adolescents have been consistently associated with demographic factors, such as gender, age, and family background. According to data from international studies, such as PISA 2022, girls are more likely to engage in compulsive social media use, while boys are more likely to report problematic gaming and screen use (Kuss & Griffiths, 2017; OECD, 2023). Males engage with technology in a more performance-oriented way, while females use it more relationally, reflecting broader gendered motivations for technology use (Andreassen et al., 2017).

Age-related trends have also been noted; older teenagers are more likely to engage in problematic behavior because they frequently use technology more intensely and have less parental supervision (Kuss et al., 2021). Findings, however, are still inconsistent across cultural contexts. Due to emotional immaturity or a lack of self-regulation, younger students may also exhibit vulnerable behavior in certain situations (Livingstone & Sylwander, 2025). Re-examining demographic differences in problematic digital use within particular cultural and migration contexts is crucial in light of these discrepancies.

In addition to gender and age, adolescents' familial background and socioeconomic status significantly influence their digital access, usage patterns, and vulnerability to problematic engagement. Young people from lower socioeconomic backgrounds may have less access to structured digital learning opportunities but more chances to engage in unmonitored online activities (OECD, 2023). For migrant adolescents, these disparities may be exacerbated by language barriers, insufficient parental knowledge of host-country technologies, and divergent cultural norms regarding device usage (Atalan Ergin & Essau, 2024; Mazzucato & van Geel, 2022). Consequently, this study examines problematic digital use among migrant adolescents in Türkiye while controlling for key demographic factors. This method establishes a contextual baseline for figuring out how psychosocial and behavioral factors add to the risks of digital engagement.

Migrant adolescents often face numerous stressors that can shape their technology usage. Experiences of social exclusion, peer victimization, and perceived insecurity in school settings are among the most commonly reported difficulties within this population (Verkuyten, 2018). These stressors may increase psychological susceptibility and lead to the use of digital technologies as a means of escapism or emotional compensation (Kardefelt-Winther, 2014).

Empirical evidence shows that adolescents subjected to bullying or unsafe school environments are more inclined to exhibit maladaptive or excessive online behaviors as a coping mechanism (Kırcaburun, 2019; Kowalski et al., 2014). Similarly, increased screen time during weekends has been associated with reduced self-regulation and poor psychosocial adjustment, reflecting a lack of routine and supervision characteristic of these periods (Boer et al., 2021; Twenge, 2019). In this context, the current study conceptualizes bullying exposure, perceived school safety, and weekend digital use as social and behavioral risk factors that may elevate the probability of problematic digital use among migrant adolescents in Türkiye.

Social support and emotional regulation are widely acknowledged as essential protective factors in the psychological adaptation of migrant adolescents. Support from family and teachers can help adolescents deal with acculturative stress, social exclusion, and discrimination by giving them a sense of belonging, stability, and guidance (Motti-Stefanidi et al., 2021; Suárez-Orozco et al., 2018). Supportive family relationships cultivate emotional security, whereas constructive teacher-student interactions enhance school engagement and resilience, both of which have been linked to diminished problematic technology use (Musetti et al., 2020).

Conversely, emotional control constitutes a vital self-regulatory skill that empowers adolescents to navigate stress and adverse emotions without engaging in maladaptive coping mechanisms, such as excessive digital involvement (Billieux et al., 2015; Elhai et al., 2017). Social support and emotional regulation together make up a dual protective system. For instance, social relationships offer external resources, whereas emotional regulation functions as an internal regulatory mechanism (Nozaki & Gross, 2025). This study investigates teacher support, family support, and emotional regulation as key protective factors associated with problematic digital use among migrant adolescents in Türkiye.

The present study is grounded in Bronfenbrenner's Ecological Systems Theory (1992) and the Risk and Resilience Framework (Fergus & Zimmerman, 2005), which collectively emphasize the dynamic interaction of individual, social, and contextual factors in shaping adolescent development. From this perspective, problematic digital use may be regarded as the outcome of both vulnerability processes (such as exposure to social risks) and protective processes (such as family-teacher support and emotional regulation skills). These models underscore that digital behavior is shaped not only by access to technology but also by its integration within broader ecological systems, including familial, educational, and social contexts.

While these frameworks are relevant, empirical research assessing multi-level risk and protective models among migrant adolescents in Türkiye is scarce. International studies have explored the impact of psychosocial and behavioral factors on adolescents' digital wellbeing; however, there is a scarcity of research examining these dynamics in migration

contexts marked by social and cultural adaptation stress (Motti-Stefanidi et al., 2021; Suárez-Orozco et al., 2018)

The migration subsample of PISA 2022 provides a unique opportunity to analyze these associations at a national level using comprehensive, representative data. This study addresses a notable research gap by integrating demographic, social-behavioral, and psychosocial factors into a unified model, offering one of the first empirical investigations of problematic digital use among migrant adolescents in Türkiye through a multi-dimensional risk-protection framework.

The Current Study

Building on the risk-protection framework, the present study aimed to examine the demographic, social-behavioral, and psychosocial determinants of problematic digital use among migrant adolescents in Türkiye, using data from the PISA 2022 migration subsample. This nationally representative dataset provides a unique opportunity to explore how individual vulnerabilities and protective resources jointly shape adolescents' digital engagement patterns within the Turkish migration context.

Gender, grade level, and socioeconomic background were included as control variables, consistent with prior international evidence linking these demographic factors to variation in technology use (OECD, 2023). The analytic model tested the combined effects of risk factors (experiences of bullying, perceptions of school safety, and intensity of weekend digital use) and protective factors (teacher support, family support, and emotional control).

Accordingly, the study aimed to address the following research questions:

1. Are there significant differences in adolescents' levels of problematic digital use across gender and grade levels?
2. How are individual, social, and behavioral factors associated with problematic digital use?
3. To what extent do demographic, social-behavioral, and psychosocial factors predict adolescents' likelihood of high problematic digital use?
4. Among all predictors, which factors emerge as the strongest risk and protective correlates of high problematic digital use?

Methods

Participant characteristics

Table 1 displays participant characteristics and descriptive statistics for the main study variables. Data were drawn from the migration subsample of the Turkish dataset in the PISA study, which included 7,137 adolescents. Based on the PISA migration status variable, this subsample consists of students who were classified as first- or second-generation immigrants. The gender distribution of the participants was roughly equal,

Table 1. Participant characteristics and descriptive statistics for key variables

Variable	N	f (%)
Gender		
Female	3,520	49.3
Male	3,617	50.7
Grade level		
Grade 7	3	.0
Grade 8	9	.1
Grade 9	549	7.7
Grade 10	6,543	91.7
Grade 11	32	.4
Grade 12	1	.0
		<i>M (SD)</i>
Socioeconomic status (ESCS) a, c	7,137	-1.22 (1.16)
Problematic digital use	6,718	2.62 (.82)
Being bullied (WLE) b, c	7,129	-.20 (1.05)
School safety risks (WLE)	7,126	.35 (1.17)
Weekend digital use (WLE)	6,853	-.07 (1.25)
Family support (WLE)	6,878	-.20 (1.09)
Teacher-student relationship quality (WLE)	7,127	-.19 (1.10)
Emotional control (WLE)	6,891	-.14 (.99)

a ESCS was standardized within the Turkish sample (ZESCS; $M = 0$, $SD = 1$). Original ESCS scores (OECD-scaled) ranged from -5.35 to 2.88 ($M = -1.22$, $SD = 1.16$).

b Warm's Mean Weighted Likelihood Estimates (WLE) were used for all PISA background indices. These indices are standardized across OECD countries, with a mean of approximately zero and a standard deviation of one. Higher scores indicate higher levels of the corresponding construct.

c Negative values indicate below-average socioeconomic resources relative to the OECD average, whereas positive values reflect higher advantage.

with 49.3% of them being female ($n = 3,520$) and 50.7% being male ($n = 3,617$). The vast majority of participants were enrolled in Grade 10 (91.7%), with smaller proportions in Grade 9 (7.7%), Grade 11 (.4%), and only a few in other grades (<.1%). Participants' socioeconomic status, measured by the *Index of Economic, Social and Cultural Status (ESCS)* ($M = -1.22$, $SD = 1.16$), indicated that, on average, students came from below-average socioeconomic backgrounds relative to the OECD reference population. In this study, the ESCS z-score was used. When standardized (ESCS z-score), the mean was .00 ($SD = 1.00$), confirming the proper scaling of the index within the PISA framework.

The dependent variable, problematic digital use, ranged from 1 to 5 ($M = 2.62$, $SD = .82$), with higher scores indicating more problematic digital engagement. Among the predictor variables, being bullied, school safety risks, and weekend digital use were modeled as risk factors, whereas teacher support, family support, and emotional control were treated as protective factors. All predictors were used in their original PISA Warm's Mean Weighted Likelihood Estimate (WLE) form, directly drawn from the PISA 2022 dataset. These indices (e.g., bullying, school safety risks, family support, teacher-student relationships, and emotional control) are standardized across OECD countries, with a mean of approximately zero and a

standard deviation of one. Higher values reflect higher levels of the underlying construct, consistent with PISA scaling conventions (see Table 1).

Procedure

Data for this study were obtained from the *Programme for International Student Assessment (PISA) 2022* Turkish dataset. The analysis focused on the migration subsample, which includes adolescents identified as first- or second-generation immigrants according to the PISA migration background variable. Data collection in PISA followed standardized international procedures coordinated by the OECD. Students filled out self-report questionnaires in schools while taking standardized tests. These questionnaires included information about the participants' demographics, how they used digital technology, their school and family contexts, and psychological characteristics. All data were anonymized and accessible via the OECD database; therefore, no further ethical approval was necessary for secondary data analysis.

Measures

Demographics

Demographic information was obtained from the background questionnaire included in the PISA 2022 dataset. In line with OECD procedures, data on *gender*, *grade level*, and *socioeconomic status* were collected for all participants. Gender was recorded as male or female, and grade level reflected students' current school grade (ranging from Grade 7 to Grade 12). Socioeconomic status was measured using the *Index of Economic, Social and Cultural Status (ESCS)*, a composite indicator derived from parental education, occupational status, and household possessions. These demographic variables were used as control factors in the analyses, following standard practices in PISA-based research.

Risk Factors

Social and behavioral risk variables were taken from the PISA background indices, which were scaled using Warm's Weighted Likelihood Estimates (WLE). For every construct in the Turkish sample, these standardized WLE scores offer reliable and psychometrically adjusted estimates. The following risk variables were used in this study: *a. Being bullied (BULLIED)* measured the frequency of peer victimization experiences. *b. School safety risks (SCHRISK)* reflected perceptions of insecurity or disorder at school. *c. Weekend digital use (ICTWKEND)* assessed the intensity of digital activity on weekends. Higher WLE scores indicate higher levels of the corresponding construct.

Protective Factors

Protective factors were taken from PISA background indices based on Warm's Mean Weighted Likelihood Estimates

(WLE). These standardized WLE scores give psychometrically adjusted estimates of protective constructs within the Turkish sample. The following protective variables were included in this study: *a. Teacher-student relationship quality (RELATST)* measured students' perceived support and respect from teachers. *b. Family support (FAMSUP)* assessed perceived emotional and practical support from family. *c. Emotional control (EMOCOAGR)* measured students' ability to regulate their emotional responses. Higher WLE scores indicated stronger perceived support and greater emotional regulation.

Problematic Digital Use

Problematic digital use was measured using PISA item set ST322 (e.g., "I keep my digital device near me to answer messages when I am home.", "I feel nervous/anxious when I don't have my digital device near me."). Responses were rated on a five-point Likert scale ranging from 1 (*never*) to 5 (*always*), with higher scores indicating greater problematic use of digital technologies. Two items (ST322Q01JA and ST322Q02JA) were reverse-coded prior to computing the mean composite score to ensure that higher values consistently reflected more problematic use. One functional-use item (ST322Q04JA: "I have my digital device open in class so I can take notes or search for information") was excluded from the calculation, as it represents purposeful rather than problematic device use. This exclusion aligns with prior research and OECD technical guidelines (Kastorff et al., 2025; OECD, 2023).

Due to the rotating design of student questionnaires, not all the students answered every question, which is in line with the PISA data structure and international reporting standards. A mean composite score was determined for students who had at least three valid answers on this scale in order to guarantee reliable measurement. This "mean of ≥ 3 valid items" approach follows OECD coding procedures for partially administered scales and has been used in previous PISA-based studies examining digital engagement and wellbeing (e.g., Bohnert & Gracia, 2022; OECD, 2023). Additionally, the selection of risk and protective variables was theory-driven and informed by prior literature, rather than data-driven or exploratory, and the study was not pre-registered.

Data Analysis

All analyses were conducted using IBM SPSS Statistics 29. Descriptive statistics were computed for all variables. Independent-samples *t*-tests examined gender and grade-level differences in problematic digital use. For this purpose, grade level was recoded into two categories: lower grades (Grades 7-9) and higher grades (Grades 10-12). Pearson correlations were conducted to assess associations between problematic digital use and continuous predictors. To identify the key predictors of high problematic digital use, a binary logistic regression was performed. The dependent variable was dichotomized at ± 1 standard deviation (SD) from the mean (0 = low digital use, 1 = high digital use), a common approach in PISA-based studies to distinguish clearly high- and low-risk groups (e.g., Bohnert & Gracia, 2022; OECD, 2023).

Predictors were entered in three blocks: (1) Demographics (gender, grade level, SES); (2) Risk factors (being bullied, school safety risks, weekend digital use); and (3) Protective factors (teacher support, family support, emotional control). To evaluate model fit, *Nagelkerke R²* and overall *classification accuracy* were used. All statistical tests were two-tailed, with $p < .05$ considered significant. The conceptual model of the hierarchical logistic regression analysis is presented in Figure 1.

Results

Gender and grade-level differences in problematic digital use

Independent-samples *t*-test results showed a significant difference between male and female students ($t(6716) = 4.58$, $p < .001$). Males ($M = 2.67$, $SD = .83$) reported significantly higher levels of problematic digital use than females ($M = 2.58$, $SD = .80$), with a small effect size (*Cohen's d* = .11).

Additionally, students in lower grades (Grades 7-9) and higher grades (Grades 10-12) were compared on problematic digital use. Independent-samples *t*-test results indicated a significant difference between groups ($t(6716) = 3.18$, $p = .001$). Students in higher grades ($M = 2.63$, $SD = .82$) reported higher problematic digital use than those in lower grades ($M = 2.51$, $SD = .84$), with a small effect size (*Cohen's d* = .14).

Associations between problematic digital use and study variables

Associations between problematic digital use and study variables are presented in Table 2. Pearson correlation results

showed that socioeconomic status had a weak correlation with problematic digital use ($r = .03$, $p < .05$). Problematic digital use was positively correlated with being bullied ($r = .13$, $p < .001$), perceived school safety risks ($r = .15$, $p < .001$), and weekend ICT activity ($r = .17$, $p < .001$), indicating that higher levels of these risk factors were associated with greater problematic use. Conversely, problematic digital use was negatively correlated with teacher-student relationship quality ($r = -.14$, $p < .001$), family support ($r = -.10$, $p < .001$), and emotional control ($r = -.16$, $p < .001$), suggesting that stronger social and emotional resources were linked to lower levels of problematic use.

Predictors of high problematic digital use

A hierarchical binary logistic regression analysis was conducted to identify the demographic, social-behavioral, and protective predictors of high problematic digital use among migrant adolescents. In the final model, all three blocks (demographics, risk factors, and protective factors) were included. Results are presented in Table 3.

The overall model was statistically significant and demonstrated good fit, explaining approximately 22.8% of the variance in adolescents' likelihood of belonging to the high-risk group for problematic digital use (*Nagelkerke R²* = .228). The model correctly classified 68.8% of cases, indicating a satisfactory level of predictive accuracy.

Findings showed that older adolescents and males were more likely to engage in problematic digital use compared to their younger and female peers. Among the risk-related variables, being bullied, feeling unsafe at school, and frequent digital use during weekends substantially increased the likelihood of high-risk digital use. Additionally, several protective factors were associated with a lower probability of problematic engagement. Adolescents who reported stronger teacher and family support and higher levels of emotional control were significantly less likely to fall into the high-risk group. Among all predictors, weekend digital activity emerged as the strongest risk factor, while emotional control appeared as the most robust protective factor.

Discussion

This study used data from the PISA 2022 migration subsample to examine problematic digital use among migrant adolescents in Türkiye. Three domains of influence were analyzed: psychosocial protective resources, social-behavioral risk factors, and demographic characteristics. The findings showed a significant association between sociodemographic characteristics and variations in digital engagement. Experiences of bullying, perceived lack of school safety, and excessive weekend digital use were identified as key risk factors associated with higher levels of problematic use. On the other hand, emotional control and teacher and family support served as significant protective factors associated with less problematic use. Overall, the findings revealed a complex pattern in which the digital engagement

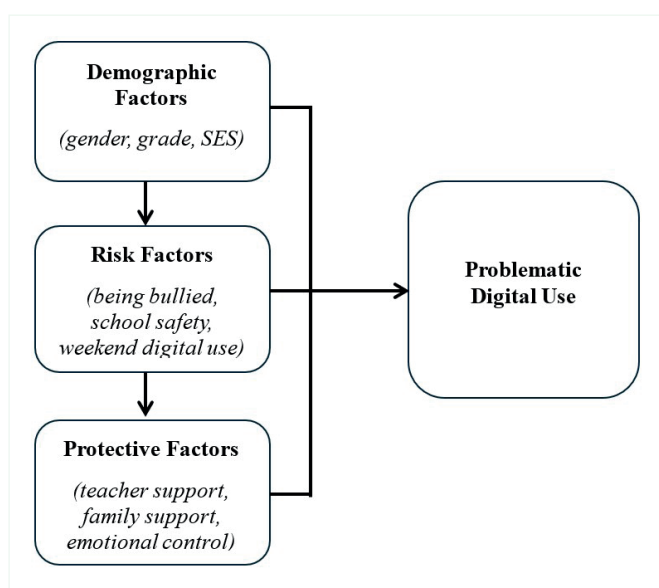


Figure 1. Conceptual model of predictors of high problematic digital use among migrant adolescents

Table 2. Correlations between problematic digital use and key study variables

Variable	1	2	3	4	5	6	7	8
1. Problematic digital use	-							
2. Socioeconomic status	.03*	-						
3. Being bullied	.13**	-.01	-					
4. School safety risks	.15**	-.02	.36**	-				
5. Weekend digital use	.17**	.15**	.04**	.09**	-			
6. Teacher-student relationship quality	-.14**	.03**	-.18**	-.21**	.01	-		
7. Family support	-.10**	.12**	-.15**	-.09**	.09**	.20**	-	
8. Emotional control	-.16**	.02	-.18**	-.10**	-.06**	.11**	.05**	-

p values are two-tailed; *p* < .05, *p* < .01, *p* < .001.

Table 3. Binary logistic regression predicting high problematic digital use

Predictor	B	SE	p	OR [95% CI]
Student International Grade (Derived)	.50	.17	.002	1.65 [1.19, 2.29]
Student (Standardized) Gender	.34	.10	< .001	1.40 [1.16, 1.70]
Socioeconomic status (ESCS z-score)	.03	.05	.525	1.03 [.94, 1.13]
Being bullied (WLE)	.16	.05	.001	1.18 [1.07, 1.30]
School safety risks (WLE)	.18	.05	< .001	1.20 [1.10, 1.31]
Weekend digital use (WLE)	.40	.04	< .001	1.49 [1.37, 1.62]
Teacher-student relationship quality (WLE)	-.215	.046	< .001	.81 [.74, .88]
Family support (WLE)	-.246	.047	< .001	.78 [.71, .86]
Emotional control (agreement; WLE)	-.450	.054	< .001	.64 [.57, .71]
Constant	-5.737	1.653	< .001	.00

Warm's Mean Weighted Likelihood Estimates (WLE) were used for all PISA background indices. These indices are standardized across OECD countries, with a mean of approximately zero and a standard deviation of one. Higher scores indicate higher levels of the corresponding construct; OR = Odds Ratio; CI = 95% Confidence Interval; *p* values are two-tailed. *p* < .05 considered statistically significant. Gender was coded as 0 = female (reference), 1 = male.

of migrant adolescents was influenced by both vulnerability and resilience factors.

This study showed that males and older migrant adolescents were more likely to report higher levels of problematic digital use, which is in line with previous research (Boer et al., 2020; Twenge & Martin, 2020). These patterns are consistent with broader gender and developmental trends, indicating that older adolescents typically have more autonomy and less parental supervision when it comes to technology use, while males may participate more intensely in digital activities related to gaming or performance (Isorna-Folgar et al., 2024; Kuss & Griffiths, 2017). Given that migrant families often experience intergenerational gaps in digital literacy and cultural adaptation, these differences may also be indicators of cultural norms and parental monitoring practices within the migration context (Moran, 2023; Suárez-Orozco et al., 2018).

The findings showed that among migrant adolescents, experiencing bullying, feeling unsafe at school, and engaging in a lot of digital activity on the weekends were all important risk factors for problematic digital use. This pattern supports the compensatory internet use framework, which suggests that adolescents may use digital spaces as a coping mechanism for stress, rejection, or unpleasant feelings (Kardefelt-Winther, 2014; Zhao et al., 2023). As digital spaces can provide short-term relief or social validation which may be limited in real social settings, peer victimization has been shown to predict

higher engagement in maladaptive online behaviors, which is consistent with previous research (Kowalski et al., 2014).

According to Gültekin et al. (2024), students who feel unsafe in their school setting might turn to online interactions as a more secure and manageable way to connect. Given that weekends are less structured and have less oversight, increased weekend digital use serves to further reinforce this dynamic (Boer et al., 2021; Twenge, 2019). Weekend patterns may also reflect other contextual constraints, especially for migrant adolescents. According to earlier studies, opportunities for outdoor social activities may be restricted by language barriers, a sense of social exclusion, and a diminished sense of neighborhood belonging (Plenty & Jonsson, 2017; Schachner, 2017). On weekends, some migrant youth might therefore rely more on digital spaces as easily accessible places for social interaction, leisure, and emotional release (Moran, 2023). When combined, these results imply that social stressors might either directly or indirectly lead to increased digital overuse among young migrants.

The findings showed that emotional control and family and teacher support were important barriers to problematic digital use among adolescent migrants. These results are consistent with earlier studies that highlight the protective function of social support networks in adolescent adjustment and digital health (Musetti et al., 2020; Suárez-Orozco et al., 2018). While family support promotes communication and a sense of

security, which can reduce the need for compensatory online behaviors, supportive teachers offer structure, belonging, and guidance, assisting students in managing academic and emotional stress (Motti-Stefanidi et al., 2021).

Similarly, emotional control is a crucial self-regulation ability that helps young people manage their stress and frustration without turning to excessive digital use (Billieux et al., 2015; Elhai et al., 2017). Within the migration context, these protective mechanisms may be particularly important, as social support networks can buffer migration-related stress, and emotional regulation capacities may strengthen adaptive coping in new challenging environments (Nozaki & Gross, 2025). All of these findings suggest that improving intrapersonal and interpersonal protective resources may be essential to lowering adolescent migrants' excessive use of digital devices. This pattern further highlights the combined role of behavioral regulation and supportive environments in relation to problematic digital use.

The final model showed that both environmental and emotional factors uniquely contributed to the likelihood of high problematic digital use among immigrant youth when all demographic, social-behavioral, and psychosocial variables were considered. Weekend digital use was the most significant risk factor among all predictors, indicating that unstructured screen time on the weekends could be a major contributing factor to excessive use. This result is consistent with studies showing that when external structure, especially school routines, is absent, adolescents tend to show less self-regulation and more media exposure (Boer et al., 2021; Twenge, 2019).

The strongest protective factor, on the other hand, seemed to be emotional control, underscoring the critical role that self-regulation plays in reducing maladaptive digital behaviors. This confirms earlier findings that problematic internet or smartphone use is predicted by issues with emotion regulation (Elhai et al., 2017; Günaydın et al., 2022). Even after accounting for contextual supports (such as teacher and family relationships), the prominence of emotional control suggests that individual coping mechanisms may act as a risk buffer in a variety of social contexts.

