

## ORIGINAL ARTICLE

### Migratory stress and cultural adaptation: what are the associations with migrants' personal and socio-demographic characteristics? Inter-cultural research in the Italian context

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#### ABSTRACT

**Background:** The experience of migration has a negative impact on migrants' mental health and their ability to adapt to new contexts and initiate a process of acculturation (Williams and Sternthal, 2010; Khan and Hasan, 2019). The effects of migratory stress may, however, be more intense in some individuals who are particularly vulnerable as they are simultaneously burdened by various economic, cultural and social difficulties.

**Objective:** To assess whether there is an association between the socio-demographic characteristics of migrants, their levels of adaptation and the intensity of migratory stress. This work should lead to a greater understanding of the set of variables that can have a relevant influence on migrants' well-being in order to promote and orient health promotion and prevention interventions for members of this population that are aimed at enhancing their individual resources.

**Methods:** The study is cross-sectional and was conducted on a total of 503 migrants (60.6% male) aged between 20 and 55 years ( $M=36.11$  years;  $SD=9.73$ ) from four continents and 47 countries. All participants completed the Revised Socio-Cultural Scale (SCAS-R) and the List of Migration Experiences (LiMEs) to assess adaptation and migratory stress, respectively; in addition, participants provided data on their socio-demographic characteristics and reasons for migration. By means of analyses of variance and post-hoc comparisons (Bonferroni), associations between migrants' socio-demographic characteristics and their levels of adaptation and migration stress were assessed.

**Results:** The area of origin, level of education and occupation significantly influence migrants' adaptation levels; furthermore, the level of education also influences the intensity of migratory stress. In particular, people who have studied for a longer time are more likely to adapt to the new context and cope more energetically with the stress associated with the migration experience.

**Conclusion:** This work provides operational guidance for the development and implementation of concrete projects and interventions that can have a significant beneficial effect on the mental health status of migrants and promote adaptation, inclusion and integration by taking into account the specific characteristics of each migrant.

#### ARTICLE HISTORY

*Received:* December 8, 2023

*Accepted:* May 9, 2024

*Firstly published online:* February 20, 2025

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Ass. Crossing  
Dialogues, Italy

#### KEYWORDS

Migration  
Migratory Stress  
Adaptation  
Socio-demographics  
Well-being

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*DIAL PHIL MENT NEURO SCI 2024; 17(1):1-16*

#### INTRODUCTION

Establishing the exact number of migrants in the world is quite difficult because many of them leave their country of origin and travel to a foreign land irregularly. The reasons behind migration can be very different from one case to another: some go abroad for study or to reunite

with family and friends, others for work or economic reasons, and others because they are refugees or asylum seekers (Caritas, 2019). Data from the UN Refugee Agency (2021) estimate that there are currently 89.3 million people in the world who have fled their countries to escape war or situations of danger or hardship, violence, persecution and places where human rights violations occur. In Italy, the Statistical Report on Immigration 2021 reported that more than 5 million migrants (5,013,200) resided in the country in 2020. The characteristics of this population are very heterogeneous with a slight prevalence of women (51.9%); migrants residing in Italy are on average 35 years old, 20% of whom have not yet reached the age of majority. With regard to the geographical area of origin, of the 5 million foreign citizens residing in Italy, 2.5 million are European (of which 1.5 million are from EU countries), 1.1 million are from African states, 1.1 million are from Asia, and 369,000 migrants are from Central and South America (Caritas and Migrants, 2020). The need to adapt to a new context by initiating a process of acculturation very often produces migratory stress (Khan and Hasan, 2019) especially in those situations where prejudice and discrimination cause humiliation and discomfort in migrants (Clausen et al., 2009) or compromise their psychological health by promoting the emergence of symptoms of depression, anxiety and post-traumatic stress (Cook et al., 2009; Torres and Wallace, 2013). Migration stress may also occur more intensely among those who simultaneously face different economic, cultural and social difficulties: however, these difficulties may produce varying outcomes among migrants, as each of them possesses personal resources that can counteract the effects of migration stress. For example, some authors have observed on migrant populations that the use of adaptive coping strategies (Monzani et al., 2015; Crockett et al., 2007; Chiu-Wan and Siu-Yuk, 2005) and the presence of resilience can foster positive adaptation to the new context while hindering the effects of migration stress (Hu et al., 2020; Yildirim, 2019; Arslan et al., 2020). In order to foster the emergence of an inclusive society that shows fairness and solidarity with the most vulnerable, it is important to delve into the migration phenomenon by trying to understand what factors may influence migrants' adaptation to new contexts (Masocha and Simpson, 2012). Several authors have shown how the migration experience has a negative impact on migrants' mental health (Williams and Sternthal, 2010).

