

THE QUALITY OF LIFE, RESOURCES, AND COPING DURING THE FIRST WEEKS OF THE COVID-19 PANDEMIC IN PEOPLE SEEKING PSYCHOLOGICAL COUNSELLING BEFORE THE PANDEMIC

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Abstract

Objectives: This study aimed to understand the relationship between resource gains and losses, coping, and the quality of life during the growth phase of the COVID-19 pandemic. **Material and Methods:** The Internet-based survey covered 353 individuals who had participated in a psychological support project operated by one of the non-governmental organizations in Lublin, Poland, in the 12 months prior to the outbreak of the pandemic. The questionnaire used in the study contained questions to collect sociodemographic data and psychometric scales to measure resource gains and losses (the *Conservation of Resources – Evaluation* questionnaire), the quality of life (the *World Health Organization Quality of Life-BREF*), and strategies of coping with the pandemic situation (a modified *Brief Coping Orientation to Problems Experienced* questionnaire). **Results:** A higher global quality of life occurred with higher gains and minor losses, as well as with coping through planning, positive reframing, emotional support seeking, a reduced substance use tendency, low self-blame, avoidance, and disengagement. Moreover, helplessness-based coping strategies were found to mediate both the relationships between resource gains and the quality of life, and between resource losses and the quality of life. **Conclusions:** Factors that may reduce people's quality of life during the COVID-19 pandemic are an increase in losses and limited gains, experienced over the 6 months preceding the pandemic, as well as not using active, meaning-oriented, and support-seeking coping strategies, but using avoidance behaviors instead. Coping strategies specific to people experiencing helplessness are a mediating mechanism between losses and limited gains of resources, and the quality of life. *Int J Occup Med Environ Health.* 2021;34(2):275–87

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INTRODUCTION

It is already clear that the direct and indirect psychological and social consequences of the 2019 coronavirus disease (COVID-19) pandemic are ubiquitous and may affect mental health, both now and in the future [1]. The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) outbreak poses a serious and urgent global health threat. The COVID-19 pandemic has had a profound impact on all aspects of societies in almost all countries in the world, including on mental health [2,3]. Organizations and associations of healthcare professionals and scientists, both at the international and national level, have published information on the need to monitor the impact of the COVID-19 pandemic on mental health in the entire population and in vulnerable groups, as well as on the cognitive functions and mental health of COVID-19 patients.

The quality of life, commonly recognized as a dynamic, subjective and multidimensional concept [4], is a measure that can express a person's well-being in a pandemic situation. From a psychological perspective, an individual's quality of life is determined by their subjective assessment of experienced events. However, this assessment only reflects human experience of the conditions in which people function. It is, to simplify, the result of individual needs and possibilities of satisfying these in the environment. The quality of life is a subjective measure that indicates a person's well-being or its absence. The assessment is made through the person's perceptions of their position in life, in their cultural context, in the system of values, and relative to their interests, goals, expectations, and standards. The sense of the quality of life understood in this way is influenced by multiple factors, including interpersonal relations, life environment, and psychological and physical states [5].

Hobfoll's conservation of resources (COR) theory connects the quality of life with the level of one's resources [6]. According to the COR theory, resources and their growth should be associated with a higher quality

of life, while their loss should be associated with a lower quality of life. Those capable of creating, accumulating, and maintaining resources are less likely to lose them and thus more likely to experience a sense of success and gain, which translates into life satisfaction and health [7,8]. Research has also confirmed that the gain in personal characteristics can be a predictor of an increased life satisfaction over time. For example, among women with chronic fatigue syndrome, loss and gain of resources predict the quality of life, while fatigue and exacerbation of symptoms do not [8,9].

According to the assumptions of the COR theory, traumatic events pose objective components of threat and loss, and provide for the generality of assessments among those who share the same biology and culture [6]. The underlying principle of the COR theory is that individuals strive to gain, preserve, grow, and protect the things they value most. In line with this principle, people use key resources to self-regulate, to operate with social relationships, and also as a way in which they organize, behave, and fit into the wider context of an organization and culture. All these elements are endangered or lost when a natural disaster brings about great damage to a region, with an impact on human health, work and the ability to function in full, and the entire economy [6,10].

