AN EMPIRICAL STUDY OF RESILIENCE AS A FACTOR OF RESISTANCE TO BURNOUT SYNDROME

INTRODUCTION

The relevance of the problem under study is justified by the fact that in the modern world, people find themselves in difficult conditions under the influence of stress factors, not only physical, socio-psychological but also informational, in conditions of uncertainty and risk, communicative and cognitive overload, a person and groups of people can develop unfavorable mental and psychophysiological conditions. Previous studies have shown that self-actualization is a factor of resistance to professional burnout and stress (DIKAYA, 2010; NALICHAEVA, 2011). A person’s resilience covers their coping and adaptation, the desire to grow and develop despite difficulties, reaching a new level of volitional moral and spiritual qualities (EFIMOVA et. al., 2018; AGADZANOVA, 2019; KALININA et. al., 2018; SALAKHOVA et. al., 2020).

In domestic psychology, the problem of resilience was considered by such authors as: Makhnach (2016a; 2016b); Laktionova (2016); Ryulska (2016) and others. Resilience is one of the most important human development resources, a condition for social adaptation of the individual - the inclusion of the individual in interaction with the social environment. This concept is interpreted as a person’s ability to develop independently, adapt to the environment, self-regulation and self-actualization. Self-actualization is a significant determinant of resistance to adverse psychophysiological conditions, the basis of personal self-actualization potential associated with human resilience. Makhnach (2016a) defines resilience as an individual’s ability to manage their resources: in volitional, motivational, emotional, and cognitive spheres in the context of cultural norms, environmental conditions, and society. Makhnach (2016a) identified six components of resilience: self-efficacy, perseverance, coping and adaptation, locus of control, spirituality, family, and social relationships. Self-efficacy includes representations of a subject who is confident in their ability to mobilize cognitive resources to influence an event and act to achieve desired goals (MAKHNACH, 2016A). Self-efficacy directly depends on a person’s ideas about their abilities. Thus, choice, decision-making, cognitive, motivational, affective processes activate a person’s self-efficacy, which is inextricably linked with resilience. High self-efficacy reduces vulnerability to stress factors.

The personal experience of achievements, the experience of others, the acceptance of verbal beliefs directed from outside or their own, and the perception of their physical and emotional state, the ability to make decisions and responsibility for them form the basis of a person’s self-effectiveness (BROWN, WENTWORTH, 2021). The manifestations of perseverance, self-discipline, activity in achieving goals are the acquired qualities of an evolved personality, ensuring the development of resilience. Stressful or challenging life circumstances require endurance, perseverance, which contribute to the development of resilience. Coping includes cognitive and behavioral strategies used by a person to manage needs in adverse conditions, and adaptation is the process of adjusting to changing or unfavorable circumstances. Lazarus and Folkman (1991) defined two functions of coping: the regulation of emotions (cognitive, emotional, and behavioral efforts) and problem management (elimination of the threat or influence of a stressor). Adaptation includes defense mechanisms that can form and develop...
under the influence of various factors. The internal locus of control is an important component of resilience since it is associated with the individual’s perception of themselves as a subject of influence on the surrounding world, the course of life, and the future in various spheres of life.

A person becomes the subject of their life and activity, knowledge, communication, relationships in the process of personal development, awareness of their power in managing life and the initiating principle is an important factor in developing resilience. A sense of self-confidence, self-control, and the belief that individuals are the initiators of events happening to them are inseparable from resilience. The internal locus of control is considered a key factor of protection against stressful and adverse environmental influences.

The subjective perception of control manifests itself in various spheres of life, such as the perception of success and failure, family life, professional and interpersonal relations, health, and wellbeing. Resilient people evaluate themselves as able to control what is happening in their lives and promote health. Along with the locus of control, the resilience of an individual can be formed by such components as endurance, stable self-esteem, the ability to mobilize one’s resources, altruism, the use of social and economic resources, self-development, the image of self as a person successful in overcoming stress. Family and social relations form various personal characteristics of an individual, including resilience, awareness of their importance is the basis of prosocial coping. Prosocial coping is the most constructive in coping with professional burnout (VODOPYANOVA, STARCHENKOVA, 2008). Burnout syndrome is an acute and complex problem that usually involves a person and groups of people, destroying relationships and reducing the effectiveness of activities and communication. Some researchers consider burnout in the aspect of a reaction to stress (OREL, 1999; VODOPYANOVA, STARCHENKOVA, 2008). In the most general form, the syndrome of mental burnout is considered a multidimensional construct that includes a set of negative psychological experiences and maladaptive behavior resulting from prolonged and intense communicative stress (MASLACH, SCHAUFELI, LEITER, 2001).

