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Adjustment Disorder of Temporary Migrants: Express-Screening

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Annotation: The article shows diagnosis' features of the socio-psychological adaptation of temporary migrants (foreign students). The results of psychological maladjustment screening among foreign students done by Rogers-Diamond methodology is characterized by a long diagnostic process. To make a rapid diagnosis we created Adjustment Disorder Scale on the basis of the author's questionnaire Migrants Psychosocial Maladjustment Scale. The new diagnostic tool allows you to simplify and significantly speed up the procedure for assessing the degree of psychological maladjustment among temporary migrants. The offered scale has sufficient reliability, validity and measuring ability. The present psycho-diagnostic tool can be applied in psychosocial maladjustment screening of temporary migrants.

Key words: foreign students; mental health; psychosocial adaptation; PTSD.

Экспресс-скрининг дезадаптации временных мигрантов

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Аннотация: В статье рассматриваются особенности диагностирования расстройства социально-психологической адаптации временных переселенцев (иностранных студентов). Представлены результаты скрининга

психологической дезадаптации англоязычных мигрантов, полученные с использованием известной методики Роджерса-Даймонд, характеризующейся длительным диагностическим процессом. Сопоставимые результаты были получены с помощью Adjustment Disorder Scale, созданной на основе авторского опросника MPMS с целью решения задачи экспресс-диагностики. Новый диагностический инструмент позволяет существенно упростить и ускорить процедуру оценки степени психологической дезадаптации испытуемых. Предложенная шкала обладает достаточной надежностью, валидностью и измерительной возможностью. Результаты исследования могут быть рекомендованы для применения в психологической практике.

***Ключевые слова*:** иностранные студенты; психическое здоровье; психосоциальная адаптация; ПТСР.

Introduction.

Foreign students studying abroad can also be named voluntary or forced migrants. The number of such migrants throughout the world over the past quarter century has increased by 68.4%. In 1995 the total number of international migrants was 161.3 million, now it is already 271.6 million. The percentage of people who left their homeland in search of a better life (temporarily or forever) in the total world population increased from 2.8% to 3.5% [UN, 2019].

Migrants usually have a high level of mental health problems compared to the general western population [Alpak et al., 2015; UNHCR, 2019], which is even called the “mental health crisis” [Schauer, 2016]. They often have symptoms of post-traumatic stress disorder (PTSD), anxiety and depression caused by various traumatic events experienced at home and by the fact of migration itself [Fazel et al., 2005; Lindert et al., 2009; Steel et al., 2009; Purgato & Olff, 2015; Turner, 2015; Hall & Olff, 2016]. We know that estimates of PTSD prevalence over the course of a person's life range from 1.3% to 8.8% [Atwoli et al., 2015]. At the same time, PTSD is diagnosed as a result of 4.0% and higher of traumatic events, depending on the type

of injury [Santiago et al., 2013; Kessler et al., 2017; Kury et al., 2018], and depressive symptoms have a significant effect on the life of injured people and their surroundings [Carper, 2015; Shalev et al., 2019].

The recent growing number of studies has shown the negative impact of migration on individuals' mental health [Fazel et al., 2005; Steel et al., 2009; Bogic et al., 2015; Schock et al., 2016; Chen et al., 2017; Hameed et al., 2018; Cengiz et al., 2019; Hall et al., 2019]. Foreign students, as temporary migrants, are fully prone to emotional perception of immigration process plus they might experience personal crisis due to age, social and mental characteristics. One of the results of this crisis is maladaptation – the loss of values, which are the basis for building life scenarios, choosing strategies for professional and personal self-realization.

Foreign students need psychosocial adaptation because of fundamental change in the social environment, lifestyle and activities resulting from migration. They also have to deal with adolescence crisis, which is associated with professional and individual self-determination [De Vroome & Van Tubergen, 2010; Fozdar & Hartley, 2013; Abebe et al., 2014; Sharma et al., 2017]. In addition, the ever-growing number of migrants with post-traumatic experiences leads to the need to assess the current state of their mental health. We might introduce mental health screening in initial medical examination, which is traditionally done upon admission to the University [Rhema et al., 2014; Elbert et al. 2016].

