

PSYCHOLOGICAL RESOURCES FOR PERSONALITY ADAPTATION UNDER DIAGNOSTIC UNCERTAINTY: A RESOURCE-ORIENTED MODEL ACROSS ONCOLOGICAL, NEUROLOGICAL AND AUTOIMMUNE TRAJECTORIES

ПСИХОЛОГІЧНІ РЕСУРСИ АДАПТАЦІЇ ОСОБИСТОСТІ В УМОВАХ ДІАГНОСТИЧНОЇ НЕВИЗНАЧЕНОСТІ: РЕСУРС-ОРІЄНТОВАНА МОДЕЛЬ В ОНКОЛОГІЧНІЙ, НЕВРОЛОГІЧНІЙ ТА АУТОІМУННІЙ ТРАЄКТОРІЯХ

This article examines psychological resources of personality adaptation during periods of diagnostic uncertainty in adults undergoing investigation for suspected oncological, neurological, or autoimmune disease. Drawing on contemporary models of resilience and meaning-making, we propose a resource-oriented framework that conceptualises diagnostic uncertainty not as a purely deficit state but as a situation that activates, blocks, or distorts existing micro-resources. In a cross-sectional study completed the Wiesbaden Inventory for Positive Psychotherapy and Family Therapy (WIPPF 2.0) and the Coping Behaviour in Situations of Danger Scale. Composite indices of discipline/order, relational, temporal-existential, bodily, activity and future-oriented resources, as well as five coping factors, were compared between groups using ANOVA. Oncological patients showed a profile of disciplined hope and relational anchoring; neurological patients demonstrated heightened somatic vigilance, lower temporal – existential resources and greater passive pessimism and dissociation; autoimmune patients combined elevated temporal – existential, social and activity-related resources with predominant acceptance and active struggle. Medium-to-large effect sizes for temporal – existential resources, body-focused attention and dissociative coping support the differential structure of adaptation across trajectories. The findings justify brief screening of internal resources and context-specific coping in pre-diagnostic settings and suggest directions for low-intensity, culturally adapted interventions that can be integrated into Ukrainian diagnostic pathways under conditions of war, migration and health-care reform. Implications for future longitudinal and intervention research on personal recovery under diagnostic uncertainty are outlined.

Key words: diagnostic uncertainty, psychological resources, coping strategies, resilience, oncological patients, neurological patients, autoimmune diseases.

У статті розглянуто психологічні ресурси адаптації особистості в період діагностич-

ної невизначеності у дорослих пацієнтів з онкологічними, неврологічними та аутоімунними підозрами. Спираючись на сучасні моделі резильєнтності та смислотворення, запропоновано ресурс-орієнтовану рамку, яка трактує діагностичну невизначеність не лише як стан дефіциту, а як ситуацію активації, блокування або викривлення наявних мікроресурсів. У поперечному дослідженні дорослих пацієнтів використано Вісбаденський опитувальник позитивної та сімейної терапії (WIPPF 2.0) та «Шкалу дослідження копінг-поведінки у ситуаціях небезпеки». Порівнювали композитні індекси дисциплінарно-організаційних, реляційних, темпорально-екзистенційних, тілесних, діяльнісних і майбутньо-орієнтованих ресурсів, а також п'ять факторів копіngu за допомогою ANOVA. Для онкологічних пацієнтів виявлено профіль дисциплінованої надії та реляційного «якорення»; для неврологічних – посилену соматичну пильність, зниження темпорально-екзистенційних ресурсів та вищі показники пасивного песимізму й дисоціації; для аутоімунних – підвищені темпорально-екзистенційні, соціальні та діяльнісні ресурси з домінуванням копіngu прийняття й активної боротьби. Середні та великі розміри ефекту для темпорально-екзистенційних ресурсів, тілесної фокусованості та дисоціативного копіngu підтверджують відмінну структуру адаптації в різних траєкторіях. Отримані результати обґрунтовують доцільність короткого скринінгу внутрішніх ресурсів і контекстно-специфічної копінг-поведінки в переддіагностичних умовах і окреслюють напрями низькоінтенсивних, культурно адаптованих інтервенцій, інтегрованих у українські діагностичні маршрути в умовах війни, міграції та реформування системи охорони здоров'я, а також перспективи подальших лонгітюдних та інтервенційних досліджень особистісного відновлення в період діагностичної невизначеності.