## **OBJECTIVE**

The objective of this study is to assess whether there is an association between the socio-demographic characteristics (including the reason for migration) of migrants and their levels of adaptation and migration stress. This work should lead to a greater understanding of the set of personal variables and resources that may have a relevant influence on migrants' wellbeing in order to promote and orient health promotion and prevention interventions aimed at members of this population that are designed to enhance their individual resources (Diwan et al., 2004; Bentley et al., 2014).

## **Hypotheses**

It is hypothesised that levels of migration stress and adaptation differ according to the socio-cultural and demographic characteristics of respondents (age, gender, marital status, level of education/schooling) (Diwan et al., 2004; Schwartz et al., 2006; Mookherjee, 1997; Nicholson, 1997). In particular, we hypothesise the following:

**H1:** Levels of migration stress and adaptation are expected to differ according to the gender of migrants (Takeuchi et al., 2007; Xu and Chi, 2013; Khan and Hasan, 2019) with women expected to exhibit lower levels of adaptation and higher levels of migration stress than men (Krishnan and Berry 1992; Liebkind and Jasinskaja-Lahti, 2000).

**H2:** Levels of migration stress and adaptation are expected to differ according to the age of migrants (Takeuchi et al., 2007; Xu and Chi, 2013; Khan and Hasan, 2019) showing lower levels of adaptation and migration stress among younger migrants (Diwan et al., 2004; Rudmin, 2003; Sam et al., 2006).

**H3:** Levels of migration stress and adaptation are expected to differ according to the marital status of migrants (Takeuchi et al., 2007; Aragona et al., 2008; Khan and Hasan, 2019; Xu and Chi, 2013) with married people expected to show higher levels of adaptation and lower levels of migration stress as they can rely on spousal support (Mookherjee, 1997; Polek and Schoon, 2008; Bookwala and Fekete, 2009).

**H4:** levels of migration stress and adaptation differ according to the reason for migration (Xu and Chi, 2013; Khan and Hasan, 2019): in particular, it is hypothesised that those who migrate for study, economic/work or family reunification reasons face lower levels of migration stress than those who move for political reasons (Nicholson, 1997; Polek and Schoon, 2008; Knipscheer and Kleber, 2006; Masocha and Simpson, 2012; Chu et al., 2013). By virtue of their greater experience in coping with adversity, people migrating for political reasons (often refugees or asylum seekers) should have developed greater adaptive capacities.

**H5:** Levels of migration stress and adaptation, resilience and coping are expected to differ by educational level (Akiyama, 1996; Takeuchi et al., 2007; Xu and Chi, 2013; Khan and Hasan, 2019) and occupation (Khan & Hasan, 2019). People with higher educational attainment and stable employment are expected to exhibit lower levels of migration stress and greater adaptation in the host country. It is also intended to explore whether levels of migration stress and adaptation differ according to the continent of origin of migrants (Takeuchi et al., 2007; Williams and Sternthal, 2010; Khan & Hasan, 2019).