Professional burnout syndrome is a combination of persistent symptoms that manifest in negative emotional experiences and attitudes regarding work (profession) and business communication actors. The systemic nature of professional burnout is emphasized. Burnout affects all levels of human functioning, manifests itself at the level of the body (psychosomatic disorders), at the level of mental abilities (a change in emotional response, a feeling of helplessness), at the level of socio-psychological properties (a factor that destroys interaction in society, in the professional, family spheres) (OREL, 1999). An important role in the development of a person’s resistance to burnout syndrome is played by their resilience, which determines the need to diagnose burnout, resilience, and analysis of correlations of the studied indicators, to identify the specifics of the relationship between burnout and resilience, as well as their manifestation in different gender, age and professional groups of the survey participants (BAYANOVA, ZAKIROVA, 2020; SALAKHOVA et.al., 2019; GOLOSHUMOVA et.al., 2019).

MATERIALS AND METHODS

For this study to achieve its goal, the following methods and techniques were used: psychodiagnostic test methods aimed at diagnosing resilience, manifestations of maladaptation (burnout syndrome), provided to the subjects in computer (electronic) and blank forms: “Human resilience test” (MAKHNACH, 2016A; MAKHNACH, 2017); “Diagnosis of emotional burnout of an individual” (BOYKO, 1999); “Strategies for overcoming stressful situations,” Hobfall (1994), 1994 - Russian-language adaptation by Vodopyanova and Starchenkova (2008). The obtained data were processed using mathematical statistics in a statistical package using the analysis of average values, frequencies, the statistical significance of differences using the Mann-Whitney U-test, correlation analysis using the r-Pearson correlation ratio. The study was conducted in the city of Sevastopol using methods in a blank form and a computer version of testing (remotely) in the period from February 2020 to August 2020. Three hundred twenty people participated in the study (126 men and 194 women, aged 18 to 61 years, four subgroups of 80 people (aged 18 to 22 years; from 23 to 35 years; from 36 to 49 years; from 50 to 61 years)). The selection was divided into four subgroups to analyze the age characteristics of resilience. Also, the following parameters were taken into account when analyzing the data: gender, marital status, occupation, profession.
RESULTS AND DISCUSSION

As a result of the diagnostics of the resilience components in subjects of different age groups, it was found that self-efficacy, perseverance, locus of control, coping and adaptation, family relationships are most pronounced in all subjects. The lowest resilience indicators were observed in the group of young adults (from 18 to 22 years). In the older group (from 50 to 61 years), the resilience components were more pronounced. The components of resilience manifest most distinctively in participants aged from 23 to 35 years and aged from 36 to 49 years. There were no differences in the resilience components between the subgroups from 23 to 35 years and 36 to 49 years. Statistically significant differences between the younger and other subgroups were revealed in all components (p<0,01). This survey confirms the data of an earlier study (NALICHAeva et al., 2020) and expands the study by analyzing different age groups of the survey participants. In general, the resilience profile in the group from 18 to 22 years is dominated by self-efficacy, coping and adaptation, less pronounced persistence, locus of control, family relationships, the least pronounced component of spirituality. The specifics of the resilience in all age groups are manifested in the prevailing idea that they are responsible for what is happening in their lives, can influence the environment and the course of life in the future, optimism about the ability to find positive solutions for themselves and other people, have cognitive and behavioral strategies for managing needs in adverse conditions, adaptation to changing or unfavorable circumstances. They have confidence that they can successfully cope with adverse conditions. They are characterized by the use of emotionally conscious and problem-solving-oriented strategies. They evaluate interpersonal relationships as an essential source of emotional support, which is the basis of resilience, the ability of an individual to use the family, social, and any external support system for better coping with stress. It was found that faith in supreme powers was not typical for all respondents of different age groups. However, manifestations of spirituality were characteristic, as an internal regulator of vital activity, reducing dissatisfaction with oneself and making life more meaningful.

When analyzing the indicators of resilience in the subgroups allocated by marital status, it was found that the highest indicators for all components of resilience were found in the “married” subgroup; the indicators of the components of resilience were significantly lower in the “single” subgroup, the lowest indicators for the components of resilience were found in young adults living with their parents.