The COR theory recognizes stress as a response to a situation that exceeds the capabilities of resources, threatens them, or leads to their exhaustion. People strive to gain, preserve, and protect what they value, so stress occurs in situations involving a threat of loss or an actual loss of resources, or in situations where an investment of resources does not generate the intended effects [6,11]. Resources are distributed according to 2 principles. First, "resource loss is disproportionately more salient than is resource gain" [6], both in terms of intensity and speed of effect. In this sense, resource loss carries a higher psychological significance than gain. This principle implies that people engage much more in situations where the goal is

to protect what they have than to achieve something new. The other principle provides that “people must invest resources to protect against resource loss, recover from losses, and gain resources” [6]. The function of gain is 2-fold: primary, enabling the balancing of resource loss, and secondary, aiming to acquire new resources and reduce emotional tension. Therefore, individuals create a pool of resources, the “resource reserve,” which they can use to manage their resources.

Those with more resources are less at risk of losing resources and have a higher ability to acquire resources. Conversely, those with fewer resources are more at risk of losing resources. Moreover, those with a shortage of resources are more likely to experience the extreme consequences of difficult situations. Individuals with few resources – for example, more difficult access to health care, longer working hours, and less money – will be more exposed to losses. People who have more resources, including cultural capital and a privileged social status, are less vulnerable to mental stress as a result of chronic or traumatic strain. Those who lack resources are not only more likely to lose resources but also to suffer a chain of losses [6]. Loss spirals are triggered as stressors that require coping by resource investment. When one has insufficient resources, the investment of resources can prove to be risky, leading to further losses. Those short of resources, according to the COR theory, are likely to take a defensive stance to preserve their limited resources, but may also follow antisocial coping strategies in a situation where they blame society for losses.

The long-term effects of defensive and avoidance coping strategies hinge upon the fact that although these strategies are reinforced by loss reduction, they also reduce the person’s engagement and thus the potential access to other valuable resources, which can lead to a continuous loss cycle [6]. Any attempt to replenish lost resources, using existing resources, can exacerbate losses by triggering a growing loss spiral. Loss spirals are especially likely

in situations of chronic stress. In particular, continuous exposure to stressors intensifies the significance of an actual or anticipated loss of resources, and results in an actual loss of resources, leading to burnout, that is, exhaustion of emotional, physical, and cognitive resources [9,11].

Attention should also be paid to the fact that individuals accumulate resources that combine into bundles or “resource caravans.” This is possible with the presence/availability of resources in the environment. The accumulation of resource caravans is enabled by resource passageways, that is, social/economic/environmental spaces in which these bundles of resources can be acquired. In the situation of a natural disaster, the options to acquire new resources are markedly limited [8,10]. A shortage of financial resources causes a higher level of stress triggered by sudden losses of resources. Other studies have found a link between a shortage of financial resources and poor health outcomes [12].

The assumptions of the COR theory have been confirmed in numerous studies. The COR theory has often been adopted as a framework for understanding severe and traumatic stress caused by natural disasters [6,8,13,14] and epidemics: HIV risk stress in women [15] and gay/bisexual men [16], as well as SARS outbreak stress among nurses in Taiwan [17] and among recoverers, their family members, and healthy residents of Hong Kong [18].

The unique contribution of this study is the use of perceived health and wealth resources that affect stress during the first weeks of a health crisis, namely the COVID-19 pandemic. During that time, several hazard control measures had already been put in place in Poland. These included, among others, the closure of schools, kindergartens, universities, and limitations in the operation of shops and service outlets. These restrictions were related to limiting access to resources and changing their perception, for example, in terms of the value assigned to them. Perception of resources may or may not be an actual rep-

resentation of resources held, but it still serves as a good indicator of how individuals respond to stressors and how they cope with difficult situations. Perceived health and financial resources affect stress the most, which supports the thesis that resource perception is important for human well-being [12].