The results of this study should be interpreted in light of its limitations. First, causal inferences about the direction of relationships between digital behaviors and psychosocial predictors cannot be made due to the study's cross-sectional design. Future studies using longitudinal and cross-cultural designs could help clarify temporal relationships and provide stronger insight into potential causal pathways. Second, the study variables were obtained from self-report measures, which may have been influenced by adolescents' self-perceptions about their technology use or by social desirability bias. Additionally, although gender, grade level, and socioeconomic status were included as demographic controls, other identity dimensions (e.g., country of origin, language spoken at home, time since migration, culture-related experiences) were not examined. Future research should take these factors into account, as they may offer a better understanding of the

heterogeneity within migrant populations. Another limitation is that adolescents' participation in sports and outdoor activities was not assessed. Engagement in such activities may be associated with lower problematic digital use, stronger emotion regulation, and greater social support. The absence of these variables may therefore limit the interpretation of the findings. Future research should incorporate indicators of physical and extracurricular engagement to provide a more comprehensive understanding of adolescents' digital behaviors. Lastly, future research should also consider the concept of digital resilience (for example, the capacity to cope with online risks) as an important component of risk-protection models for migrant adolescents.

Implications

Several important implications emerged based on the risk-resilience framework (Fergus & Zimmerman, 2005) and ecological systems theory (Bronfenbrenner, 1992). First, educators and school psychologists should consider interventions to strengthen emotional regulation and supportive social networks among migrant youth. Since maladaptive digital coping is frequently associated with social isolation and cultural adaptation stress, it can be reduced by teacher-student relationship programs, mentorship networks, and family involvement. Similarly, training in emotional self-regulation, stress management, and mindful technology use should be part of preventive efforts in addition to traditional digital literacy programs. Promoting balanced and healthy digital use, especially for migrant adolescents, requires culturally sensitive strategies that consider migration-related difficulties (such as disrupted support systems and language barriers).

Conclusion

The current study highlights that problematic digital use among migrant adolescents in Türkiye is associated with both contextual stressors and individual vulnerabilities. Bullying experiences, feeling unsafe at school, and increased weekend digital use were identified as key factors associated with maladaptive engagement, whereas supportive teacher and family relationships, along with stronger emotional regulation, were linked to lower levels of problematic use.

This study emphasizes the unique digital challenges faced by immigrant youth by applying PISA 2022 data specifically to the migration context. The results suggest that problematic technology use reflects processes of social belonging, emotional adjustment, and ecological support, rather than being purely a matter of personal preference. Taken together, the findings highlight the importance of promoting self-control and a sense of belonging in order to support the digital wellbeing of migrant adolescents.

Author contributions

Conception and design: E.M.; Data interpretation: E.M.; Drafting of the manuscript: E.M.; Critical revision of the

manuscript: E.M. The author reviewed the results, approved the final version of the manuscript, and agreed to be accountable for all aspects of this study.

Ethical approval

Ethics committee approval and informed consent were not required for this study.

Data availability statement

The data supporting the findings of this study are openly available in OECD PISA 2022 Database at <https://www.oecd.org/en/data/datasets/pisa-2022-database.html>.

Conflict of interest

The author declares that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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The author declares that no generative AI or AI-assisted technologies were used in the writing or preparation of this study.

References

- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, 64, 287-293. [\[Crossref\]](#)
- Atalan Ergin, D., & Essau, C. A. (2024). Factors related to internet gaming disorder: Comparing reports of adolescents and their parents in Türkiye and the United Kingdom. *European Journal of Developmental Psychology*, 22(6), 852-874. [\[Crossref\]](#)
- Billieux, J., Philippot, P., Schmid, C., Maurage, P., De Mol, J., & Van der Linden, M. (2015). Is dysfunctional use of the mobile phone a behavioural addiction? Confronting symptom-based versus process-based approaches. *Clinical Psychology & Psychotherapy*, 22(5), 460-468. [\[Crossref\]](#)
- Boer, M., Stevens, G. W., Finkenauer, C., de Looze, M. E., & van den Eijnden, R. J. (2021). Social media use intensity, social media use problems, and mental health among adolescents: Investigating directionality and mediating processes. *Computers in Human Behavior*, 116, 106645. [\[Crossref\]](#)
- Boer, M., van den Eijnden, R. J. J. M., Boniel-Nissim, M., Wong, S. L., Inchley, J. C., Badura, P., & Stevens, G. W. J. M. (2020). Adolescents' intense and problematic social media use and their well-being in 29 countries. *Journal of Adolescent Health*, 66(6), S89-S99. [\[Crossref\]](#)
- Bohnert, M., & Gracia, P. (2022). *Digital engagement, social inequalities and adolescent well-being*. SocArXiv. [\[Crossref\]](#)
- Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (Ed.), *Six theories of child development: Revised formulations and current issues* (pp. 187-249). Jessica Kingsley Publishers. [\[Crossref\]](#)
- Elhai, J. D., Levine, J. C., Dvorak, R. D., & Hall, B. J. (2017). Non-social features of smartphone use are most related to depression, anxiety, and problematic smartphone use. *Computers in Human Behavior*, 69, 75-82. [\[Crossref\]](#)
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, 26(1), 399-419. [\[Crossref\]](#)
- Fujita, N., Sugimoto, T., Kuribayashi, K., & Yamamoto, M. (2022). Problematic internet use and daily difficulties among adolescents with school refusal behaviors. *Medicine*, 101(7), e28916. [\[Crossref\]](#)
- Gültekin, İ., Tapan, Ş., & Öztürk, N. (2024). Psychological factors associated with online friendship in adolescents: A systematic literature review. *Cumhuriyet International Journal of Education*, 13(2), 512-526. [\[Crossref\]](#)
- Günaydin, N., Arıcı, Y. K., Kutlu, F. Y., & Yançar Demir, E. (2022). The relationship between problematic Internet use in adolescents and emotion regulation difficulty and family Internet attitude. *Journal of Community Psychology*, 50(2), 1135-1154. [\[Crossref\]](#)
- Isorna-Folgar, M., Mateo-Orcjada, A., Failde-Garrido, J. M., Dapia-Conde, M. D., & Vaquero-Cristóbal, R. (2024). Influence of gender, parental control, academic performance and physical activity level on the characteristics of video game use and associated psychosocial problems in adolescents. *Behavioral Sciences*, 14(12), 1204. [\[Crossref\]](#)
- Kardefelt-Winther, D. (2014). A conceptual and methodological critique of internet addiction research: Towards a model of compensatory internet use. *Computers in Human Behavior*, 31, 351-354. [\[Crossref\]](#)
- Kastorff, T., Müller, M., & Greiff, S. (2025). Digital media use and availability can mitigate the digital divide: Meta-analytic insights from PISA 2022. *Computers & Education*, 238, 105409. [\[Crossref\]](#)
- Kircaburun, K., Kokkinos, C. M., Demetrovics, Z., & Griffiths, M. D. (2019). Problematic online behaviors among adolescents and emerging adults. *International Journal of Mental Health and Addiction*, 17, 891-908. [\[Crossref\]](#)
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, 140(4), 1073-1137. [\[Crossref\]](#)
- Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 14(3), 311. [\[Crossref\]](#)
- Kuss, D. J., Kristensen, A. M., & Lopez-Fernandez, O. (2021). Internet addictions outside of Europe: A systematic literature review. *Computers in Human Behavior*, 115, 106621. [\[Crossref\]](#)
- Livingstone, S., & Sylwander, K. R. (2025). There is no right age! The search for age-appropriate ways to support children's digital lives and rights. *Journal of Children and Media*, 19(1), 6-12. [\[Crossref\]](#)
- Mazzucato, V., & van Geel, J. (2022). Transnational young people: Growing up and being active in a transnational social field. In *Handbook on transnationalism* (pp. 198-210). [\[Crossref\]](#)
- Mehjabeen, D., Blignault, I., Taha, P. H., Reavley, N., & Slewa-Younan, S. (2023). A mixed methods systematic review of mental health self-care strategies for Arabic-speaking refugees and migrants. *BMC Public Health*, 23, 2544. [\[Crossref\]](#)
- Moran, C. (2023). The 'connected migrant': A scoping review. *Convergence*, 29(2), 288-307. [\[Crossref\]](#)

- Motti-Stefanidi, F., Pavlopoulos, V., & He, J. (2021). Immigrant youth resilience: Theoretical considerations, empirical developments, and future directions. *Journal of Research on Adolescence*, 31(4), 966-988. [\[Crossref\]](#)
- Musetti, A., Corsano, P., Boursier, V., & Schimmenti, A. (2020). Problematic internet use in lonely adolescents: The mediating role of detachment from parents. *Clinical Neuropsychiatry*, 17(1), 3-10. [\[Crossref\]](#)
- Nozaki, Y., & Gross, J. J. (2025). Bridging supportive communication and interpersonal emotion regulation: An integrative review. *Journal of Social and Personal Relationships*, 42(8), 2231-2262. [\[Crossref\]](#)
- OECD. (2023). *PISA 2022 results (volume I): The state of learning and equity in education*. OECD Publishing. [\[Crossref\]](#)
- Plenty, S., & Jonsson, J. O. (2017). Social exclusion among peers: The role of immigrant status and classroom immigrant density. *Journal of Youth and Adolescence*, 46(6), 1275-1288. [\[Crossref\]](#)
- Schachner, M. K. (2017). From equality and inclusion to cultural pluralism - Evolution of school acculturation research. In P. Schnabel & R. Powell (Eds.), *Intercultural relations in education* (pp. 45-66). Routledge. [\[Crossref\]](#)
- Suárez-Orozco, C., Motti-Stefanidi, F., Marks, A. K., & Katsiaficas, D. (2018). An integrative risk and resilience model for immigrant-origin youth. *American Psychologist*, 73(6), 781-796. [\[Crossref\]](#)
- Twenge, J. M. (2019). More time on technology, less happiness? *Current Directions in Psychological Science*, 28(4), 372-379. [\[Crossref\]](#)
- Twenge, J. M., & Martin, G. N. (2020). Gender differences in associations between digital media use and psychological well-being. *Journal of Adolescence*, 79, 91-102. [\[Crossref\]](#)
- Verkuyten, M. (2018). *The social psychology of ethnic identity* (2nd ed.). Routledge. [\[Crossref\]](#)
- Zhao, B., Liu, J., & Li, J. (2023). Peer relationships and adolescent internet addiction. *Computers in Human Behavior*, 149, 109884. [\[Crossref\]](#)

Gambling disorder among young migrants in Germany

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Abstract

This study examines the development of gambling disorder among young migrants in Germany, focusing on the interaction between migration-related experiences and social contexts. The study adopts a qualitative, practice-based exploratory design, drawing on anonymized composite case vignettes derived from professional counseling practice in the fields of family and gambling disorder support. The empirical material consists of analytically condensed case representations reflecting three predominant migration constellations in Germany: marriage migration, forced migration, and second-generation migration. The data were analyzed using an inductive thematic approach, informed by sociological and psychological theories, including acculturation stress, stigma, social exclusion, and behavioral addiction models. The findings identify five central mechanisms shaping gambling trajectories among young migrants: migration-related vulnerability, the social embedding of gambling practices, the increasing role of digital gambling environments, escalation dynamics, and the emergence of debt, shame, and social withdrawal. Gambling behavior emerges not only as a coping strategy in response to psychosocial stressors such as discrimination, unemployment, and identity conflicts, but also as a socially embedded practice that provides temporary inclusion and recognition. This study contributes to existing research by offering a practice-based qualitative perspective that complements predominantly quantitative findings. It highlights the importance of culturally sensitive prevention and intervention strategies, particularly in addressing barriers related to stigma, language, and institutional trust. The findings underline the need for integrated approaches that connect social policy, public health, and community-based support structures.

Keywords: gambling disorder, migrant youth, sports betting, acculturation stress, intercultural prevention, online gambling

Main points

- Young migrants in Germany are particularly vulnerable to gambling disorder due to migration-related stress, social exclusion, and limited opportunities for social participation.
- Sports betting and online gambling often function not only as risk behaviors but also as socially embedded practices linked to belonging, recognition, and everyday interaction.
- The analysis of composite case vignettes identifies five central mechanisms shaping gambling trajectories: migration-related vulnerability, social embedding, digital gambling environments, escalation dynamics, and psychosocial consequences.
- Shame, stigma, and institutional mistrust can delay help-seeking and reinforce the persistence of gambling disorder among migrant youth.
- Effective prevention and intervention require culturally sensitive, community-based, and digitally informed strategies that address both structural and psychosocial barriers.

Introduction

Migration is often accompanied by profound psychological and social stressors that can affect individuals long after their arrival in the host country. For young migrants in particular, the simultaneous negotiation of identity, social belonging,

and future prospects creates a complex vulnerability structure that may increase the risk of developing maladaptive coping strategies. While substance use among migrant youth has been extensively studied (Kuhn, 2018; Parla, 2005), gambling disorder remains an underexplored yet increasingly relevant

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phenomenon (Petry, 1998; Şahinöz, 2025), especially in the context of digital gambling environments.

In countries such as Germany, where large groups of young migrants experience structural disadvantages including discrimination, unemployment, and limited social mobility, gambling may function both as a coping mechanism and as a form of social participation. At the same time, this practice is associated with significant risks, frequently resulting in cycles of indebtedness, loss of control, and social isolation (Şahinöz, 2014). Cultural stigma, limited access to culturally sensitive services, and the normalization of gambling in certain social environments further complicate early intervention.

Existing research has largely focused on quantitative prevalence data and structural risk factors. Less attention has been paid to the lived experiences and trajectories through which gambling behavior develops within specific migration contexts. In particular, there is a lack of qualitative, practice-based analyses that connect migration-related stress, social environments, and individual coping strategies in an integrated framework.

Against this background, this study aims to examine how migration-related experiences and social contexts shape the development of gambling disorder among young migrants in Germany. It adopts a qualitative, practice-based perspective and combines composite case vignettes from counseling practice with sociological theory and empirical research.

The study contributes to the literature by providing a theoretically informed, practice-based analysis of gambling trajectories among young migrants. By focusing on everyday contexts and lived experiences, it offers insights into mechanisms that are often not captured by quantitative approaches, particularly the role of social environments, stigma, and digital gambling structures.

This article proceeds as follows: First, the theoretical framework and relevant literature are outlined. Second, the methodological approach is presented. Third, the empirical material is analyzed through thematic findings. Finally, the findings are discussed in relation to existing research and implications for prevention and intervention.

Theoretical Framework

Understanding gambling disorder among young migrants requires a multidimensional theoretical perspective that integrates migration-related stress, social exclusion, identity formation, and behavioral addiction. This study draws on four complementary theoretical approaches: acculturation stress theory, stigma theory, perspectives on social exclusion and integration, and models of behavioral addiction in digital environments.

First, acculturation stress theory provides an important framework for understanding the psychological burden associated with migration processes. According to Berry

(1997), individuals who migrate are confronted with the challenge of negotiating between their culture of origin and the host society. This process often involves identity conflicts, experiences of marginalization, and perceived discrimination. Such stressors have been shown to increase vulnerability to maladaptive coping strategies, including substance use and behavioral addictions (Berry, 2006; Bhugra, 2004). In the context of young migrants, these tensions are often intensified by developmental challenges related to adolescence and identity formation.

Second, the concept of stigma, as developed by Goffman (1963), offers a valuable lens for analyzing the social dynamics surrounding gambling disorder. Stigma refers to the social devaluation of individuals who deviate from normative expectations, leading to shame, secrecy, and social withdrawal. In migrant communities, stigma can be further reinforced by cultural norms, collective honor, and moral expectations (Link & Phelan, 2001). As a result, individuals affected by gambling disorder may delay or avoid seeking professional help, thereby exacerbating the progression of the disorder.

Third, sociological perspectives on social exclusion and integration are central to understanding the structural conditions that shape gambling behavior among migrants. Social exclusion refers to the limited access to economic, social, and cultural resources that are necessary for full participation in society (Bourdieu, 1986; Castel, 2003). Migrant youth are disproportionately affected by unemployment, precarious labor conditions, and educational disadvantages, which can lead to feelings of marginalization and lack of belonging (Heckmann, 2005). In this context, gambling environments such as betting shops, cafés, or online communities can function as alternative spaces of social inclusion, offering recognition, belonging, and temporary relief from everyday stress.

Fourth, behavioral addiction models help explain the specific mechanisms underlying gambling behavior. Gambling disorder is characterized by impaired control, continued engagement despite negative consequences, and the pursuit of reward and excitement (Griffiths, 2005; Petry, 2004). In recent years, the expansion of digital gambling platforms has significantly transformed the accessibility and intensity of gambling experiences. Online betting and gaming environments operate through rapid reward cycles, continuous availability, and personalized incentives, which increase the risk of addictive behavior (Gainsbury, 2015; King & Delfabbro, 2018). For young migrants, who are often highly engaged in digital environments, these structural features interact with psychosocial vulnerabilities and further amplify addiction risks.

Taken together, these theoretical perspectives are used as complementary analytical lenses throughout the study. Acculturation stress helps explain migration-related psychological strain, stigma theory illuminates delayed help-seeking behavior, social exclusion theory explains structural marginalization and the search for alternative spaces of belonging, and behavioral addiction models

help interpret escalation processes within digital gambling environments. Combined, these perspectives provide an integrated framework for analyzing how structural, social, and psychological factors interact in the development of gambling disorder among young migrants.

Literature Review

In Germany, gambling-related problems represent a significant public health issue. Recent data indicate that approximately 4.6 million adults show problematic gambling behavior or early symptoms of addiction, while around 1.3 million individuals meet the criteria for a gambling disorder, corresponding to 1.54% of the population (Schütze et al., 2023). In international comparison, prevalence rates are somewhat lower in countries such as Switzerland (0.5%; Bondolfi et al., 2008), Sweden (1.4%; Volberg et al., 2001), and Spain (1.7%; Becona, 1993) (Müller et al., 2013). Research further indicates that around 80% of individuals affected by gambling disorder are male. According to a study, male gender, low educational attainment, unemployment, and a migrant background are particular risk factors for problem gambling behavior (BZgA, 2014, pp. 8, 11, 21, 106, 108, 161). Being male increases the risk by approximately 2.7%, having a migrant background by approximately 3.7%, unemployment by approximately 6.5%, and low educational attainment by approximately 3.8% (BZgA, 2014, p. 107).

Research on gambling disorder among migrants is situated at the intersection of migration studies, addiction research, and social inequality. While substance use among migrant populations has been widely examined, gambling behavior, particularly among young migrants, remains comparatively underexplored.

A substantial body of research has demonstrated that migration is associated with increased psychosocial vulnerability. Studies have shown that migrants are more likely to experience discrimination, social exclusion, and economic disadvantage, all of which are linked to negative mental health outcomes (Bhugra, 2004; Fragner et al., 2023; Wiesinger, 2018). These structural and psychosocial stressors are particularly pronounced among young people, who must simultaneously navigate developmental challenges related to identity formation and social belonging.

Within addiction research, several studies have identified a migration background as a significant risk factor for problematic gambling behavior. Data from Germany indicate that individuals with a migrant background show higher prevalence rates of pathological gambling compared to the general population (BZgA, 2014; Milin et al., 2017). These findings suggest that gambling disorder among migrants is not merely an individual issue but is closely linked to broader social and structural conditions.

Existing research has also highlighted the role of socioeconomic factors such as unemployment, low educational attainment, and financial insecurity in the development of gambling

problems (Müller et al., 2013; Schütze et al., 2023). These conditions are disproportionately prevalent among migrant populations and contribute to increased exposure to high-risk environments. In this context, gambling can function as a perceived strategy for economic improvement, even though it often leads to further financial instability and indebtedness.

In addition to structural factors, cultural and social dynamics play a crucial role. Studies focusing on migrant communities have shown that gambling may be embedded in social practices and collective environments, such as cafés or community meeting spaces, where it becomes normalized and socially reinforced (Milin et al., 2017; Şahinöz, 2011). Similarly, research on Turkish Cypriot communities has identified the emergence of a distinct gambling subculture, in which gambling is perceived less as a financial activity and more as a form of social interaction and emotional relief (Macit, 2021). Such findings highlight the importance of understanding gambling within its cultural and social context rather than solely as an individual pathology.

Recent developments in digital technologies have further transformed the landscape of gambling. Online betting platforms, mobile applications, and gaming environments with gambling-like features have significantly increased accessibility and participation, particularly among young people (Hayer, 2025; Hayer & Brosowski, 2025). These platforms operate through rapid reward mechanisms, continuous availability, and targeted marketing strategies, which are known to increase the risk of addictive behavior. Young migrants, who often rely heavily on digital environments for communication and socialization, may be particularly vulnerable to these dynamics.

Despite these important contributions, the existing literature reveals several gaps. First, there is a lack of qualitative research that explores how migration-related experiences and social contexts shape individual gambling trajectories. Second, the voices and lived experiences of young migrants are often underrepresented, as many studies rely primarily on quantitative data. Third, culturally sensitive perspectives remain limited, particularly with regard to how stigma, family structures, and community norms influence help-seeking behavior.

Thus, there remains a lack of qualitative, practice-based research that connects migration experiences, social environments, and gambling trajectories in an integrated analytical framework.

This study therefore aims to combine practice-oriented case analyses with theoretical and empirical findings. By focusing on young migrants in Germany and incorporating culturally embedded perspectives, it aims to contribute to a more nuanced understanding of gambling disorder as a socially situated phenomenon.

Methodology

Research Design

This study adopts a qualitative, practice-based exploratory design to investigate the relationship between migration-related experiences and the development of gambling disorder among young migrants in Germany. The research is grounded in professional counseling practice and aims to generate theoretically informed insights into recurring patterns and mechanisms rather than statistically generalizable findings.

Data Collection and Setting

The empirical basis of the study consists of case material derived from the author's professional work as a family counselor and gambling disorder counselor in Germany. The data originate from counseling interactions with clients from diverse migrant backgrounds collected over more than ten years of professional counseling practice in Germany. During this period, the author worked with several hundred clients in the fields of family counseling, migration counseling, and gambling disorder support.

To ensure confidentiality and ethical compliance, all cases were fully anonymized. Individual case elements were not presented as single-client biographies but were systematically reconstructed into composite case vignettes. These vignettes represent analytically condensed patterns observed across multiple counseling cases and are intended to illustrate typical trajectories rather than individual life histories.

Case Selection and Analytical Focus

The composite vignettes represent three analytically relevant migration constellations within the German context:

- marriage migration
- forced migration (refugees)
- second-generation migration

The cases are not presented as individual biographies but as anonymized, composite vignettes that reflect recurring patterns observed across multiple clients.

The cases of Cengiz, Faris, and Diyar serve as representative examples of these constellations. They were constructed by synthesizing recurring features related to migration experiences, social environments, and gambling trajectories.

The vignettes are presented as empirical material that forms the basis for the thematic analysis in the following section. Rather than functioning as isolated narratives, they are understood as analytically condensed representations of typical patterns observed in counseling practice.

Analytical Procedure

The analysis followed principles of inductive thematic analysis as outlined by Braun and Clarke (2006). The case material was systematically examined to identify recurring patterns related to migration-related stress, social exclusion, identity conflicts, and gambling behavior.

At the same time, the analysis is theoretically informed. Concepts derived from acculturation stress theory, stigma theory, social exclusion, and behavioral addiction models were used as sensitizing frameworks to interpret the empirical material. This approach combines inductive pattern generation with theory-guided interpretation.

The analytical process involved moving from narrative case descriptions to analytically condensed thematic categories, which form the basis of the Findings section. The aim is to identify underlying mechanisms and trajectories rather than to test predefined hypotheses.

Triangulation

The study applies a form of methodological triangulation by integrating three sources of knowledge:

- practice-based counseling observations
- existing empirical research
- sociological and psychological theory

This triangulation allows for a more comprehensive understanding of gambling behavior among young migrants by linking lived experiences with broader structural and theoretical perspectives.

Ethical Considerations

All data used in this study were handled in accordance with professional ethical standards of counseling practice. Personal identifiers were removed, and sensitive details were modified to prevent identification. According to institutional guidelines, formal ethical review was not required because the study relied exclusively on anonymized composite case material derived from routine counseling practice. Nevertheless, particular attention was paid to confidentiality, vulnerability, and the prevention of indirect identification.

