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# **RESEARCH OF SOCIO-PSYCHOLOGICAL CHARACTERISTICS OF PHARMACY SPECIALISTS**

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Метою статті є дослідження соціально-психологічних характеристик українських фахівців фармації. Методи дослідження: методи психодіагностичного аналізу, експертних оцінок, аналітичний, порівняльний та логічний. В опитуванні брали участь 352 провізора-практика з усіх регіонів України. Результати дослідження. В умовах впровадження в діяльність аптечних закладів належної аптечної практики та загострення соціально-економічної ситуації в країні перед фахівиями фармації гостро постає питання надання фармацевтичної допомоги відвідувачам аптечного закладу на відповідному професійному рівні, для чого їм потрібний певний набір соціально-психологічних характеристик. Оцінка цих характеристик здійснювалася за допомогою методів діагностики системно-характерологічних відносин, стійкості до конфліктів, рівня суб'єктивного контролю, Г. Айзенка, СПП-98, вольових якостей Н. Стамбулової. Запропоновані методи дозволили виявити притаманні фахівцям якості, а саме середній рівень показників самовладання та витримки, ініціативності, креативності та самостійності. При цьому фахівців фармації здатні подолати перешкоди задля досягнення мети, але проявляють певну м'якість, також вони не завжди впевнені при прийнятті рішень, їм характерні схильність до сумнівів. Вольова сфера опитуваних провізорів характеризується схильністю до невпевненості та безініціативності. У більшості провізорів не яскраво виражені лідерські якості та середній рівень конфліктостійкості. Високий рівень конфліктності мають 22,03 % фахівців, рівень вираженої конфліктності характерний для 8,48 % респондентів.

Висновки. Досліджено соціально-психологічні характеристики фахівців фармації за допомогою психодіагностичних методів. Відповідно тесту системно-характерологічних відносин особистості визначено, що для більшості фахівців фармації характерні тактовність, принциповість, чуйність, організованість, працьовитість, самокритичність, впевненість у собі, акуратність, ощадність та помірність у потребах, але існує певна необхідність розвитку або удосконалення цих якостей. Фахівці фармації також характеризуються середнім значенням рівня суб'єктивного контролю. Вольова сфера опитуваних провізорів характеризується частковою невпевненістю та безініціативністю

**Ключові слова:** соціально-психологічні характеристики, фахівець фармації, психодіагностичні методи, конфліктостійкість, тактовність, організованість, працьовитість

### 1. Introduction

Under conditions of changes that have occurred in Ukrainian society and the world as a whole, the conditions of management, approaches to the management of pharmaceutical institutions, and technologies for selling medicines are changing. It is especially important that the content and nature of the activities of pharmacists are changed. But ukrainian stakeholders have not yet realized the need to restructure their views on world trends and the modern portrait of a pharmacist. Today, its main functional responsibilities are the release of drugs; provision of proper pharmaceutical care for patients with the issue of OTC medications; control of the expiration date of medicines, cash documentation; accounting for defect and presentation of pharmaceutical products at the pharmacy showcases [1, 2].

Unlike domestic, foreign specialists carry out such professional duties: advising clients and direct selling of medicines to them in the pharmacy, monitoring pharmacotherapy of a patient to improve the effectiveness of treatment and reducing side effects and reactions, providing and coordinating the medical services of the pharmacy, developing treatment schemes, training pharmacy staff, informing and advising doctors about new medicines or manifestations of their use, as well as building longterm relationships with pharmacy visitors [3, 4].

### 2. Problem statement in general, the relevance of the topic and its relationship with important scientific and practical issues

The study of the professional activity of pharmacists in recent years has received a lot of attention both by scientists and stakeholders, mainly they concerned the determination of the competencies of specialists. Among the scientists who studied these aspects are Tolochko V. M. [5], Gallii L. V. [6, 7], Mnushko Z. M. [7], Pestun I. V. [7] etc.

### 3. Analysis of recent studies and publications in which the solution of this problem is initiated and on which the author relies

The modern market demands also the personality traits of a pharmacist, which requires the intensification of research on this issue, taking into account the experience of other countries of the world with the aim of determining the directions for the development of socio-psychological characteristics (SPC) of pharmacy specialists, taking into account the social orientation of their professional activities and the urgency of creating patient-centered space [8].

