ANALYSIS OF POST-MIGRATION TRAUMATIC EVENTS INFLUENCE ON IMMIGRANTS AND THEIR PERSONALITY TRAITS

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SUMMARY

Objectives: This study aims to analyse the way immigrants and their personality traits get affected by traumatic events in the post-migration process.

Methods: This descriptive study was conducted through Google Forms with the involvement of 2,509 immigrants. A descriptive questionnaire, the "IFOMA Post-Migration Post-Traumatic Effect Scale" and the "GADOT Personality Types Determination Scale" were used to collect the research data. Independent samples t-test, one-way ANOVA, and related sample Friedman's two-way analysis tests were used in data analysis.

Results: Immigrants were exposed to significant effects in all sub-dimensions of the Post-Migration Post-Traumatic Effect Scale. Experiencing post-traumatic stress was found to be significantly related to the research parameters, which, respectively, are gender, age, marital status, educational background, legal status, years of living in the current country, employment status, ethnicity, Turkish language proficiency, and post-migration psychological problems ($p < 0.05$); 42.8% of the immigrants had the Type 9 personality, and all personality types were affected by the Psychological Affection, Physical Affection, Anxiety, and Social Adaptation sub-dimensions, respectively ($p < 0.05$).

Conclusion: By analysing the impact of migration-induced trauma on immigrants within their society, it can be recommended to implement initiatives specific to immigrants' personality traits and to carry out protective/preventive projects that will minimize immigrants' exposure to trauma and encourage their participation in social adaptation processes.

INTRODUCTION

Globally increasing inequalities, technological developments, and changing regimes boost migration. In the ninth year of violence in Syria since March 2011, the number of Syrian immigrants throughout the globe unpredictably soared. According to United Nations High Commissioner for Refugees (UNHCR) data, as of March 2021, 11.7 million Syrians have been displaced, and 5.8 million of them live as immigrants in Lebanon, Jordan, Iraq, and primarily in Turkey (1). Migration, which is a global phenomenon, occurs voluntarily or compulsorily. Migration is divided into several dissimilar categories based on its occurrence, form, and post-migration process (2, 3). Migrants going through the migration process are exposed to certain conditions and challenges during and after their migration journey. These circumstances pose a risk to the health of migrants (4, 5). Migration, the act of moving from one region to another either temporarily or permanently, is eventually a traumatic case. Immigrants are generally exposed to stressful and traumatic events during migration. After going through traumatic migration journeys, migrants may experience severe mental health problems. Indeed, they make up the disadvantaged group in terms of mental health problems due to the loss of social support networks and the isolation caused by a lack of information (6, 7). Immigrants are at greater risk for psychiatric disorders, such as adjustment disorders, anxiety, depression, and schizophrenia (8). Studies have indicated that the stress experienced after migration negatively affects mental health (9, 10). One of the changes that migration brings about in the lives of individuals is mental health problems during the migration process. The most common

mental health problem among immigrants is post-traumatic stress disorder (PTSD). Immigrants' PTSD status is influenced by several factors, such as age, gender, exposure to violence during the migration process, loss of a relative, and injury (7). Another factor affecting the incidence and level of PTSD among immigrants is their personality type. The personality, comprising deep-rooted thinking, emotion, and behaviour patterns, being harmonious with lifestyle and developed by the individual consciously and unconsciously as a consequence of experiences and developmental and behavioural characteristics, is divided into nine distinct types: a reformer/perfectionist, helper, motivator (achiever, troubleshooter), individualist, investigator, loyalist (epicure), enthusiast, leader, and peacemaker. The way each personality type gets affected by events shows differences (11, 12). Although there are studies evaluating immigrants' personality types and their adaptation to the current society, no study has been conducted to determine the effects of trauma on immigrants and to identify their personality traits (13). This is important both for immigrants' involvement in society and the evaluation of the impact experienced during the migration process on personality traits. Taking these as a starting point, this study aims to analyse the level of the trauma-induced effect faced by immigrants and their personality traits during the post-migration process.