According to existing data, we believe that the early identification and treatment of migrants' mental health problems are mandatory. It can significantly improve psychosocial adaptation of foreign students to their new life [Lamkaddem et al., 2014; Bozorgmehr & Razum, 2015; Song et al., 2015; Schick et al., 2016; Melnichuk, 2017].

Methods

Adaptation is a complex socio-psychological mechanism of personal socialization, including assimilation of a new social status, formation of a motivational sphere, self-perception, perception of a new environment, and many

other psychological phenomena, states, and formations [Taylor, 1983; Hovey, 1996; James, 1997; Fuligni, 2001 et al.].

The DSM-5 Manual (Diagnostic and Statistical Manual of Mental Disorders, 5th edition), which is developed and published by the American Psychiatric Association, provides criteria for the diagnostic adjustment disorder (AD). It has the so-called criterion A, which indicates the development of emotional or behavioral symptoms in response to identifiable stress that occur within 3 months after the onset of the stress. Moreover, a specific subtype of AD (pursuant to International Statistical Classification of Diseases and Related Health Problems 10th Revision, ICD-10) is associated with the presence of the following symptoms [APA, 2013]:

– With depressed mood (F43.21): Low mood, tearfulness, or feelings of hopelessness are predominant;

– With anxiety (F43.22): Nervousness, worry, jitteriness, or separation anxiety is predominant;

– With mixed anxiety and depressed mood (F43.23): A combination of depression and anxiety is predominant;

– With disturbance of conduct (F43.24): Disturbance of conduct is predominant;

– With mixed disturbance of emotions and conduct (F43.25): Both emotional symptoms (e.g., depression, anxiety) and a disturbance of conduct are predominant;

– Unspecified (F43.20): For maladaptive reactions that are not classifiable as one of the specific subtypes of adjustment disorder.

According to DSM-5, we should also consider four additional criteria to diagnose an adaptation disorder.

Criterion B – These symptoms or behaviors are clinically significant, as evidenced by one or both of the following:

B_1 – Marked distress that is out of proportion to the severity or intensity of the stressor, taking into account the external context and the cultural factors that might influence symptom severity and presentation;

B_2 – Significant impairment in social, occupational, or other important areas of functioning.

Criterion C – The stress-related disturbance does not meet the criteria for another mental disorder and is not merely an exacerbation of a preexisting mental disorder.

Criterion D – The symptoms do not represent normal bereavement (for example death of a close person).

Criterion E – Once the stressor or its consequences have terminated, the symptoms do not persist for more than an additional 6 months.

Thus, according to DSM-5 and ICD-10, an individual's maladjustment is a state of subjective distress and emotional disorder arising during the period of adaptation to a significant change in life or stressful event. Individual predisposition or vulnerability plays an important role in the risk of occurrence and the form of manifestation of AD, but the possibility of its occurrence without a traumatic factor was not found [APA, 2013; WHO, 2019].

In our case, this factor is the manifestation of psychological crisis among foreign students due to their age, social and mental characteristics, as well as the fact of immigration. These factors negatively affect the process of adaptation to a new life and studding [Bakker et al., 2014; Schick et al., 2016].

A theoretical analysis of psychological and diagnostic tools indicates a small selection of valid methods for the study of psychological adaptation of personality [Söndergaard et al., 2003; Hollifield et al., 2016; Kaltenbach, 2017]. In particular, in medical psychology, in order to obtain a quantitative assessment of clinical indicators during clinical and psychopathological research, as a rule, we use Hamilton scales to assess depression and anxiety, as well as the Derogatis scale to assess the severity of psychopathological symptoms [Hamilton, 1959; Hamilton, 1960; Derogatis, 1975].