### 4. Allocation of unsolved parts of the general problem

On the basis of the conducted research [8, 9], it was determined that almost all scientific research is aimed at determining the professional competencies of pharmacy specialists, but under current conditions, as noted above,

considerable attention in the selection of specialists should be paid not only to their professional qualities, but also socially psychological characteristics that will help him fulfill job descriptions at an appropriate level and ensure the quality of pharmaceutical visitor assistance to them pharmaceutical institution, and due to this, the appropriate level of competitiveness of the institution.

### 5. Formulation of goals of article

The purpose of the article is to study the sociopsychological characteristics of Ukrainian pharmacists.





6. Main research material (methods and objects) with the justification of the results

At the first stage of our work, we conducted a questionnaire survey of pharmacists and practitioners in order to determine the need for them to possess a certain set of socio-psychological characteristics.

The survey, which was conducted from November 2016 to February 2018, was attended by 352 practitioners, the characteristics of which are shown in Fig 1.



Fig. 1. Characteristics of the interviewed pharmacists practitioners: a – the age of pharmacists; b – the experience of pharmacists; c – gender of pharmacists; d – regions in which the surveyed pharmacists work

The results of the survey show that almost 90 % of practitioners believe that the pharmacist should have certain social and psychological characteristics necessary for the quality and effective implementation of professional activities. The obtained data emphasize the need to study the socio-psychological characteristics of a pharmacist which are expedient to conduct with the help of classical methods of express diagnostics: systemic-characterological relations [10], resistance to conflicts [11], the level of subjective control [12], MPI (G. Aysenck) [10], SSB-98 (Self-regulation style of behavior) [12], volitional qualities by N. Stambulova [10, 12].

At the second stage of our work we conducted a diagnosis of systemic-characterological relations of specialists in pharmacy. With the help of the test of system-character relations of personality [5], the severity of such traits of a specialist's character was determined, such as tactfulness, principledness, responsiveness, organization, hard work, self-criticism, initiative, altruism, self-confidence, accuracy, thrift and moderation in needs. According to the methodology, the maximum amount of points obtained can be equal to 84. Analysis of the results shows that 33.78 % of the surveyed

pharmacists have a favorable profile for concerted action (more than 54 points); average profile (from 30 to 53 points) – 41.89 %; unfavorable (less than 30 points) – 24.33 %. Apparently, most pharmacists have a certain set of socio-psychological characteristics – tactfulness, principledness, responsiveness, organization, diligence, self-criticism, self-confidence, accuracy, economy and moderation in needs – which help them to carry out their professional activities effectively. But averaging of the results testifies to the average profile of specialists: practically all socio-psychological characteristics are estimated at 4 points, except for initiative and altruism (3 points) (Table 1), which highlights the need for their development or improvement.

Table 1

The profile of systemic and characterological relations of specialists in pharmacy

Socio-psychological	0	1	2	3	4	5	6	7	Socio-psychological
characteristics									characteristics
tactfulness					P				indelicacy
adherence to principles					•				unprincipledness
responsiveness					•				indifference
discipline					•				promiscuity
diligence					•				laziness
self-criticism									arrogance
initiative									lack of initiative
altruism									egoism
self-confidence					7				diffidence
accuracy					•				untidiness
thriftiness					•				squandering
moderation in needs					•				aspiration for profit

Diagnosis of system-character relations allows us to draw conclusions about the attitude of the surrounding ones (visitors, colleagues), the pharmacy institution, things and oneself. For all four types of relationships, the pharmacy experts interviewed are in the middle position (Table 2), that is, it has an average level of moral behavior, which indicates the advisability of developing certain methods and approaches to improve these characteristics both in the process of education and postgraduate education, and in the process professional activity.

At the next stage of our work, we conducted a diagnostic of the conflict stability of a pharmacy specialist.

An important characteristic of a specialist in pharmacy, necessary for his professional activities, is the

conflict resistance, which is conditioned by the desire of pharmacy visitors to get the appropriate level of service without "splashing out" negative emotions and increasing their voice, their desire to be heard and get help even if the visitor has an aggressive manner behavior. The analysis of the obtained results made it possible to conclude that the majority of specialists of pharmacy have an average level of conflict resistance (69.5 %), high level of conflict had 22.03 % of experts, the level of expressed conflict is characteristic for 8.48 % of respondents (Table 3).