In general, the survey participants are characterized by self-efficacy and perseverance; for young adults, it is typical to have more expectations and ideas, faith in their ability to mobilize the motivation, cognitive resources, and actions to influence a particular event, relevant self-esteem, faith in their effectiveness. In contrast, the indicators of perseverance are somewhat lower, which is expressed in average indicators of perseverance, vitality, self-discipline, the desire to continue the struggle for restoring balance after the impact of adverse life events.

Of particular interest were the results of differences in the manifestation of resilience within a group of young adults. Thus, the analysis of differences in the components of resilience in subgroups of young people of different ages, gender, marital status, both studying and working, different professions and areas of training (using the Mann-Whitney U-test) showed the following differences:

- young men have more pronounced perseverance than young women (p<0.05), and young women have more pronounced self-efficacy, family and social relationships than young men (p<0.05); no significant differences in the internal locus of control, adaptation, and coping, spirituality were found;
- the manifestation of coping and adaptation is statistically significantly higher in the young adults of the older subgroup (aged 31-36 years) than in the young adults of the younger subgroup (from 20 to 25 years) (p<0.05), the indicators of perseverance are statistically significantly higher in the young people of the middle-aged subgroup (26-30 years) (p<0.05);
- differences in the manifestation of family and social relationships, spirituality were revealed between subgroups of young adults with different marital statuses, so these
indicators are statistically significantly higher for young people living in a parental family and having their own family (r<0,01).

As a result of the diagnostics of symptoms and phases of burnout, the following trends were observed. On average, a subgroup of the survey participants aged 18 to 22 years develops a symptom of expanding the sphere of saving emotions, a symptom of emotional deficit, and the resistance phase is in the formation stage.

On average, in the subgroups from 23 to 35 years and 36 to 49 years, there are symptoms of experiencing traumatic circumstances, emotional deficit, symptoms of anxiety and depression, inadequate and selective emotional response, emotional and moral disorientation, expansion of the sphere of saving emotions, reduction of professional duties, emotional detachment, personal detachment, psychosomatic and psycho-vegetative disorders. Furthermore, in these subgroups, all phases of burnout are in the development stage, which indicates the average levels of burnout and the tendency to develop this syndrome.

On average, the following symptoms develop in a subgroup of subjects from 50 to 61 years old: experiencing traumatic circumstances, emotional and moral disorientation, emotional detachment, personal detachment (depersonalization), inadequate selective emotional response, reduction of professional responsibilities, the phases of resistance and exhaustion are in the stage of development.

It is worth noting that, in general, the subjects of the youngest subgroup and the oldest subgroup are the least susceptible to burnout. No differences in the manifestation of burnout phases and symptoms between the subgroups from 23 to 35 years and 36 to 49 years were observed. However, the subgroup from 50 to 61 years has its specificity in the severity of burnout symptoms - they instead reflect unconstructive coping, but at the same time, resistance to the development of burnout phases.

The selection of the survey participants included students, unemployed and working people - representatives of different professions: university professors, teachers, psychologists, engineers, entrepreneurs, economists, programmers, lawyers, doctors, and artists. The analysis of the severity of symptoms and phases of burnout in the professional groups of the selection showed that students are the least susceptible to burnout, while artists and the unemployed have high indicators for the resistance phase, the highest indicators of symptoms, and the “Resistance” phase of burnout are among the unemployed, teachers, entrepreneurs, economists and programmers. Students, artists, and the unemployed are the least susceptible to burnout, while teachers, programmers, and doctors have the highest indicators for symptoms and the “Exhaustion” phase of burnout. A common feature for all professional groups is the development of emotional detachment and personal detachment (depersonalization), that is, a tendency to unconstructive coping.

According to the indicators of symptoms and phases of burnout in respondents living with their parents, married, single, it was found that for most of the symptoms and phases of burnout in married participants, burnout indicators are higher (experiencing traumatic circumstances, inadequate selective emotional response, emotional and moral disorientation, reduction of professional duties, emotional detachment, personal detachment (depersonalization). The lowest burnout rates were observed among young respondents living with their parents. Single people have the most pronounced symptoms of “being cornered,” anxiety and depression, expansion of the sphere of saving emotions, emotional deficit, psychosomatic and psycho-vegetative disorders.