MATERIALS AND METHODS

The study, involving 2,509 immigrants who were reached within four months, was conducted in the descriptive research type. Immigrants, particularly those inhabiting a metropolitan city located in the Southeastern region of Turkey, took part in the study. Participation took place in accordance with snowball sampling. Immigrants who were eligible to contact and volunteered to participate were included in the study through improbable sampling. All the forms used in the study were filled in personally by the participants. Immigrants who had Arabic literacy participated in the study.

Data Collection Tools

The research data were collected through the descriptive questionnaire, the "IFOMA Post-Migration Post-Traumatic Effect Scale," and the "GADOT Personality Types Determination Scale." All forms were in Arabic, and the researchers participating in the data collection process were experts who could speak and understand the Arabic language.

Descriptive Questionnaire. The form was created by the researchers based on relevant literature and comprised questions related to age, gender, marital status, educational background, employment status, Turkish language proficiency, country of origin, current city, legal status, income levels, psychological problems faced (if any), and actions taken in case of such a problem (14, 15).

IFOMA Post-Migration Post-Traumatic Effect Scale. Avci et al. developed this scale to determine immigrants' exposure to post-traumatic effects after migration (16). The scale aims to reveal the post-traumatic effects faced by immigrants in the post-migration process and identify their need for psychological support based on the traumatic experience within the affected

sub-dimensions. It comprises four sub-dimensions: Psychological Affection, Physical Affection (somatization), Anxiety, and Social Adaptation, including a total of 36 questions. The scale does not have a total score; the scores obtained from each sub-dimension show the degree of specific impact faced in that dimension and the frequency of the problems experienced. Cronbach's alpha coefficients were found to be 0.94 for Psychological Affection, 0.89 for Physical Affection (somatization), 0.80 for Anxiety, and 0.59 for Social Adaptation. On the other hand, Cronbach's alpha coefficients in this study were found to be 0.93 for Psychological Affection, 0.88 for Physical Affection, 0.88 for Anxiety, and 0.53 for Social Adaptation.

GADOT Personality Types Determination Scale. The scale, developed by Güngörmüş et al. consisted of nine dimensions and a total of 64 items for the determination of nine personality types (17). The scale did not have a total score. Each dimension of the scale had its own total score. Each sub-dimension represented a personality type, and it was possible to use those types together or separately. In the form, developed to determine the personality types specified in the Enneagram test, personality types were classified as follows: Type 1: reformer/perfectionist, Type 2: helper, Type 3: success-oriented, Type 4: individualist/original,

Table 1. *Distribution of some immigrant characteristics regarding immigration processes (N = 2,509)*

	n	%
Length of stay in Turkey (years)*, mean (SD)	6.34 (2.56)	–
Ethnicity		
Syrian	2,437	97.1
Iraqi	41	1.6
Afghan	31	1.3
Turkish proficiency		
Yes	1,575	62.8
No	934	37.2
Social security availability		
Available	586	23.4
Not available	1,923	76.6
Province of residence		
Sanliurfa	1,501	59.8
Gaziantep	508	20.3
Istanbul	500	19.9
Current legal status		
Temporary protection	1,433	57.1
Refugee	520	20.7
Asylum seeker	330	13.2
TR citizen/touristic stay	226	9.0
Whether suffered any psychological problems after immigrating		
Suffered	1,378	54.9
Not suffered	1,131	45.1
Action taken when suffered psychological problem		
No action taken	457	54.3
Sharing with relatives	239	28.4
Getting help from a doctor	79	9.4
Using medication	66	7.9

*Length of stay in Turkey: min–max 1–22 years

Type 5: investigator, Type 6: interrogative, Type 7: curious, Type 8: challenger, Type 9: peacemaker, and relevant characteristics of these types were described. Cronbach's alpha coefficients were found to be as follows: Type 1: 0.84, Type 2: 0.83, Type 3: 0.82, Type 4: 0.70, Type 5: 0.75, Type 6: 0.80, Type 7: 0.76, Type 8: 0.84, Type 9: 0.83. On the other hand, Cronbach's alpha coefficients in this study were found to be as follows: Type 1: 0.75, Type 2: 0.76, Type 3: 0.77, Type 4: 0.74, Type 5: 0.72, Type 6: 0.78, Type 7: 0.79, Type 8: 0.78, Type 9: 0.73.