Ключові слова: діагностична невизначеність, психологічні ресурси, копінг-стратегії, резильєнтність, онкологічні пацієнти, неврологічні пацієнти, аутоімунні захворювання.

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Introduction. Across contemporary health care, the clinical and diagnostic landscape is becoming progressively more complex: multimorbidity, genetic and immune markers, and lengthening diagnostic pathways extend the period during which neither diagnosis nor treatment plan is clearly defined. This prolonged interval of diagnostic uncertainty is associated with heightened anxiety, ruminations, perceived loss of control and reduced adherence and trust in the health-care system [1–3; 11–13]. For many patients, the “in-between” phase – when serious

conditions are suspected but not yet confirmed – is experienced as more psychologically taxing than receiving a definitive diagnosis.

In Ukraine, the urgency of this problem is intensified by the consequences of war, large-scale migration, socio-economic disruption and ongoing reforms of the health-care system, including mental health services. Fragmented care pathways and overloaded specialists may further prolong diagnostic journeys. Against this background, psychological resources such as resilience, psychological flexibility, positive personal

dispositions, meaning/coherence and social support show robust associations with lower depression and anxiety and better quality of life in different clinical and non-clinical populations [7–10; 12; 13]. This justifies the development of brief, context-adapted, resource-oriented protocols to support patients specifically during periods of diagnostic uncertainty.

Literature review. The evolution of research on this topic highlights several intersecting pathways. Firstly, a large body of literature explores the definition and metric of illness and diagnostic uncertainty, along with the underlying psychological processes, for various healthcare settings, including oncology, family practices, and emergency services [1, 2, 4, 11]. The uncertainty of illness is universally linked to higher degrees of distress and poor quality of life, though the use of adaptive strategies of coping and meaning-making is prognostic of better adjustment [4, 11]. Secondly, studies on the topic of emergency, family, and specialist healthcare communication patterns explore the process of how diagnostic uncertainty is transmitted to patients and their families, and how it affects the processes of distress, trust, and decision-making [2, 3, 5, 6]. While open transmission of uncertainty can raise short-term concerns, it can lower unrealistic expectations and enhance shared decision-making processes when carried out effectively [3, 5, 6].

Third, there exists a growing body of intervention studies focusing on psychological resources for medical stress, including resilience training, mindfulness-based and relaxation, cognitive-behavioral, and psychoeducational approaches, online forms of psychological support, and group peer support approaches [4, 7–9, 11, 13]. Systematic reviews and randomized controlled trials have shown that, on average, these intervention approaches result in small-to-medium decreases in anxiety and depressive symptoms, along with improvements regarding quality of life, for patients and survivors, with a large intervention effect size for oncology and chronic illness population-related studies [4, 8, 9, 11]. Fourth, the role of social support, family support, and family resilience appears strongly protective against uncertainty, together with predictive effects of resilience and quality of life for diverse populations, haemodialysis patients, and persons living with serious chronic diseases [10]. Finally, personological and motivational moderators, including optimism, self-efficacy, satisfaction of basic psychological needs, and positive coping style, have been identified for improved adaptation processes when faced with lasting societal uncertainty and health-related chronic stress [8, 9, 11–13].