## **METHODOLOGY**

Prior to taking part in the research, each subject was presented with both the information and consent to participate in the study, and the information for the processing of data in the context of a research project (in line with the General Data Protection Regulation, GDPR, EU Regulation No. 679/2016 of 27.04.2016), which participants could not only view but also sign. Participation in the research, was conducted in accordance with the principles of the Declaration of Helsinki concerning biomedical research involving human beings, was therefore anonymous and voluntary and participants could withdraw from the investigation at any time.

### **Participants**

The research was conducted on 503 adults with migration experience (305 males 60.6%, 206 females 198, 39.4%) aged between 20 and 55 years ( $M=36.11$  years;  $SD=9.73$ ) from four continents (47 countries). Within the study we chose to find information on migrants who have been living in Italy for many years. In particular, one of the basic requirements to take part in

the study was the participants should be residing in Italy at least five years or more. Those subjects with less than 5 years' residence in Italy were not included. On average, study participants spent 9 years and 6 months in Italy, ranging from a minimum of 5 years to a maximum of 15. Five age groups were considered in this study, distributed as follows: 20 years (N=10), 21-30 years (N=172), 31-40 years (N=139), 41-50 years (N=176), and over 50 years (N=6). Among the respondents, most belong to the 41-50 age group (35%), while the least represented are those aged 51 and over (1.2%).

With regard to origin, since the migrants considered in the study came from as many as 47 different countries, it was decided to classify them according to their geographical area of origin. The migrants who participated in the study came from various ethnic groups ranging from Africa (N=289), Asia (N=80), Eastern Europe (N=60), and South America (N=74). As the data show, more than half of the immigrants come from the African continent (57.5%), followed by Asia, South America and Eastern Europe. The most represented nations are: Nigeria (10.9%), Ghana (8.9%), Senegal (7.0%), Peru (5.4%), and South Sudan (5.0%).

With reference to marital status, some migrants are married and travelled with their spouse (and eventual children) while others are young people looking for work or going to the host country for study reasons and travelled alone; still others, although adults, do not have a partner to count on because they are single, divorced or separated. In the total sample, marital status is distributed as follows: single (N=215), married with children (N=218), married without children (N=63), divorced (N=7).

Among the migrants who took part in the survey, some possessed a high educational qualification such as a university degree or a post-graduate certificate, while others held only a primary or secondary school diploma or licence. The subjects were classified into the following categories: primary school (N=122), secondary school (N=172), graduate (N=91), university (N=118).

**Table 1. Distribution of participants based on gender**

Gender	N	%	% Cumulative
Male	305	60.6 %	60.6 %
Female	198	39.4 %	100.0 %

**Table 2. Distribution of participants based on continents of origin**

Continent	N	%	% Cumulative
Africa	289	57.5 %	57.5 %
Asia	80	15.9 %	73.4 %
East Europe	74	14.7 %	88.1 %
South America	60	11.9 %	100.0 %

A further variable considered in the study is employment status. In particular, some of the migrants consulted in this research were students, others held a job (with or without a contract) and others were unemployed. At the employment level, the subjects of the total sample were classified as follows: student (N=56), unemployed (N=135), employed with contract (N=203), employed without contract (N=109).

**Table 3. Distribution of participants based on marital status**

Status	N	%	% Cumulative
Single	215	42.7 %	42.7 %
Married with children	218	43.3 %	86.1 %
Married without children	63	12.5 %	98.6 %
Divorced	7	1.4 %	100.0 %

**Table 4. Distribution of participants based on the level of education**

Level	N	%	% Cumulative
Primary	122	24.3 %	24.3 %
Secondary	172	34.2 %	58.4 %
Tertiary	91	18.1 %	76.5 %
University	118	23.5 %	100.0 %

**Table 5. Distribution of participants based on occupational status**

Occupation	N	%	% Cumulative
Student	56	11.1 %	11.1 %
Unemployed	135	26.8 %	38.0 %
Employed with contract	203	40.4 %	78.3 %
Employed without contract	109	21.7 %	100.0 %

### Survey instruments

Different scales were used to measure the constructs of interest. They were administered to migrants who had already been resident in Italy for a period of five years or more and who resided in the main Italian cities: two from the north (Turin and Bologna), two from the centre (Rome and Pescara) and two from the south (Caserta and Palermo). The number of questionnaires were administered was determined on the basis of the statistical universe of the migration phenomenon and the various institutional reports (Ministry of the Interior, Ministry of Labour and Social Policies, Caritas) or Statistical Institutes (ISTAT). It was therefore decided to dispense over 500 questionnaires.