Data Analysis

Data analysis was made using the SPSS 20.0 package program. The Kolmogorov-Smirnov test was used to check whether the data were normally distributed or not. In data analysis, independent samples t-test, one-Way ANOVA, and related samples Friedman's two-way analysis were used for the normality of distribution.

Also, descriptive statistics such as percentages and means were used. The significance value was accepted as $p < 0.05$.

Ethical Aspect of the Research

Before starting the research, approval of the Social Sciences Ethics Committee of Ondokuz Mayıs University (2021–1044) and permission from the Directorate General of Migration Management were received.

RESULTS

The mean age of the immigrants who took part in the study was 32.52 ± 10.45; 50.1% of the participants were males, 37.5% were university graduates, and 52.3% were married; 42.8% had a specific job while 59.7% had a moderate income level,

Table 2. *Difference between immigrants' IFOMA Post-Migration Post-Traumatic Stress Effect Scale data and their socio-demographic characteristics*

Characteristics	IFOMA Post-Migration Post-Traumatic Stress Effect Scale							
	Psychological affection		Physical affection (somatization)		Anxiety		Social Adaptation	
	Mean (SD)	Statistics	Mean (SD)	Statistics	Mean (SD)	Statistics	Mean (SD)	Statistics
Gender								
Female	47.34 (14.78)	t = 2.099	23.60 (8.20)	t = 4.169	14.54 (5.67)	t = 2.158	11.22 (3.15)	t = 3.155
Male	46.10 (14.75)	**p = 0.036**	22.24 (8.09)	**p < 0.001**	14.05 (5.66)	**p = 0.031**	11.62 (3.16)	**p = 0.002**
Educational status								
Literate*	49.72 (14.10)		24.06 (8.15)		15.43 (5.44)		11.33 (3.15)	
Primary education	45.95 (15.49)	F = 5.279	22.64 (8.38)	F = 2.878	13.88 (5.90)	F = 5.834	10.92 (3.20)	F = 4.494
High school	45.85 (14.75)	**p < 0.001**	22.40 (7.83)	**p = 0.022**	13.76 (5.46)	**p < 0.001**	11.45 (3.05)	**p = 0.001**
University	46.21 (14.39)		23.03 (8.12)		14.32 (5.60)		11.67 (3.12)	
Postgraduate degree	47.85 (15.67)		22.23 (8.87)		14.51 (6.27)		11.42 (3.45)	
Marital status								
Married	46.36 (15.01)	F = 9.543	22.37 (8.2)	F = 10.396	13.87 (5.69)	F = 7.802	11.30 (3.19)	F = 2.326
Single	46.62 (14.02)	**p < 0.001**	23.33 (8.0)	**p < 0.001**	14.77 (5.58)	**p < 0.001**	11.57 (3.09)	p = 0.098
Widow/spouse missing*	53.50 (18.56)		25.95 (9.5)		14.66 (6.06)		11.20 (3.47)	
Employment status								
Employed	46.06 (14.27)	t = −1.930	22.78 (7.96)	t = −0.730	13.97 (5.57)	t = −2.461	11.17 (3.20)	t = −3.405
Unemployed	47.21 (15.12)	p = 0.054	23.02 (8.33)	0.466	14.53 (5.74)	**p = 0.014**	11.60 (3.11)	**p = 0.001**
Turkish proficiency								
Yes	45.88 (13.94)	t = −3.561	22.82 (7.87)	t = −0.814	14.25 (5.51)	t = −0.441	11.46 (3.11)	t = 0.937
No	48.13 (15.99)	**p < 0.001**	23.10 (8.65)	p = 0.416	14.36 (5.93)	p = 0.660	11.34 (3.24)	p = 0.354
Ethnicity								
Syrian	46.65 (14.82)	F = 2.634	22.92 (8.20)	F = 2.828	14.26 (5.67)	F = 4.335	11.40 (3.16)	F = 1.759
Iraqi	46.17 (13.32)	p = 0.072	20.93 (7.91)	p = 0.059	17.26 (4.11)	**p = 0.013**	11.59 (2.84)	p = 0.172
Afghan	52.74 (11.69)		25.55 (5.31)		14.02 (5.98)		12.45 (3.14)	
Current legal status								
Temporary protection	45.16 (16.43)		21.30 (8.52)		12.81 (5.78)		12.81 (5.78)	
Refugee	48.33 (9.85)	F = 22.112	25.32 (5.95)	F = 67.3	16.78 (4.19)	F = 135.1	16.78 (4.19)	F = 12.031
Asylum seeker*	51.90 (11.89)	**p < 0.001**	26.98 (7.0)	**p < 0.001**	17.90 (4.51)	**p < 0.001**	17.90 (4.51)	**p < 0.001**
TR citizen/touristic stay	45.36 (14.84)		21.74 (8.52)		12.70 (5.04)		12.70 (5.04)	
Whether suffered any psychological problems after immigrating								
Suffered	51.10 (14.13)	t = 17.346	24.66 (7.96)	t = 12.099	15.27 (5.45)	t = 9.606	12.05 (3.12)	t = 11.301
Not suffered	41.38 (13.75)	**p < 0.001**	20.80 (7.92)	**p < 0.001**	13.11 (5.71)	**p < 0.001**	10.65 (3.03)	**p < 0.001**