The analysis of correlations of resilience components and burnout indicators using the r-Pearson ratio showed significant pronounced correlations between the studied indicators (Table 1).
Table 1. Correlations of resilience components, indicators of symptoms and phases of burnout and age

<table>
<thead>
<tr>
<th>Qualities inherent in others</th>
<th>Self-efficacy</th>
<th>Persistence</th>
<th>Locus of control</th>
<th>Coping style</th>
<th>Self-esteem</th>
<th>Self-acceptance</th>
<th>Spirituality</th>
<th>Autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Experiencing traumatic circumstances</td>
<td>-0.3**</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
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<td></td>
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<tr>
<td>2. Dissatisfaction with self-family</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Being cornered</td>
<td>-0.5**</td>
<td>-0.5**</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Anxiety and depression</td>
<td>-0.6**</td>
<td>-0.5**</td>
<td>-0.5**</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The &quot;Anxious stress&quot; phase</td>
<td>-0.6**</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Inadequate selective emotional response</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
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<tr>
<td>6. Emotional and moral disorientation</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
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<tr>
<td>7. Expanding the sphere of saving emotions</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
<td></td>
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<tr>
<td>8. Reduction of professional responsibilities</td>
<td>0.3*</td>
<td>-0.4**</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
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<tr>
<td>The &quot;Resistance&quot; phase</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
<td></td>
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<tr>
<td>9. Emotional deficit</td>
<td>-0.3*</td>
<td>0.3*</td>
<td>0.3*</td>
<td>0.3*</td>
<td>0.3*</td>
<td></td>
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</tr>
<tr>
<td>10. Emotional detachment</td>
<td>-0.6**</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11. Personal detachment (depersonalization)</td>
<td>-0.5**</td>
<td>-0.4**</td>
<td>-0.4**</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Psychosomatic and psychovegetative disorders</td>
<td>-0.3*</td>
<td>-0.4**</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td>-0.3*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.3*</td>
<td>0.4**</td>
<td>0.4**</td>
<td>0.3*</td>
<td>0.5**</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*at the significance level p<0,05;  **at the significance level p<0,01

Source: Search data.

Table 1 shows that the obtained correlations describe two general trends: firstly, the older the respondents, the higher their resilience indicators - the correlation of resilience with the age of the respondents; secondly, the more developed the components of resilience, the lower the indicators of symptoms and phases of burnout, that is, resilience can be considered as a factor of resistance to burnout syndrome.

As a result of the diagnosis, it was found that the subjects are characterized by the use of the following strategies and models of coping behavior: entering into social contact and seeking social support (72% of the sample), impulsive actions (15%), manipulative (indirect) actions (9%) and other strategies (4%). The analysis of the average values on the scales of models of overcoming behavior showed that the most characteristic for representatives of subgroups from 18 to 22 years, from 23 to 35 years, from 36 to 49 years are prosocial strategies (search for social support and entering into social contact). Active, prosocial strategies of overcoming behavior among young adults are constructive, because in a situation of stress and uncertainty, students and young professionals, as well as experienced employees over the age of 35, tend to turn to friends, colleagues, family for support, having the opportunity to constructively respond to negative emotions, get support and help, new experience in the communication process.

A special feature of a small part of this selection of young adults (from 18 to 35 years old) is resorting to impulsive actions to overcome stress, which does not belong to a constructive strategy of coping with stress. This feature can be correlated with the age of the subjects and with the characteristics of their personality. In general, this selection of young adults is not characterized by non-constructive strategies: aggressive, uncautious actions. However, there were participants with a predominance of such a coping strategy as manipulative (indirect) actions, which is an unconstructive feature when coping with stress, since indirect strategies often do not lead to overcoming a stressful situation, but, on the contrary, complicate the process of resolving a stressful situation. An interesting feature of the coping strategies of young people is a weak manifestation of assertiveness and self-confidence in the context of
coping with stress, which can be correlated with insufficiently constructive coping in case of stress in the process of training and professional activity. The analysis of the features of coping strategies in subgroups of young adults of different ages, gender, marital status, studying and working, of different professions and areas of training (using the Mann-Whitney U-test) showed the following differences:

- young men have a more pronounced impulsive coping strategy than young women (p<0.05), and young women have a more pronounced manipulative coping strategy than young men (p<0.05). However, no significant differences in manifestations of prosocial strategies were found.

- the distinct manifestation of the impulsive coping strategy is statistically significantly higher in young people of the younger subgroup (aged 20-25 years) than in young people of the older subgroup (from 31 to 36 years) (p<0.01), the indicators of prosocial strategies are statistically significantly higher in young people of the middle-aged subgroup (26-30 years) (p<0.01).