- Migratory stress was measured by means of the LiMEs (List of Migration Experiences), a self-report instrument designed to assess two dimensions: traumatic experiences and life difficulties in migration contexts (Aragona et al., 2014). The scale in its original version

contains 59 items: in this research, attention was only paid to the dimension of life difficulties in migration contexts (30 items, number 29 to number 59) (Aragona et al., 2020). A check-list-type response system was used, so that subjects could indicate with a simple tick whether the event described in the item had occurred or not. The term "stressful" was also added to the original list of items as it was considered useful in a research context on post-traumatic stress reactions (Aragona et al., 2012).

- Migrants' adaptation was measured using the Revised Socio-Cultural Adaptation Scale (SCAS-R; Searle and Ward, 1990). The SCAS-R was designed as a measure of self-reported behavioural ability to adapt to a new cultural context. The scale consists of 21 items and allows for the identification and measurement of 5 dimensions: Interpersonal communications (7 items) which refers to the ability to respond clearly to communications (verbal and non-verbal) from members of the host community, obtain the services one requires, improve communication skills, interact with colleagues or with people of the opposite sex, modify one's capacity to adapt to the host country's typical modes of interaction; Academic/work performance (5 items), which concerns the ability to work effectively, take responsibility, perform well at work and in academia, and interact with bureaucracy; Personal interests and community involvement (4 items), related to the ability to interact with members of the host community during social events or common activities, build and maintain relationships, and cultivate hobbies; Ecological adaptation (3 items), concerning the ability to adapt to the characteristics of the new living environment, such as population density, noise and pace of life; Linguistic competence (2 items), concerning the ability to understand, speak, read and write the language of the host country. A 5-point Likert scale (from 1 "Not at all competent" to 5 "Extremely competent") was used to answer all items.

### Data analysis

Data analyses were performed using SPSS statistical software (version 25.0); in addition, MACRO PROCESS for SPSS (Hayes, 2017) was used for mediation analysis. The number of questionnaires to be administered was determined using the G\*Power programme which, at a level of  $\alpha = 0.05$  and with a power of .95, indicated that the minimum number of participants should be 472 individuals. It was therefore decided to administer over 500 questionnaires. Before proceeding with the data analysis, the collected data were examined and those participants who had returned incomplete questionnaires or had anomalies in their completion were removed from the study. Descriptive statistics were calculated for all scales and subscales used in the study (mean and standard deviation, minimum and maximum) (Goodwin and Goodwin, 2013). This made it possible to carry out a preliminary check for possible data entry errors, verifying that all entered scores fell within the expected ranges. In addition, the presence of any univariate outliers, i.e. scores that were anomalous with respect to the rest of the distribution, was checked. In order to handle missing data, a listwise strategy was chosen, whereby only those cases with valid scores on the entire set of variables were analysed. In addition, it was also checked whether the assumption of normality was respected by analysing the shape, skewness and kurtosis indices (Crea, 2021). At the same time, the reliability of the same scales and subscales was verified by calculating Cronbach's Alpha index. In order to assess whether there were significant differences between participants in relation to the main

study variables (adaptation, migration stress), univariate analyses of variance were carried out (followed by post-hoc comparisons where necessary using Bonferroni's method). The independent variables consisted of the participants' gender, age group, geographical origin, marital status, level of education, occupation and reason for migration. The dependent variables, on the other hand, consist of the mean scores obtained on the adaptation (SCAR-R) and migration stress (LiMEs) scales.