In practical psychology, the so-called Rogers-Diamond scale of socio-psychological adaptation is the most often used tool to diagnose respondents' adaptation to environment in the system of interpersonal relationships. The

methodology was developed at the University of Chicago by Rosalind F. Diamond, led by Professor Carl Rogers. The Q-Adjustment Score (QAS) was based on the Q-sorting method and was designed to assess the psychological adaptation of patients after a course of psychotherapy [Dymond, 1953].

The Q-sorting technique suggested by W. Stephenson (colleague of C. Rogers at the University of Chicago) is a task in which a respondent sorts into categories a set of 100 cards with statements about personality characteristics, ranking them from the "most specific for me" to the "least specific for me". Cards are laid out in 11 categories in the given order: 2–4–8–11–16–18–16–11–8–4–2 (which corresponds to the normal distribution). The respondent must arrange the stated number of cards in each specific category. The same phrases should be sorted by the same number of categories, but in relation to the ideal self. This allows you to quantify the mismatch between the real and ideal self, which is very important for understanding psychopathology and personality changes in psychotherapy. Using the Q-sorting method, researchers could obtain data on the subjective self-perception [Stephenson, 1953; Block, 1961; John, 2010].

Many C. Rogers' followers confirmed his assumption that the mismatch between the conscious and ideal self indicates a poor psychological adaptation of the individual [Hjelle, 1992]. The greater is this mismatch, the higher will be the degree of anxiety, instability, social immaturity and emotional disorders [Turner, 1958; Achenbach, 1963; Higgins, 1987]. Moreover, people with a strong discrepancy between the real and ideal self have a lower degree of self-actualization than people without it [Mahoney, 1973].

The QAS questionnaire consists of 74 statements that the patient must sort into 9 categories, ranked according to the normal distribution. 37 statements correspond to the criteria of psychological maladaptation of the personality (on a scale from 0 to 3), and the other 37 indicates the adaptation criteria (on a scale from 5 to 8). The QAS scale as a measuring tool shows a high differentiating ability in the diagnosis of adaptation-maladaptation states. The model of a person's relationship with the social

environment and with himself is the basis of this tool and proceeds from the concept of a person as a subject of his own development, capable of being responsible for his own behavior [Dymond, 1954].

However, all above stated methods do not reflect the specifics of rapid screening of adaptation disorders of foreign students who have been in the country of temporary residence for no more than six months. In this regard, the previously developed scale for studying the problems of psychosocial adaptation of English-speaking migrants from foreign countries (Migrants Psychosocial Maladjustment Scale) [Melnichuk, 2016; Melnichuk, 2018] was redesigned taking into account the diagnostic criteria of AD [APA, 2013]. The proposed psycho-diagnostic tool allows screening of respondents' adaptation disorders in short terms without psychotherapeutic intervention.

The Adjustment Disorder Scale (ADS) is suitable for respondents of both genders with minimal age of 18. It consists of 10 statements, each of which describes the psychological state and behavior of the respondent over the past 6 months.

The respondent evaluates the above statements on a 5-point Likert scale, from 4 to 0: “Always”, “Mostly”, “Sometimes”, “Seldom”, “Never”. The psychological maladjustment index obtained as a result of scoring ranges from 0 (full adaptation) to 40 (severe maladaptation). Express screening using the ADS scale can be carried out in a group or individually, while taking a minimum of time.

Each of the 10 statements of the questionnaire is the most informative for the diagnosis of AD. We used the Kendall correlation method to determine the differential strength of the statements. It helped to establish significant correlations of the points of each statement with the total number of points scored throughout the test ($\tau = 0.68 – 0.79$ at $p < 0.01$).