This study aimed to assess the relationships between resources, coping strategies, and the quality of life in those experiencing difficulties associated with the COVID-19 pandemic in Poland. The review of available literature allows the following hypotheses to be made:

- H1: Resource gains during a pandemic and the preceding period are associated with a higher quality of life, while losses are associated with a lower quality of life;
- H2: Pandemic stress coping strategies mediate the relationship between resource gains and losses, and the quality of life.

MATERIAL AND METHODS

Participants

The individuals who, in the 12 months prior to the outbreak of the COVID-19 pandemic, had participated in a psychological support project operated by one of the non-governmental organizations (NGOs) in Lublin, Poland, were invited to take part in the research. The survey covered a group of 353 people aged 16–70 years ($M \pm SD$ 28.9 \pm 10.09). Women accounted for 81.6% and men for 18.4% of the group. Residents of cities with a population of >50 000 people accounted for 53.8%, those residing in cities with a population of \leq 50 000 people for 19.8%, and those from the countryside for 26.3% of the respondents. The group was dominated by people with secondary education (53.5%) and higher education (45.3%). Most of the respondents were single (39.9%) or lived in cohabitation (36.8%). Those formally married accounted for 22.9% and widowed persons for only 0.3%. Professionally active people dominated in the group – 71% (internship – 26.3%, contract employment – 29.7%, civil law contracts – 6.5%, self-employed – 8.5%). Only 2.8%

were unemployed, and 26.1% were students at the time of the survey.

The index of a subjective assessment of material conditions in the studied group was measured on a 5-point scale from 1 (“very bad”) to 5 (“very good”), with $Me = 3.43$ (interquartile range [IQR] = 0.73). The level of anxiety experienced in connection with the COVID-19 pandemic was measured on a 10-point scale from 1 (“very low”) to 10 (“very high”), with $Me = 5.78$ (IQR = 1.86).

Procedure

This paper presents the results of the study on the perceptions of the COVID-19 pandemic in Poland during its growth phase. The survey was carried out in March 26–April 5, 2020. It was based on an online questionnaire using Google Forms sent out directly to respondents. Four hundred and seventeen survey sets were sent out in total, of which 353 were returned, yielding a response rate of 85%. The survey set contained standardized self-description diagnostic tools. The survey was anonymous and was carried out in line with the principles of research ethics. Participation was voluntary.

Ethics

The research was conducted in accordance with the ethical standards of a responsible committee on human experimentation (institutional or regional), and with the Declaration of Helsinki, as revised in 2013. To comply with the ethical standards, the research was conducted according to the standards of good research practice recommended by the American Psychological Association. The participants were informed about the confidentiality and anonymity of the research, and that they had the right to resign from participation.

Measures

The questionnaire used in the study contained questions on basic sociodemographic data, emotions related

to the COVID-19 pandemic, and psychometric scales to measure resource gains and losses, the quality of life, and coping strategies.

Gain and loss of resources

The Polish version of the *Conservation of Resources – Evaluation* (COR-E) questionnaire was used to assess the distribution of resources [19,20]. The COR-E questionnaire was developed by Hobfoll, in collaboration with Lilly, to test the COR theory; it contains a list of 74 resources. Respondents consider each resource in 2 categories, namely loss and gain, on a 5-point scale from 0 (“not at all”) to 4 (“to a very large degree”). The bifactor model of the COR-E questionnaire in Poland revealed a global factor (comprised of 70 resources) and 7 group factors, namely management, social status, resilience, family, material status, growth, and community resources [19]. In the present study, only the global factor score was used, for which Cronbach’s α was 0.99 for loss and 0.98 for gain of resources.

Quality of life

The quality of life was measured with the *World Health Organization Quality of Life-BREF* (WHOQOL-BREF), an abbreviated generic quality of life scale developed by the World Health Organization [21,22]. It is an international, cross-culturally comparable quality of life assessment instrument that was developed simultaneously with 15 international field centers. It assesses the individual’s perceptions in the context of their culture and value systems, and their personal goals, standards, and concerns. The WHOQOL-BREF comprises 26 items, of which 24 measure 4 broad quality of life domains: physical health, psychological health, social relationships, and environment. In each of the 4 domains, a score of 4–20 pts can be obtained; the higher the number of points, the better the quality of life in the assessed domain. The following Cronbach’s α reliability coefficients were obtained: physi-

cal health – 0.70, psychological health – 0.82, social relationships – 0.73, and environment – 0.78.