Findings and Case-Based Analysis

The following analysis is based on composite case vignettes derived from the author's professional practice as a family counselor and gambling disorder counselor in Germany. Rather than presenting the vignettes as isolated narratives, the analysis integrates them as empirical material illustrating recurring patterns observed across different migration constellations. The cases of Cengiz, Faris, and Diyar represent

analytically condensed examples of marriage migration, forced migration, and second-generation migration. The findings reveal five interconnected dimensions shaping gambling disorder among young migrants: migration-related vulnerability, the social embedding of gambling practices, the role of digital gambling environments, escalation trajectories, and psychosocial consequences.

Migration-Related Vulnerability

Across all cases, migration-related experiences constitute a central background condition shaping the emergence of gambling behavior. Although the cases represent different migration trajectories, they share experiences of social dislocation, insecurity, and limited social participation.

Cengiz, a 27-year-old marriage migrant, arrived in Germany with expectations of building a stable future. However, limited German language skills, unemployment, and the absence of social networks contributed to feelings of loneliness and alienation. His trajectory illustrates how recent migration can produce psychosocial vulnerability, particularly when individuals experience dependency and loss of orientation in the host society.

A different form of vulnerability appears in the case of Faris, a 16-year-old refugee from Syria. Having experienced war, displacement, and the loss of his father, Faris entered Germany under conditions marked by trauma and instability. In school, he encountered racism, bullying, and cultural isolation, while his family struggled with bureaucratic challenges and emotional exhaustion. His case demonstrates how forced migration intensifies psychological stress and increases susceptibility to maladaptive coping strategies.

Diyar, a 17-year-old born in Germany to Kurdish migrant parents, represents a second-generation migration constellation. Unlike Cengiz and Faris, his vulnerability does not emerge from recent migration or forced displacement, but from a persistent feeling of not fully belonging. Despite growing up in Germany, he experiences exclusion at school and social marginalization in everyday life. His case illustrates how identity conflicts and experiences of symbolic exclusion can also generate psychosocial strain among second-generation migrant youth.

Taken together, the cases demonstrate that migration-related vulnerability manifests differently across migration trajectories. Nevertheless, all cases reveal common emotional dynamics characterized by insecurity, loss of control, and social exclusion, which create conditions under which gambling behavior becomes psychologically meaningful.

Social Embedding of Gambling Practices

A second central finding concerns the social contexts in which gambling behavior emerges and becomes normalized. In all cases, gambling is embedded in environments that provide forms of social interaction, familiarity, and belonging.

For Cengiz, gambling initially develops within the setting of a Turkish café. What begins as social interaction through tea drinking and conversations with compatriots gradually evolves into low-stakes gambling activities such as Okey or card games involving small bets. The café functions not only as a gambling environment but also as a compensatory social space that temporarily reduces feelings of isolation and exclusion.

Similarly, Diyar's gambling behavior is closely linked to peer-group dynamics. Sports betting becomes a shared activity among friends and serves as a means of recognition and group integration. Participation in betting practices allows him to experience temporary status and social acceptance that he otherwise lacks in school and everyday life.

In Faris's case, gambling is embedded in digital communities rather than physical social spaces. Through Arabic-speaking gaming networks and social media platforms, he encounters online gambling activities disguised as games or social challenges. These digital spaces combine linguistic familiarity with emotional escape and social connection.

The findings therefore indicate that gambling among young migrants cannot be understood solely as an individual economic activity or pathological impulse. Instead, gambling environments function as alternative spaces of inclusion in which belonging, recognition, and emotional relief are temporarily experienced.

Role of Sports Betting and Digital Gambling Environments

Digital gambling environments emerge as a particularly significant dimension in the development of gambling disorder among younger migrants. In the cases analyzed, online platforms constitute central entry points into gambling behavior.

Diyar's gambling practices are closely connected to smartphone use and online sports betting applications integrated into everyday digital routines. Betting is normalized within peer interactions and becomes part of daily communication patterns. Similarly, Faris encounters gambling through gaming applications and social media environments, where gambling mechanisms are embedded within seemingly harmless digital entertainment structures.

These online environments are characterized by continuous accessibility, rapid reward cycles, anonymity, and low barriers to entry. As a result, gambling behavior is often not perceived as a clearly distinct risk activity but rather as an ordinary element of digital interaction.

The findings suggest that digital gambling environments amplify existing psychosocial vulnerabilities by combining emotional stimulation, social interaction, and constant accessibility. Particularly for young migrants who rely heavily on digital spaces for communication and belonging, these

structures create intensified risks for problematic gambling behavior.

Escalation Trajectories

Another recurring pattern concerns the gradual escalation of gambling behavior. In all cases, gambling begins as a low-threshold activity associated with curiosity, distraction, or social participation before developing into increasingly problematic behavior.

In the case of Cengiz, gambling evolves from occasional café games to regular visits to gambling halls involving progressively higher financial stakes. His attempts to recover financial losses reinforce a repetitive cycle of hope, frustration, and renewed gambling.

Diyar's trajectory follows a similar pattern. What initially appears as harmless sports betting among peers gradually develops into secretive and financially risky behavior involving borrowed money and unauthorized account use. Likewise, Faris experiences rapid escalation within digital environments, where constant accessibility facilitates repeated engagement and intensifies loss of control.

Across all cases, escalation is characterized by increasing financial involvement, compulsive repetition, and repeated attempts to compensate for previous losses through further gambling. The findings therefore demonstrate that gambling disorder develops progressively through cumulative reinforcement mechanisms rather than sudden behavioral change.

Psychosocial Consequences: Debt, Shame, and Social Withdrawal

The final analytical dimension concerns the psychosocial consequences associated with gambling disorder. Despite differences in migration background and social context, all cases reveal similar patterns of emotional distress, social withdrawal, and deteriorating relationships.

Cengiz experiences marital conflict, emotional isolation, and growing dependency as gambling increasingly dominates his daily life. Diyar accumulates debt, faces legal risks, and becomes increasingly disconnected from school and family structures. Faris encounters secrecy, family tension, and emotional isolation while struggling with unresolved trauma and addiction-related shame.

A central pattern across all cases is the emergence of stigma and concealment. Gambling behavior is hidden from family members and social networks due to fear of shame, social judgment, and loss of reputation. This secrecy delays help-seeking and contributes to the persistence of gambling disorder.

The findings therefore suggest that gambling disorder among young migrants must be understood not only in terms of financial consequences but also as a process of social and emotional disintegration shaped by stigma, exclusion, and loss of belonging.

Discussion

The findings of this study provide a practice-based, qualitative perspective on the mechanisms linking migration experiences and gambling disorder among young migrants in Germany. Rather than merely reiterating known risk factors, the analysis offers insight into how these factors interact within everyday social contexts and across different migration trajectories.

Reflection in Relation to Theoretical Framework

The results confirm the relevance of acculturation stress as a central explanatory framework. Consistent with previous research (Berry, 1997; Bhugra, 2004), migration-related experiences such as language barriers, social exclusion, and identity conflicts generate psychological strain. However, the present findings extend this perspective by demonstrating how such stress is actively processed through gambling practices. Gambling does not appear solely as a passive reaction to stress but as a structured attempt to regain agency, control, and emotional stability within contexts of uncertainty.

The findings also support and refine sociological theories of stigma (Goffman, 1963; Link & Phelan, 2001). While stigma is commonly understood as an individual experience of shame, the present analysis highlights its embeddedness in collective expectations related to family honor, masculinity, and social reputation. This culturally intensified form of stigma contributes to secrecy and delayed help-seeking, thereby reinforcing the persistence of gambling disorder.

Furthermore, the study confirms the relevance of social exclusion as a structural condition shaping gambling behavior (Bourdieu, 1986; Castel, 2003). At the same time, the findings extend this perspective by showing that gambling environments function as compensatory spaces of inclusion. Cafés, peer groups, and digital communities do not merely normalize gambling but provide alternative forms of recognition and belonging for individuals who experience marginalization in other areas of life.

Finally, the findings align with behavioral addiction models emphasizing the role of accessibility, reinforcement mechanisms, and continuous engagement (Gainsbury, 2015; Griffiths, 2005). The present study extends these models by illustrating how digital gambling environments intersect with migration-related vulnerabilities. For young migrants, digital spaces often represent primary arenas of social interaction. The integration of gambling elements into these environments creates a risk structure that is difficult to regulate and often not perceived as distinct from everyday digital practices.

Comparison with Existing Literature

The findings are consistent with quantitative research indicating higher prevalence rates of gambling problems among individuals with a migrant background (BZgA, 2014; Milin et al., 2017). However, while existing studies primarily identify structural risk factors, the present analysis provides insight into the processes through which these factors translate into everyday behavior.

In particular, the study highlights the role of social environments and cultural contexts in shaping gambling practices. Previous research has shown that gambling can be embedded in collective settings (Milin et al., 2017; Şahinöz, 2011). The present findings extend this perspective by demonstrating how these environments actively compensate for experiences of exclusion and lack of belonging.

Moreover, the analysis contributes to the literature on digital gambling by illustrating how online environments are integrated into everyday life. While existing studies emphasize accessibility and risk (Gainsbury, 2015; Hayer, 2025), the present findings suggest that digital gambling is often normalized as part of routine digital interaction. This perspective helps explain why early signs of problematic behavior are frequently overlooked.

Practical and Clinical Implications

The findings have important implications for prevention and intervention strategies. First, they highlight the need for culturally sensitive approaches that take into account migration-related experiences, social environments, and stigma dynamics. Standardized intervention models may not adequately address the specific barriers faced by young migrants, such as language difficulties, institutional mistrust, and culturally shaped perceptions of addiction.

Second, the results underline the importance of early detection within social environments. Since gambling behavior is often embedded in peer groups, cafés, and digital communities, preventive strategies should not be limited to individual counseling but should also target these social contexts.

Third, the findings point to the necessity of integrating digital dimensions into prevention efforts. Given the central role of online gambling, particularly among younger individuals, interventions should include digital literacy, awareness of gambling mechanisms, and targeted outreach in online environments.

Finally, the study suggests that trust-building measures are crucial for effective intervention. Collaboration with community networks, schools, and culturally embedded institutions may help reduce barriers to help-seeking and facilitate earlier access to support services.

Limitations and Future Research

This study is subject to several limitations. The analysis is based on qualitative, practice-based composite case vignettes, which do not allow for statistical generalization. The cases represent analytically condensed patterns rather than individual biographies. However, they offer conceptual insights into mechanisms that may be transferable to similar contexts.

In addition, the findings are shaped by the perspective of counseling practice, which may involve selective visibility of more severe cases. While efforts were made to ensure analytical rigor, the interpretive nature of the analysis may introduce subjective elements.

Future research should build on these findings by combining qualitative and quantitative approaches. Larger-scale studies could examine the prevalence and variation of the identified mechanisms across different migrant groups. In particular, further research is needed on the role of digital environments, including algorithm-driven engagement and targeted marketing strategies. Moreover, the development and evaluation of culturally sensitive prevention programs should be prioritized to translate research findings into effective practice.

Conclusion

Gambling disorder among young migrants emerges as a complex and multidimensional phenomenon that is deeply embedded in the broader context of migration, identity formation, and social integration. The findings of this study demonstrate that gambling behavior cannot be understood solely as an individual pathology, but must be analyzed in relation to structural inequalities, psychosocial stressors, and culturally embedded social practices.

Migration-related experiences such as social exclusion, discrimination, and identity conflicts create conditions that increase vulnerability to behavioral addictions. Within this context, gambling, particularly sports betting and online gambling, functions not only as a means of financial aspiration but also as a coping mechanism and a form of social participation. However, these short-term functions often lead to long-term consequences, including debt, social isolation, and emotional distress.

The study highlights that effective prevention and intervention strategies must go beyond individual-level approaches. Instead, they require culturally sensitive, community-based, and structurally informed responses that take into account the lived realities of migrant populations. Strengthening intercultural competence among professionals, reducing barriers to access, and addressing stigma within communities are essential components of such strategies.

At the same time, several limitations of this study must be acknowledged. First, the analysis is based on qualitative case vignettes derived from counseling practice, which do not allow for statistical generalization. The cases represent typical patterns rather than a representative sample of the population. Second, the reliance on practice-based observations may introduce subjective interpretations, even though efforts were made to ensure analytical rigor. Third, the study focuses primarily on specific migrant groups in Germany, which may limit the transferability of the findings to other contexts.

Future research should build on these findings by conducting systematic empirical studies, including both qualitative and quantitative approaches, to further investigate gambling behavior among migrant youth. Comparative studies across different migrant groups and national contexts would provide valuable insights into cultural and structural variations. In addition, more research is needed on the role of digital environments, particularly the impact of online betting platforms and algorithm-driven engagement mechanisms. Finally, the development and evaluation of culturally sensitive prevention and intervention programs should be prioritized in order to translate research findings into effective practice.

In conclusion, addressing gambling disorder among young migrants requires a holistic and multidisciplinary approach that integrates sociological, psychological, and public health perspectives. Only by considering the complex interplay between individual experiences and structural conditions can sustainable and effective solutions be developed.

Author contributions

Conception and design: C.Ş.; data acquisition: C.Ş.; data analysis: C.Ş.; data interpretation: C.Ş.; drafting of this study: C.Ş.; critical revision of this study: C.Ş. The author reviewed the results, approved the final version of this study, and agreed to be accountable for all aspects of this study.

Ethical approval

Ethics committee approval and informed consent were not required for this study.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of interest

The author declares that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Generative AI statement

The author declare that no generative AI or AI-assisted technologies were used in the writing or preparation of this study.

References

- Becona, E. (1993). The prevalence of pathological gambling in Galicia (Spain). *Journal of Gambling Studies*, 9, 353-369. [\[Crossref\]](#)
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, 46(1), 5-34. [\[Crossref\]](#)
- Berry J. W. (2006). Stress perspectives on acculturation. In D. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (pp. 43-57). Cambridge University Press. [\[Crossref\]](#)
- Bhugra, D. (2004). Migration and mental health. *Acta Psychiatrica Scandinavica*, 109(4), 243-258. [\[Crossref\]](#)
- Bondolfi, G., Jermann, F., Ferrero, F., Zullino, D., & Osiek, C. H. (2008). Prevalence of pathological gambling in Switzerland after the opening of casinos and the introduction of new preventive legislation. *Acta Psychiatrica Scandinavica*, 117(3), 236-239. [\[Crossref\]](#)
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). Greenwood Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. [\[Crossref\]](#)
- BZgA. (2014). *Glücksspielverhalten und Glücksspielsucht in Deutschland*. BZgA.
- Castel, R. (2003). *From manual workers to wage laborers: Transformation of the social question*. Routledge.
- Fragner, L., Schiffler, T., & Plener, P. L. (2023). Migration und Flucht - Auswirkungen auf Kinder und Jugendliche. In J. Fegert (Ed.), *Psychiatrie und Psychotherapie des Kindes- und Jugendalters*. Springer Reference Medizin (pp. 1-18). [\[Crossref\]](#)
- Gainsbury, S. M. (2015). Online gambling addiction: The relationship between internet gambling and disordered gambling. *Current Addiction Reports*, 2(2), 185-193. [\[Crossref\]](#)
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice-Hall Inc.
- Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use*, 10(4), 191-197. [\[Crossref\]](#)
- Hayer, T. (2025). Online-Glücksspiele, Sportwetten und Co.: Aktuelle Entwicklungen auf dem Glücksspielmarkt und ihre Risiken für Jugendliche. *Aktion Jugendschutz der Landesarbeitsstelle Baden-Württemberg*, 1, 4-5.
- Hayer, T., & Brosowski, T. (2025). Online-Glücksspiel in Deutschland: Wie werden Maßnahmen des Spielerschutzes bei Glücksspielenden wahrgenommen? *Deutscher Suchtkongress*, 2(1), 2172.
- Heckmann, F. (2005). *Integration and integration policies. IMISCOE network feasibility study*. Europäisches Forum für Migrationsstudien Institut an der Universität Bamberg.
- King, D. L., & Delfabbro, P. H. (2018). Predatory monetization schemes in video games (e.g. 'loot boxes') and internet gaming disorder. *Addiction*, 113(11), 1967-1969. [\[Crossref\]](#)

- Kuhn, S. (2018). *Drogenkonsum und Hilfebedarfe von Geflüchteten in niedrighschwelligen Einrichtungen der Suchthilfe in Deutschland*. Zentrum für Interdisziplinäre Suchtforschung. [\[Crossref\]](#)
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27, 363-385. [\[Crossref\]](#)
- Macit, R. (2021). Kıbrıs Türk toplumunda kumar alt kültürü. *Bağımlılık Dergisi*, 22(2), 171-179. [\[Crossref\]](#)
- Milın, S., Buth, S., Karakuş, D., & Kalke, J. (2017). *Glücksspielprobleme bei türkeistämmigen Migranten - Ursachen, Barrieren der Inanspruchnahme von Hilfen und Unterstützungsbedarfe*. Institut für interdisziplinäre Sucht- und Drogenforschung.
- Müller, K., Wölfling, K., & Gıral, S. (2013). Update Glücksspielsucht. Pathologisches Glücksspiel. Eine aktuelle Übersicht zu Verbreitung, Merkmalen und therapeutischer Handhabung. *Konturen. Fachzeitschrift zu Sucht und sozialen Fragen*, 34(1).
- Parla, F. (2005). *Migration und Drogenabhängigkeit. Eine vergleichende Studie von türkischen Jugendlichen in Deutschland und in der Türkei* [Doctoral dissertation, Universität Köln]. https://kups.ub.uni-koeln.de/1785/1/Doktorarbeit_von_Fatma_Parla.pdf
- Petry, J. (1998). Die Behandlung der „Glücksspielsucht“ bei Migranten. In *Sucht in unserer multikulturellen Gesellschaft* (pp. 166-183). Lambertus.
- Petry, N. (2004). *Pathological gambling: Etiology, comorbidity, and treatment*. American Psychological Association. [\[Crossref\]](#)
- Schütze, C., Kalke, J., Möller, V., Turowski, T., & Hayer, T. (2023). *Glücksspielatlas Deutschland 2023: Zahlen, Daten und Fakten*. Institut für interdisziplinäre Sucht- und Drogenforschung, Deutsche Hauptstelle für Suchtfragen, Universität Bremen.
- Şahinöz, C. (2011). *Als türkische Cafés getarnte illegale Glücksspielorte*. DTN.
- Şahinöz, C. (2014). *Avrupa’da yaşayan Türklerde kumar sorunu*. *Yeşilay Dergisi*, (967), 36-38.
- Şahinöz, C. (2025). *Gefangen im Spiel: Glücksspielsucht unter Migranten. Ursachen, Folgen und Wege aus der Sucht*. BOD.
- Volberg, R. A., Abbott, M. W., Ronnberg, S., & Munck, I. M. (2001). Prevalence and risks of pathological gambling in Sweden. *Acta Psychiatrica Scandinavica*, 104(1), 250-256. [\[Crossref\]](#)
- Wiesinger, I. (2018). Integration und Identitätsbildung junger Geflüchteter in der Jugendhilfe - ein Drahtseilakt ohne Sicherung. *Das Jugendamt*, 91(10), 426-436.

Between borders and substances: Body packer cases among refugees in Van, Türkiye

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Abstract

Van, Türkiye's eastern border province, is a major transit corridor for irregular migrants and lies on the Balkan route for drug trafficking. This study describes the clinical and radiological features of body packer cases presenting to an emergency department in this critical border region. This retrospective case series included all 13 confirmed body packer patients who presented to the University of Health Sciences, Van Training and Research Hospital Emergency Department between January 2021 and November 2025. Data on demographics, clinical presentation, imaging findings, and management were extracted from medical records. Eleven patients (84.6%) were refugees or irregular migrants; all 13 were brought by law enforcement, with no voluntary self-presentations. The median age was 33 years, and 12 were male. The concealed substances were predominantly methamphetamines (69.2%), followed by opioids (15.4%) and cocaine (15.4%). Seven patients (53.8%) were asymptomatic. CT imaging, used in all cases, showed a 100% detection rate. A key finding was the observation of two patients with rectal packet clustering and marked bladder distension, both reporting deliberate avoidance of defecation and urination—a behavioral cue for high-risk screening. The single female patient had multiluminal concealment (rectal and vaginal). No toxicity or mortality occurred; median hospital stay was 3 days. Body packing among migrants in Van is an under-recognized phenomenon at the intersection of migration, trafficking, and substance use vulnerability. The small number of detected cases, all law-enforcement-driven, suggests a significant underestimation of the true burden. The predominance of methamphetamines suggests a significant stimulant trafficking trend. Border-region emergency departments must implement risk-based screening strategies, integrate addiction services, and adopt trauma-informed care frameworks to address the complex needs of this vulnerable population.

Keywords: methamphetamine, body packing, drug trafficking, migration, refugees, emergency management

Main points

- Body packing among refugees and irregular migrants in Van represents an under-recognized phenomenon at the intersection of migration, trafficking, and substance use vulnerability, with all 13 cases brought by law enforcement and no voluntary presentations.
- Methamphetamines accounted for 69.2% of concealed substances, suggesting a significant shift from the traditional opioid-dominated pattern of the Balkan Route and highlighting evolving regional drug markets.
- Behavioral cues such as deliberate avoidance of defecation and urination leading to bladder distension may serve as practical clinical red flags for risk-based screening in resource-limited border-region settings.
- The absence of major complications and the small number of detected cases over five years suggest that body packing in this region is highly professionalized and that detected cases represent only the "clinical tip of the iceberg."
- Border-region emergency departments require standardized clinical protocols, trauma-informed care approaches, and integration of addiction services to address the complex medical, psychological, and social needs of this vulnerable population.

Introduction

Body packing, the internal concealment of illicit drugs, places individuals at extreme risk and presents a complex clinical and medico-legal challenge for emergency physicians worldwide

(Booker et al., 2009; Cappelletti et al., 2016; Traub et al., 2003). These individuals, often referred to as mules, carry numerous tightly wrapped packets of cocaine, heroin, or other drugs, facing the constant threat of life-threatening toxicity from packet rupture or severe mechanical complications like bowel

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obstruction (Booker et al., 2009; Traub et al., 2003). While modern packaging has reduced catastrophic ruptures, it has also enabled individuals to travel long distances, often in silence and fear, while remaining asymptomatic (Booker et al., 2009; Maier et al., 2017).

Türkiye stands at a global crossroads of migration. In 2024, the country hosted over 2.9 million Syrians under temporary protection and approximately 194,000 asylum seekers from Afghanistan, Iraq, Iran, and other nations (AIDA, 2025; IOM, 2024). Between 2020 and 2024, Turkish authorities apprehended over 1.3 million irregular migrants, highlighting the sheer scale of human movement across the region (Presidency of Migration Management, 2024).

Van province, situated along the 560-km Türkiye-Iran border, is a primary gateway for irregular migrants from Afghanistan, Pakistan, and Iran on their arduous journey towards Europe (AIDA, 2025). This same geography is a key segment of the Balkan Route, a long-established corridor for Afghan opiates trafficked to European markets (UNODC, 2024, 2025). This convergence places refugees and irregular migrants at a dangerous crossroads, making them exceptionally vulnerable to exploitation by trafficking networks. Previous research has documented the profound links between migration, vulnerability, and substance use disorders in the Turkish context.

While the existing literature on body packing provides valuable diagnostic and management algorithms, it is largely derived from high-income settings (Cappelletti et al., 2016; Fremery et al., 2024; Maier et al., 2017; Traub et al., 2003). The voices and clinical realities of those intercepted in border regions like Van remain underrepresented. This study aims to shed light on the human faces behind the statistics by describing the demographic, clinical, and radiological characteristics of body packer cases presenting to a frontline emergency department.

Our research specifically aimed to address the following question: How does the clinical profile of body packers at a primary border transit hub compare to those reported in destination countries, and what specific medical and behavioral markers can facilitate their early identification? We hypothesized that the profile of body packers in this border region would deviate from traditional patterns, exhibiting a higher prevalence of refugees and a shift towards non-opioid substances, thereby reflecting evolving regional trafficking dynamics.