The correlation between the ADS scale and the QAS questionnaire (indicators “adaptability”, “maladaptability”) was used as evidence of the criterion validity of the new psycho-diagnostic tool. Kendall correlation between the data of both methods was $\tau = 0.47$ at $p < 0.001$, which indicates the statistical dependence of the ADS and

QAS diagnostic indicators, due to their focus on measuring conceptually related mental properties of the personality. The substantive validity of the ADS scale was ensured by maximal match between the content of the test material and a modern understanding of the concept of a personal maladaptation.

We tested the stability and internal consistency of the ADS scale to determine the reliability of the new methodology. The Pearson correlation coefficient between the results of the first and the second tests was 0.87 at $p < 0.05$, and the Cronbach alpha coefficient was 0.89, which indicates a high retest reliability and internal consistency of the method. The obtained psychometric characteristics of the ADS scale allow us to conclude that it is justified to be used in practice.

Results

In order to verify the adequacy of the new psycho-diagnostic tool, we studied structural characteristics of the individual's adaptation to the new environment in the system of interpersonal relationships (psychosocial adaptation). We studied foreign first-year students of Kharkiv National University of Radio Electronics (Ukraine), who arrived to the country over the past five years. The majority of temporary migrants were fluent in English. The total number of respondents was 543.

At the first stage of the study, we formed two groups of respondents by rapid screening of maladaptation of migrants using the ADS scale. The first group (presence of AD) included foreign students who were diagnosed with an adaptation disorder, the second one represents students without AD diagnosis (absence of AD). Checking the significance of differences by the Mann-Whitney U-test ($U = 6.4$ at $p < 0.01$), as well as by the Rosenbaum Q-test ($Q = 10$ at $p < 0.01$) we obtained statistically significant differences between the groups. In addition, groups insignificantly differed by the social-demographic descriptions.

The first group consisted of 215 respondents (178 male, 37 female), average age $M = 20.8$; $SD = 1.79$. Distribution of temporary migrants by countries of origin: Afghanistan – 12.8%, Egypt – 3.4%, Iraq – 19.7%, Iran – 6.3%, Cameroon – 15.9%, Libya – 12.9%, Nigeria – 13.0%, Sudan – 9.6%, Tunisia – 6.4%; by religion: Islam –

77.5%, Christianity – 13.1%, local cults – 9.4%; according to academic results (on the ECTS scale): A – 0.7%, B – 2.8%, C – 6.5%, D – 26.9%, E – 48.2%, FX – 11.4%, F – 3.5%.

The second group consisted of 328 respondents (256 male, 72 female), average age M = 20.7; SD = 1.92; Distribution of foreign students by countries of origin: Egypt – 8.6%, Iran – 18.7%, Cameroon – 20.9%, Nigeria – 47.6%, Tunisia – 4.2%; by religion: Islam – 48.1%, Christianity – 34.2%, local cults – 17.7%; according to academic results (on the ECTS scale): A – 29.2%, B – 38.5%, C – 17.4%, D – 14.9%, E – 0.0%, FX – 0.0%, F – 0.0%.

At the second stage, we studied structural characteristics of the socio-psychological adaptation of foreign students using the QAS questionnaire. It was based on the analysis of changes in the average values of the corresponding indicators in two formed groups of foreign students. When analyzing the data, both statistically significant changes and minor shifts in indicators were taken into account. This allowed us to present a more complete picture of the structure of socio-psychological adaptation of migrants and confirm the adequacy of the ADS scale use for solving the problem of rapid screening of maladaptation.

Analysis of the results shows that such indicators of the state of socio-psychological adaptation-maladaptation as “internality” and “desire to dominate” are within the range of sufficient severity, while “self-acceptance”, “adaptation”, “acceptance of others” and “emotional comfort” are of a high degree of severity.

A statistically significant greater value of the “adaptation” indicator ($t = -6.67$ at $p < 0.001$) was established in the second group (absence of AD) relative to the same value in the first group (presence of AD). The variables “self-acceptance”, “acceptance of others”, “emotional comfort” and “internality” showed the same results: $t = -48.79$; $t = -29.65$; $t = -25.28$; $t = -10.37$, respectively, with $p < 0.001$. Only the “desire for dominance” indicator had the opposite result: $t = 4.32$ at $p < 0.001$.