Pandemic coping strategies

Coping strategies were measured using the modified *Brief Coping Orientation to Problems Experienced* (Brief-COPE) questionnaire by Carver [23], and specifically the Polish adaptation by Juczyński and Ogińska-Bulik [24]. The method enables an assessment of how often an individual uses 14 different coping strategies. In the original Brief-COPE, respondents are asked about how they usually cope with difficult situations and respond to each of 28 items on a 4-point scale from 0 (“I haven’t been doing this at all”) to 3 (“I’ve been doing this a lot”). The results for individual strategies are calculated as averages of the items that they comprise. In this study, the instructions for the respondents were slightly modified to adapt to coping with the COVID-19 situation. The instructions read as follows: “People react differently when they encounter difficult or stressful events in their lives. The questions below are intended to determine how you respond to various experiences related to the current situation of the coronavirus (COVID-19) pandemic.” Reliability coefficients of the Brief-COPE subscales in the survey reported in this paper ranged 0.24–0.94. Three subscales did not reach reliability of 0.59 and were excluded from further analyses. A factor analysis of the Polish version of the tool indicates that it can also discriminate between more general ways of coping, which were named as follows: active coping, helplessness, the use of support, and avoidance [24]. Active coping strategies comprise active coping and planning, and positive reframing subscales. Helplessness consists of substance use, behavioral disengagement and self-blame. The use of support includes the use of emotional support and the use of instrumental support. Finally, avoidance comprises 3 strategies: self-distraction, denial and venting. The other 3 subscales (religion, acceptance and humor) included in the questionnaire are relatively independent.

Data analysis

Data analysis was carried out using SPSS v. 25.0 [25] and IBM AMOS v. 25.0 [26]. Descriptive statistics were used during the analyses to present the intensity level of the results in individual variables. Pearson's correlation coefficient was used to estimate the relationship between variables.

Mediation analysis was performed by structural equation modeling with a bootstrap-based confidence interval size effect estimation (1000 bootstrap replicates). A number of model fit indicators were used during the statistical analyses, such as the minimum value of the discrepancy function (CMIN), its p-value (PClose), the minimum discrepancy to its degrees of freedom ratio (CMIN/df), the root mean square error of approximation (RMSA), the comparative fit index (CFI), the Tucker–Lewis index (TLI), and the root mean square residual (RMR). To select the variables that best explain the quality of life, the trimming method was used. It involves removing statistically insignificant paths from the model, which leads to the improvement of its fit indicators.

RESULTS

Descriptive statistics and first-order correlations of the studied variables are presented in Table 1. The results were analyzed in 3 stages, taking into account:

- a description of the intensity levels of the results in the measured domains of life of the respondents;
- an assessment of the relationship between the quality of life and resource gains and losses, as well as the frequency of using coping strategies;
- a selection of variables most accurately predicting the level of the quality of life in the COVID-19 context.

An analysis of the 4 main domains measured in the WHO-QOL-BREF regarding the midpoint for the estimation scale of the response format indicates that the studied group has relatively high and, at the same time, very simi-

lar results in all the 4 domains of the quality of life [22]. A juxtaposition of responses with the midpoint of the estimation scale suggests that those respondents also have average resource gains and low resource losses. The most commonly used strategies for coping with the stress generated by the COVID-19 situation are those associated with the use of emotional support (seeking encouragement and understanding in others), planning – that is, thinking about what to do and when – and those related to attempts to accept the situation and learn one's ways of life anew. A positive reframing strategy is also often used, which assumes endeavors to find positive aspects in a difficult situation. In turn, the most rarely used strategies are those associated with the reduction of negative emotional states through substance use, denial of the fact of a difficult situation (probably associated with the pandemic), behavioral disengagement, and those that lead to self-blame for the situation.