Methods

Study Design and Setting

This retrospective case series was conducted at the Emergency Department of University of Health Sciences, Van Training and Research Hospital, a tertiary care center in Van, eastern Türkiye. The hospital serves the local population and is the primary receiving facility for apprehended refugees and irregular migrants from the nearby Türkiye-Iran border.

Study Period and Case Identification

The study period extended from January 1, 2021, to November 30, 2025. We identified all patients with confirmed body packing through a systematic review of emergency department logs, imaging reports, and medico-legal consultation records. Search terms included "body packer," "drug courier," "internal concealment," and "packet ingestion."

Inclusion and Exclusion Criteria

We included all patients aged 18 years or older who visited the Emergency Department during the study period with confirmed cases of body packing. Confirmation was defined by the visualization of foreign bodies resembling drug packets on imaging (plain radiography or CT) or the retrieval of packets, either spontaneously or through intervention. We excluded patients with suspected but unconfirmed body packing (i.e., negative imaging and observation period) and "body stuffers" (individuals who quickly swallow drugs to avoid arrest, typically with loosely wrapped packets). Figure 1 illustrates the study flow and case identification process.

Data Collection

We extracted demographic data (age, sex, nationality, refugee or irregular migrant status), clinical presentation (symptoms, vital signs, route of presentation), laboratory parameters,

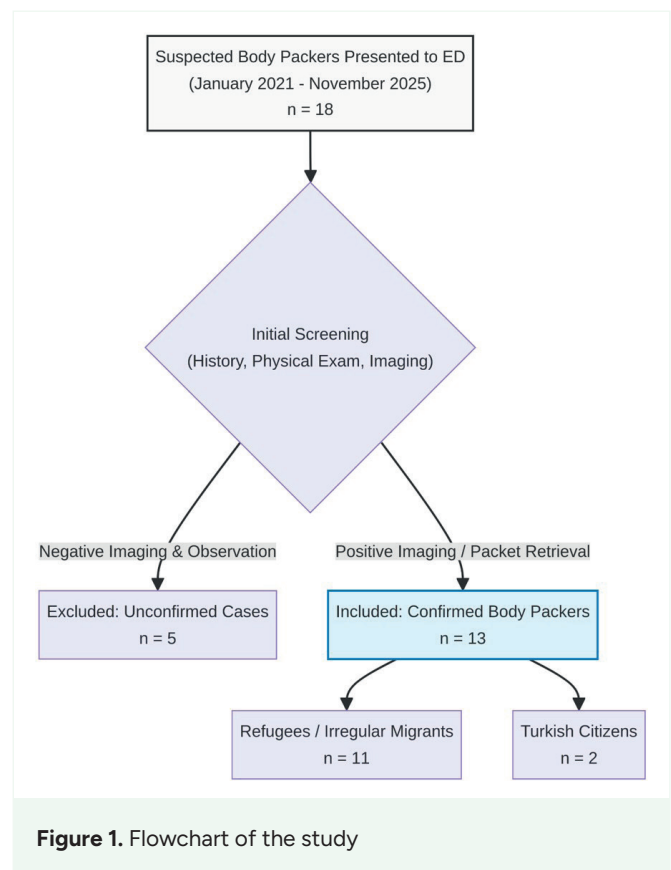


Figure 1. Flowchart of the study

imaging data (modality, presence and distribution of packets, additional findings), management details, and outcomes. Substance identification was based on forensic laboratory reports provided by law enforcement. We specifically noted rectal packet clustering and bladder distension when reported by radiologists or visible on stored images. Patient reports regarding toileting behavior were extracted from clinical notes when available.

Statistical Analysis

Data were analyzed using descriptive statistics. Continuous variables are presented as medians with ranges (minimum-maximum) due to the non-normal distribution anticipated in small sample sizes. Categorical variables are shown as frequencies (n) and percentages (%). No inferential statistical tests were conducted because of the limited sample size (n=13). All analyses were performed using Microsoft Excel.

Ethical Approval

The study protocol was approved by the University of Health Sciences, Van Training and Research Hospital Ethics Committee (Approval No: GOKAEK/2025-09-03, at date 07.11.2025). All data were anonymized prior to analysis.

Results

Demographic Characteristics

We identified thirteen patients with confirmed body packing. Eleven (84.6%) were refugees or irregular migrants, and two (15.4%) were Turkish citizens. The median age was 33 years (range 22–47 years). Twelve patients (92.3%) were male. The

single female patient was a refugee with multiluminal drug concealment involving both the rectum and the vaginal canal.

Concealed Substances

The concealed substances were predominantly methamphetamine, found in 9 cases (69.2%). This category includes 8 cases of methamphetamine and 1 case of methamphetamine combined with THC (tetrahydrocannabinol). Opioids were found in 2 cases (15.4%, including one case combined with THC), and cocaine was found in 2 cases (15.4%). Table 1 summarizes the demographic and clinical characteristics of the cohort.

Clinical Presentation and Vital Signs

Seven patients (53.8%) were asymptomatic upon arrival. Crucially, all 13 individuals were brought to the Emergency Department by law enforcement, a stark finding that indicates a complete absence of self-presentation in this cohort. Among symptomatic patients, abdominal pain (8/13) and nausea/vomiting (4/13) were most common. Vital signs at triage were stable in all patients, with no signs of acute toxicity.

Laboratory Findings

Laboratory parameters were largely unremarkable. Urinary drug screening was performed inconsistently (in 5/13 cases). This inconsistency was due to systemic limitations, the attending physician's discretion based on clinical suspicion, and varying requests from law enforcement at the time of presentation. However, in cases where it was conducted, it revealed positive results for the concealed substance, suggesting recent exposure or personal use.

Table 1. Demographic and clinical characteristics of body packer cases (N=13)

Characteristic	Total (n=13)	Refugees/Migrants (n=11)	Turkish Citizens (n=2)
Age (years), median (range)	33 (22-47)	34 (22-47)	28 (25-31)
Male, n (%)	12 (92.3)	10 (90.9)	2 (100)
Nationality: Iranian, n (%)	11 (84.6)	11 (100)	-
Asymptomatic presentation, n (%)	7 (53.8)	6 (54.5)	1 (50.0)
CT performed, n (%)	13 (100)	11 (100)	2 (100)
Rectal clustering observed, n (%)	2 (15.4)	2 (18.2)	0
Bladder distension observed, n (%)	2 (15.4)	2 (18.2)	0
Concealed substances			
Methamphetamine-related, n (%)	9 (69.2)	7 (63.6)	2 (100)
Opioid-related, n (%)	2 (15.4)	2 (18.2)	0
Cocaine, n (%)	2 (15.4)	2 (18.2)	0
Number of packages, median (range)	35 (10-75)	36 (10-75)	33 (32-33)
Multiluminal concealment, n (%)	1 (7.7)	1 (9.1)	0
Length of stay (days), median (range)	3 (1-7)	3 (1-7)	5 (2-7)
Brought by law enforcement, n (%)	13 (100)	11 (100)	2 (100)
Complications or mortality, n (%)	0	0	0

CT: Computed tomography. Continuous variables are presented as median (range); categorical variables as n (%). No inferential statistics were performed due to small sample size

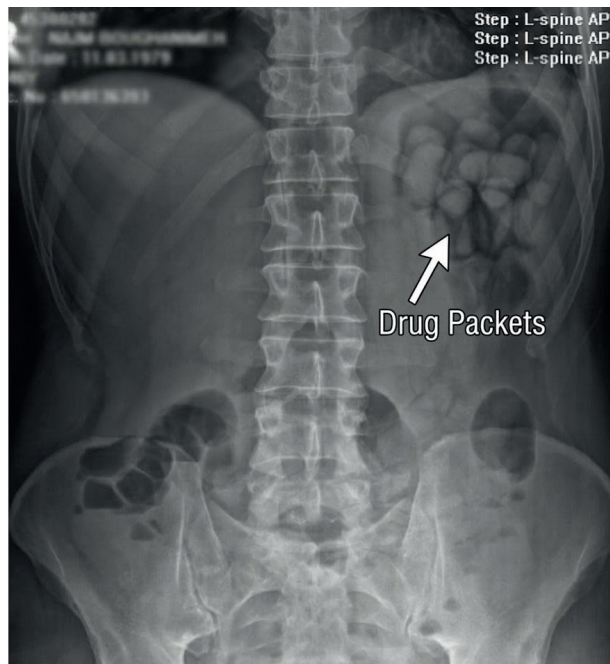


Figure 2. Plain radiographs, AP view showing drug packets

Imaging Findings

All 13 patients underwent imaging. Plain radiographs demonstrated multiple radiopaque foreign bodies distributed throughout the gastrointestinal tract (Figure 2). CT scans, performed in all cases, provided definitive confirmation with a 100% detection rate for intraluminal packets (Figure 3) (Pinto et al., 2014). No evidence of bowel obstruction or perforation was identified. Two patients exhibited striking pelvic CT findings: multiple oval packets densely clustered in the rectum with markedly distended urinary bladders (Figure 4).

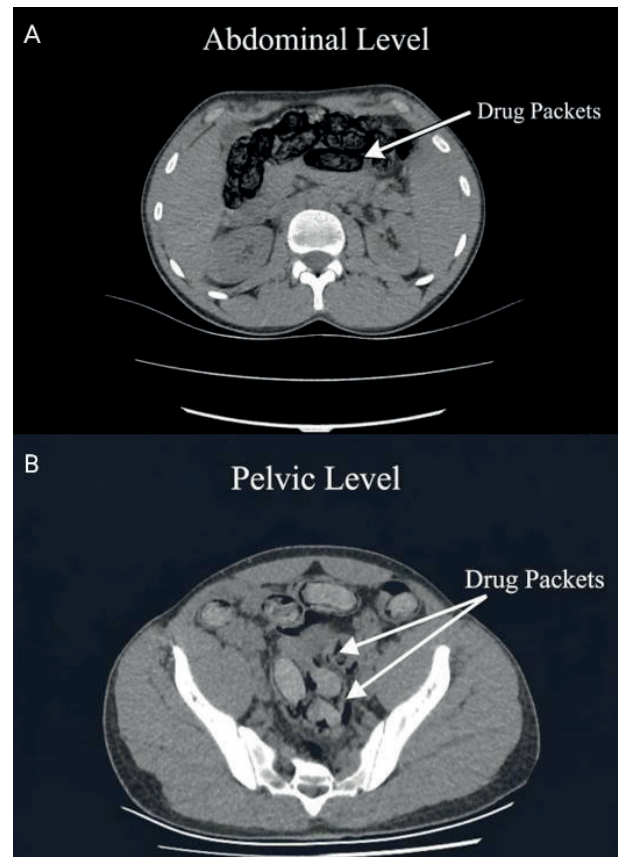


Figure 3. CT images: (A) Abdominal level, (B) Pelvic level showing drug packets.

Both patients reported deliberately avoiding defecation and urination to prevent packet loss.

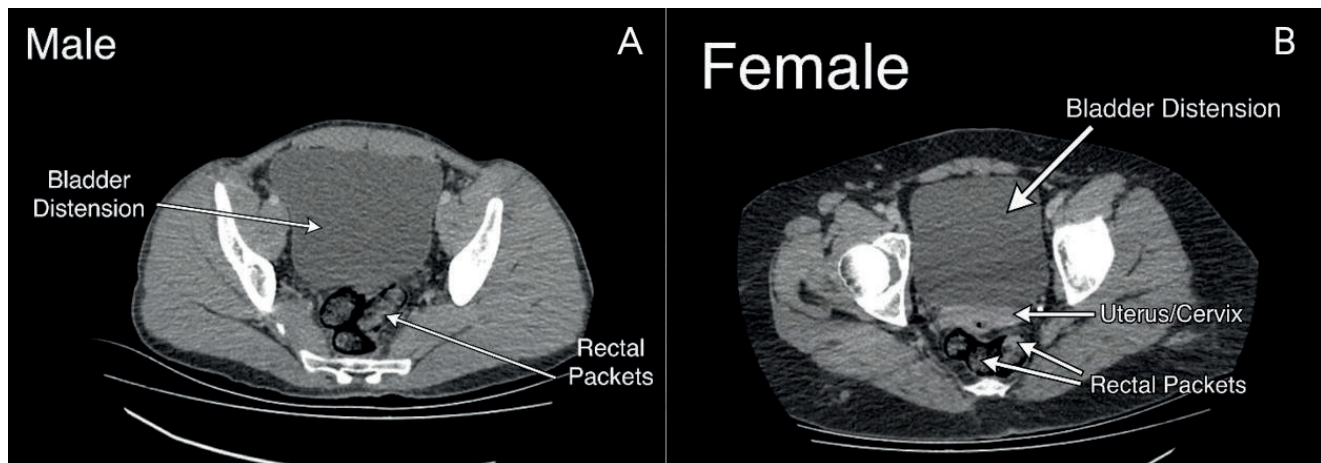


Figure 4. Bladder distension: (A) Male patient, (B) Female patient.

Management and Outcomes

Ten patients (76.9%) received whole bowel irrigation (Thanacoody et al., 2015). Four underwent endoscopic intervention, and one required surgery. The median length of hospital stay was 3 days. No patient developed clinical toxicity or died during hospitalization.

Discussion

Our study offers a rare clinical window into the phenomenon of body packing as it unfolds at the dangerous intersection of migration, trafficking, and human vulnerability. The predominance of refugees and irregular migrants in our cohort is a somber reflection of the local migration landscape, where individuals fleeing conflict and poverty are exposed to extreme forms of exploitation.

Van's strategic position on the Balkan Route, a traditional corridor for Afghan opiates, is well established (AIDA, 2025; UNODC, 2024). While our findings confirm the continued presence of opioids (15.4%), the most striking result is the predominance of methamphetamine (69.2%). This aligns with recent intelligence indicating a significant shift towards stimulant trafficking along the Balkan Route. Multiple reports from the UNODC have highlighted a surge in methamphetamine trafficking along this route in recent years (UNODC, 2025). This finding underscores the evolving nature of stimulant trafficking along the Balkan Route and warrants closer surveillance.

Our clinical findings are consistent with international literature in several respects. The 100% detection rate of CT imaging confirms its role as the diagnostic gold standard (Cappelletti et al., 2016; Fremery et al., 2024; Maier et al., 2017; Traub et al., 2003). Similarly, the favorable clinical outcomes, with no mortality, mirror trends in recent series where improved packaging has reduced catastrophic complications (Cappelletti et al., 2016; Fremery et al., 2024; Maier et al., 2017).

Distinctive Findings and Clinical Implications

The fact that we identified only 13 cases over five years, despite Van being a region with multi-ton annual drug seizures, strongly suggests that these individuals represent the clinical tip of the iceberg. Body packing is a high-risk, high-reward method of trafficking, with a low probability of detection. That all patients were brought in by law enforcement, with no one seeking help voluntarily, paints a stark picture: asymptomatic individuals only enter the healthcare system when intercepted. This reality points to a critical public health gap, leaving the true incidence and human cost of body packing in this region largely invisible. Furthermore, the absence of major complications in our cohort, while clinically fortunate, may suggest a degree of professionalism among traffickers and couriers, implying repeated, successful journeys with well-manufactured packets. However, this interpretation should be approached with caution given our small sample size; it is also

possible that we simply did not encounter the complications that undoubtedly occur in this high-risk activity.

The experience of two patients provides a chilling insight into the behaviors driven by coercion and fear. Both individuals intentionally refrained from defecation and urination to avoid packet loss, as instructed by trafficking networks. This manifested radiologically as dense rectal packet accumulation and extreme bladder distension. Frontline clinicians can use signs like persistent toilet refusal, clear discomfort, or defecation anxiety as useful indicators in critical cases.

User vs. Courier: A Critical Distinction

Effectively managing body packers involves a crucial distinction between those who are merely couriers, often under duress, and those who also use substances. Our study's findings, which include positive urinary drug screens among tested patients, indicate that some couriers are indeed consumers, thereby blurring the line between "packer" and "user." This differentiation carries significant implications for harm reduction strategies. While a pure courier may need protection and legal advocacy, a courier-user requires immediate attention to withdrawal symptoms and connection to addiction treatment services. The inconsistency in urinary screening identified in our study, attributed to systemic constraints and differences in clinical decision-making, indicates an unrealized opportunity to recognize this patient group. We contend that urinary drug screening should be a standard protocol, not only for legal verification but also to inform clinical management and addiction support.

Limitations and Implications for Clinical Practice

Our study has several limitations inherent to its retrospective, single-center design. The small sample size ($n=13$), while representing the entirety of confirmed cases at our institution over a five-year period, limits the generalizability of our findings. Our reliance on routine medical records and law-enforcement referrals also introduces the potential for selection and reporting biases. Crucially, due to the retrospective nature of the data, we lacked detailed information on the migrants' journeys, such as time in transit, specific routes, or the presence of debt bondage or coercion. Future prospective studies should aim to capture these vital sociological details to better understand the drivers of this phenomenon.

Standardization of Clinical Approach

The variation in clinical assessment we observed is not merely a limitation, but a key finding in itself. The inconsistent application of urinary drug screening and CT imaging, alongside incomplete anamnesis, highlights an urgent need for standardized clinical protocols. We propose that such protocols should include routine urinary drug screening for all suspected body packers, systematic CT imaging for high-risk cases, and a detailed, compassionate anamnesis. Adopting such standards would not only improve case detection but also yield more complete epidemiological data to inform

public health responses. Crucially, the integration of addiction medicine and mental health services into the care pathway is vital to address the underlying vulnerabilities and trauma experienced by these individuals.

Conclusion

Body packing in the context of migration is not merely a crime; it is a public health crisis born from the convergence of intense migratory flows, established drug-trafficking routes, and profound human vulnerability. Our study provides rare clinical evidence from a key transit hub, challenging the traditional opioid-centric view of the Balkan Route by highlighting a significant prevalence of methamphetamine. While the small number of cases limits broad generalizations, the complete absence of voluntary presentations underscores the hidden nature of this population.

Clinicians on the front lines need more than just technology; they need risk-based screening strategies that integrate a person's migration context, clinical findings, and behavioral cues. This approach allows for the identification of high-risk individuals while preserving dignity and human rights. Border-region emergency departments must develop structured diagnostic pathways and embed them within trauma-informed, gender-sensitive care frameworks. Ultimately, meaningful progress requires collaboration with public health and migration services to address the broader harms at the perilous interface of migration, trafficking, and addiction.

Author contributions

Conception and design: M.T.; Data acquisition: M.N.S.; Data analysis: M.T., M.N.S.; Data interpretation: M.T., M.N.S.; Drafting of the manuscript: M.T., M.N.S.; Critical revision of the manuscript: M.T., M.N.S. All authors reviewed the results, approved the final version of the manuscript, and agreed to be accountable for all aspects of this study.

Ethical approval

This study was approved by the Van Training and Research Hospital Ethics Committee (Date: November, 7, 2025, Decision/Protocol No: GOAEK/2025-09-03). Ethics committee approval and informed consent were not required for this study.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of interest

The authors declare that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Generative AI statement

The authors declare that no generative AI or AI-assisted technologies were used in the writing or preparation of this study.

References

- AIDA. (2025). *AIDA Country Report on Türkiye – Update on 2024*. <https://ecre.org/aida-country-report-on-turkiye-update-on-2024>
- Booker, R. J., Smith, J. E., & Rodger, M. P. (2009). Packers, pushers and stuffers—managing patients with concealed drugs in UK emergency departments: A clinical and medicolegal review. *Emergency Medicine Journal*, 26(5), 316–320. [\[Crossref\]](#)
- Cappelletti, S., Piacentino, D., Sani, G., Bottoni, E., Fiore, P. A., Aromatario, M., & Ciallella, C. (2016). Systematic review of the toxicological and radiological features of body packing. *International Journal of Legal Medicine*, 130(3), 693–709. [\[Crossref\]](#)
- Fremery, A., Pujo, J., Aboikoni, A., Hamiche, K., & Bonifay, T. (2024). Body-packing, a public health issue requiring more researches. *European Journal of Emergency Medicine*, 31(2), 158–159. [\[Crossref\]](#)
- IOM. (2024). *Türkiye - Migrant Presence Monitoring, Situation Report, June 2024. Displacement Tracking Matrix (DTM)*. <https://dtm.iom.int/reports/turkiye-migrant-presence-monitoring-situation-report-june-2024>
- Maier, L., Trueb, L., Schmidt, S., Carron, P.-N., Hugli, O., Heymann, E., & Yersin, B. (2017). Emergency department management of body packers and body stuffers. *Swiss Medical Weekly*, 147(3738), w14499 [\[Crossref\]](#)
- Pinto, A., Reginelli, A., Pinto, F., Sica, G., Scaglione, M., Berger, F. H., Romano, L., & Brunese, L. (2014). Radiological and practical aspects of body packing. *British Journal of Radiology*, 87(1036), 20130500. [\[Crossref\]](#)
- Presidency of Migration Management. (2024). *Irregular migration statistics*. Republic of Türkiye Ministry of Interior. <https://goc.gov.tr/duzensiz-goc-istatistikleri>
- Thanacoody, R., Caravati, E. M., Troutman, B., Höjer, J., Benson, B., Hoppu, K., Erdman, A., Bedry, R., & Mégarbane, B. (2015). Position paper update: Whole bowel irrigation for gastrointestinal decontamination of overdose patients. *Clinical Toxicology*, 53(1), 5–12. [\[Crossref\]](#)
- Traub, S. J., Hoffman, R. S., & Nelson, L. S. (2003). Body packing—the internal concealment of illicit drugs. *New England Journal of Medicine*, 349(26), 2519–2526. [\[Crossref\]](#)
- UNODC. (2024). *Findings of the expert working group on opiates and methamphetamine trafficking on the southern route*. United Nations Office on Drugs and Crime.
- UNODC. (2025). *Opiates and methamphetamine trafficking on the balkan route: Drug flows, illicit incomes and illicit financial flows*. United Nations Office on Drugs and Crime.

A sociological study of substance use among Turkish youth in Germany

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Abstract

Migration is a complex system that can lead to stress among migrants who are uprooted from their homes. Immigrants are often associated with increased risk factors for behaviors such as substance use and addiction. A multitude of intersecting factors determines this relationship. One issue that has been a subject of study by public-health and sociology academics has been the substance use among immigrants stemming from this displacement. This study focuses on the increase in substance use among Turkish youth in Germany, who are part of the Germany's largest immigrant population. Five main themes emerged from the analysis: (1) generational patterns in substance use, (2) identity conflict, acculturation stress and mental health issues, (3) structural and social exclusion, (4) barriers to addiction treatment, and (5) protective factors. The results of the literature review reveal the need for empirical studies that consider the specific characteristics and context of Turkish youth in Germany regarding their substance use trends.

Keywords: substance use, risk factors, migration, Turkish youth, Germany, acculturation

Main points

- Substance abuse is higher among younger generations of Turks than among older generations.
- Cultural and religious factors serve as a protective measure against substance use and other unhealthy behaviors.
- Racism, stigma, and perceived discrimination create social isolation, reinforcing the tendency to use substances.
- Cultural interpretation framework of addiction and illness are among the most significant barriers to accessing addiction treatment.
- Studies that consider the social, economic, and cultural characteristics of Turkish immigrants and structural shortcomings are needed.