At the next stage, the level of subjective control (LSC) was assessed using the questionnaire of the LSC [9, 10], which allows to determine the degree of responsibility of a specialist for his actions and life, his external and internal locus (Table 4).

Table 2

Degree of expression of the system of relations of pharmacists							
Scale	Attitude to						
	surrounding ones	pharmacy institution	oneself	things			
High (over 12.6)							
Average (7.5–12.5)	11.36	11.80	10.24	11.51			
Low (less than 7.4)							

Thus, it is possible to conclude that the specialists of pharmacy have intrinsic characteristics of both external and internal locus, as evidenced by the average value of LSC.

At one of the stage of work, we carried out a diagnosis of the temperament of a pharmacy specialist.

Thus, it is possible to conclude that the specialists of pharmacy have intrinsic characteristics of both external and internal locus, as evidenced by the average value of LSC. To determine the nature of the specialists, MPI test questionnaire by G. Aysenck [4] was used to psychodiagnose the level of neuroticism, extraversion and introversion. On a scale of neuroticism, the average score is 32, that is the indicator of their emotional instability. The average score on the extraversion-introversion scale (30 points) shows that the extrovert type of personality inherent in the surveyed pharmacists, whose main characterological features are sociability, optimism, good nature, joy, the need for contacts, impulsiveness and inflexibility, not always the control of feelings and emotions, as well propensity to risky actions. The negative point is that the specialist can not always be relied on. Depending on the conditions in which a pharmacy specialist works, or the environment, he may experience such features as endurance, constancy or vice versa - lethargy, indifference, laziness, weakness, weakness of emotions, tendency to perform only the usual actions.

Table 3

	Profile of the modern	pharmacist re	garding cor	iflict resistance
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Characteristic	5	4	3	2	1	Characteristic
I avoid controversy		•				I am in a dispute
I treat my competitor without bias		•				I'm suspicious
I have adequate self-esteem		•				I have high self-esteem
I listen to the opinion of others						I do not accept other thoughts
I do not succumb to provocation						I'm easy to get started
I yield to the dispute, the search for a compromise						I'm strong in dispute: victory or defeat
If I "explode", then I feel guilty		4				If I "explode", I believe that without
						this it is impossible
I maintain the correct tone and tact in the dispute		•				I admit a tone that does not tolerate
						objections, faux pas
I believe that the dispute does not need to show		•				I think that in a dispute it is only neces-
your emotions						sary to show a strong character
I believe that the dispute is an extreme form of						I believe that a dispute is necessary to
conflict resolution						resolve the conflict

Table 4

Analysis of the level of subjective control of pharmacy specialists

		Investigated	
Scale	Type of control	level of subjective control	Conclusions
The scale of general internality (Io)	Control over significant situations	The average level of general internality (Io=26)	Experts consider all significant situations to be the actions of other people
International Achievement Scale (Ід)	Subjective control over emotionally positive events	Rather high (Id=8) and exceeds the average	Specialists of pharmacy believe that they have only achieved their own and can achieve their goal
The scale of the internality in the field of failures (IH)	The attitude of a pharmacist to negative events and situations	In equals 6,6	There are cases of accusations of failures of other people and the transfer of responsibility for them for all actions
The scale of internality in family relationships (Ip)	The attitude of a pharmacist to failures	Ip=5, which is an average value	The pharmacy specialists considers himself fully responsible for the events occurring in the family, but 36 % of specialists note that the reason for the significant situations arising in the family is the partners
The scale of internality in the field of industrial relations (IB)	Attitude of the pharmacy specialist to professional activity	IB=5 at IB <sup>max</sup> =8	Specialists of pharmacy recognize themselves and their actions as an important factor in the organization of production activities. At the same time, almost 43 % of respondents tend to give importance to the management of the pharmacy institution, colleagues, "luck is failure"
The scale of internality in the sphere of interpersonal relations (IM)	Attitude of specialists of pharmacy to colleagues and other people	Ім=3	Most pharmacy specialists feel able to earn the respect of colleagues and the sympathy of pharmacy visitors, but 36 % of specialists are not inclined to take responsibility for their relationships with others.
The scale of internality in the health sector (I3)	The attitude of the pharmacy specialist to his own health	I3=2	50 % of pharmacy specialists consider the state of health and any illness as a result of the event and hope to help in the recovery of other people, especially doctors. Only 21.4 % of experts have the highest value of health control (I3=4) and recognize themselves as responsible for their own health and well-being