The results that we obtained perfectly correlate with the C. Rogers' phenomenological theory of personality, according to which human behavior can be understood only in terms of the most important person-logical construct – the "self" concept (people tend to experiences that intensify the "self" and avoid those that deny it) [Rogers, 1961; Hjelle, 1992; Rogers, 2003].

The study is based on anonymous data collected as a part of preliminary medical examination. Specific categories of personal data (health data) as well as research results were collected, stored and used for psychological and pedagogical support of students. Thus, for evaluation and anonymous publication, special permission (informed consent) of the respondents is not required.

Discussion

Our study confirms the assumption that the more a person accepts himself, the higher the likelihood that he accepts others. This relation between self-acceptance and acceptance of others is based on the theoretical assertion that a sense of acceptance, respect and value of others appears if the discrepancy between the real and ideal self tends to decrease. Moreover, self-dislike is accompanied by significant hostility to others [Hjelle, 1992; Rogers, 2016].

The low rate of internality (a personality trait that reflects the mode of social orientation) diagnosed within respondents with AD symptoms corresponds to a low level of subjective control and allows us to classify this group as external. Such people do not see the connection between their actions and significant life events. They believe that most of these phenomena are random or happen due to the actions of others, so they cannot control their life. A generalization of various experimental data characterizes externalities as individuals with increased anxiety, aggressiveness, and a tendency to depression [Hartmann, 1958; Snyder, 2005; Lambert, 2013; Lishman, 2015].

A group of students with diagnosed AD revealed a significant decrease in emotional comfort, which provides for a harmonious combination of external and internal aspects of individual being, mainly positive emotional states and

expectations, as well as a sense of internal balance. It is obvious that the extrovert personality is characterized by the desire to develop communication skills and response strategies. But in conflict situations, such person usually loses self-control and does not know what he is doing, therefore his emotional comfort is often not only a cause, but also a consequence of maladaptation [Hartmann, 1958; Kim, 1988; Robinson, 1991].

The final indicator of the QAS questionnaire – the desire for dominance – was found in the group of students with AD symptoms. The tendency to dominate others is an attempt to control one's social environment, influence, give advice, persuade, give orders, prohibit, etc. High values of the indicator show a person's tendency to suppress others.

The consequence of an obsessive desire to dominate is the inability of the individual to have equal relations with others. The desire for power helps a person to avoid the fear of isolation and feelings of powerlessness due to his own superiority over others, because the individual feels alone in a "foreign" and "hostile" world. Power and sadism, providing him with self-confidence, help to get rid of loneliness and social isolation [Robinson, 1991; Woods, 1999; Taylor, 2017].

Thus, greater degree of maladaptation and a desire for dominance was recorded in the group of foreign students with AD symptoms, comparing to the group with no symptoms of AD, as well as a decrease in the rates of self-acceptance, acceptance of others, emotional comfort and internality.

The QAS questionnaire results, as well as rapid screening data, helped us studying psychosocial adaptation within a sample of temporary migrants. We used the Fisher angular transformation to identify differences in the socio-demographic characteristics of adapted and non-adapted migrants.

We found that the degree of adaptation does not depend on the age of the respondents (the average age of the respondents in both groups is the same). The gender differences in the groups of adapted and non-adapted students cannot be considered unconditionally reliable, given that the value of the Fisher angular

transformation indicator falls on the boundary of uncertainty zone ($\varphi^* = 1.67$; $p = 0.049$). In other words, the degree of adaptation does not depend on the gender of the respondents.

We found no difference in places of origin of adapted respondents ($\varphi^* = 0.01$; $p = 0.023$). Thus, students from Afghanistan, Iran, and Iraq showed almost the same level of maladjustment as their peers from Cameroon, Nigeria, Egypt, Tunisia, Libya and Sudan.