Introduction

Nearly 3 million individuals with a Turkish migration background live in Germany, of whom 1,520,400 still hold Turkish citizenship. As of 2024, this population had aged significantly, with only about 101,190 under the age of 20, largely due to the naturalization of many younger Turkish-origin individuals of over time (Destatis Statistisches Bundesamt, 2025). This age group consists of immigrants who can be defined as second, third and fourth generation immigrants rather than first generation immigrants. The generational effect is one of the important variables considered when examining integration processes. Unlike the first generation, which was employed in low-skilled and labor-intensive jobs, subsequent bilingual generations have shown diversity in education, occupational status, economic and social participation in society (Demirağ

& Kakişım, 2018). As Turks became more established, they demonstrated greater educational and professional diversity and, lacking a language barrier, greater cultural interaction with the host society (Kırmızı, 2016; Şahin, 2010). However, this integration process was not merely positive; they also faced complex challenges, encompassing cultural, social, and economic difficulties. On the one hand, they desired to exist socially and economically in the country where they were born and raised, where they were largely citizens and to which they felt a sense of belonging. On the other hand, they experienced identity closure due to deficiencies in social and structural acceptance (Demirağ & Kakişım, 2018; Şahin, 2010). The struggle to maintain and manage the balance between the challenges of occupational mobility and economic insertion, on the one hand, and the preservation of cultural identity and integration into mainstream society, on the other, remains a

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fundamental issue at both the individual and collective levels. The challenges experienced by Turkish youth in Germany during this integration process place them at a disadvantage in terms of health-harming behaviors compared to previous generations. Acculturation theory offers a useful framework for understanding generational differences. Individuals navigating two cultures may experience acculturative stress, a form of psychosocial strain associated with adapting to a new cultural context (Berry et al., 1987). Research on immigrant youth across 13 countries, including Germany, shows that acculturation profiles vary by length of residence and generation. Integration is associated with more positive outcomes, whereas a diffuse profile, marked by uncertainty about cultural identity, is linked to poorer psychological and sociocultural adjustment (Berry et al., 2006). These challenges may place Turkish youth at greater risk.

Health-harming behaviors have been studied in relation to mental health problems among immigrant youth. In the study by Schulz et al. (2025), young adults with migrant backgrounds reported more behavioral and mental health problems, received less social support, exhibited lower life satisfaction, and reported more frequent smoking and alcohol abuse. Research by Efendioğlu and Özcebe (2024), a meta-analysis by Najdini et al. (2025), and Salas-Wright et al. (2014) all indicate that second-generation immigrants have higher rates of substance use compared to first generation immigrants. One reason for this is that the protective effects provided by the culture of origin diminish over generations, especially among those who immigrated at a younger age. Because affiliation with the culture of origin and religious values is strongly maintained in the host society in the early generations, culture and religion serve as important social control mechanisms that guide behavior. The influence of the culture of origin and values on framing and guiding behavior diminishes among immigrants who spend more time socializing through interaction with the host society, in other words, those who immigrated at an early age, or those born and raised in the host country. While younger generations experience less of a protective effect than earlier generations, they still exhibit lower rates of health-harming behaviors than their native peers. The HELIUS study found that Turkish and Moroccan immigrants in the Netherlands are more likely to be distant from alcohol than their host communities, based on the role of cultural and religious factors in determining and framing behavior, and are not at higher risk of alcohol dependence. Immigrant adolescents, particularly those of non-European or Muslim origin, report lower levels of alcohol use compared to their native-born peers, while findings regarding tobacco and illicit drug use are still inconclusive (Van Dorp et al., 2021).

These findings align with the broader framework of the “healthy immigrant paradox” or “healthy immigrant effect”. This concept generally refers to the better health status of newly arrived immigrants compared to the native population in industrialized societies (Riosmena et al., 2017). In this study, the healthy immigrant paradox emerges among first-generation immigrants, who, despite the socioeconomic disadvantages and challenges they experience, have greater health advantages and tend to exhibit lower rates of substance

use and other risky behaviors. Understanding the propensity for risky behavior among Turkish-origin youth in Germany, and how to combat it, therefore, requires considering generational effects and acculturation during the integration process, along with other socioeconomic factors.

Methods

The study employed a qualitative research method. This study aimed to reveal the structural and sociocultural factors influencing substance use and health-risk addictive behaviors among Turkish youth in Germany through a thematic analysis, based on existing literature. Since articles and reports were used as data sources, document review was determined as the most appropriate method. The researchers did not use any qualitative data analysis software for the data analysis. Studies in the literature were color-coded within the text. The coding was then organized into themes. Thus, the process progressed from raw data to condensed meaning units, coding, categorization, and themes (Erlingsson & Brysiewicz, 2017).

The literature search was conducted in PubMed, Scopus, Web of Science, and Google Scholar using predefined keywords related to Turkish youth and substance use in Germany, including “Turkish youth in Germany,” “substance use among Turkish immigrants,” and “addiction among Turkish youth in Germany.” To increase the sensitivity of the search and capture a broader range of studies, these keywords were combined using Boolean operators (AND, OR) in different configurations. For example, search strings such as “Turkish migrants” OR “Turkish immigrants” OR “Turkish Youth” AND Germany AND “substance use” OR “addiction” OR “alcohol consumption” OR “smoking” were employed. A total of 2,440 records were initially identified. After removing duplicates, titles and abstracts were screened, and studies were assessed for eligibility based on predefined inclusion criteria. Studies were included if they: (1) focused on youth or young adults of Turkish origin or with a Turkish migration background in Germany; and (2) addressed at least one substance use-related outcome (such as alcohol, tobacco, illicit drugs, or related risk/protective factors). Studies were excluded if they focused exclusively on other immigrant populations without disaggregated data for Turkish-origin youth, were conducted outside Germany, or did not report empirical findings. Following the application of inclusion and exclusion criteria, a total of 26 studies were identified and included in the final analysis. As a result of the systematic search, relevant studies were identified, with the earliest publication dating back to 2003 and the most recent dating to 2025.

Given the population-specific focus of this review, it should be noted as a limitation that the experiences and substance use patterns of other immigrant groups — such as those of Moroccan, Arab, or other, European and non-European backgrounds residing in Germany — were not systematically analyzed. While some risk and protective factors related to acculturation stress referring to stress arising from the acculturation process and causing identity confusion and a

decline in health status (Berry, 1992; Berry et al., 1987, 2006), discrimination, and structural marginalization may be shared across these populations, the cultural, religious, and socio-structural circumstances specific to Turkish-origin youth warrant a dedicated analytical focus. Additionally, a number of systematic reviews and empirical studies not exclusively focused on Turkish-German youth were consulted and incorporated into the findings section for contextual and comparative purposes. These sources were not subject to the same inclusion criteria applied to the core review but were drawn upon where they provided relevant theoretical or empirical grounding. A comparative examination across ethnic minority groups in Germany remains an important direction for future research.

Results

The related articles found in the literature were coded by the two researchers. Thematic analysis of the included studies resulted in the coding of findings into five main themes: (1) generational patterns in substance use, (2) identity conflict, acculturation stress, and mental health, (3) structural and social exclusion, (4) barriers to addiction treatment, and (5) protective factors (see Table 1).

Theme (1) Generational Patterns in Substance Use

Substance use patterns among migrants are not only shaped by individual trajectories but also reflect intergenerational dynamics and migration-related life-course experiences (Haasen et al., 2004). Cultural baggage, duration of residence in the host society, and integration processes influence the health behaviors of immigrant communities. There is a significant relationship between generation, age, gender, and substance use. The STEPS study conducted by the Presidency

for Turks Abroad and Related Communities (YTB) on Turks in Germany provides important data in this regard (Efendioğlu & Özcebe, 2024). Third-generation Turks in Germany have higher rates of substance use and risky behaviors compared to other generations. The rates of substance use increase significantly from the first generation to the third generation; they are 9.4%, 24.9%, and 29.4%, respectively (Efendioğlu & Özcebe, 2024). In terms of gender, consistent with previous studies, substance use among men is approximately twice as prevalent as among women. These data provide an interpretative framework for evaluating young immigrants vis-à-vis substance use within the context of social and economic integration, cultural belonging, and identity conflicts.

A systematic review of cannabis use among immigrants, refugees, and asylum seekers highlights important generational patterns in substance use (Kortas et al., 2022). The findings indicate that cannabis use rates are generally lower among first-generation immigrants compared to native populations but tend to increase across subsequent generations.

In the case of Turkish migrants in Germany, the age at migration (average of 8.7 years) indicates that many individuals experience migration during a critical developmental period, potentially disrupting socialization and identity formation (Haasen et al., 2004). At the same time, family structures play a dual role across generations. Strong family ties and extended kinship networks act as protective factors, contributing to a relatively late onset of regular substance use (mean age of 19.7 years) and potentially improving prognosis (Haasen et al., 2004). Moreover, migrant families tend to frame substance use as a private issue, delaying contact with formal treatment systems. This results in a significant lag between onset and intervention (mean age at first contact: 27.2 years), reinforcing patterns of delayed help-seeking.

Table 1. Main themes and corresponding studies identified through thematic analysis

Theme	Categories	Quantitative Studies	Qualitative Studies	Mixed Methods
Generational Patterns in Substance Use	-	Beutel et al. (2016); Efendioğlu and Özcebe (2024); Haasen et al. (2004); Reeske et al. (2009); Reiss, Sauzet et al. (2014).	-	-
Identity Conflict, Acculturation Stress and Mental Health	-	Gül and Kolb (2009); Haasen et al. (2004); Janssen-Kallenberg et al. (2017); Reiss, Breckenkamp et al. (2014); Schulz et al. (2025); Van Dorp et al. (2021); Yıldırım and Dilbaz (2024).	-	Penka et al. (2003).
Structural and Social Exclusion	Education, Racism, Discrimination and Stigma	Haasen et al. (2004); Schunck et al. (2015).	De Kock and Decorte (2017); Fernandez-Kelly (2012); Moffitt et al. (2019); Yeşil (2020).	-
	Socioeconomic Precarity and Workplace Discrimination	Haasen et al. (2004).	Güllüpinar (2010); Lodigiani (2018).	-
Barriers to Addiction Treatment	-	Bermejo et al. (2012); Bondar and Machleidt (2007).	-	Penka et al. (2008).
Protective Factors	-	Dimitrova and Aydinli-Karakulak (2016); Donath et al. (2011); Donath et al. (2016); Henkel and Zemlin (2016); Mechammil, 2020.	De Kock and Decorte (2017).	-

However, a generational reversal of smoking behavior is observed. While smoking is higher among first-generation male Turkish immigrants in Germany than among second-generation male immigrants, it is generally lower among female immigrants (Reeske et al., 2009). However, among low-educated second-generation female immigrants, the prevalence of smoking approaches that of German women. This may indicate that, with increasing length of residence, the persistence of cultural attitudes among first-generation women partially diminishes in the second generation. The study's results indicate that socioeconomic status and education level, which can be considered indicators of the integration process, influence health behaviors. The lower smoking behavior among highly educated second-generation male immigrants compared to first generation immigrants demonstrates the relationship between low socioeconomic status and high-risk behavior. A comparative study examining the role of education and gender in smoking behavior found that smoking prevalence among Turkish migrants is higher in the Netherlands than in Germany, with lower-educated men smoking at significantly higher rates than lower-educated women (Reiss, Sauzet et al., 2014). Therefore, gender-specific awareness-raising activities regarding social and cultural factors are important.

Substance use and other harmful behaviors do not always correspond directly to mental health patterns across generations. In other words, higher levels of psychological distress do not necessarily result in higher levels of substance use. This is particularly evident in migrant populations, where first-generation migrants may report poorer mental health outcomes while still displaying lower levels of substance use than later generations. Findings from a study based on the Gutenberg Health Study (GHS) support this interpretation, showing that first-generation migrants—particularly those of Turkish origin—report higher levels of depression, anxiety, and suicidal ideation compared to native Germans, whereas second-generation migrants display mental health outcomes largely similar to those of native population (Beutel et al., 2016). This pattern may be interpreted as suggesting that substance use is shaped not only by psychological vulnerability, but also by cultural, religious, and normative frameworks that regulate behavior. It could be argued that, although first-generation Turkish migrants tend to experience higher levels of emotional distress, they often remain more strongly embedded in protective social environments that may discourage substance use. In contrast, second-generation Turkish migrants, despite showing relatively better mental health outcomes, may be more exposed to host-society norms, peer influence, and more permissive behavioral patterns, which could increase the likelihood of substance use.

Theme (2) Identity Conflict, Acculturation Stress and Mental Health

Research specifically focusing on Turkish-German adolescents regarding the relationship between acculturation and substance use is limited. Studies examining other ethnic groups may provide relevant insights. Okamoto et al. (2009)

highlight that experiences of perceived discrimination during adolescence may disrupt ethnic identity formation, leading to confusion and negative self-perceptions. In a similar vein, while the risk of substance use increases in Hispanic adolescents who experience discrimination, a positive connection to the culture of origin has been shown to have a protective effect (Unger et al., 2014). While some immigrants' culture of origin may serve a protective function against substance use, persistent negative cultural experiences in the host country increase the risk of substance use, particularly among adolescents.

In the case of Turkish migrants in Germany, identity formation is often complicated by early migration experiences and disrupted socialization processes. Many individuals report repeated movements between the country of origin and the host society, leading to feelings of rejection, insecurity, and a lack of belonging (Haasen et al., 2004). These experiences can be interpreted as forms of identity conflict, where individuals struggle to reconcile differing cultural expectations and social norms. In their study examining risky behaviors among youth with immigrant backgrounds in Germany, Schulz et al. (2025) found that outcomes were more adverse for those with a one-sided migrant background than for those with two-sided migrant backgrounds. Young people with only one-sided migrant backgrounds exhibited more mental health problems and less social support and resilience. The researchers interpreted this to mean that one-sided migrant backgrounds create more uncertainty about cultural identity and, therefore, have more negative effects.

Acculturation factors, along with other factors, play a significant role in the depressive disorders of Turkish immigrants in Germany. Acculturation, which can be defined as the process of learning the patterns of another culture through exposure to that culture and changes in the relationship with the culture of origin, also refers to the immigrant's management of this process (Berry, 1992; Berry et al., 2006). Described as a complex, multidimensional process of psychological and social adjustment to a new cultural context, acculturation has been closely linked to mental health outcomes in immigrant populations (Berry, 1992; Berry et al., 1987, 2006); among Turkish and Moroccan immigrants in Northwestern Europe, ethnic discrimination and acculturation were more consistently associated with depressive symptomatology than socio-demographic factors, with Turkish immigrants showing the highest prevalence of depressive disorder compared to native-born populations (Sempértegui et al., 2023). Janssen-Kallenberg et al.'s (2017) study further noted higher rates of depressive disorders among those with a German cultural identity and those who speak only Turkish. While ethnic discrimination and acculturation emerge as particularly salient correlates of depression, socio-demographic factors are not without relevance. Age and economic status, for instance, warrant consideration, as older men and women are at greater risk of developing a depressive disorder than younger people. This situation should be considered in conjunction with age group and economic status. Older men and women are at greater risk of developing a depressive disorder than younger people. Depressive disorders are more common in low-income

men. While integration, meaning embracing both cultures, is associated with lower depression, the values and behaviors associated with these two cultures may not be compatible, creating a conflicting environment and pushing immigrants into a negative psychological situation. For immigrants, the process of finding a balance between two cultures can trigger depression. Acculturation-related family stress among Turkish patients has been shown to be associated with higher rates of co-occurring substance use and psychiatric disorders, particularly affective disorders (Gül & Kolb, 2009). Younger generations of immigrants living in the host country are shaped by the dominant German culture while simultaneously preserving their families' cultural values, resulting in a dual cultural existence that may create tension between differing norms. The studies indicate that this situation may lead to an identity crisis, which can affect one's mental health.

According to a study on Turkish immigrant women in Germany, smoking prevalence increases with higher levels of acculturation, a longer length of stay, and better language proficiency (Reiss, Breckenkamp et al., 2014). While women with lower levels of acculturation report lower smoking rates than native Germans, this pattern reverses as acculturation increases. This finding may be interpreted in relation to identity conflict and acculturation-related stress. As acculturation increases, individuals may experience greater tension between the norms and values of their culture of origin and those of the host society, which can intensify stress processes. In addition, a longer length of stay may weaken the protective influence of origin-based cultural norms, while simultaneously facilitating the adoption of host-society behaviors. In this context, smoking can be understood either as a coping mechanism for dealing with stress or as part of a broader process of normative change. Another study conducted among immigrant adolescents living in four European countries (England, Germany, the Netherlands, and Sweden) shows that identification as a foreigner is negatively associated with alcohol use, whereas identification with the host country is positively associated with alcohol use (Czaderny, 2025). This finding suggests that non-selective acculturation may contribute to increased alcohol consumption.

Varied substance use patterns among immigrant adolescents emerged from the findings. Alcohol initiation was shown to be lower than that of non-immigrant peers, whereas a higher prevalence of cigarette and cannabis use was suggested. However, binge drinking appears to be an exception to the low incidence of alcohol consumption, often associated with educational aspirations, socioeconomic conditions, and the degree of assimilation versus cultural retention within the family. Consequently, it cannot be assumed that immigrant adolescents generally exhibit less harmful consumption behaviors (Van Dorp et al., 2021). This pattern underscores the central role of acculturation processes in shaping behavioral outcomes (Kortas et al., 2022). While first-generation migrants often benefit from protective cultural and religious norms, these influences gradually weaken over time, leading to higher levels of substance use among second- and third-generation individuals. However, the study by Yıldırım and Dilbaz (2024) found no significant relationship between

identity status and the use of cigarettes, alcohol, marijuana, and drugs among German citizens of Turkish origin. Instead, the younger generation, more integrated into the society of the host country with their multicultural identity and serving as a bridge between Turkey and Europe, may be more cautious about harmful behaviors compared to other generations.

The definition of addiction can be shaped by cultural and socioeconomic factors. The study by Penka et al. (2003) indicates that the definition of addiction differs among German and Russian-German youth. While German youth define eating disorders as serious addiction-related disorders, Turkish-German youth consider definitions of addiction based solely on physical dependence to be insufficient. In the study, nearly half of the Turkish participants characterized such definitions as ineffective for describing addiction. This distinction in defining addiction between the different groups clearly highlights the importance of culturally sensitive approaches to combating addiction. Moreover, this finding emphasizes that concepts central to Western medicine need careful handling in cross-cultural contexts.

Theme (3) Structural and Social Exclusion

This theme examines how experienced and perceived forms of exclusion in everyday life and at the institutional level are associated with substance use and other health-risk behaviors among Turkish immigrant youth. Inequalities embedded in institutional structures—particularly within education systems and labor markets—as well as everyday experiences of racism, discrimination, and stigma, are central to processes of marginalization. These dynamics not only limit access to social and economic opportunities but also generate psychosocial stress, thereby increasing vulnerability to adverse health outcomes and risky behaviors. This theme is examined through two interrelated subthemes: *Education, Racism, Discrimination and Stigma* and *Socioeconomic Precarity and Workplace Discrimination*.

Education, Racism, Discrimination and Stigma. Experiences of discrimination constitute a key mechanism through which health inequalities between immigrants and non-immigrants are produced and reproduced. According to a study based on a national panel survey in Germany, perceived discrimination significantly affects both mental and physical health among immigrants, and its impact on physical health is largely mediated through its effects on mental health, highlighting its role as a key structural determinant of health inequalities (Schunck et al., 2015).

Schools are one of the most important institutions for the social integration and identity development of young people with immigrant backgrounds. However, in Germany, schools are simultaneously places where young people of Turkish origin encounter racism, discrimination, and stigmatization (Moffitt et al., 2019). Thus, the literature suggests that the nature of the education system in Germany remains deeply “unequal,” “hierarchical” and “exclusive.” It is also emphasized that maintaining the marginalized position of Turkish children

in Germany means that the country of origin or the immigrants' background continues to be a barrier to accessing education and the labor market (Fernandez-Kelly, 2012). A study by Moffitt et al. (2019) examined the school experiences of Turks in Germany's Gymnasium high school system and revealed that they were subjected to prejudiced and exclusionary actions by teachers and students. This discrimination was based on the students' cultural background, undermining their individuality. In a study based on the analysis of semi-structured interviews on Turkish students' perceptions of discrimination and exclusion in Germany (Yeşil, 2020), it was found that most Turkish students feel socially and culturally excluded in Germany, and they experience discrimination, particularly on the basis of race, ethnicity, and religion, especially from their teachers and principals. A high proportion of participants reported discrimination in leisure activities (88.5%), education (81.9%), and interactions with local authorities (71.2%), pointing to a structural and pervasive pattern of exclusion (Haasen et al., 2004). Within the educational context, such experiences can be interpreted as forms of institutionalized racism, reinforcing stigma and limiting social mobility. Importantly, the intensity of perceived discrimination was found to be significantly correlated with the severity of substance dependence, highlighting how racism and stigma directly shape mental health outcomes. Within the educational context, these findings point to systematic forms of exclusion and discrimination. Importantly, the intensity of perceived discrimination was found to be significantly correlated with the severity of substance dependence.

Widely accepted norms regarding what it means to be German undermine the inclusive and integrative function of education, further reinforcing structural inequalities. Critically examining these structural inequalities in the German system is important in this regard, as they leave young people vulnerable to risks associated with identity and psychosocial problems. These exclusionary attitudes, which disregard the individuality of young people with immigrant backgrounds through stereotypical judgments, also reinforce social isolation, and it is through this pathway that educational inequalities intersect with broader risks, including substance use. Exclusion caused by attitudes such as racism and discrimination toward immigrants negatively affects the mental health of immigrant youth in particular (Lerias et al., 2025). Immigrant youth who experience discrimination often experience post-traumatic stress disorder due to exposure to prejudiced behavior.

Experiencing racism and discrimination negatively affects the socio-psychological adaptation of Turkish youth, which in turn has a significant impact on the formation of addictive behavior. Among those who reported experiencing discrimination, excessive alcohol consumption and cigarette use were significantly higher than among those who reported not experiencing discrimination, particularly among men (Patrão et al., 2019). A similar study shows that perceived discrimination is associated with substance use. In a study examining substance use among Turkish and Eastern European immigrants (De Kock & Decorte, 2017), almost all participants reported perceived discrimination. Perceived discrimination,

when combined with a complex but weak sense of ethnic identity and a weak ethnic network, constitutes a risk factor for substance use. This situation can be interpreted as ethnic networks functioning as a social and psychological support mechanism. Immigrants who experience individual and structural exclusion in the host society and also lack ethnic belonging and networks are largely deprived of social and psychological support.

Socioeconomic Precarity and Workplace Discrimination. Socioeconomic precarity constitutes a central dimension of migrants' vulnerability to substance dependence, particularly when combined with structural barriers in the labor market. The findings indicate that a large proportion of participants were unemployed (66.7%), while only a limited number had stable full-time employment, pointing to significant socioeconomic marginalization (Haasen et al., 2004). Nolte-Troha et al. (2023) argue that the pressures of unemployment can lead to substance use. Given that Turkish migrants often experience periods of unemployment and employment insecurity, such as low-wage jobs and unfavorable working conditions, they are more susceptible to engaging in risky behaviors such as substance use. Thus, Turkish migrants in Germany are doubly disadvantaged due to difficulties in acculturating to the host society and economic challenges.

Güllüpinar (2010) echoes this predicament in his examination of the limited social mobility afforded to young Turks in Germany due to systemic and structural barriers in employment compared to older generations. This economic deprivation, accompanied by marginalization, discrimination, and insufficient access to welfare services, creates a deleterious environment for Turks in economic, social, and psychological terms, potentially resulting in substance use as an inappropriate coping mechanism for difficult situations.

The disadvantages Turks face in the job market have also been highlighted in Lodigiani's (2018) study. For example, resumes submitted for a job with Turkish-sounding names are often rejected in favor of German-sounding names, even when applicants have the same level of education. Even when Turkish immigrants successfully obtain employment, they are often paid less than their German counterparts. Furthermore, sectors that tend to employ more Turkish men are more susceptible to structural changes that can jeopardize their career advancement and limit upward social mobility.

Theme (4) Barriers to Addiction Treatment

A lack of health information in Turkish provides a barrier for Turkish immigrants seeking addiction treatment (Bondar & Machleidt, 2007). This situation creates obstacles to the development of preventive health behaviors and the tendency to seek treatment. At the same time, the cultural interpretation framework plays an important role in understanding and expressing illnesses and addictions (Penka et al., 2008). Failure to consider the cultural reflection of these terms when translating medical concepts from Western languages may cause immigrant communities to misinterpret, dismiss, or

reject the Western medical model. Therefore, it is important to consider the cultural framework when addressing addiction.