*Variable that differs in one-way ANOVA analysis

Table 3. *Relationship of immigrants' age and years of stay in the country with sub-dimensions of Post-Migration Post-Traumatic Effect Scale*

	Psychological affection	Physical affection (somatization)	Anxiety	Social adaptation
Age	**r = −0.053**	r = −0.093	r = −0.116	r = −0.074
	p = 0.008	**p < 0.001**	**p < 0.001**	**p < 0.001**
Years of stay in the country	r = −0.032	r = 0.028	**r = 0.046**	r = −0.007
	p = 0.104	p = 0.164	**p = 0.021**	p = 0.723

47.5% had permanent jobs, and 28% were workers; 54.9% of the immigrants stated they had psychological problems after immigration, and 54.3% of the immigrants who reported having such a problem expressed they did nothing when they experienced that problem (Table 1).

Female immigrants had higher mean scores from the Psychological Affection, Physical Affection (somatization), and Anxiety sub-dimensions, while male immigrants were more severely affected in the Social Adaptation sub-dimension

($p < 0.05$). Also, scores from all the sub-dimensions of the Post-Migration Post-Traumatic Stress Effect Scale differed significantly according to educational background and marital status ($p < 0.05$). In addition, scores from the Anxiety and Social Adaptation sub-dimensions of the Post-Migration Post-Traumatic Stress Effect Scale differed significantly according to employment status ($p < 0.05$). Finally, scores from all the sub-dimensions of the Post-Migration Post-Traumatic Stress Effect Scale differed significantly according to legal status
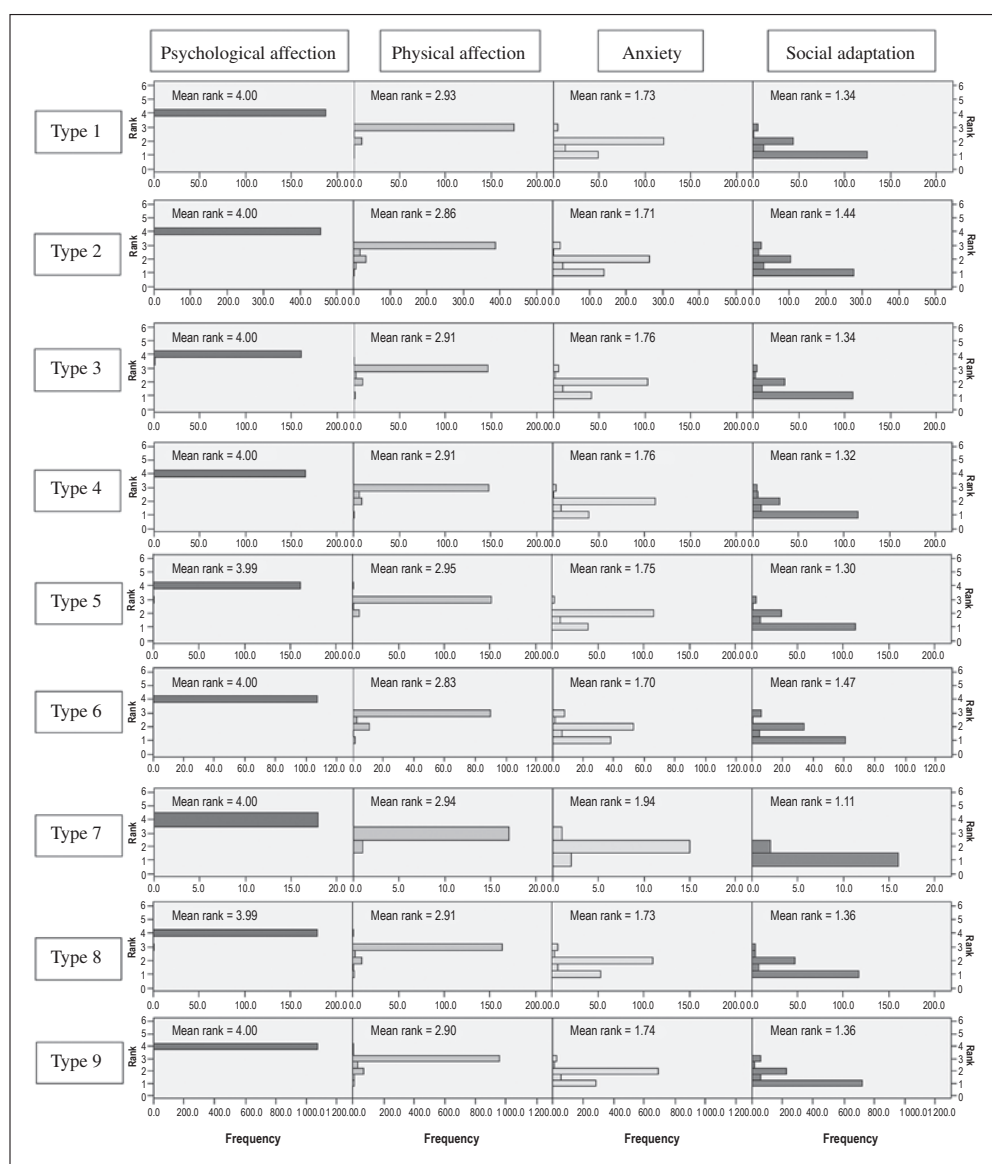
Fig. 1. *Comparison of immigrants' personality types with Post-Migration Post-Traumatic Stress Affect Scale sub-dimensions.*
p < 0.05; related sample Friedman's two-way analysis

and the presence of post-migration psychological problems (p < 0.05) (Table 2).