Interestingly, there are no significant differences in coping strategies between subgroups of young people of different marital statuses. This indicates flexibility in searching for social contact and social support in the parental family, in their own family, among colleagues and friends. Based on the analysis of the obtained data, the following recommendations for the development of human adaptability have been developed to prevent burnout and strengthen resilience:

1) give up the usual behavioral patterns, start doing the usual things in a new way;
2) learn to work with risk, maintaining its optimum, try to increase the scope of the task and reduce the deadline for its completion, training to apply a creative approach;
3) surrounding oneself with progressive people open to new experiences, which helps expand horizons and building self-confidence.
4) constantly learn new skills.
5) develop behavioral algorithms, think over several scenarios for the development of events and an action plan.

CONCLUSION
Resilience is a factor of resistance to burnout syndrome. In most participants, the indicators of resilience increase with age, which reflects the development of self-efficacy, perseverance, awareness of the importance of family and social contacts, preference for assertiveness, and prosocial coping. Tendencies to the development of burnout syndrome are manifested in representatives of all age groups. However, there is a specific manifestation of symptoms depending on gender, age, and marital status. As a result of the diagnosis, it was found that, in general, self-efficacy and perseverance are characteristic of the participants. For young adults, it is typical to have more expectations and ideas, faith in their ability to mobilize the motivation, cognitive resources, and actions to influence a particular event, relevant self-esteem, faith in their effectiveness. At the same time, the indicators of perseverance are somewhat lower, which is expressed in average indicators of perseverance, viability, self-discipline, the desire to continue the struggle for restoring balance after the impact of adverse life events.

RECOMMENDATIONS
The materials of the article can be used in psychological support of individual groups and improving psychological literacy, developing resilience in various groups of the population, and teachers and psychologists. In addition, the results can be used in the educational process of future psychologists and programs of other academic disciplines.

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An empirical study of resilience as a factor of resistance to burnout syndrome

Resumo
O objetivo do artigo é descrever os resultados de um estudo empírico de resiliência como fator de resistência à síndrome de burnout. Os principais métodos deste estudo são os questionários “Resiliência de adultos”, “Diagnóstico do desgaste emocional de um indivíduo”, “Estratégias para superar situações estressantes”. Como resultado do estudo, constatou-se que a resiliência é um fator de resistência à síndrome de burnout. Na maioria dos participantes, os indicadores de resiliência aumentam com a idade, o que reflete o desenvolvimento da autoeficácia, perseverança, consciência da importância dos contatos familiares e sociais, preferência pela assertividade e enfrentamento pró-social. Os materiais do artigo podem ser úteis no apoio psicológico de grupos individuais, no desenvolvimento da resiliência em vários grupos, nas atividades profissionais de professores e psicólogos. Além disso, os resultados podem ser usados no processo educacional de futuros psicólogos e programas de outras disciplinas acadêmicas.


Abstract
The purpose of the article is to describe the results of an empirical study of resilience as a factor of resistance to burnout syndrome. The leading methods in this study are the questionnaire “Adults’ resilience”, “Diagnostics of emotional burnout of an individual”, “Strategies for overcoming stressful situations”. As a result of the study, it was found that resilience is a factor of resistance to burnout syndrome. In most participants, the indicators of resilience increase with age, which reflects the development of self-efficacy, perseverance, awareness of the importance of family and social contacts, preference for assertiveness, and prosocial coping. The materials of the article can be helpful in psychological support of individual groups, the development of resilience in various groups, in the professional activities of teachers and psychologists. In addition, the results can be used in the educational process of future psychologists and programs of other academic disciplines.

Keywords: Resilience. Burnout syndrome. Adaptation. Perseverance.

Resumen
El propósito del artículo es describir los resultados de un estudio empírico de la resiliencia como factor de resistencia al síndrome de burnout. Los métodos protagonistas de este estudio son el cuestionario “Resiliencia de adultos”, “Diagnóstico del agotamiento emocional de un individuo”, “Estrategias para la superación de situaciones estresantes”. Como resultado del estudio, se encontró que la resiliencia es un factor de resistencia al síndrome de burnout. En la mayoría de los participantes, los indicadores de resiliencia aumentan con la edad, lo que refleja el desarrollo de la autoeficacia, la perseverancia, la conciencia de la importancia de los contactos familiares y sociales, la preferencia por la assertividad y el afrontamiento prosocial. Los materiales del artículo pueden ser útiles en el apoyo psicológico de grupos individuales, el desarrollo de la resiliencia en varios grupos, en las actividades profesionales de profesores y psicólogos. Además, los resultados se pueden utilizar en el proceso educativo de futuros psicólogos y programas de otras disciplinas académicas.