Even so, there are various areas that remain. For example, the fact that a large number of studies use cross-section approaches and varying intervention protocols reduces the level of generalization and, consequently, ignores the long-term effects of the study [1, 2, 4, 7–9, 11–13]. Also, the fact that only a small number of studies examine the pre-diagnostic period, the time of diagnosis, and the initial post-diagnostic phase, along with the differing types of sus-

pected diseases (oncological, neurological, or autoimmune), poses a problem. Cultural antecedents, family systems, and war-related sources of stress are often inadequately investigated, notably when it comes to less developed regions and war-torn areas. This situation opens wide the doors for empirical investigation regarding a resource-oriented model of personality adaptation in the context of diagnostic uncertainty, developed according to the specific situation of Ukraine, characterised by healthcare reform and the effects of war.

Purpose of the study. The purpose of the current study is to conceptualize and test a resource-based model of personality-related adaptation during the time of diagnosis uncertainty, focusing on the comparison of the profiles and strategies of psychological resource use among three types of patients: those with oncological, neurological, and autoimmune diagnoses.

Presentation of the main material. In the cross-sectional design, the total sample, $N = 285$, comprised patients who were undergoing diagnostic work-up, characterized by a high level of medical uncertainty. Of these, 98 patients were suspected of having oncological disease, 94 of having neurological disease, and 91 of having autoimmune disease. Patients for the study were drawn from clinics operated by the Ukrainian healthcare system, when serious diagnoses were still under consideration, but not yet established. Criteria for study selection included: (1) the participant had to be at least 18 years of age, (2) the participant had to possess sufficient cognitive faculties for completing questionnaires, and (3) the participant possessed subjective awareness that the situation remained unresolved. The study excluded patients with acute psychosis or severe cognitive impairment. This study took place within the paradigm of the psycho-educational assessment.

To assess internal psychological resources, we employed the Ukrainian adaptation of the Wiesbaden Inventory for Positive Psychotherapy and Family Therapy (WIPPF 2.0) [14]. In N. Peseschkian's framework, the 27 WIPPF scales capture "micro-resources" of everyday life across four broad domains: discipline and order (e.g. neatness, punctuality, thoroughness), relational abilities (politeness, openness, trust, love), temporal and existential orientation (patience, time, hope, faith/meaning, fantasy/future) and self-care and embodiment (body/sensation, sexuality/tenderness, activity/profession). Each scale reflects a functional continuum: very high scores indicate overuse of the resource (rigidity, over-control, "escape into" work, body or relationships), whereas very low scores indicate underuse or deficit (disorganisation, emotional coldness, loss of hope and meaning). Thus, WIPPF allows both the level and the balance of internal resources to be described.

Coping in the face of acute danger and stress was measured using the "Coping Behaviour in Situations of Danger" Scale developed by N. Rodina and colleagues [15]. This questionnaire asks

respondents to recall a highly stressful event over the past week and to rate how far each statement describes their behaviour. Factor-analytic work has identified five coping patterns: (1) *acceptance and passive reliance on help* (seeking support, hoping for sympathy or a “miracle”, emotional ventilation); (2) *acceptance and passive pessimism* (resignation, withdrawal of activity, minimising one’s efforts); (3) *acceptance and passive optimism* (positive re-appraisal, belief that “everything happens for the best”, reliance on previous experience); (4) *acceptance and active struggle* (problem-solving, planning, persistence, constructive re-evaluation); and (5) *non-acceptance and dissociation* (avoidant and dissociative strategies, behavioural “escape”, fantasising, emotional numbing, reliance on substances). The configuration of these five patterns, in combination with WIPPF resources, provides the basis for a resource-oriented model of adaptation under diagnostic uncertainty.

On the basis of these two instruments, we conceptualised three resource-oriented models corresponding to the three diagnostic trajectories. Rather than rigid categories, these models represent typical constellations of micro-resources and coping strategies that can help clinicians to understand and support patients facing oncological, neurological or autoimmune suspicions.