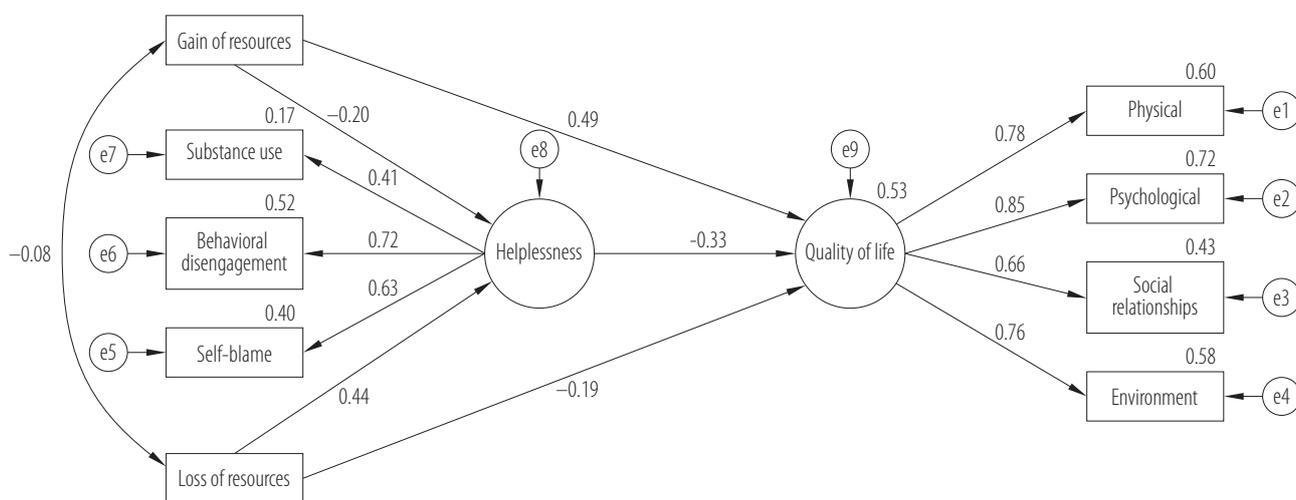
There are several notable statistically significant relationships in the assessment of the relationships between the quality of life dimensions and the other variables. All the measures of the quality of life have a similar relationship with resource gains and losses. Gains amplify the perceived quality of life, while losses attenuate it. By contrast, the relationships for coping strategies display specific patterns for the various dimensions of the quality of life. An analysis of the relationships between the level of the quality of life in the physical, psychological, social relationships, and environment domains indicates that they correlate positively, and in the same pattern, with strategies based on positive reframing and acceptance of the situation (in the case of the latter, except for the social relationships domain). Negative correlations, on the other hand, can be seen for denial, venting tendencies, substance use, behavioral disengagement, and self-blame. Moreover, the quality of life in the psychological and social relationships domain coexists with the use of strategies associated with thinking about and planning

Table 1. Descriptive statistics and Pearson's r correlations between the quality of life, coping strategies, and resource levels among the participants (N = 353) of psychological counseling provided by non-governmental organizations in Lublin, Poland, in the 12 months prior to the outbreak of the pandemic