Younger immigrants were found to get more intensely affected in all the sub-dimensions of the Post-Migration Post-Traumatic Stress Effect Scale (p < 0.05). As the immigrants' years of stay in the country increased, their anxiety levels also increased (p < 0.05) (Table 3).

The primary personality type of the immigrants was Type 9 (peacemaker personality type) (Table 4).

The immigrants of each personality type were determined to be variously affected in the four sub-dimensions of the Post-Migration Post-Traumatic Stress Effect Scale. The ranking of Post-Migration Post-Traumatic Stress Effect Scale sub-dimensions among all personality types occurred as Psychological Affection, Physical Affection (somatization), Anxiety, and Social Adaptation, respectively (Fig. 1).

DISCUSSION

Investigating the effects of post-migration traumatic events on immigrants and analysing their personality traits, the current study found that immigrants were exposed to significant effects in the Psychological Affection, Physical Affection, Anxiety, and Social Adaptation sub-dimensions. Indeed, previous studies also show that post-migration post-traumatic stress disorder is quite common among immigrants (9, 14).

In the present study, female immigrants were observed to get more affected in the Psychological Affection, Physical Affection, and Anxiety sub-dimension, whereas males were more affected in the Social Adaptation sub-dimension (p < 0.05). Globally, women are usually forced to migrate (19, 20), and they are exposed to many atrocities, such as neglect, sexual violence, discrimination, and physical and psychological violence during this challenging process (21, 22). This situation is considered to cause the social adaptation of immigrant men to be worse than that of women.