## **RESULTS**

### **Gender**

No significant differences emerged between men and women with regard to the intensity of migration stress or the level of adaptation. Men and women therefore seem to experience migration stress with similar intensity and also show equivalent adaptive capacities.

### **Age**

Considering the age groups, no significant differences were observed with regard to the mean scores of the scales and subscales considered: thus, the levels of migratory stress and adaptation do not seem to be affected at all by the age of the participants and the possibility of experiencing a different time period.

### **Marital status**

Comparing the participants according to marital status, no significant differences were observed with regard to the mean scores of the scales and subscales used in the survey: thus, the mean levels of migratory stress and adaptation do not seem to be affected at all by the marital status of the participants.

### **Level of education**

The analysis of variance showed significant differences between the groups considered (primary, secondary, diploma, degree) with respect to migration stress ( $F(3,499)=2.95$ ;  $p=.032$ ) and also with respect to all scales assessing adaptation: interpersonal communication ( $F(3,499)=14.20$ ;  $p<.001$ ), academic or work performance ( $F(3,499)=14.69$ ;  $p<.001$ ), personal interests and community involvement ( $F(3,499)=7.68$ ;  $p<.001$ ), ecological adaptation ( $F(3,499)=7.39$ ;  $p<.001$ ), language proficiency ( $F(3,499)=19.64$ ;  $p<.001$ ) and general levels of adaptation ( $F(3,499)=17.95$ ;  $p<.001$ ).

**Table 6 - Difference between groups relative to gender**

	F	df1	df2	p
Migratory stress	0.44880	1	501	0.503
Interpersonal communication	1.37068	1	501	0.242
Academic / work performance	0.62753	1	501	0.429
Personal interest and community involvement	0.62587	1	501	0.429
Ecological adaptation	0.94152	1	501	0.332
Language proficiency	0.36334	1	501	0.547
Adaptation	0.82560	1	501	0.364

**Table 7 - Difference between groups relative to age**

	F	df1	df2	p
Migratory stress	0.7347	4	498	0.569
Interpersonal communication	0.4294	4	498	0.787
Academic / work performance	0.2926	4	498	0.883
Personal interest and community involvement	0.1092	4	498	0.979
Ecological adaptation	0.4333	4	498	0.785
Language proficiency	0.0444	4	498	0.996
Adaptation	0.1621	4	498	0.957

**Table 8 - Difference between groups relative to marital status**

	F	df1	df2	p
Migratory stress	1.223	3	499	0.301
Interpersonal communication	0.949	3	499	0.417
Academic/work performance	0.450	3	499	0.717
Personal interest and community involvement	0.330	3	499	0.804
Ecological adaptation	0.662	3	499	0.576
Language proficiency	2.344	3	499	0.072
Adaptation	0.435	3	499	0.728



**Table 9 – difference between group relative to educational level**

	F	df1	df2	P
Migratory stress	2.95	3	499	0.032
Interpersonal communication	14.20	3	499	< .001
Academic/work performance	14.69	3	499	< .001
Personal interest and community involvement	7.68	3	499	< .001
Ecological adaptation	7.39	3	499	< .001
Language proficiency	19.64	3	499	< .001
Adaptation	17.95	3	499	< .001

Post-hoc comparisons showed that migrants with a primary school leaving certificate report higher levels of migration stress than those with a diploma (mean difference=-2.33;  $p=.048$ ). Significant results were also observed in relation to migrants' adaptation levels: specifically, those with a diploma obtained higher average scores on the interpersonal communication scale than those who had completed primary school (mean difference=-2.55;  $p<.001$ ) and secondary school (mean difference=-2.81;  $p<.001$ ). Similarly, migrants with a university degree also showed higher average scores in interpersonal skills than those who had completed primary school (mean difference=-2.21;  $p<.001$ ) and secondary school (mean difference=-2.47;  $p<.001$ ). In contrast, no significant differences were found between university graduates and high school graduates.