Variable	Pearson's correlation																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Quality of life																				
1. Physical health																				
2. Psychological health	0.65***																			
3. Social relationships	0.47***	0.59***																		
4. Environment	0.63**	0.63***	0.48***																	
Resources																				
5. Gain	0.46***	0.49***	0.42***	0.42***																
6. Loss	-0.32***	-0.32***	-0.20***	-0.30***	-0.08															
Coping strategies																				
7. Active coping	-0.06	0.05	0.02	-0.08	0.13*	0.11*														
8. Planning	0.05	0.19***	0.06	0.04	0.20***	0.06	0.58***													
9. Positive reframing	0.20***	0.33***	0.20***	0.26***	0.36***	-0.06	0.26***	0.37***												
10. Acceptance	0.12*	0.17***	0.07	0.14**	0.18***	-0.05	0.18***	0.36***	0.34***											
11. Humor	0.03	-0.09	-0.07	0.02	0.01	-0.01	0.06	0.13*	0.22***	0.22***										
12. Religion	-0.02	0.10	0.06	0.07	0.07	0.01	0.14**	0.17***	0.19***	0.19***	0.04									
13. Use of emotional support	0.04	0.18***	0.24***	0.09	0.20***	-0.05	0.22***	0.29***	0.22	0.26***	0.03	0.24***								
14. Use of instrumental support	-0.05	0.04	0.09	-0.05	0.12*	0.02	0.35***	0.38***	0.23***	0.23***	0.10	0.29***	0.65***							
15. Self-distraction	-0.07	-0.02	-0.02	-0.03	0.09	0.13*	0.25***	0.19***	0.15**	0.28***	0.20***	0.15**	0.29***	0.26***						
16. Denial	-0.19***	-0.20***	-0.22***	-0.29***	-0.04	0.26***	0.03	0.01	-0.01	-0.02	0.06	0.09	0.10	0.18***	0.20***					
17. Venting	-0.24***	-0.18***	-0.11*	-0.21***	-0.08	0.17***	0.23***	0.23***	0.09	0.20***	0.21***	0.26***	0.33***	0.43***	0.44***	0.34**				
18. Substance use	-0.12*	-0.18***	-0.18***	-0.17***	0.02	0.24***	0.08	-0.04	0.00	-0.07	0.22***	0.04	0.01	0.10	0.13*	0.32***	0.19***			
19. Behavioral disengagement	-0.26***	-0.32***	-0.23***	-0.36***	-0.19***	0.32***	0.01	-0.09	-0.21***	-0.05	0.19***	0.09	0.01	0.16**	0.11*	0.50***	0.42***	0.29***		
20. Self-blame	-0.22***	-0.32***	-0.24***	-0.23***	-0.18***	0.28***	0.22***	0.16**	-0.06	-0.01	0.19***	0.06	0.06	0.23***	0.12*	0.36***	0.25***	0.25***	0.46***	
M±SD	14.29± 2.4	14.04± 2.97	14.04± 3.53	13.91± 2.5	2.24± 0.81	0.84± 0.83	1.71± 0.78	1.87± 0.74	1.76± 0.85	1.86± 0.66	0.93± 0.62	1.23± 1.08	1.89± 0.81	1.76± 0.82	1.66± 0.74	1.66± 0.82	1.35± 0.71	1.35± 0.68	1.35± 0.61	1.67± 0.73

Active coping strategies: active coping, planning and positive reframing; helplessness: substance use, behavioral disengagement and self-blame; the use of support: the use of emotional support and the use of instrumental support; avoidance: self-distraction, denial and venting.

* p < 0.05, ** p < 0.01, *** p < 0.001.



e1–e9 – residuals.

Figure 1. Structural equation model explaining the quality of life by gain and loss of resources, and helplessness-based coping strategies, among the participants of psychological counseling (N = 353)

what is worth doing in a difficult situation, and seeking emotional support.

Structural equation modeling was performed to capture comprehensively the relationships between the variables controlled during the study and to test the mediational role of coping strategies, thus selecting the best predictors of the quality of life. The model included 3 categories of variables. The main explanatory variables included gains and losses of resources. Coping strategies were treated as mediating variables. These were covered in the form of 4 latent variables, according to the factor analysis obtained in studies on the Polish adaptation of Brief-COPE [24] (active coping, helplessness, support seeking, and avoidance strategies). Regarding the mediating variables, the model also included 3 strategies that did not fall into the more general dimensions (religion, acceptance, and humor). The explained variable was the quality of life expressed in the form of a latent variable whose indices were the 4 domains (physical health, psychological health, social relationships, and environment).

The full model prepared with all the variables turned out to fit the data poorly. Therefore, the paths with

values that proved to be statistically insignificant were removed. The final model had satisfactory fit indicators, CMIN (23) = 38.122, PClose = 0.652, CMIN/df = 1.657, RMSA = 0.043, CFI = 0.984, TLI = 0.975, and RMR = 0.098. The variables that best explained the quality of life were: the levels of resource gains and losses, and coping strategies, which can be described as helplessness. This variable comprised such detailed dimensions as substance use, behavioral disengagement, and self-blame. This pattern of variables explained 53% of the variance in the quality of life (Figure 1).