Another factor affecting access to healthcare is perceived discrimination (Burgess et al., 2008). Immigrants have less access to healthcare and treatment. Types of discrimination experienced in daily life or when accessing healthcare services may lead racial and ethnic minorities to seek healthcare less often. Turkish immigrants have been reported to feel misunderstood by healthcare professionals regarding their cultural peculiarities, which constitutes an additional barrier to accessing treatment (Bermejo et al., 2012). There is also a general reluctance among migrant youth to access mental health services (Lerias et al., 2025). Increased acculturation stress complicates access to treatment. Stigma and cultural factors also limit help-seeking behavior. Consequently, young people may prefer the support provided by their social environment over institutional and professional support.

Theme (5) Protective Factors

Cultural and religious values and family ties can play a protective role for Turkish immigrants in the host country against substance use by functioning as social control and socio-psychological support mechanisms. An individual's religious affiliation, particularly in the case of Muslim Turkish adolescents, plays a protective role against alcohol consumption (Donath et al., 2016). Adolescents whose parents transmit strong cultural traditions within the family have a lower risk of alcohol consumption. In another study (Henkel & Zemlin, 2016), adolescents with Turkish, Asian, or Middle Eastern/North African backgrounds had lower rates of problematic alcohol use. Another study suggests that alcohol consumption patterns among adolescents in Germany vary significantly by migration background and cultural context (Donath et al., 2011). Adolescents with Turkish migration background consistently report lower lifetime and regular alcohol use compared to their German peers, as well as a later age of first alcohol consumption. This pattern is largely attributed to the influence of cultural and religious norms, particularly among youth from Islamic backgrounds. However, when adolescents with a migration background do consume alcohol, they tend to engage in excessive drinking patterns similar to their German peers. This pattern indicates that while cultural norms may delay or limit alcohol initiation, they do not necessarily prevent the adoption of high-risk consumption behaviors once alcohol use begins. This situation can be interpreted as stemming from the fact that most people from these regions belong to the Islamic faith and are therefore distanced from alcohol consumption. Thus, these values function as a social control mechanism that directs behavior. However, the findings underscore the context-dependent nature of alcohol use among migrant youth, where protective cultural norms do not necessarily preclude engagement in risky behaviors.

The protective effect of maintaining religious identity and Turkish culture curtailing substance use is prevalent throughout the research on Turkish migrants. Typically, adolescence, low educational levels, unemployment, and low socioeconomic

status increase the risk of alcohol and substance dependence among immigrants. However, the presence of family, values, and attachment to religion and culture are instrumental in counteracting the effects of these factors in the prevention or reduction of substance use. Thus, strong cultural and social traditions play important roles in maintaining the well-being of Turkish immigrants (De Kock & Decorte, 2017; Dimitrova & Aydinli-Karakulak, 2016; Mechammil, 2020; Taşdemir et al., 2020). The presence of meso-level social resources is crucial for the social adaptation and mental health of immigrant youth (Lerias et al., 2025). The presence of social support groups, such as family and healthy communication with peer groups, is a social factor that increases the resilience of young immigrants.

Discussion

This study examines the individual, social, and structural factors influencing substance use among Turkish youth in Germany. Substance use among Turkish youth emerges as a phenomenon shaped by the interaction of structural inequalities, discrimination, exclusion, generational effects, and acculturation processes. The findings demonstrate that, in the case of migrants, substance use should not be understood merely as an individual habit or behavioral issue, but rather as a problem that must be addressed within the broader context of integration, identity, belonging, and structural conditions.

One of the key findings of this study is the decisive role of generational effects in shaping health behaviors among Turkish migrants. Consistent with existing literature, substance use and high-risk behaviors tend to increase across generations. First-generation migrants, despite socioeconomic disadvantages, exhibit fewer risky behaviors and better health outcomes due to the protective function of cultural and religious frameworks. In contrast, second- and third-generation Turkish individuals demonstrate higher levels of risky behaviors. As the duration of residence increases, interaction with the host society intensifies, and the protective influence of cultural and religious factors diminishes due to the effects of acculturation.

Acculturation theory provides an important interpretative framework that can be considered in relation to generational effects. Berry's model of acculturation describes strategies that vary based on an individual's orientation toward two dimensions: the maintenance of one's heritage culture and identity, and the preference for interaction and relationships with the larger society; these are integration, assimilation, separation, and marginalization (Berry, 1992; Berry et al., 1987). Across generations, there may be a shift in these strategies from the heritage culture toward the dominant culture, or psychological and cultural ties with both cultures may be lost, leading to marginalization. While factors such as language acquisition, adoption of the normative values of the host society, participation in the labor market, and higher educational attainment support socioeconomic integration and adaptation, they also contribute to the weakening of the social control functions of the culture of origin. As a result, cultural frameworks lose their protective capacity

over behavior. In this respect, the acculturation process, particularly for Turkish youth, should be understood as a phenomenon with both positive and negative implications in terms of identity, belonging, and integration.

Another key concept linking acculturation and generational effects is “acculturation stress.” Acculturation gives rise to physical, biological, political, economic, cultural, and social-relational changes, which are also reflected at the individual level, leading to significant shifts in values, attitudes, and behaviours (Berry, 1992). During this process, individuals may experience social and psychological difficulties, commonly referred to as acculturative stress. Although acculturation stress is typically higher among second-generation individuals—who experience a sense of being “in-between” the culture of origin and the host society—compared to third-generation individuals who are more integrated, this does not allow for a direct causal inference regarding substance use. Acculturation stress may contribute to substance use through negative psychological effects arising from identity and belonging uncertainties. However, third-generation youth who perceive themselves as fully integrated and equal members of the host society may also experience daily or institutional discrimination, which constitutes a similarly significant risk factor for substance use. Therefore, when integration does not translate into full social acceptance and equality, it may increase vulnerability and the tendency toward risky behaviors. Among the more permanently settled third generation, the weakening of cultural frameworks combined with experiences of discrimination makes them more susceptible to harmful behaviors.

The findings also indicate that inequalities and discrimination in education and working life influence substance use among Turkish migrants. Experiences of exclusion, stigmatization, and racism—both in everyday life and at the institutional level—negatively affect integration processes and increase psychosocial stress. When combined with challenges related to belonging, these factors can lead to risky behaviors such as smoking, alcohol consumption, and substance use as coping strategies. In this respect, the findings highlight the relationship between perceived discrimination and risky behaviors.

The study also demonstrates the limitations of overly deterministic approaches that explain immigrant health solely through acculturation. While some studies suggest that acculturation leads to convergence with host society behaviors, the findings here show that cultural and religious values may continue to exert a protective influence across generations among Turkish and other Muslim youth. One of the clearest indicators of this is the lower rate of alcohol consumption in these groups than in the host population. From this perspective, acculturation should not be seen as a passive process of assimilation, but rather as a selective adaptation shaped by sociocultural and structural contexts.

Another important finding of the study is the role of socioeconomic status and educational level in shaping risky

behaviors. Higher levels of education—particularly among second-generation males—are associated with reduced risky behaviors, while lower educational attainment and economic insecurity are linked to higher levels of substance use. This highlights the impact of structural inequalities on behavioral outcomes.

Finally, the findings emphasize the importance of culturally sensitive research and intervention processes. Effective responses to harmful health behaviors such as addiction and substance use require an understanding of the perceptions and norms of different cultural groups. Solutions developed within a Western-centric framework risk overlooking the specific characteristics of migrant populations, thereby reducing the effectiveness of interventions. Additionally, language barriers, stigmatization, and discrimination create obstacles to prevention and treatment processes. Therefore, there is a need for culturally sensitive, accessible, and inclusive public health strategies.

In conclusion, substance use among Turkish youth in Germany cannot be explained solely by individual factors, but is the result of complex and dynamic interactions between acculturation, generational effects, socioeconomic disadvantages, structural challenges, and exclusion. This underscores the need for holistic approaches, and future research should adopt longitudinal and intersectional perspectives to better capture these complex dynamics.

Conclusion

This study aims to reveal the factors influencing substance use and addictive behaviors among Turkish youth in Germany through a thematic analysis based on existing literature. The generational influences on substance use among Turkish youth in Germany are among the key themes explored, given that substance use tends to increase in subsequent generations of Turkish immigrants. This increase in these risky behaviors is attributed to differences in cultural interaction and identity shifts experienced during the integration process. Specifically, a lack of access to quality education, exclusion, racism, discrimination, and unemployment increase the susceptibility to substance use. Furthermore, the inadequacy of social and structural factors that could facilitate upward social mobility, combined with elements of identity, belonging, and social capital, creates a risk environment for health-harming behaviors among younger generations. Among Turkish immigrants, substance use is seen as a coping mechanism to address these challenges. However, these studies also indicate that cultural ties to the country of origin, such as family relationships and religious beliefs, play a protective role in the prevention or reduction of substance use.

Early waves of Turkish immigrants to Germany were motivated by economic factors, believing they could provide a better future for their families. The availability of Turkish associations and social networks facilitated their social integration, resulting in fewer identity crises or uncertainty about belonging. Social networks that support, but do not conflict with, their sense of

belonging and values—which, for first-generation immigrants with limited interaction with the host society, are shaped around cultural social networks of origin—serve as important psychosocial support for immigrants. However, this was not the case with subsequent generations. They were more likely to experience a cultural crisis, and, coupled with a lack of policies focused on social inclusion and combating inequality. Therefore, they struggled to develop a sense of belonging. On the one hand, the protective effect of the culture of origin was diminished, while on the other, difficulties experienced in managing the integration process were exacerbated, often leading to substance use as a coping mechanism.

This study highlights the limitations of the literature on substance use and risky behavior among Turkish youth in Germany. Existing literature generally lacks sufficient diversity to address the unique forms of immigrant groups by distinguishing them across social, economic, and cultural dimensions. Immigrants are far from forming a homogeneous group within their host countries. Generalizing immigrants' risks obscuring the experiences of young people of Turkish origin, the largest immigrant community in Germany, and the impact of unique social, cultural, and structural factors. For example, while there is a significant body of evidence for Latino or Hispanic groups in the United States, or for "immigrant youth" in Europe generally, few specific studies have focused on Turkish migrants in Germany.

Research gaps exist in the development of approaches that consider individual and structural factors in the integration process in the causes of substance use, risky behaviors, and addiction among Turkish youth in Germany. It is crucial to understand how various factors, such as inequality of educational opportunity, discrimination, access to the labor market, and barriers to accessing addiction treatment, influence the substance use of Turkish youth in Germany. Empirical studies that directly address the experiences of young people of Turkish origin, rather than those of immigrant communities in general, are needed.

Migrant background is one of the most important determinants of mental health and unhealthy behaviors. Therefore, targeted preventive and supportive interventions are needed for children and families with a migrant background in Germany. Resilience is one of the most important protective factors for immigrant youth. Strengthening resilience allows them to cope with mental challenges, have a positive outlook on life and the future, build social relationships, and access resources. In this context, community-based organizations and public institutions are important actors in addressing addiction among migrants from micro, meso and macro perspective to increase the resilience of young people with migrant backgrounds. To combat substance use, solutions need to be developed that are tailored to the needs and specific requirements of the target audience and that take into account structural and social perspectives such as inequality and exclusion.

Future studies should prioritize the following:

- Examining Turkish youth with a migration background as a distinct group.
- An intersectional approach that addresses the initiation of substance use, barriers to accessing treatment, and rehabilitation processes of Turkish youth with a migrant background.
- Comparing the incidence of substance use among young people of Turkish origin with that minority groups.
- Using more qualitative research, developed from a phenomenological perspective, and interviews, alongside quantitative research.

Through these studies, it will be possible to develop evidence-based policies and practices that support the well-being of Turkish youth in Germany using a culture-based approach.

Author contributions

Conception and design: H.Y.; Data acquisition: H.Y., Z.H.; Data analysis: H.Y., Z.H.; Data interpretation: H.Y., Z.H.; Drafting of the manuscript: H.Y., Z.H.; Critical revision of the manuscript: H.Y., Z.H. All authors reviewed the results, approved the final version of the manuscript, and agreed to be accountable for all aspects of this study.

Ethical approval

Ethics committee approval and informed consent were not required for this study.

Data availability statement

Data sharing is not applicable to this article as no new datasets were generated or analyzed during this study.

Conflict of interest

The authors declare that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

- Bermejo, I., Hölzel, L. P., Kriston, L., & Härter, M. (2012). Subjektiv erlebte Barrieren von Personen mit Migrationshintergrund bei der Inanspruchnahme von Gesundheitsmaßnahmen [Barriers in the attendance of health care interventions by immigrants]. *Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz*, 55(8), 944-953. [\[Crossref\]](#)
- Berry, J. W. (1992). Acculturation and adaptation in a new society. *International Migration*, 30, 69-85. [\[Crossref\]](#)
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative Stress. *The International Migration Review*, 21(3), 491-511. [\[Crossref\]](#)
- Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied Psychology*, 55(3), 303-332. [\[Crossref\]](#)
- Beutel, M. E., Jünger, C., Klein, E. M., Wild, P., Lackner, K. J., Blettner, M., Banerjee, M., Michal, M., Wiltink, J., & Brähler, E. (2016). Depression, anxiety and suicidal ideation among 1(st) and 2(nd) generation migrants - results from the Gutenberg health study. *BMC Psychiatry*, 16(1), 288. [\[Crossref\]](#)
- Bondar, A., & Machleidt, W. (2007). Addiction among Russian and Turkish migrants in Germany: Developing prevention strategies. *European Psychiatry*, 22(1), S33-S33. [\[Crossref\]](#)
- Burgess, D. J., Ding, Y., Hargreaves, M., Van Ryn, M., & Phelan, S. (2008). The association between perceived discrimination and underutilization of needed medical and mental health care in a multi-ethnic community sample. *Journal of Health Care for the Poor and Underserved*, 19(3), 894-911. [\[Crossref\]](#)
- Czaderny, K. (2025). The longitudinal relationship between acculturation and alcohol use among immigrant adolescents in Europe. *International Migration Review*. [\[Crossref\]](#)
- De Kock, C., & Decorte, T. (2017). Exploring problem use, discrimination, ethnic identity and social networks. *Drugs and Alcohol Today*, 17(4), 269-279. [\[Crossref\]](#)
- Demirağ, H., & Kakişım, C. (2018). Almanya'daki Türklerin göç ve entegrasyon süreci: Birinci ve üçüncü kuşak karşılaştırması. *Sosyal Siyaset Konferansları Dergisi*, 75, 123-152. [\[Crossref\]](#)
- Destatis Statistisches Bundesamt. (2025). *Foreigner population by age groups*. Retrieved April 7, 2026, from <https://www.destatis.de/EN/Themes/Society-Environment/Population/Migration-Integration/Tables/foreigner-age-groups.html>
- Dimitrova, R., & Aydinli-Karakulak, A. (2016). Acculturation orientations mediate the link between religious identity and adjustment of Turkish-Bulgarian and Turkish-German adolescents. *SpringerPlus*, 5(1), 1024. [\[Crossref\]](#)
- Donath, C., Baier, D., Graessel, E., & Hillemacher, T. (2016). Substance consumption in adolescents with and without an immigration background: A representative study-What part of an immigration background is protective against binge drinking? *BMC Public Health*, 16(1), 1157. [\[Crossref\]](#)
- Donath, C., Gräbel, E., Baier, D., Pfeiffer, C., Karagülle, D., Bleich, S., & Hillemacher, T. (2011). Alcohol consumption and binge drinking in adolescents: Comparison of different migration backgrounds and rural vs. urban residence-a representative study. *BMC Public Health*, 11(1), 84. [\[Crossref\]](#)
- Efendioğlu, E., & Özcebe, L. H. (2024). Determination of risk factors influencing substance use among Turkish-origin immigrants in Germany. *Turkish Journal of Medical Sciences*, 54(5), 1147-1153. [\[Crossref\]](#)
- Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, 7(3), 93-99. [\[Crossref\]](#)
- Fernandez-Kelly, P. (2012). The unequal structure of the German education system: Structural reasons for educational failures of Turkish youth in Germany. *Spaces and Flows: An International Journal of Urban and ExtraUrban Studies*, 2(2), 93-112. [\[Crossref\]](#)
- Gül, V., & Kolb, S. (2009). Almanya'da yaşayan genç türk hastalarda kültürel uyum, iki kültürlülük ve psikiyatrik bozukluklar [Acculturation, bicultural identity and psychiatric morbidity in young Turkish patients in Germany]. *Türk Psikiyatri Dergisi*, 20(2), 138-143.
- Güllüpinar, F. (2010). *Downward integration of the third generation in the Turkish community in a small German town: A case study in Goslar* (Thesis No. 277621) [Doctoral dissertation, Middle East Technical University]. Council of Higher Education National Thesis Center.
- Haasen, C., Blätter, A., Gharaei, D., Toprak, M. A., Haferkorn, J., & Reimer, J. (2004). Psychosocial aspects of opiate dependence among Turkish migrants in Germany. *Journal of Ethnicity in Substance Abuse*, 3(1), 1-10. [\[Crossref\]](#)
- Henkel, D., & Zemlin, U. (2016). Social inequality and substance use and problematic gambling among adolescents and young adults: A review of epidemiological surveys in Germany. *Current Drug Abuse Reviews*, 9(1), 26-48. [\[Crossref\]](#)
- Janssen-Kallenberg, H., Schulz, H., Kluge, U., Strehle, J., Wittchen, H. U., Wolfardt, U., Koch-Gromus, U., Heinz, A., Mösko, M., & Dingoyan, D. (2017). Acculturation and other risk factors of depressive disorders in individuals with Turkish migration backgrounds. *BMC Psychiatry*, 17(1), 264. [\[Crossref\]](#)
- Kırmızı, B. (2016). Göçmen Türklerin Almanya'da yaşadığı sorunların dünü ve bugünü. *Littera Turca*, 2(3), 145-156. [\[Crossref\]](#)
- Kortas, G. T., Abrahão, A. B. B., Malbergier, A., Fidalgo, T. M., Moura, H., de Andrade, A. G., Neto, F. L., Torales, J., Ventriglio, A., & Castaldelli-Maia, J. M. (2022). Immigrants, refugees and cannabis use. *International Review of Psychiatry*, 34(1), 59-77. [\[Crossref\]](#)
- Lerias, D., Ziaian, T., Arthur, N., Augoustinos, M., Pir, T., & Miller, E. (2025). The mental health of refugee and migrant youth after settlement: Outcomes of a multinational study. *Community Mental Health Journal*, 61, 1334-1367. [\[Crossref\]](#)
- Lodigiani, M. (2018). Turks in Germany: An evaluation of socioeconomic integration. *The Political Science Journal of Boston College*, 2(1). <https://ejournals.bc.edu/index.php/colloquium/article/view/10242>
- Mechammil, M. (2020). *Cultural and contextual influences on mental health, stigma, and substance use among MENA US college students* [Doctoral dissertation, Utah State University]. <https://digitalcommons.usu.edu/etd/7899/>
- Moffitt, U., Juang, L. P., & Syed, M. (2019). "We don't do that in Germany!" A critical race theory examination of Turkish heritage young adults' school experiences. *Ethnicities*, 19(5), 830-857. [\[Crossref\]](#)
- Najdini, M., Mathieu, J., Shadili, G., Frigaux, A., Ménauges, M., Mouton, C., Gressier, F., & Essadek, A. (2025). Substance use prevalence among immigrants by generational status in Europe: A systematic review and meta-analysis. *Alcohol: Clinical and Experimental Research*, 49, 1381-1391. [\[Crossref\]](#)
- Nolte-Troha, C., Roser, P., Henkel, D., Scherbaum, N., Koller, G., & Franke, A. G. (2023). Unemployment and substance use: An updated review of studies from North America and Europe. *Healthcare (Basel)*, 11(8), 1182. [\[Crossref\]](#)
- Okamoto, J., Ritt-Olson, A., Soto, D., Baezconde-Garbanati, L., & Unger, J. B. (2009). Perceived discrimination and substance use among Latino adolescents. *American Journal of Health Behavior*, 33(6), 718-727. [\[Crossref\]](#)

- Patrão, A. L., Almeida, M. D. C., Matos, S. M. A., Goes, E. F., Nogueira, C., & Aquino, E. M. (2019). Association between perceived discrimination and alcohol and tobacco consumption in ELSA-Brasil cohort: Focusing on gender differences. *Substance Use & Misuse*, 54(7), 1214-1225. [\[Crossref\]](#)
- Penka, S., Heimann, H., Heinz, A., & Schouler-Ocak, M. (2008). Explanatory models of addictive behaviour among native German, Russian-German, and Turkish youth. *European Psychiatry*, 23(S1), 36-42. [\[Crossref\]](#)
- Penka, S., Krieg, S., Hunner, Ch., & Heinz, A. (2003). Unterschiedliche Erklärungsmodelle für abhängiges Verhalten bei türkischen und deutschen Jugendlichen. *Der Nervenarzt*, 74(7), 581-586. [\[Crossref\]](#)
- Reeske, A., Spallek, J., & Razum, O. (2009). Changes in smoking prevalence among first-and second-generation Turkish migrants in Germany-an analysis of the 2005 Microcensus. *International Journal for Equity in Health*, 8(1), 26. [\[Crossref\]](#)
- Reiss, K., Breckenkamp, J., Borde, T., Brenne, S., David, M., & Razum, O. (2014). Smoking during pregnancy among Turkish immigrants in Germany-are there associations with acculturation? *Nicotine & Tobacco Research*, 17(6), 643-652. [\[Crossref\]](#)
- Reiss, K., Sauzet, O., Breckenkamp, J., Spallek, J., & Razum, O. (2014). How immigrants adapt their smoking behaviour: Comparative analysis among Turkish immigrants in Germany and the Netherlands. *BMC Public Health*, 14, 844. [\[Crossref\]](#)
- Riosmena, F., Randall, K., & Warren, C. J. (2017). Explaining the immigrant health advantage: Self-selection and protection in health-related factors among five major national-origin immigrant groups in the United States. *Demography*, 54(1), 175-200. [\[Crossref\]](#)
- Salas-Wright, C. P., Vaughn, M. G., Clark, T. T., Terzis, L. D., & Córdova, D. (2014). Substance use disorders among first-and second-generation immigrant adults in the United States: Evidence of an immigrant paradox? *Journal of Studies on Alcohol and Drugs*, 75(6), 958-967. [\[Crossref\]](#)
- Schulz, W., Supke, M., Hahlweg, K., & Job, A. K. (2025). Young adults with migration background: Mental health problems, risk behaviour, and educational and occupational development. Results of an 18-year longitudinal study. *International Journal of Adolescence and Youth*, 30(1), 2480715. [\[Crossref\]](#)
- Schunck, R., Reiss, K., & Razum, O. (2015). Pathways between perceived discrimination and health among immigrants: Evidence from a large national panel survey in Germany. *Ethnicity & Health*, 20(5), 493-510. [\[Crossref\]](#)
- Sempértegui, G. A., Baliatsas, C., Knipscheer, J. W., & Bekker, M. H. J. (2023). Depression among Turkish and Moroccan immigrant populations in Northwestern Europe: A systematic review of prevalence and correlates. *BMC Psychiatry*, 23, 402. [\[Crossref\]](#)
- Şahin, B. (2010). Almanya'daki Türk göçmenlerin sosyal entegrasyonunun kuşaklar arası karşılaştırması: Kültürleşme. *Bilgi Türk Dünyası Sosyal Bilimler Dergisi*, 55, 103-134.
- Taşdemir, M., Küçükali, H., Uçar, A., & Sur, H. (2020). Exploring alcohol and substance addiction among Syrian migrants in Turkey: A qualitative study integrating perspectives of addicts, their relatives, local and national institutions. *Addicta: The Turkish Journal on Addictions*, 7(4), 253-276. [\[Crossref\]](#)
- Unger, J. B., Schwartz, S. J., Huh, J., Soto, D. W., & Baezconde-Garbanati, L. (2014). Acculturation and perceived discrimination: Predictors of substance use trajectories from adolescence to emerging adulthood among Hispanics. *Addictive Behaviors*, 39(9), 1293-1296. [\[Crossref\]](#)
- Van Dorp, M., Boon, A., Spijkerman, R., & Los, L. (2021). Substance use prevalence rates among migrant and native adolescents in Europe: A systematic review. *Drug and Alcohol Review*, 40(2), 325-339. [\[Crossref\]](#)
- Yeşil, A. E. (2020). Discrimination and exclusion perceptions of Turkish students living in Germany. *Journal of Education, Theory and Practical Research*, 6(3), 337-351. [\[Crossref\]](#)
- Yıldırım, G., & Dilbaz, H. N. (2024). Identity status, frequency of substance use and psychological symptoms of adults: Comparison of in native Germans and Germans of Turkish origin. *Journal of Identity & Migration Studies*, 18(1).