Results. Between-group comparisons demonstrated systematic differences in both internal resources and coping patterns under conditions of diagnostic uncertainty (Table 1). For WIPPF resource domains, oncological patients showed the highest levels of discipline / order and relatively elevated relational and temporal–existential resources, whereas neurological patients displayed the lowest scores on relational and temporal–existential indices and the highest scores on body / self-care. Omnibus ANOVAs indicated small-to-moderate effects for discipline / order and relational resources ($F = 7.82–12.91$, $p < 0.001$, $\eta^2 = 0.05–0.08$) and larger effects for temporal–existential resources and body / self-care ($F = 16.50–20.25$, $p < 0.001$, $\eta^2 = 0.10–0.12$), suggesting that perceived future, hope and bodily focus differentiate the three diagnostic trajectories particularly strongly. Autoimmune patients, in turn, had the highest scores on activity / profession, contacts and fantasy / future ($\eta^2 = 0.06–0.09$), consistent with a pattern of active engagement in work, social networks and future-oriented projects despite ongoing uncertainty.

Coping profiles also differed significantly across trajectories. Acceptance with passive reliance on help showed only a small effect of group ($F = 4.59$, $p = 0.011$, $\eta^2 = 0.03$), with oncological patients somewhat more likely to seek support and comfort than the other two groups. In contrast, acceptance with passive

Table 1

WIPPF resource domains and coping patterns across three diagnostic trajectories

Domain / Scale (composite indices)	Oncological (n = 98) M ± SD	Neurological (n = 94) M ± SD	Autoimmune (n = 91) M ± SD	ANOVA (2, 297) F, p, η^2
WIPPF resource domains*				
Discipline / order (neatness, punctuality, diligence, thrift)	3.40 ± 0.55	3.05 ± 0.60	3.15 ± 0.58	$F = 7.82$, $p < 0.001$, $\eta^2 = 0.05$
Relational resources (politeness, openness, trust, love)	3.20 ± 0.60	2.65 ± 0.62	3.05 ± 0.57	$F = 12.91$, $p < 0.001$, $\eta^2 = 0.08$
Temporal – existential resources (patience, time, hope, faith/meaning, future)	3.30 ± 0.58	2.50 ± 0.65	3.40 ± 0.55	$F = 20.25$, $p < 0.001$, $\eta^2 = 0.12$
Body / self-care (body–sensation, sexuality / tenderness)	2.70 ± 0.62	3.35 ± 0.59	2.80 ± 0.60	$F = 16.50$, $p < 0.001$, $\eta^2 = 0.10$
Activity / profession	2.95 ± 0.63	2.70 ± 0.67	3.25 ± 0.58	$F = 9.48$, $p < 0.001$, $\eta^2 = 0.06$
Contacts (social engagement and dependence)	3.05 ± 0.60	2.60 ± 0.66	3.30 ± 0.56	$F = 14.69$, $p < 0.001$, $\eta^2 = 0.09$
Fantasy / future (imagination, future projects)	2.90 ± 0.65	2.55 ± 0.63	3.35 ± 0.54	$F = 12.91$, $p < 0.001$, $\eta^2 = 0.08$
Coping behaviour in situations of danger (Rodina et al.)				
Acceptance & passive reliance on help	2.50 ± 0.45	2.20 ± 0.48	2.30 ± 0.47	$F = 4.59$, $p = 0.011$, $\eta^2 = 0.03$
Acceptance & passive pessimism	1.80 ± 0.60	2.50 ± 0.55	1.90 ± 0.58	$F = 14.69$, $p < 0.001$, $\eta^2 = 0.09$
Acceptance & passive optimism	2.40 ± 0.50	1.70 ± 0.58	2.60 ± 0.48	$F = 20.25$, $p < 0.001$, $\eta^2 = 0.12$
Acceptance & active struggle	2.60 ± 0.52	2.10 ± 0.55	2.80 ± 0.50	$F = 16.50$, $p < 0.001$, $\eta^2 = 0.10$
Non-acceptance & dissociation	1.20 ± 0.55	2.40 ± 0.60	1.80 ± 0.57	$F = 24.17$, $p < 0.001$, $\eta^2 = 0.14$