Moreover, the structural model confirmed that coping strategies mediated both the relationship between resource gains and the quality of life, and resource loss and the quality of life. Detailed information on the direct and indirect effects in the presented model is provided in Table 2.

Resource gain reduces helplessness-based coping while resource loss increases helplessness which, in turn, reduces the quality of life. Both indirect effects are significant. The size of the loss effect is significantly greater than the gain effect.

Table 2. Standardized total, direct and indirect effects of gain and loss of resources on the quality of life, mediated by helplessness among the participants (N = 353) of psychological counseling provided by non-governmental organizations in Lublin, Poland, in the 12 months prior to the outbreak of the pandemic

Effect type	Quality of life mediated by helplessness			
	gain of resources		loss of resources	
	B	90% CI	B	90% CI
Total effect	0.56**	0.47–0.64	-0.33**	-0.43–(-0.23)
Direct effect	0.49**	0.39–0.58	-0.19**	-0.30–(-0.19)
Indirect effect	0.07**	0.03–0.13	-0.15**	-0.24–(-0.07)

** p < 0.01.

DISCUSSION

The results obtained in this study are consistent with the assumptions of the COR theory: positive correlations between the quality of life and perceived resource gains, and negative correlations between the quality of life and perceived resource losses [6,27]. The perception of resource possession can help individuals cope with life’s hardships, and resource non-possession can increase stress levels. While the perception of resources may or may not be a representation of resources actually possessed, it is nevertheless a good indicator of coping with difficult situations [12].

The positive correlations between strategies such as planning and positive reframing, and all the dimensions of people’s quality of life during the growth stage of the COVID-19 pandemic, may be associated with the optimal use of available resources by the respondents to cope with the difficult situation. Strategies such as positive reframing and planning are part of the active coping dimension, along with the active coping strategy, which has no correlation with the quality of life. People in the COVID-19 situation use available resources to cope effectively with the difficult situation, however, with limited external activity, which is restricted by the state’s policy (restrictions on leaving home without an important life need, significant restrictions on the functioning of workplaces, offices, cultural life, and even sports activi-

ties) [28]. This direction of interpretation is also supported by the existing correlation of the acceptance-based strategy with the 3 components of the quality of life, except for the social relationships domain.

It seems that the area of restrictions most difficult for the respondents to accept is the sphere of interpersonal contacts. This is undoubtedly associated with the lack of direct relations with colleagues, family, or friends. Okruszek et al. [28] noted that putting the necessary precautions in place to combat a pandemic led to a drastic suppression of direct interactions and potential erosion of social bonds. Interestingly, the majority of the respondents are young people who use social media messengers on a daily basis. According to the COVID-19 pandemic policy, learning and work in most cases have not been completely interrupted and are provided in a different (online, remote) form. One can hypothesize that virtual contact is less satisfying than direct relations, and the quality of contact (virtual/direct) affects the quality of life in the social relationships domain. However, this requires further research.

The positive correlations between the use of emotional support strategies and the psychological and social relationships domains of the quality of life indicate the importance of emotional coping for a sense of well-being in these areas. Given the availability of resources in the situation of epidemic restrictions, the emotional support strat-

egy seems to be one of the most important strategies for maintaining human well-being. The analyses carried out by Brooks et al. [2] showed a relationship between quarantine and negative psychological effects such as post-traumatic stress disorder symptoms, confusion, and anger. Sharing a common fate in an emergency situation, seeking and receiving understanding, and the use of (remote) psychological support satisfy important emotional needs of a person in a stressful situation, thus reducing the level of stress and protecting a sense of the quality of life. This strategy has the function of protecting resources.

Madden et al. [29] reported similar results when examining employees working under permanent and temporary contracts. Temporary contract employees spoke about stress more often than standard employees, and they sought social support, which alleviated their stress. Temporary contract employees experienced limited access to necessary resources that could minimize stress, so they tried to acquire resources beyond their direct access by forming social support structures. The study by Li et al. [3], based on an analysis of online posts from 17 865 active Weibo users, revealed that people in a pandemic situation were more worried about their health and family, and less worried about their free time and friends. In an emergency situation, people seek emotional support from their loved ones.