Scores on the work or academic performance scale follow those observed on the previous scale. In fact, migrants who have completed a diploma obtain higher average scores in academic or work performance than those who have completed primary (mean difference=-2.20;  $p<.001$ ) and secondary school (mean difference=-2.03;  $p<.001$ ). Similarly, migrants with university degrees also showed higher average scores in academic or work performance than those who had completed primary (mean difference=-2.00;  $p<.001$ ) and secondary school (mean difference=-2.03;  $p<.001$ ). Again, no significant differences were found between university graduates and high school graduates.

Again, migrants with a diploma scored higher on the personal interests and community involvement scale on average than those who completed primary (mean difference=-1.24;  $p=.009$ ) and secondary school (mean difference=-1.39;  $p=.001$ ). Along the same lines, migrants with a university degree show higher average scores on the same scale than those who have completed primary school (mean difference=-1.03;  $p=.029$ ) and secondary school (mean difference=-1.18;  $p=.003$ ). There were no significant differences between graduates and high school graduates in this case either.

Furthermore, migrants who have graduated show higher mean scores on the ecological adaptation scale than migrants who have completed primary school (mean difference=-1.08;  $p=.003$ ) and secondary school (mean difference=-1.22;  $p<.001$ ). In contrast, migrants with a university degree show higher mean scores on the same scale only than those who have completed secondary school (mean difference=-.718;  $p=.041$ ). Graduate migrants also score

higher on the language proficiency scale on average than those who completed primary (mean difference=-1.15;  $p<.001$ ) and secondary schools (mean difference=-1.12;  $p<.001$ ). Similarly, migrants with a university degree show higher average scores in language skills than those who have completed primary (mean difference=-1.18;  $p<.001$ ) and secondary schools (mean difference=-1.15;  $p<.001$ ). No significant differences were found between university graduates and high school graduates.

Finally, high school graduates show higher levels of general adaptation on average than primary school leavers (mean difference=-.391;  $p<.001$ ) and secondary school leavers (mean difference=-.407;  $p<.001$ ); similarly, university graduates also show higher general adaptation scores on average than primary school leavers (mean difference=-.333;  $p<.001$ ) and secondary school leavers (mean difference=-.349;  $p<.001$ ). No significant differences were found between university graduates and high school graduates.

### Current occupation

The analysis of variance showed that there were no significant differences attributable to occupation with regard to the intensity of migration stress ( $F(3,499)=.317$ ;  $p=.813$ ); significant differences were found in the adaptation scales: interpersonal skills ( $F(3,499)=4.33$ ;  $p=.005$ ), academic or work performance ( $F(3,499)=4.08$ ;  $p=.007$ ), personal interests and community involvement ( $F(3,499)=4.92$ ;  $p=.002$ ), language skills ( $F(3,499)=4.19$ ;  $p=.006$ ) and general levels of adjustment ( $F(3,499)=5.44$ ;  $p=.001$ ).

In particular, post-hoc comparisons showed that on the interpersonal skills scale, those with a contract scored higher than those who were unemployed (mean difference=-1.74;  $p=.003$ ). The same results were observed with reference to the work performance scale: migrants who have a contract obtain higher average scores in academic or work performance than those who are unemployed (mean difference=-1.28;  $p=.005$ ). With regard to the scale on personal interests and involvement in the community, it was observed that migrants with an employment contract showed higher mean scores than those unemployed (mean difference=-1.08;  $p=.004$ ) and those employed without a contract (mean difference=-.968;  $p=.026$ ). With regard to language skills, although the ANOVA results showed the presence of differences between the groups ( $F(3,499)=4.19$ ;  $p=.006$ ), following the post-hoc comparisons these differences were no longer significant: thus, language skills do not seem to be affected by migrants' employment. Finally, with regard to general fit levels, the data analyses showed that employees with a contract scored higher on average on this variable than both the unemployed (mean difference=-.247;  $p<.001$ ) and employees without a contract (mean difference=-.176;  $p=.050$ ).