Is rural-to-urban migration related to smoking, alcohol, and substance use a cross-sectional study among medical students

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Abstract

The prevalence of smoking, alcohol, and substance use and the factors associated with these behaviors show marked regional variations. This study aimed to determine the prevalence of these behaviors among medical students and examine their associations with migration and other related factors. All medical students at a faculty were invited to participate (n = 1056). Of these, 780 (73%) completed a self-report form. Of them, %58.8 (n=447) were male and %41.8 were female (n=313). The median age of the sample was 22. The form included Drug Use Disorders Identification Test (DUDIT), Alcohol Use Disorders Identification Test (AUDIT), the Childhood Trauma Questionnaire (CTQ-28), smoking characteristics, migration history, residential area characteristics, history of perinatal complications, and mental illness. Prevalence of smoking, alcohol use, risky drinking, and illicit substance use were assessed. Migration history was defined as relocation across provincial boundaries during childhood for reasons related to security threats or other social, familial, or economic factors. The prevalence of smoking among students was 33%, lifetime alcohol use was 30.5%, risky alcohol consumption in the past year was 2.0%, lifetime use of illicit substances was 4.3%, and problematic substance use in the past year was 2.5%. A history of mental illness was associated with all variables except smoking (p < 0.01). Other factors associated with smoking included a history of migration, the CTQ-28 score, and residence in a student house. In addition to well-known risk factors, the findings highlight relatively underrecognized factors such as internal migration and a history of perinatal complications.

Keywords: migration, smoking, alcohol, substance use, medical students

Main points

- Individuals who experienced mental health issues in the past five years, sought professional help, and received a diagnosis had a significantly higher risk of smoking, alcohol, and substance use, particularly risky alcohol consumption and problematic substance use.
- Problematic substance use was uncommon yet systematically associated with early rural residence, mental illness, and perinatal complications, suggesting the importance of early developmental context.
- A history of migration and frequent childhood relocations was significantly associated with higher rates of smoking and alcohol use, indicating that residential instability is an important contextual risk factor for substance-related behaviors in this population.
- Smoking was highly prevalent among medical students (33.3%) and showed robust associations with male gender, academic progression, migration history, and all forms of childhood trauma, while alcohol use was common but risky drinking remained rare and was primarily associated with personal mental illness and perinatal complications, highlighting distinct high-risk subgroups.

Introduction

The use of psychoactive substances remains an increasingly important public health concern worldwide. Tobacco and

alcohol consumption are among the leading preventable causes of death (World Health Organization [WHO], 2023a, 2023b). Medical students receive extensive theoretical and practical training regarding the harms of tobacco, alcohol, and

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substance use throughout their six-year medical education. Although it might be assumed that increased knowledge would protect this population from psychoactive substance use, several studies have reported similar or even higher rates of use among medical students compared to the general population (Bahji et al., 2021).

In the present study, medical students were selected primarily as a convenience sample within a single institution. However, this population also represents a strategically important group: as future physicians, their personal substance use patterns may influence clinical decision-making, attitudes toward substance-using patients, and their likelihood of providing preventive counseling. Thus, examining substance use among medical students offers insights not only into an at-risk youth population, but also into a group that will soon be responsible for patient education and intervention.

In Türkiye, considerable regional differences exist in the prevalence of smoking, alcohol, and substance use. Factors associated with alcohol and substance use disorders often vary across regions due to cultural, economic, geographic, and sociopolitical differences (Koç et al., 2020). Examining the prevalence of smoking, alcohol, and substance use among medical students in a medical school located in Eastern Türkiye may therefore highlight characteristics specific to this region and enable comparisons with other regions.

Migration is one such regional characteristic. Migration encompasses complex economic, political, social, and cultural elements, and it represents a major life event. Evidence suggests that migration is associated with higher levels of psychosocial stress, acculturation difficulties, disruptions in social networks, and exposure to adversity, all of which increase vulnerability to psychoactive substance use (Manhica et al., 2016). Moreover, migration and childhood trauma are interrelated; migration-related stress increases the risk of childhood adversity, and childhood trauma is a well-established risk factor for later alcohol and substance use disorders (Conway & Lewin, 2022). Eastern Türkiye experiences significant domestic (particularly rural-to-urban) and international migration, yet research on migration and psychoactive substance use in this region remains scarce (Yilmaz et al., 2022).

Perinatal complications represent another early vulnerability factor. These complications are associated with oxidative stress and long-term neurodevelopmental outcomes, including increased risk for psychiatric conditions such as attention-deficit/hyperactivity disorder, impulse control disorders, and schizophrenia (Mansur et al., 2017). Individuals with such conditions may be more prone to substance use through mechanisms involving impaired impulse control, altered reward processing, and vulnerability to stress. To our knowledge, no prior study has examined the relationship between perinatal complications and alcohol or substance use.

Medical education itself is demanding and stressful. Burnout, depressive symptoms, and psychological distress are

commonly reported among medical students, and mental health difficulties are associated with increased substance use. The self-medication hypothesis suggests that individuals may use substances to manage negative affect, anxiety, mood symptoms, or reward deficiencies (Salisbury et al., 2024).

In summary, migration, perinatal complications, and current mental health status were selected *a priori* as predictors, as they represent different domains such as developmental, psychosocial, and emotional that may contribute to psychoactive substance use. They were not identified *post-hoc* but rather were incorporated into the study design based on theoretical and empirical relevance.

This study aimed to examine the prevalence of smoking, alcohol use, risky drinking, lifetime illicit substance use, and problematic substance use among medical students at a medical school in Türkiye, and to explore their associations with migration, income, housing status, childhood traumas, perinatal complications, and personal or family histories of mental illness.

Methods

The study was approved by the Non-Interventional Clinical Research Ethics Committee of Van Yüzüncü Yıl University (Date: December 6, 2019; Approval No: 2019/17-08). The study population consisted of all students (from first to sixth year) enrolled at the Faculty of Medicine of Yüzüncü Yıl University ($n = 1056$). This cross-sectional study was conducted between May 2020 and October 2020. The inclusion criteria were being a volunteer and being over 18 years of age. After informing participants about the purpose and methods of the study, informed consent was obtained from those who volunteered. The participants themselves completed anonymous forms. Students not present at the faculty were contacted via their peers to facilitate participation. Data were collected in person.

A sociodemographic information form was used to gather data on age, gender, year of study, history of migration and its reasons, lifelong residential characteristics, income (Below minimum wage: low income, 1–3× minimum wage: moderate income, Above 3× minimum wage: high income) and accommodation status (Dormitory or student housing, because these two living arrangements reflect differing social environments: dormitories represent high-structure/low-autonomy settings, whereas student housing represents low-structure/high-autonomy settings), history of perinatal complications, personal and family history of mental illness, and smoking status. Migration status was examined in three categories: no migration, migration due to security threats, and migration due to other reasons. Migration was defined as the movement of individuals or groups from one location to another, either domestic or international, with the intention of settling temporarily or permanently. Several primary items related to migration, such as place of birth, type of residence (urban/rural) at different developmental periods, and self-reported reasons for relocation were developed specifically for this study, based on previous epidemiological surveys

examining population mobility in Turkey (Sirkeci & Cohen, 2015), but they did not originate from a validated instrument. The “number of displacements” variable was derived from participants’ reports of each period during which they resided in a different province. Migration reasons were collected as a single open-ended question referring to the primary reason for the most significant childhood relocation rather than for every move.

Alcohol use was assessed through the Alcohol Use Disorders Identification Test (AUDIT), which shows high internal consistency ($\alpha = .75-.95$), good test-retest reliability, and well-supported two- or three-factor structures capturing alcohol consumption and related consequences. It has well-established criterion validity and performs reliably in university populations. The first three questions of the AUDIT were employed, which evaluate risky drinking (Saatçioğlu et al., 2002). Risky drinking was defined as consuming more than 14 standard drinks per week for men and more than 7 standard drinks per week for women. The Drug Use Disorders Identification Test (DUDIT) was used to assess participants’ substance use. DUDIT is an 11-item self-report scale evaluating the frequency of substance use and associated problems over the previous year. DUDIT similarly demonstrates excellent internal consistency ($\alpha > .85$), stable factor structure, and high sensitivity and specificity for identifying problematic drug use across both clinical and general samples. The first nine items are scored on a 0–4 scale, while the last two can be scored 0, 2, or 4. The total possible score ranges from 0 to 44. For women, a score of 2 or above, and for men, a score of 6 or above indicates problematic use, while a score of 25 or above signifies high-risk use (Evren et al., 2014).

Childhood traumas were evaluated using the Childhood Trauma Questionnaire (CTQ-28). This is a five-point Likert-type self-report scale that assesses abuse and neglect during childhood. The Childhood Trauma Questionnaire (CTQ) displays consistently high internal consistency across its five subscales (emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect), strong convergent and discriminant validity, and a stable factor structure across cultures and languages. In its Turkish adaptation, cutoff scores were set as follows: 5 points for sexual and physical abuse, 7 points for physical neglect and emotional abuse, 12 points for emotional neglect, and 35 points for the total score (Sar et al., 2012). The selection of key predictors was guided by a priori theoretical and empirical frameworks emphasizing life-course and developmental pathways to substance use and health-risk behaviors. Migration-related variables were treated as central exposures of interest due to their conceptual relevance to social stress, disruption, and adaptation processes. Perinatal complications and personal or familial mental health history were included as theoretically relevant vulnerability factors reflecting early biological risk and individual-level psychopathology. These variables were not selected based on statistical significance but were identified before analysis based on existing literature and clinical relevance.

STATA version 13 was utilized for all the statistical analyses in the study. The normality of continuous variables was

evaluated using skewness and kurtosis tests. Since none of the continuous variables exhibited a normal distribution, they are reported as medians and interquartile ranges (IQR). Categorical variables are presented as frequencies (n) and percentages (%). Logistic regression models were employed to examine the relationships between the dependent variables—the presence of smoking, the presence of alcohol use, risky drinking, the use of at least one non-alcohol substance, and problematic use—and the independent variables. These models were subsequently adjusted for age, sex, family history of mental illness, and total score on the Childhood Trauma Questionnaire-28 (CTQ-28). The Variance Inflation Factor (VIF) command in STATA was utilized to assess potential multicollinearity among the variables. All VIF values were below 5 and tolerance values exceeded .20, indicating no evidence of problematic multicollinearity except for age and study year. For consistency across models, we included only study year as the proxy for academic progression, and excluded age from all adjusted models. As a sensitivity analysis, we re-estimated the regression models after removing the most overlapping predictors. The results were consistent across model specifications, suggesting that the findings were robust to changes in predictor selection. The results are reported as odds ratios (OR) with corresponding 95% confidence intervals (CI). For smoking, all predictors were entered into a single multivariable model because the prevalence of smoking in the sample was sufficient to support a fully adjusted analysis. However, the prevalence of alcohol use and substance use was substantially lower (2–4%), and preliminary checks indicated that including all predictors simultaneously led to unstable estimates and convergence difficulties. To preserve model stability and interpretability, the analyses for alcohol and substance use were therefore conducted in two separate models, grouping predictors conceptually while reducing the number of variables entered at once. This analytic decision was driven by statistical power considerations and the need to avoid inflated standard errors. To account for multiple testing, we applied a Bonferroni correction, setting the threshold for statistical significance at $p < 0.01$ ($0.05 / 5$ outcomes).

Results

A total of 780 students completed the forms (corresponding to 73% of the target population). Also, 20 forms were excluded from the study due to incompleteness ($n=760$). Of the participants, 58.2% were male. Among medical school students, the point prevalence of smoking was 33.3%, lifetime prevalence of having tried alcohol at least once was 30.5%, risky alcohol use in the past year was 2.0%, lifetime prevalence of having used an illicit substance at least once was 4.3%, and problematic substance use in the past year was 2.5% ($n=19$). Two participants (0.3%) reported high-risk use, according to the DUDIT. The age at onset for smoking was 16.6 ± 3.74 , and for alcohol it was 17.55 ± 4.00 . Analysis of factors associated with smoking yielded significant relationships with age, year of study, being male, living in student housing, a history of frequent relocation and migration, a personal history of mental illness, and childhood trauma scores (Table 1).

Table 1. Sociodemographic and other factors associated with smoking among medical students

Whole Sample (s: 760, 100%)		Smokers (s: 253, 33.3%)	
	N (%) / Median (25-75 % range)	N (%) / Median (25-75 % range)	Or^a (95% CI)
Study years (continuous)	3 (2 - 5)	3 (2 - 5)	1.13 ^b (1.03-1.25)*
Accommodation			
With family	167 (22.2)	45 (27.0)	Ref
Dormitory	360 (47.7)	99 (27.5)	1.12 ^b (0.72-1.72)
Student house	227 (30.1)	106 (46.7)	2.5 ^b (1.59-3.94)**
Income			
Good	196 (25.8)	58 (29.6)	Ref
Moderate	490 (64.6)	162 (33.1)	0.89 (0.6-1.3)
Poor	73 (9.6)	33 (45.2)	1.08 (0.58-1.99)
Place of birth			
Village/town	117 (15.4)	48 (41.0)	Ref
County	193 (25.4)	64 (33.2)	1.1 (0.7 - 1.9)
Non-metropolitan provincial center	120 (15.8)	43 (35.8)	1.2 (0.7 - 2)
Metropolitan provincial center	292 (38.4)	85 (29.1)	1.01 (0.62- 1.64)
Abroad	38 (5.0)	13 (34.2)	0.74 (0.33- 1.66)
Place of residence from ages 0 to 5			
Village/town	155 (20.5)	62 (40.0)	Ref
County	197 (26.0)	61 (30.9)	0.91 (0.56- 1.46)
Non-metropolitan provincial center	128 (16.9)	39 (30.5)	0.83 (0.49- 1.4)
Metropolitan provincial center	277 (36.6)	91 (32.8)	0.98 (0.63-1.53)
Place of residence from ages 6 to 15			
Village/town	89 (11.7)	33 (37.1)	Ref
County	184 (24.3)	57 (31.0)	1.15 (0.65-2.04)
Non-metropolitan provincial center	146 (19.3)	55 (37.7)	1.39 (0.78-2.49)
Non-metropolitan provincial center	339 (44.7)	108 (31.9)	1.16 (0.69-1.97)
History of migration			
None	149 (19.6)	28 (18.8)	Ref
Migration due to security threats	54 (7.1)	23 (42.6)	2.52 (1.56-4.07)**
Migration due to other reasons	557 (73.3)	202 (36.3)	2.75 (1.33-5.67)*
Number of displacement (continuous)	2 (1 - 3)	2 (1 - 3)	1.15 (1.05-1.26)*
Perinatal complication history (present)	73 (9.6)	28 (38.4)	1.37 (0.8- 2.35)
Childhood trauma scale total score (continuous)	32 (28 - 39)	34 (29 - 41)	1.03 (1.01-1.05)**
Family history of mental illness (present)	196 (25.8)	73 (37.2)	1.34 (0.93-1.93)
Self-reported mental health problem (present)	213 (28.0)	89 (41.8)	1.61 (1.12-2.3)*
Psychiatric diagnosis (present)	103 (13.5)	48 (46.6)	1.67 (1.05-2.63)

* p < 0.01 (Significant after Bonferroni correction), ** p<0.001. OR: Odds Ratio.CI: Confidence Interval; a Adjusted for age, gender, family history of mental illness, and total childhood trauma score; b Adjusted for gender, family history of mental illness, and total childhood trauma score. Age was not included in these analyses as a confounding variable to avoid multicollinearity. DUDIT: Drug Use Disorders Identification Test

Furthermore, significant associations were observed between smoking and each of the five subdimensions of the CTQ-28 (emotional abuse, physical abuse, sexual abuse, physical neglect, and emotional neglect).

Examining the factors associated with having tried alcohol at least once indicated significant relationships with age, year of study, being male, living in student housing, a family history of frequent relocation and migration during childhood, having lived in an urban area before the age of 15, and a personal history of mental illness. Risky drinking was also significantly associated with a personal history of mental illness (Table 2, Table 3). Some variables include "N/A" in the regression tables

because no participants in certain subgroups reported the outcome, resulting in empty cells and preventing odds ratio estimation for those categories. Additionally, wide confidence intervals were observed for predictors with low frequency, therefore reflecting limited statistical power.

Lifetime substance use among students was significantly associated with a personal history of mental illness, a history of perinatal complications, and having lived in a village or small town between the ages of 0 and 5. Problematic substance use was significantly associated solely with a personal history of mental illness (Table 4, Table 5). Most participants reported a history of migration for reasons other than security

Table 2. Sociodemographic factors associated with alcohol consumption among medical students

Whole sample (s: 760, 100%)		Alcohol use (S: 232, %30.5)		Risky alcohol consumption (s:15, %2.0)	
	N (%) / Median (25-75 % range)	N (%) / Median (25-75 % range)	Or ^a (95% CI)	N (%) / Median (25-75 % range)	Or ^a (95% CI)
Study years (continuous)	3 (2 - 5)	4 (2 - 5)	1.17 ^b (1.06-1.28) *	3 (2 - 5)	1.04 (0.76-1.41)
Accommodation					
With family	167 (22.2)	45 (27.0)	Ref	2 (1.2)	Ref
Dormitory	360 (47.7)	79 (21.9)	0.77 ^b (0.5-1.19)	5 (1.4)	1.21 (0.23-6.33)
Student house	227 (30.1)	107 (47.1)	2.39 ^b (1.55-3.7) **	7 (3.1)	2.54 (0.66-8.96)
Income					
Good	196 (25.8)	69 (35.2)	Ref	5 (2.6)	Ref
Moderate	490 (64.6)	139 (28.4)	0.65 (0.45-0.94)	10 (2.0)	0.66 (0.21-2.03)
Poor	73 (9.6)	24 (32.9)	0.67 (0.36-1.24)	0 (0)	N/a
Place of birth					
Village/town	117 (15.4)	33 (28.2)	Ref	1 (0.8)	Ref
County	193 (25.4)	57 (29.5)	1.25 (0.7 - 2.1)	3 (1.5)	2.38 (0.23-23.65)
Non-metropolitan provincial center	120 (15.8)	35 (29.2)	1.2 (0.7 - 2.1)	2 (1.7)	2.27 (0.19-25.98)
Metropolitan provincial center	292 (38.4)	101 (34.6)	1.89 (1.14- 3.14)	9 (3.1)	5.03 (0.61-41.56)
Abroad	38 (5.0)	6 (15.8)	0.44 (0.16- 1.19)	0 (0)	N/a

* p < 0.01 (Significant after Bonferroni correction), ** p<0.001. OR: Odds Ratio.CI: Confidence Interval; a Adjusted for age, gender, family history of mental illness, and total childhood trauma score; b Adjusted for gender, family history of mental illness, and total childhood trauma score. Age was not included in these analyses as a confounding variable to avoid multicollinearity. DUDIT: Drug Use Disorders Identification Test

threats (73.3%, n=557), while 19.6% (n=149) reported no migration history and 7.1% (n=54) reported migration due to security threats. Migration due to non-security reasons was significantly associated with smoking, whereas no clear association was observed for migration due to security threats, likely due to the small size of this subgroup.

Bivariate associations between key variables are given in Supplementary Table 1. Bivariate associations between key variables are given in Supplementary Table 1.

Discussion

Prevalence of Smoking, Alcohol Consumption, Risky Drinking, Substance Experimentation, and Problematic Substance Use

Our findings suggest that one-third (33.3%) of medical students were active smokers, a rate that closely mirrors national figures and previous studies among medical students. The 2022 Türkiye Health Survey reported that 28.3% of individuals aged 15 and older smoked daily (Türkiye İstatistik Kurumu, 2023), while prior studies among medical students in different regions of Türkiye found tobacco use prevalences between 25.6% and 34.7% (Fakili et al., 2024). These similarities suggest that tobacco use among medical students is relatively consistent across regions and broadly reflects national patterns. In contrast, the alcohol and substance use rates observed in our sample were lower than those reported in several comparable studies. Although 30.5% of students had consumed alcohol at least once in their lifetime, only 2.0% reported risky alcohol use in the past year. Lifetime alcohol consumption among medical students in previous studies

ranged from 39.5% to 55.6%, and lifetime substance use ranged from 5.9% to 13.4% (Havaçeliği Atlam & Yüncü, 2017; Köşger & Altınöz, 2020). Our findings therefore fall below the upper end of previously reported ranges. When compared with population-level surveys, the lifetime prevalence of alcohol use in our sample (30.5%) was higher than that reported in the general population (22.1%), as was lifetime substance use (4.3% vs. 3.1%) (Türkiye Uyuşturucu ve Uyuşturucu Bağımlılığı İzleme Merkezi, 2018). However, the very low prevalence of risky alcohol use (2%) was substantially lower than figures observed among university students in European countries, where prevalence commonly exceeds 30% and can reach up to 66% (Loy et al., 2021). A likely explanation for these discrepancies is the regional variation in alcohol consumption within Türkiye, with the Marmara and Aegean regions showing the highest rates and Eastern and Southeastern Türkiye showing the lowest (T.C. Sağlık Bakanlığı, Türkiye Halk Sağlığı Kurumu, 2013). The relatively conservative alcohol culture and lower general population consumption in the Eastern Türkiye Region may therefore influence the patterns observed among medical students. These contextual factors should be considered when interpreting cross-study differences.

First-time Smoking and Alcohol Use

The results showed that students most frequently initiated smoking and alcohol use during their high school years. It has been reported that the age of onset for smoking, alcohol consumption, and other psychoactive substances typically coincides with adolescence and early adulthood, which often overlaps with the high school period (Salisbury et al., 2024). Other studies also indicate that among university and medical students, the average age of first cigarette use is around 15,

Table 3. Factors related to migration and health history associated with alcohol consumption among medical students

Whole Sample (s: 760. 100%)		Alcohol Use (s:232, %30.5)		Risky Alcohol Consumption (s:15. %2.0)	
	n (%) / Median (25-75 % range)	n (%) / Median (25-75 % range)	OR ^a (95% CI)	n (%) / Median (25-75 % range)	OR ^a (95% CI)
Place of residence from ages 0 to 5					
Village/town	155 (20.5)	40 (25.8)	Ref	2 (1.2)	Ref
County	197 (26.0)	64 (32.5)	1.64 (1.01- 2.67)	2 (1.0)	0.91 (0.12-6.66)
Non-metropolitan provincial center	128 (16.9)	32 (25.0)	1.09 (0.63- 1.9)	2 (1.6)	1.31 (0.17-9.57)
Metropolitan provincial center	277 (36.6)	96 (34.7)	1.81 (1.14-2.86)	9 (3.3)	2.94 (0.61-14.2)
Place of residence from ages 6 to 15					
Village/town	89 (11.7)	17 (19.1)	Ref	0 (0)	Ref
County	184 (24.3)	59 (32.1)	2.5 (1.32-4.72)*	2 (1.1)	N/a
Non-metropolitan provincial center	146 (19.3)	41 (28.1)	1.93 (1.01-3.73)	2 (1.4)	N/a
Metropolitan provincial center	339 (44.7)	115 (33.9)	2.69 (1.48-4.89)**	11 (3.2)	N/a
History of migration					
None	149 (19.6)	28 (18.8)	Ref	5 (3.4)	Ref
Migration due to security threats	54 (7.1)	18 (33.3)	1.7 (0.83-3.49)	0 (0)	N/a
Migration due to other reasons	557 (73.3)	186 (33.4)	1.88 (1.18-2.97) *	10 (1.8)	0.5 (0.16-1.56)
Number of displacement (continuous)	2 (1 - 3)	2 (1 - 3)	1.11 (1.02-1.21)	1.5 (1-3)	0.86 (0.6-1.2)
Perinatal complication history (present)	73 (9.6)	30 (41.1)	1.79 (1.09- 2.98)	4 (5.5)	3.7 (1.1-12.1)
Childhood trauma scale total score (continuous)	32 (28 - 39)	33 (28 - 41)	1.01 (0.99-1.03)	31 (29-34)	0.98 (0.92-1.05)
Family history of mental illness (present)	196 (25.8)	74 (37.8)	1.53 (1.07-2.18)	3 (1.5)	0.79 (0.2-2.86)
Self-reported mental health problem (present)	213 (28.0)	90 (42.3)	1.92 (1.36-2.73)**	9 (4.2)	4.86 (1.66-14.18)*
Psychiatric diagnosis (present)	103 (13.5)	53 (51.5)	2.45 (1.58-3.8)**	5 (4.9)	3.75 (1.21-11.58)

* p < 0.01 (Significant after Bonferroni correction), ** p<0.001. OR: Odds Ratio.CI: Confidence Interval; a Adjusted for age, gender, family history of mental illness, and total childhood trauma score; b Adjusted for gender, family history of mental illness, and total childhood trauma score. Age was not included in these analyses as a confounding variable to avoid multicollinearity. DUDIT: Drug Use Disorders Identification Test

while first alcohol and substance use occurs at approximately 17 (Fakili et al., 2024; Köşger & Altınöz, 2020).