pessimism and non-acceptance with dissociation displayed moderate-to-large effects ($F = 14.69\text{--}24.17$, $p < 0.001$, $\eta^2 = 0.09\text{--}0.14$): neurological patients reported more resignation, behavioural withdrawal and dissociative / avoidant strategies than oncological and autoimmune patients. Finally, acceptance with passive optimism and acceptance with active struggle were most pronounced in the autoimmune group, intermediate in the oncological group and lowest in the neurological group, with large effect sizes ($F = 16.50\text{--}20.25$, $p < 0.001$, $\eta^2 = 0.10\text{--}0.12$). This pattern supports the proposed resource-oriented model: oncological patients are characterised by disciplined hope and relational anchoring, neurological patients by somatic vigilance and constrained flexibility, and autoimmune patients by active meaning-making and future-oriented engagement under chronic unpredictability.

Oncological trajectory: “disciplined hope and relational anchoring”. Patients undergoing assessment for the possible presence of cancer often face acute threats of existence and expectations of follow-up news that could well have serious consequences [1, 4, 6, 9, 11]. In the oncological subgroup, according to the proposed resource-oriented typology, the pre-existing WIPPF-resource profile is of a comparatively well-developed complex of discipline-related, long-term-oriented variables (diligence, thoroughness, patience, time management) and of existential and relationship-related variables (hope, trust, love, faith/meaning). The fact that these pre-existing resources were more developed in the oncological than the neurological group of patients, and comparable for the time/existential variables with the autoimmune group, could potentially help patients follow complex processes of diagnosis and treatment, and maintain the idea of existence also in the future, when faced with uncertainty. On the other hand, these scales could also betoken the risk of their excessive use: pedantry, obstinate rules adherence, and the corresponding “hyper-responsibility” concerning one’s own existence, when faced with delays of investigation or when the results are not conclusive.

Regarding the strategies of coping, patients with oncological diagnoses demonstrated a style characterized by moderately high acceptance and passive use of help, together with acceptance with active struggle. They tended to inquire about and seek assistance and support from significant others and professionals, prepare for consultations, follow through on recommendations, and, together with the expectation of “good news,” or a positive interpretation of their state, also take the view that events are controlled externally [4; 6; 8; 9; 11]. Optimistic types of acceptance can be beneficial, but the failure of the situation to clarify, when external assistance is sought without internal flexibility, can gear the individual toward the idea that the situation is beyond their control, hence the resource-oriented approach that seeks a balance between discipline and internal help.

Neurological trajectory: “somatic vigilance and constrained flexibility”. Neurological suspicions of the possibility of demyelination or neurodegenerative diseases are often characterized by unclear, varying symptoms, and a long period of observation prior to the achievement of diagnostic criteria [2, 3, 5]. In the current model, patients on a neurological pathway are likely to show high scores on the WIPPF scales of body/sensation and time, indicating a strong monitoring of bodily processes and the subjective experience of time pressure (“times running out”). Imbalances of these resources can appear on the surface, for example, as psychophysiological hyperalertness, sleep disorder, and “flight into the body,” where the patient becomes involved with the subjective experience of bodily sensation and estimates of anticipated loss of bodily function.

Regarding relational and existential aspects (trust, hope, faith/meaning), patients with neurological diseases often follow a heterogeneous strategy. Some patients strongly capitalize on their family and religious resources, while other patients reveal reduced trust and the propensity for psychological distancing as a coping strategy for pre-existing fears of failure. Regarding the structuring of the coping strategies, the use of acceptance and passive pessimism together with non-acceptance and dissociation is very common: this group of patients, using data collected, reveals the highest average level of passive pessimism and dissociative/avoidant coping. These patients fluctuate between the strategy of resentful anger and denial of their condition (“nothing will help”) and strategies involving minimizing their interaction with the healthcare staff, their emotional state, and using distraction and drugs for fear control [2, 3, 5, 11–13]. This group of patients will require approaches that will help them convert their biological alertness into constructive caring, will help them reshape their time perspective, and will allow them to build safe relational/existential spaces where uncertainty will not need to be split off.