Analysis of the adaptive capacities of temporary migrants by religion showed an insufficiently high perspective for the adaptation of Christians ($\varphi^* = 1.7$ at $p = 0.054$) and Buddhists ($\varphi^* = 2.24$ at $p = 0.013$). Muslims showed high perspective for the maladaptation ($\varphi^* = 3.1$ at $p < 0.001$). The distribution of respondents by academic performance confirmed ($\varphi^* = 5.38$ at $p < 0.001$) the obvious fact that adapted students should have higher ECTS scores (A, B, C), and maladaptive students should have lower scores (D, E, FX, F).

We analyzed the average values of the characteristics of socio-psychological adaptation of foreign students obtained with the R. Diamond methodology and here are the following conclusions:

– the severity degree of indicators of migrants' adaptability variables indicates a rather high level of psychological adaptation in the group of first year students with no symptoms of AD and a low level of adaptation in the group where such symptoms were found by the ADS scale;

– the group of respondents with AD at a statistically significant level showed a greater degree of indicators of “maladaptation” and “desire for dominance” than the group with no AD that showed an increase in the rates of “self-acceptance”, “acceptance of others”, “emotional comfort” and “internality”;

– analysis of the socio-demographic differences of adapted and non-adapted foreign students indicates that the degree of adaptation doesn’t depend on the age, place of birth, and religion of the respondents.

Thus, the offered scale for rapid screening of psychological maladjustment of migrants has sufficient reliability, validity and measuring ability. In the future, we would also like to evaluate the psychometric characteristics of the ADS method on samples of foreign senior (graduate) students.

The results of the study confirmed the need for early detection of maladaptation symptoms for people who have undergone traumatic events (including the immigration procedure). We showed that the right time assessment of mental health can predict the likelihood of developing long-term PTSD [Shalev et al., 2019].

Using the offered approach will help to reduce the quantity of chronic mental disorders and related secondary problems discussed earlier [McFarlane, 2010]. Psychological self-help [Mouthaan et al., 2013] and therapist care [Cernvall et al., 2015] potentially provide a flexible and effective way to increase the level of psychosocial adaptation of migrants and should be investigated further.

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Ethical Approval

All procedures performed in this study were done in accordance with the ethical standards of the author's institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The Human Subjects Committee of Kharkiv National University of Radio Electronics approved the study.

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Appendix

Adjustment Disorder Scale

Male/Female

Age _____

Country_____

Occupation_____

Religion _____

The reason of your visit to the country_____

Do you have any physical, emotional or social problems that bother you? Yes/No

What are they? _____

During your life, did you experience any traumatic life events? Yes/No

What were they? _____

Have you ever received a psychiatric diagnosis or have you ever been treated for psychological problems? Yes/No

What were they? _____

Instructions: Read carefully the statements. Circle the answer that best describes your feelings.

1.	I feel homesick.	Never	Seldom	Sometimes	Mostly	Always
2.	I find it difficult to get used to new living conditions.	Never	Seldom	Sometimes	Mostly	Always
3.	I cannot lead a socially active lifestyle.	Never	Seldom	Sometimes	Mostly	Always
4.	I find it difficult to make new friends and acquaintances.	Never	Seldom	Sometimes	Mostly	Always
5.	I feel anxious.	Never	Seldom	Sometimes	Mostly	Always
6.	I am easily annoyed at the slightest occasion.	Never	Seldom	Sometimes	Mostly	Always
7.	I am in a state of depression.	Never	Seldom	Sometimes	Mostly	Always
8.	I have a sleep disturbance (insomnia, nightmares, etc.).	Never	Seldom	Sometimes	Mostly	Always
9.	I have developed or worsened bad habits.	Never	Seldom	Sometimes	Mostly	Always
10.	I have thoughts of suicide.	Never	Seldom	Sometimes	Mostly	Always