The current study determined that as the immigrants' ages decreased, their likeliness to experience psychological and physical (somatization) effects, anxiety, and social adaptation problems increased. Similarly, Ahmad et al. found that as the age of the immigrants increased, the incidence of PTSD increased as well (15). Young immigrants are more likely to get involved in working and social life. On the other hand, they go through many challenges, such as communication problems due to a lack of language proficiency, long working hours, and discrimination (23). Thus, young immigrants are considered more likely to get affected psychologically and physically, suffer anxiety, and have problems with social adaptation.

Regarding the educational background, the study found that literate immigrants were more negatively affected in all sub-dimensions, including Psychological Affection, Physical Affection (somatization), Anxiety, and Social Adaptation, than those with other educational backgrounds. However, Kaya et al. found no relationship between educational background and PTSD (18). As a result, when individuals with a high level of education encounter a problem, they can try to solve and overcome the problem without harming their psychological and physical health.

In the current study, the immigrants, widowed or with a missing spouse, were found to be more likely to experience psychological

Table 4. GADOT Personality Types Determination Scale mean score

	n	%
Type 1	187	7.5
Type 2	453	18.1
Type 3	162	6.5
Type 4	165	6.6
Type 5	162	6.5
Type 6	107	4.2
Type 7	18	0.6
Type 8	180	7.2
Type 9	**1,075**	**42.8**

or physical (somatization) effects, while anxiety mostly affected single immigrants. Immigrants who are obliged to go through the migration process on their own are more likely to experience mental health problems since they do not use adequate strategies to overcome stress (24, 25). Migration is a stressful process. Whether immigrants are provided with effective social support networks affect their competency in coping with stress in the post-migration period. For this reason, the immigrants, with no spouse by their side, might be more vulnerable to post-traumatic effects in this process.

In this study, post-migration anxiety and social adaptation problems were found to be more common among unemployed immigrants (p < 0.05). Similarly, Alpak et al. detected a significant relationship between employment status and post-traumatic stress (9). Working and being engaged in a job reduces the probability of having psychological problems since it relaxes individuals mentally (26, 27). Therefore, it can be stated as an expected result that unemployed immigrants face more anxiety and have poor social adaptations.

Another finding obtained in the study is that immigrants going through post-migration psychological problems faced more psychological and physical effects, anxiety, and social adaptation problems than those with no psychological problems (p < 0.05). The study conducted by Sangalang et al. revealed that asylum seekers and refugees underwent considerable post-migration anxiety problems and psychological effects (14). It is regarded as an expected result that immigrants who spontaneously and subjectively report having psychological problems get psychologically and physically affected, experience more anxiety, and have poorer social adaptations.

The primary personality type of the immigrants involved in the study was Type 9 (peacemaker), and all personality types experienced effects in Psychological Affection, Physical Affection, Anxiety, and, finally, Social Adaptation sub-dimensions, respectively. The traits of Type 9 personality are being mediating, guiding, peacemaker, and avoiding conflicts. Those individuals refrain from tensions and resist living in the way stipulated by others (28, 29). It is thought-provoking that individuals of this personality type experience the most severe post-migration traumatic effects. This result suggests that all immigrants, including this personality type, are likely to face post-migration traumatic effects.

CONCLUSION

Many socio-demographic characteristics and personality traits of the immigrants who took part in the study influenced their post-migration post-traumatic stress experiences. Gender, age, marital status, educational background, legal status, years of stay in the current country, employment status, ethnicity, Turkish language proficiency, post-migration psychological problems, and personality type are the variables that affect immigrants' post-traumatic stress experiences. By analysing the impact of migration-induced trauma on immigrants within their society, it can be recommended to implement initiatives specific to immigrants' personality traits and to carry out interventional projects that will minimize immigrants' exposure to trauma and encourage their participation in social adaptation processes. In particular, public health nurses, psychiatric nurses and psychologists who work with immigrants can plan their attempts at personality analysis of immigrants.

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