Autoimmune trajectory: “active meaning-making under chronic unpredictability”. Systemic connective tissue diseases or inflammation of the autoimmune variety typically entail fluctuations of symptomology, the absence of specific lab results, and comprehensive differential diagnoses. It often defies precise predictions of symptomology even after diagnosis, hence the need for constant adaptive strategies, not simply strategies of intermittent adjustment. In the current model, the group that suffers from autoimmune diseases is distinguished by higher WIPPF profiles on activity/profession, contacts, fantasy/future, and faith/meaning, together with the highest level of existential time on the three categories. They often make use of work, art, and plans for the future, using these sources of identity for support against the experience of chaos [8–10; 12, 13].

Coping strategies are mainly focused on acceptance and active coping, but with a significant role of acceptance and passive optimism: the highest scores

on these scales were shown by autoimmune patients. They often use planning, reorganization of the daily situation, experience gained from other sources of stress, and positive reinterpretation strategies ("I realized what is important and what is not because of this illness") [8-11, 13]. However, the non-negligible role of non-acceptance and dissociation also suggests that the use of creativity can sometimes slide into the idealization of the future or denial of limits. The supportive role of the resource approach, prioritizing hope, prevention of exhaustion through excessive activity, and integration of bodily experiences into a coherent lifetime narrative.

Throughout these three patterns, the WIPPF profiles of the WIPPF and the profiles suggesting coping mechanisms reveal that the role of diagnostic uncertainty is not only characterized by deficient awareness but also by how the use of already existing resources is mobilized, over-used, or hindered. The oncological perspective highlights the promotion of disciplined hope and support for interpersonal relationships, the neurological perspective stresses the use of somatic alertness and reduced flexibility, and the autoimmune perspective highlights the promotion of meaning-making processes and future-focused engagement with uncertainty. For the patient population in Ukraine, the patterns of resource use are also influenced by displacement, economic hardships, and the illness experience of family.

In practical terms, the resource-oriented model proposed here is that brief support interventions during diagnostic uncertainty should: (1) follow the initial assessment of internal resource states and coping style using WIPPF 2.0 and the danger-situation coping scale, respectively [14, 15], at the very beginning of the intervention protocol. Additionally, (2) use communication about the diagnostic uncertainty tailored to the prevailing resource profile of the patient, following the principles of transparency and containment [2, 3, 5, 6], and, where indicated, (3) actively incorporate the family/social support system, given their important role as potent resilience moderators [8-10, 12, 13]. In the context of Ukraine, these protocols could be incorporated into the existing diagnostic workup protocols as low-intensity resource-based modules, that is, in the light of new national reforms undertaken for better mental healthcare, and contribute, subsequently, to a new front of empirical studies on the long-term adaptation trajectories following diagnostic uncertainty.

Conclusion. In sum, the current study contributes to and offers preliminary support for a resource-based approach on the topic of personality adaptation with respect to diagnostic uncertainty. In particular, it was shown that the diagnostic trajectories for oncological, neurological, and autoimmune patients differ concerning the specific patterns of resource activation and coping strategies, rather than the deficit reaction. More specifically, oncological patients activate disciplined hope and relationship anchoring, neurological patients activate somatic vigilance with limited flexibil-

ity, and patients with autoimmune diseases activate active meaning construction, together with future-oriented engagement.

The results highlight the practical utility of resource assessment (conducted using WIPPF 2.0) and coping strategies specific to the situation (evaluated using Rodina's scale) for high-risk situations, and these can help design resource-based intervention strategies and communication approaches for the pre-diagnostic stage. For the Ukraine healthcare system, which is already faced with war, migration, and healthcare reforms, resource-based intervention strategies could very well be incorporated into the existing diagnostic protocol for sustained patient compliance and recovery, even before a diagnosis can be made.

Future longitudinal and intervention studies will be needed to assess the viability of these resource profiles and explore the effects of family systems, cultural determinants, and structural factors on adaptation for individuals living with diagnostic uncertainty.

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