According to the matrix of the types of temperament of G. V. Sukhodolsky (Fig. 2), the pharmacists who took part in the study belong to the

ninth quadrant – choleric persons. Such results give grounds to speak about the excitation of the nervous system of a pharmacy specialist (emotional instability), a

high level of dependence on the influence of others and a quick response to it, impatience, impetuousness,

sharpness of movements, as well as hard work and high concentration [10, 12].



### Stability

Fig. 2 Matrix typology of personalities of a pharmacy specialist using the method of G. Aysenck (by G. V. Sukhodolsky)

At the next stage of work, we carried out a diagnosis of the volitional qualities of a pharmacy specialist.

To study the volitional qualities of pharmacists, such as dedication, courage, decisiveness, perseverance, autonomy, initiative, endurance in expressiveness (that is, the presence and stability of the manifestation of the main features) and generalization (breadth of performance in different life situations and activities) SPC used the technique developed by N. Stambulova [10]. As a result of the testing on this method, the following data were obtained (Fig. 3):

- the purposefulness (P) of the pharmacists corresponds to the average level (23 points by expressiveness and 22 points by generalization from 40 maximum possible): the research subjects have certain goals set, but in some cases it is difficult for them to plan their affairs;



Fig. 3 Graphic image of volitional qualities of the studied pharmacists

- such an SPC as courage and determination (C–D) has an average value (23 points for expressiveness and 21 points for generalization with 40 maximum possible): pharmacists are not always confident in making decisions, they are characterized by some indecision, uncertainty and tendency to doubt;

– on the scale of "perseverance and persistence" (P–P), the average level of development of these qualities is determined (24 points by expressiveness and 25 points by generalization from 40 maximum possible): pharmacists can overcome obstacles to achieve the goal, but they have in its character a certain softness;

– indicators of initiative and independence (I–I) from pharmacists are on average – a certain degree of initiative, creativity and independence. Most often they are satisfied with the current state of affairs, and they are not inclined to change anything;

- the average level of self-control and selfcontrol (C-S) indicates the presence of pharmacists to some extent to resist the team, but they have a certain degree of suggestiveness.

Thus, the strong-willed sphere of the surveyed pharmacists is characterized by a tendency to significant fluctuations, partial uncertainty and lack of initiative. Investigators can, in certain cases, neglect their own duties while weakening external control, and also show less activity and energy. In addition, conducted psychodiagnostics allowed to establish that most pharmacists are not clearly expressed leadership qualities.

## 7. Conclusions of the study and the prospects for further development of this direction

Socio-psychological characteristics of specialists of pharmacy with the help of psychodiagnostic methods are researched. According to the test of systemiccharacterological personality relations, it is determined that for most specialists of pharmacy tactfulness, principledness, responsiveness, organization, diligence, self-criticism, self-confidence, accuracy, economy and moderation in needs are characteristic, but there is a certain need for their development or improvement. The diagnosis of the persistence of specialists to conflicts suggests that the specialists of pharmacy have an average level of conflict resistance and the need for appropriate training to increase the resilience to conflicts. Specialists in pharmacy are characterized by the presence of external and internal locus, indicating the average value of the level of subjective control. On the scale of neuroticism of the G. Aysenck questionnaire, pharmacy specialists are characterized by emotional instability and peculiarity of an extrovert personality type, sociability, optimism, good nature, cheerfulness, the need for contacts, impulsivity and hot temper. The volitional sphere of the interviewed pharmacists is characterized by a tendency to significant fluctuations, partial uncertainty and lack of initiative, as well as not a clear manifestation of leadership qualities. At the same time, specialists in pharmacy who have scored more than 10 points on the scale of neuroticism are not recommended to work in a specialty of the "person-person" type The application of the results of diagnosing the sociopsychological characteristics of pharmacy specialists will make it possible to identify those characteristics that negatively affect the performance of professional duties and need to be developed or improved in order to reach the appropriate level.

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