### Continent of origin

The results of the analysis of variance showed that there were no significant differences between the groups with regard to the intensity of migratory stress ( $F(3,499)=.608$ ;  $p=.610$ ); however, significant differences were observed between the groups with regard to adaptive capacity in the following scales: interpersonal communications ( $F(3,499)=4.66$ ;  $p=.003$ ), academic/work performance ( $F(3,499)=7.00$ ;  $p<.001$ ), personal interests and community

involvement ( $F(3,499)=3.53$ ;  $p=.015$ ), ecological adaptation ( $F(3,499)=5.15$ ;  $p=.002$ ), language proficiency ( $F(3,499)=7.94$ ;  $p<.001$ ) and global adaptation index ( $F(3,499)=7.12$ ;  $p<.001$ ).

Post-hoc comparisons were conducted to assess which groups had significant differences (Bonferroni). Scores on the work and academic performance scales were on average higher among migrants from Asia than among those from Africa (mean difference=-1.71;  $p<.001$ ) and Eastern Europe (mean difference=-1.58;  $p=.025$ ); Furthermore, it is noted that migrants from South America score higher on the academic and work performance scales than those from Africa (mean difference=-1.36;  $p=.031$ ).

In ecological adaptation, migrants from South America also obtain higher mean scores than migrants from Africa (mean difference=-1.05;  $p=.006$ ). The same results were also obtained with regard to linguistic competence, with South American migrants having higher mean scores than African migrants (mean difference=-1.14;  $p<.001$ ). No further significant differences were found between the groups considered.

Finally, it should be noted that migrants from South America show higher levels of general adaptation than migrants from Africa (mean difference=-.305;  $p=.001$ ) and Eastern Europe (mean difference=-.292;  $p=.002$ ); furthermore, Asian migrants also show higher levels of adaptation on average than those observed among African migrants (mean difference=-.231;  $p=.008$ ).

**Table 10 - difference between groups relative to occupational status**

	F	df1	df2	p
Migratory stress	0.317	3	499	0.813
Interpersonal communication	4.325	3	499	0.005
Academic/work performance	4.078	3	499	0.007
Personal interest and community involvement	4.918	3	499	0.002
Ecological adaptation	2.187	3	499	0.089
Language proficiency	4.188	3	499	0.006
Adaptation	5.443	3	499	0.001

**Table 11 - difference between groups relative to the continent of origin**

	F	df1	df2	p
Migratory stress	0.608	3	499	0.610
Interpersonal communication	4.659	3	499	0.003
Academic/work performance	6.998	3	499	<.001
Personal interest and community involvement	3.525	3	499	0.015
Ecological adaptation	5.145	3	499	0.002
Language proficiency	7.941	3	499	<.001
Adaptation	7.120	3	499	<.001

## DATA DISCUSSION AND VERIFICATION OF HYPOTHESES

The analyses partially confirmed the hypotheses. No significant differences were observed among migrants in levels of migration stress and adaptation attributable to gender, age and marital status. These data are not in line with what other authors have reported that women should show lower levels of adaptation and higher levels of migratory stress (Krishnan and Berry, 1992; Liebkind and Jasinskaja-Lahti, 2000; Takeuchi et al., 2007; Xu and Chi, 2013; Khan & Hasan, 2019), younger people lower levels of migration stress (Schwartz et al, 2006; Diwan et al., 2004; Rudmin, 2003; Sam et al., 2006) and married people lower levels of migration stress and greater adaptive capacity (Polek and Schoon, 2008; Bookwala and Fekete, 2009).