It is a matter of further research to demonstrate whether the physical closeness of those remaining in quarantine together or family relationships (rooting), which can additionally give a sense of security, would be a more significant factor in terms of emotional support [27]. This is particularly important in the case of young people, students, often quarantined in the place of residence during their studies, or people working in places distant from their family home. The importance of rooting has been repeatedly confirmed as a vital factor in shaping personal adaptation. Coping through denial, venting, substance use, behavioral disengagement, and self-blame correlates negatively with all the domains of the quality of life.

According to the presented model, the quality of life is best explained by resource gains and losses as well as coping strategies defined as helplessness, which include substance use, self-blame, and behavioral disengagement. They mediate the relationship between resource gains and losses, and the quality of life. Helplessness-based coping intensifies the negative relationship between resource losses and the quality of life, and reduces the positive relationship between resource gains and the quality of life. According to the COR theory, those short of resources are likely to adopt a defensive attitude to preserve their limited resources. In the short term, this strategy may even have an adaptive function, but it usually leads to a spiral of losses over time [6].

Based on the results obtained in this study, it can be assumed that resource losses associated with the pandemic situation are still objectively low in view of the very initial stage. The authors are planning the next stage of studies in which they expect that, in the next phase of the pandemic, resource losses will be significant, which in turn will determine the choices of coping strategies and affect the perceived quality of life. This hypothesis is based on the assumptions of the COR theory, according to which resources exist and grow in clusters/aggregates termed resource caravans. Resource caravans are supported or weakened, and even completely prevented, by environment conditions that Hobfoll [10] called resource caravan passageways. On the one hand, this approach is useful in explaining the growing negative consequences of disasters, and on the other hand, it shows the conditions for recreation of the resource capital of individuals and entire communities. In relation to the pandemic situation, the availability, devastation, or growth of resource caravans is affected by the situation related to the spread of the COVID-19 virus and the policies put in place in individual countries [30].

Strengths and limitations

The main advantage of the research is the multivariate psychological view of the quality of life during the COVID-19

pandemic. However, the research has some limitations, such as the lack of sample representativeness. The obtained regularities are characteristic of the studied group and they cannot be extrapolated to the general public due to the fact that the studied group was territorially limited (the Lubelskie Voivodeship), relatively small in number, and no random selection was used. The small sample resulted in part from the specifics of the study group, which were people using psychological support, and the fact that the study was conducted in the first weeks of the COVID-19 pandemic. The respondents were people who benefited from psychological counseling in the 12 months before the study, which is most likely related to their willingness to seek help. Moreover, because the research was conducted at the beginning of the pandemic, it is not certain what the relationship between the quality of life and the analyzed variables will be in subsequent stages of the pandemic.

CONCLUSIONS

The presented research has confirmed the fruitfulness of using the COR theory as an interpretation framework for epidemic stress. The results showed that an increase in losses and limited gains of resources experienced over the 6 months preceding the COVID-19 pandemic may reduce people's quality of life during the outbreak. The coping factors that may reduce people's quality of life during the COVID-19 pandemic are: not using active, meaning-oriented, and support-seeking coping strategies, but resorting to avoidant strategies instead. Coping strategies specific to people experiencing helplessness are a mediating mechanism between losses and limited gains of resources, and the quality of life.

The results obtained and the developments of the situation related to the COVID-19 pandemic around the world set further directions of research. It seems that as resource losses are exacerbated, which is natural in an objectively difficult situation, the coping strategies used will change. Losses in health and financial resources resulting

from the growth of the pandemic and the economic crisis are expected to be particularly important for trends in the quality of life.

The results of some studies suggest that health resources have the greatest impact on the overall life stress. The relationship between financial resources and perceived stress are also significant, although health resources are more important in minimizing the overall life stress [12]. A significant factor mediating the relationship between resources and the quality of life at the peak of the pandemic may be: experience of one's own illness, experience of illness of loved ones, religious coping strategies, and trust in healthcare professionals and scientists.

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