In the present study, smoking and alcohol use were found to be significantly more prevalent among male students. Despite the higher prevalence of alcohol and substance use disorders among men, women typically initiate substance use at a later age but progress to addiction more rapidly. This accelerated progression, known as the telescoping effect, is attributed to biological differences (such as metabolism and hormonal fluctuations) and psychosocial factors (such as using substances as a coping mechanism for stress) (Towers et al., 2023). It has been shown that adolescent boys consume more alcohol than girls and that their substance use increases more rapidly. Masculinity has been identified as a risk factor for substance use disorders in both genders, with masculine male adolescents being at the highest risk. Social norms were found to predict alcohol and cannabis use, and the presence of alcohol in the home was identified as a risk factor for girls' intoxication (Mahalik et al., 2015). Furthermore, consistent with previous findings, our results suggest that both smoking and alcohol use are more common among students living

independently (i.e., in student housing) compared to those living with their families. These findings align with data from other studies conducted with medical students in Turkey and worldwide (Bahji et al., 2021; Fakili et al., 2024; Havaçeliği Atlam & Yüncü, 2017; Köşger & Altınöz, 2020; Salisbury et al., 2024). However, some studies have reported higher rates of alcohol consumption among preclinical medical students and have found no relationship between alcohol use and the academic year of study (Jackson et al., 2016; Papazisis et al., 2018).

Urbanism and Internal Migration

The present study found that the prevalence of substance use was significantly higher among students who had lived in a rural area before the age of five. In contrast, among those who had lived in a rural area before the age of 15, the prevalence of alcohol use was lower. In general, studies have associated urban living with psychoactive substance use. However, in some research conducted among university students in our country, similar to our findings, a higher prevalence of alcohol use has been reported among individuals who grew

Table 4. Sociodemographic factors associated with substance use among medical students

Whole Sample (s: 760. 100%)		Substance Users at Least Once (s:34, %4.5)		DUDIT Problematic Substance Use (s:19. %2.5)	
	n (%) / Median (25-75 % range)	n (%) / Median (25-75 % range)	OR ^a (95% CI)	n (%) / Median (25-75 % range)	OR ^a (95% CI)
Study years (continuous)	3 (2 - 5)	3 (2 - 5)	1.04 ^b (0.84-1.28)	4 (3 - 5)	1.07 (0.81-1.42)
Accommodation					
With family	167 (22.2)	5 (3.0)	Ref	2 (1.2)	Ref
Dormitory	360 (47.7)	11 (3.1)	1.07 ^b (0.36-3.18)	6 (1.7)	1.41 (0.28-7.11)
Student house	227 (30.1)	17 (7.5)	2.68 ^b (0.96-7.49)	11 (4.9)	4.22 (0.92-19.5)
Income					
Good	196 (25.8)	8 (4.1)	Ref	6 (3.1)	Ref
Moderate	490 (64.6)	18 (3.7)	0.77 (0.32-1.85)	9 (1.8)	0.58 (0.2-1.72)
Poor	73 (9.6)	7 (9.6)	1.75 (0.56-5.46)	4 (5.5)	1.51 (0.36-6.33)
Place of birth					
Village/town	292 (38.4)	10 (3.4)	Ref	7 (2.4)	Ref
County	120 (15.8)	5 (4.2)	1.13 (0.37 - 3.42)	2 (1.7)	0.69 (0.14-3.42)
Non-metropolitan provincial center	193 (25.4)	8 (4.2)	1.17 (0.45 - 3.04)	5 (2.6)	1.08 (0.34-3.5)
Metropolitan provincial center	117 (15.4)	8 (6.8)	1.55 (0.57-4.22)	4 (3.4)	1.17 (0.31-4.39)
Abroad	38 (5.0)	2 (5.3)	1.23 (0.25- 6.09)	1 (2.6)	0.89 (0.1-7.83)

* p < 0.01 (Significant after Bonferroni correction), ** p<0.001. OR: Odds Ratio.CI: Confidence Interval; a Adjusted for age, gender, family history of mental illness, and total childhood trauma score; b Adjusted for gender, family history of mental illness, and total childhood trauma score. Age was not included in these analyses as a confounding variable to avoid multicollinearity. DUDIT: Drug Use Disorders Identification Test

up in urban areas (Dayi et al., 2015). This observation may be related to the prohibition of alcohol in Islam, as well as to the potentially stronger traditional family structure and religious belief systems in rural regions.

Research examining the relationship between rural/urban residence and substance use has yielded contradictory findings. Some studies from the United States, consistent with our results, have found higher rates of smoking and substance use among those who grew up in rural areas (Gale et al., 2012). Conversely, other studies have linked substance use to urban residence (Çakıcı et al., 2017). Such discrepancies may stem from the unique characteristics of the regions where these studies were conducted. In our sample, the higher rate of substance use among those who lived in rural areas during ages 0–5 could be associated with increased internal migration rates (especially from rural to urban areas), especially given that our study was conducted in a major metropolitan center.

Although the relationship between migration and psychoactive substance use has long been debated, no studies have investigated this issue among medical school students in our country, and only a few have examined it among university students (Demirci & Eker, 2017). Migration involves the intersection of cultural values, sociocultural continuity, alienation, and adaptation challenges. Before the early 1980s, migration was mainly driven by mechanization in agriculture and industrial changes. In the 1980s and 1990s, it became more about forced migration, particularly affecting populations in the eastern and southeastern regions. The psychological impact of migration depends on the nature, extent, causes, and experiences throughout the process.

When families migrate or frequently relocate for various reasons, children in school may be adversely affected and struggle with adapting to new social environments (Şencan & Canatan, 2020). One negative outcome of migration is an increased susceptibility to psychoactive substance use (Yılmaz et al., 2022). Our study also observed significant relationships between having a migration history, the number of relocations, and cigarette and alcohol use. Although the association between the number of relocations and substance use did not reach statistical significance, the trend was similar.

Multiple studies in the literature have indicated that individuals with a migration history exhibit higher rates of smoking, alcohol, and substance use (Lau et al., 2012; Livaditis et al., 2001). However, most of these studies have focused on external migration, and there is a dearth of research examining the relationship between internal migration and psychoactive substance use. Moreover, the cross-sectional design of our study limits the ability to establish cause-and-effect relationships. Also, replication in larger samples is needed to suggest a stronger association.

Other Factors

In this study, individuals who experienced mental health issues in the past five years, sought professional help, and received a diagnosis had a significantly higher risk of smoking, alcohol, and substance use, particularly risky alcohol consumption and problematic substance use. Previous studies also show a strong link between mental disorders and psychoactive substance use (Köşger & Altınöz, 2020). Research on medical students similarly links burnout, stress, long hours, and

Table 5. Factors related to migration and health history associated with substance use among medical students

Whole Sample (s: 760. 100%)		Substance Users at Least Once (s:34, %4.5)		DUDIT Problematic Substance Use (s:19. %2.5)	
	n (%) / Median (25-75 % range)	n (%) / Median (25-75 % range)	OR ^a (95% CI)	n (%) / Median (25-75 % range)	OR ^a (95% CI)
Place of residence from ages 0 to 5					
Village/town	277 (36.6)	7 (2.5)	Ref	5 (1.8)	Ref
County	128 (16.9)	7 (5.5)	2.22 (0.76- 6.53)	2 (1.6)	0.91 (0.17-4.8)
Non-metropolitan provincial center	197 (26.0)	8 (4.1)	1.63 (0.58- 4.59)	6 (3.1)	1.71 (0.51-5.72)
Metropolitan provincial center	155 (20.5)	11 (7.1)	2.55 (1.01-6.88)*	6 (3.9)	2.19 (0.63-7.54)
Place of residence from ages 6 to 15					
Village/town	339 (44.7)	10 (2.9)	Ref	9 (2.7)	Ref
County	146 (19.3)	9 (6.2)	2.11 (0.83-5.36)	3 (2.1)	0.8 (0.21-3.03)
Non-metropolitan provincial center	184 (24.3)	9 (4.9)	1.73 (0.68-4.37)	4 (2.2)	0.82 (0.24-2.73)
Metropolitan provincial center	89 (11.7)	5 (5.6)	1.6 (0.52-4.91)	3 (3.4)	1.21 (0.3- 4.74)
History of migration					
None	149 (19.6)	8 (5.4)	Ref	3 (2.0)	Ref
Migration due to security threats	54 (7.1)	4 (7.4)	1.21 (0.34-4.3)	1 (1.9)	0.7 (0.06-7.05)
Migration due to other reasons	557 (73.3)	21 (3.8)	0.67 (0.29-1.57)	15 (2.7)	1.22 (0.34-2.56)
Number of displacement (continuous)	2 (1 - 3)	2 (1 - 3)	0.97 (0.78-1.19)	2 (1 - 4)	1.13 (0.91-1.41)
Perinatal complication history (present)	73 (9.6)	7 (9.6)	2.76 (1.13- 6.71)*	3 (4.1)	1.97 (0.54-7.11)
Childhood trauma scale total score (continuous)	32 (28 - 39)	34 (30 - 45)	1.03 (0.99-1.05)	34 (30 - 38)	1.02 (0.98-1.07)
Family history of mental illness (present)	196 (25.8)	10 (5.1)	1.24 (0.57-2.71)	8 (4.1)	1.91 (0.74-4.92)
Self-reported mental health problem (present)	213 (28.0)	18 (8.5)	3.17 (1.53-6.58)*	12 (5.6)	3.85 (1.44-10.25)*
Psychiatric diagnosis (present)	103 (13.5)	11 (10.7)	3.16 (1.43-6.95)*	7 (6.8)	3.01 (1.1-8.19)*

* p < 0.01 (Significant after Bonferroni correction), ** p<0.001. OR: Odds Ratio.CI: Confidence Interval; a Adjusted for age, gender, family history of mental illness, and total childhood trauma score; b Adjusted for gender, family history of mental illness, and total childhood trauma score. Age was not included in these analyses as a confounding variable to avoid multicollinearity. DUDIT: Drug Use Disorders Identification Test

economic difficulties with substance use (Bahji et al., 2021). Our results show that smoking and alcohol use increase as students progress to higher academic years, likely due to more on-call shifts, intense study hours, and residency exam stress. Future research on motivational factors behind substance use in medical students could help explain the high prevalence of tobacco, alcohol, and substance use in this group, given their future roles in prevention and treatment.

Our findings also show a significant relationship between perinatal complications and substance use. Previous studies have linked perinatal complications to mental disorders like ADHD, impulse control, and psychotic disorders, often co-occurring with substance use disorders (Mansur et al., 2017). However, no study has directly examined this link. We did not determine specific psychiatric diagnoses alongside substance use but only general mental health problems and past diagnoses, which could have influenced the results. The retrospective collection of perinatal data may have introduced recall bias, requiring caution. Prospective studies with more detailed evaluations are needed.

This study found a significant relationship between all CTQ-28 subscales and cigarette smoking, but no link between

childhood trauma and alcohol/substance use. Systematic reviews show associations between smoking and childhood trauma, and trauma is also linked to an increased risk of alcohol and substance use, with earlier onset and greater dependence severity (Conway & Lewin, 2022). Research additionally suggests that gender differences exist in the relationships between different types of childhood trauma and alcohol or substance use disorders. It is further recommended that a range of biopsychosocial dimensions, such as age, gender, ethnicity, marital status, culture, and family history, be considered when investigating the relationship between childhood trauma and alcohol/substance use (Cabanis et al., 2021). The lack of a significant association in our study could be due to confounding factors, sample characteristics, and the small number of individuals with risky alcohol or substance use, reducing statistical power.

Limitations and Directions/Suggestions for Future Research

Our study has several limitations but also notable strengths. A key strength of our study is the large sample, which includes most students from the faculty, enhancing

representativeness. This is the first study to explore cigarette, alcohol, and substance use among medical students in Eastern Türkiye, offering insights into region-specific factors and within-country comparisons. It also examines the relationship between substance use and factors like internal migration and perinatal complications. Regarding limitations, while the participation rate was high, non-respondents may have different substance use patterns, affecting the results. The small number of individuals with risky drinking or problematic substance use limits the statistical power, requiring replication. Due to low cell frequencies for some outcomes, several estimates could not be calculated and appear as "N/A" in Tables 2 and 3. Another limitation of this study is the low prevalence of several outcomes (2–4%), which reduced the statistical precision of the corresponding estimates. This is reflected in the wide confidence intervals observed in the regression analyses, and these results should therefore be interpreted with caution. Future studies with larger and more diverse samples would allow more stable estimation of effects for rare outcomes. The cross-sectional design prevents causal conclusions, and the results may not apply to the broader population. The study also relied on self-reports, which may lead to underestimation due to possible withholding of information. Finally, without biological measurements, self-reports remain the main data source, though research shows both methods yield consistent results.

The prevalence of alcohol use, risky alcohol use, substance experimentation, and illicit substance use among students at a medical faculty in Eastern Türkiye appears moderately lower compared to rates reported in Western Türkiye. However, these levels are still considerable and cannot be overlooked. Furthermore, the factors identified concerning tobacco, alcohol, and substance use (history of rural-to-urban migration, mental health history, perinatal complications, childhood traumas, gender, age, and place of residence) underscore the multidimensional nature of this issue.

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Author contributions

Conception: H.O.T., B.A., U.K.; Design: H.O.T., B.A.; Data acquisition: M.I., U.K.; Data analysis: M.I., U.K.; Data interpretation: H.O.T., B.A.; Drafting of the manuscript: H.O.T., B.A., M.I., U.K.; Critical revision of the manuscript: H.O.T., B.A. All authors reviewed the results, approved the final version of the manuscript, and agreed to be accountable for all aspects of this study.

Ethical approval

This study was approved by the Non-Interventional Clinical Research Ethics Committee of Van Yüzüncü Yıl University (Date: December 6, 2019, Decision/Protocol No: 2019/17-08). Informed consent was obtained from all participants involved in this study.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of interest

The authors declare that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Generative AI statement

The authors declare that no generative AI or AI-assisted technologies were used in the writing or preparation of this study.

References

- Bahji, A., Danilewitz, M., Guerin, E., Maser, B., & Frank, E. (2021). Prevalence of and factors associated with substance use among Canadian medical students. *JAMA Network Open*, 4(11), e2133994. [\[Crossref\]](#)
- Cabanis, M., Outadi, A., & Choi, F. (2021). Early childhood trauma, substance use and complex concurrent disorders among adolescents. *Current Opinion in Psychiatry*, 34(4), 393–399. [\[Crossref\]](#)
- Conway, C. A., & Lewin, A. (2022). Development and psychometric properties of the ACE-I: Measuring adverse childhood experiences among Latino immigrant youth. *Psychological Trauma: Theory, Research, Practice, and Policy*, 14(8), 1247–1255. [\[Crossref\]](#)
- Çakıcı, M., Tutar, N., Çakıcı, E., Karaaziz, M., & Çakıcı, A. (2017). The prevalence and risk factors of psychoactive drug use in Turkish Republic of Northern Cyprus: 2003–2013. *Anatolian Journal of Psychiatry*, 18(2), 99–107. [\[Crossref\]](#)
- Dayi, A., Guleç, G., & Mutlu, F. (2015). Prevalence of tobacco, alcohol and substance use among Eskisehir Osmangazi University students. *Dusunen Adam: The Journal of Psychiatry and Neurological Sciences*, 28(4), 309–318. [\[Crossref\]](#)
- Demirci, M., & Eker, E. (2017). Üniversite öğrencilerinin madde bağımlılığı sıklığı ve madde kullanım özellikleri. *Anadolu Bil Meslek Yüksekokulu Dergisi*, 12(48), 63–84. <https://izlik.org/JA69HU35AD>
- Evren, C., Ovalı, E., Karabulut, V., & Çetingök, S. (2014). Psychometric properties of the Drug Use Disorders Identification Test (DUDIT) in heroin dependent adults and adolescents with drug use disorder. *Klinik Psikofarmakoloji Bülteni*, 24(1), 39–46. [\[Crossref\]](#)

- Fakili, F., Taylan, M., Doğru, S., & Al-Haithamy, S. (2024). Prevalence of smoking among medical students and associated factors in Turkey. *Journal of Substance Use*, 29(3), 382-388. [\[Crossref\]](#)
- Gale, M. S., Lenardson, J. D., Lambert, D., & Hartley, D. (2012). *Adolescent alcohol use: Do risk and protective factors explain rural-urban differences?* University of Southern Maine. https://digitalcommons.usm.maine.edu/behavioral_health/5
- Havaçeliği Atlam, D., & Yüncü, Z. (2017). Relationship between cigarette, alcohol, substance use disorders and familial drug use in university students. *Klinik Psikiyatri Dergisi*, 20(3), 161-170. [\[Crossref\]](#)
- Jackson, E. R., Shanafelt, T. D., Hasan, O., Satele, D. V., & Dyrbye, L. N. (2016). Burnout and alcohol abuse/dependence among U.S. medical students. *Academic Medicine*, 91(9), 1251-1256. [\[Crossref\]](#)
- Koç, A., Erim, B., & Boztaş, M. (2020). Influence of regional differences in substance use disorders. *Anatolian Journal of Psychiatry*, 21(1), 61-69. [\[Crossref\]](#)
- Köşger, F., & Altınöz, A. (2020). The relationship between attachment style and substance abuse proclivity in the students of a medical school. *Anatolian Journal of Psychiatry*, 21(4), 367-372. [\[Crossref\]](#)
- Lau, M., Chen, X., & Ren, Y. (2012). Increased risk of cigarette smoking among immigrant children and girls in Hong Kong: An emerging public health issue. *Journal of Community Health*, 37(1), 144-152. [\[Crossref\]](#)
- Livaditis, M., Samakouri, M., Kafalis, G., Tellidou, C., & Tzavaras, N. (2001). Sociodemographic and psychological characteristics associated with smoking among Greek medical students. *European Addiction Research*, 7(1), 24-31. [\[Crossref\]](#)
- Loy, J. K., Seitz, N.-N., Bye, E. K., Raitasalo, K., Soellner, R., Törrönen, J., & Kraus, L. (2021). Trends in alcohol consumption among adolescents in Europe: Do changes occur in concert? *Drug and Alcohol Dependence*, 228, 109020. [\[Crossref\]](#)
- Mahalik, J. R., Lombardi, C. M., Sims, J., Coley, R. L., & Lynch, A. D. (2015). Gender, male-typicality, and social norms predicting adolescent alcohol intoxication and marijuana use. *Social Science & Medicine*, 143, 71-80. [\[Crossref\]](#)
- Manhica, H., Gauffin, K., Almqvist, Y. B., Rostila, M., & Hjern, A. (2016). Hospital admission and criminality associated with substance misuse in young refugees: A Swedish national cohort study. *PLOS ONE*, 11(11), e0166066. [\[Crossref\]](#)
- Mansur, R. B., Cunha, G. R., Asevedo, E., Zugman, A., Rios, A. C., Salum, G. A., Pan, P. M., Gadelha, A., Levandowski, M. L., Belangero, S. I., Manfro, G. G., Stertz, L., Kauer-Sant'anna, M., Miguel, E. C., Bressan, R. A., Mari, J. J., Grassi-Oliveira, R., & Brietzke, E. (2017). Perinatal complications, lipid peroxidation, and mental health problems in a large community pediatric sample. *European Child & Adolescent Psychiatry*, 26(5), 521-529. [\[Crossref\]](#)
- Papazisis, G., Tsakiridis, I., & Sifas, S. (2018). Nonmedical use of prescription drugs among medical students and the relationship with illicit drug, tobacco, and alcohol use. *Substance Abuse: Research and Treatment*, 12, 1178221818802298. [\[Crossref\]](#)
- Saatçioğlu, Ö., Evren, C., & Çakmak, D. (2002). Alkol kullanım bozuklukları tanıma testinin geçerliği ve güvenilirliği. *Türkiye'de Psikiyatri*, 4(2), 107-113.
- Salisbury, T., Chamanadjian, C., & Nguyen, H. (2024). Substance misuse among medical students, resident physicians, and fellow physicians: A review with focus on the United States population. *Cureus*, 16(10), e72636. [\[Crossref\]](#)
- Sar, V., Öztürk, E., & İkikardeş, E. (2012). Validity and reliability of the Turkish version of Childhood Trauma Questionnaire. *Turkish Clinics Journal of Medical Sciences*, 32(4), 1054-1063. [\[Crossref\]](#)
- Sirkeci, İ., & Cohen, H. J. (2015). Hareketlilik, göç, güvensizlik. *İDEALKENT*, 6(15), 8-21. <https://izlik.org/JA42FN52TL>
- Şencan, F., & Canatan, K. (2020). Göç ve kentleşme sürecinde ergenlerin madde kullanımına yönelen sosyal bağlamın analizi. *Sosyal Çalışma Dergisi*, 4(2), 115-125. <https://izlik.org/JA38YA54GE>
- T.C. Sağlık Bakanlığı, Türkiye Halk Sağlığı Kurumu. (2013). *Türkiye kronik hastalıklar ve risk faktörleri sıklığı çalışması*. <https://ekutuphane.saglik.gov.tr/Ekutuphane/kitaplar/khrfat.pdf>
- Towers, E. B., Williams, I. L., Qillawala, E. I., Rissman, E. F., & Lynch, W. J. (2023). Sex/gender differences in the time-course for the development of substance use disorder: A focus on the telescoping effect. *Pharmacological Reviews*, 75(2), 217-249. [\[Crossref\]](#)
- Türkiye İstatistik Kurumu. (2023). *Türkiye sağlık araştırması, 2022*. <https://data.tuik.gov.tr>
- Türkiye Uyuşturucu ve Uyuşturucu Bağımlılığı İzleme Merkezi. (2018). *Türkiye'de genel nüfusta tütün, alkol ve madde kullanımına yönelik tutum ve davranış araştırması*. <https://www.narkotik.pol.tr/kurumlar/narkotik.pol.tr/Duyurular/T%C3%9CRK%C4%B0YE%E2%80%99DE%20GENEL%20N%C3%9CFUSTA%20T%C3%9CT%C3%9CN%20ALKOL%20VE%20MADDE%20KULLANIMINA%20Y%C3%96NEL%C4%BOK%20TUTUM%20VE%20DAVRANI%C5%9E%20ARA%C5%9ETIRMASI.pdf>
- World Health Organization. (2023a). *WHO report on the global tobacco epidemic, 2023: Protect people from tobacco smoke*. <https://www.who.int/publications/i/item/9789240077164>
- World Health Organization. (2023b). *WHO report on the global tobacco epidemic, 2023: Executive summary*. <https://history-commons.net/artifacts/18815481/executive-summary/19716037/>
- Yılmaz, H. B., Prajapati, P., Dalkılıç, A., Ünlü, A., Rahmani, M., & Pumariega, A. (2022). Impact of rural-urban immigration on substance use in a sample of Turkish youth. *World Social Psychiatry*, 4(2), 132-138. [\[Crossref\]](#)



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