With reference to country of origin, it was noted that South Americans are characterised by higher levels of adaptation than those from Africa and Eastern Europe. We hypothesised that a key element in this respect might be language: both Italian and Spanish (the language most widely spoken in South America) are in fact Romance languages with a similar structure and similar grammatical rules. The possibility to learn the host country's language more quickly may allow migrants to adapt better in the new context. Furthermore, it has been observed that Asian migrants also show higher levels of adaptation than those from Africa and Eastern Europe. This finding is not reflected in the literature as there is to our knowledge no other research that has compared the level of adaptation of Asian migrants with that of Eastern European and African migrants in the Italian context. There is therefore a need for further research to investigate this relationship in greater depth. Still, no significant differences emerged between the groups with regard to migratory stress, which appears common to migrants of all ethnicities.

Furthermore, results have shown that migrants with higher education qualifications succeed more easily than those with a low level of schooling in adapting in the host country, as their greater knowledge and skills (especially language) provide them with greater access to community life and more opportunities to work and familiarise themselves in the new context (Lueck and Wilson, 2010). Thus, the results indicated that a high educational qualification is a promoting factor for adaptation. Graduates and high school graduates report higher scores in the dimensions of adaptation than those who have completed primary and secondary school, showing themselves to be more proficient in interpersonal communication, academic or work performance, ecological adaptation and language skills (Lueck and Wilson, 2010). Finally, it is hypothesised that migrants who have a job with a contract are more likely than those who are unemployed or employed without a contract to adapt better in the host country, as the job guarantee also allows them to expand their network of acquaintances and thus receive social support.

## CONCLUSIONS

The data presented in this study provide important suggestions for setting up research programmes, especially as they underline how interventions aimed at promoting adaptation and protecting the well-being of migrants must be tailored to migrants' real needs. The adoption of standardised programmes aimed indiscriminately at all migrants undermines the very effectiveness of interventions as different segments of migrants have equally different needs

and requirements. For this reason, it is imperative to target support interventions at those segments of the migrant population that suffer most from migratory stress and are most vulnerable to risk factors. Allowing these people to learn the language, to get a job, to increase their level of education would allow them to have a better chance of integrating with members of the host community, to form an identity, to develop resources that promote wellbeing and adaptation, while hindering the effects of migration stress. These interventions should be carried out in the social context where the migrants live, taking into account the characteristics of each reality considered. Psycho-education, training meetings, personal narratives and, above all, mentoring (provided by migrants who have been living in Italy for a longer time and who are now perfectly adapted to the context in which they live) could be useful for this purpose, as well as role-playing, workshop activities, meetings and group discussions, shared experiences carried out with other migrants aimed at learning specific skills (especially to acquire skills that can be used in the labour market and to improve communication with natives). All these options, if integrated well with each other, should make it possible to create pathways that offer migrants support and promote the emergence of social-relational skills and adaptive capacities. Providing migrants with opportunities for work, personal and professional growth allows them to become part of a new community that no longer sees them as unwanted guests, but as people with skills and professionalism, individuals seeking a place in the world, possible resources that can enhance the quality of life of the host country. For all these reasons, there is a need to conduct interventions aimed at developing individual competences such as appropriate coping and resilience strategies (Caqueo-Urizar et al., 2021; Gambaro et al., 2020) and knowledge that can foster migrants' entry into community life.

The work presented is not without its limitations, which could be remedied in subsequent studies. A first limitation is the fact that the research design is cross-sectional, which makes it possible to find information on numerous constructs at the same time. However, this does not allow the investigation of cause-effect relationships between variables, which could instead be studied in experimental studies or through a longitudinal design, conducting follow-ups in which the same variable is measured at different times. A second limitation of the study is the exclusive use of self-report instruments, which are subject to influences due to social desirability, through which people try to offer a better description of themselves. Furthermore, it is by no means a given that people's actual behaviours coincide with their stated intentions: thus, some migrants may have over- or underestimated both the magnitude of the stressful events they experienced and their adaptation levels.

Despite these limitations, the study presented has produced relevant results with respect to a topic that is gaining increasing relevance in the field of well-being, health and, even more generally, in the field of psychology. Indeed, the work provided operational indications for the development and implementation of concrete projects and interventions that can have a significant beneficial effect on the mental health status of migrants and promote adaptation, inclusion and integration.

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