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Satisfaction with life in a group of alcohol and drug addicts. The role of personal resources and health behaviors

Abstract: The article presents the results of research aimed at determining the role of personality resources and health behaviors as factors determining life satisfaction among alcohol and drug addicts. In the article, we present a holistic model of predictors that takes into account resilience, communality, causality, health behaviors and life satisfaction. Its suitability has been tested through the analysis of a number of variables that have so far been examined separately: resilience, communality, causality and health behaviors as explanatory variables and satisfaction of life as a variable to be explained. We assumed that causative and communal orientation, resilience and health behaviors as personal resources can be considered as factors influencing life satisfaction and, in consequence, the course of addiction therapy. Our research reveals that personal resources are determinants of life satisfaction, which can make a significant contribution to the fight against the disease, including addiction.

Keywords: addicts, personal resources, resilience, health behaviors, causality, communality, life satisfaction

Introduction

The World Health Organization (WHO), in setting its core objectives for Europe in the Health 2020 program, points to promotion of health, improvement of the well-being of the population and reduction of health inequalities. However,

in order to define the detailed objectives, it is necessary to accurately diagnose the existing situation, the main risks and to identify target groups for prevention and intervention measures. Therefore, it seems that the recognition of life satisfaction and its health and personality conditions in the group of addicts is in line with the objectives of the World Health Organization. This leads to undertaking new directions of research together with the need for effective prophylactic and therapeutic measures (Kessler i in., 2010; Langford i in., 2014).

Satisfaction with life is defined as a global assessment of an individual's quality of life based on criteria chosen by them (Shin & Johnson, 1978). Diener explains it as the result of an individual's comparison of their life situation with the standards they have adopted. Thus, life satisfaction is an individual assessment of one's own life and the more compatible both aspects are, the higher it is (Diener, Emmons, Larsen, & Griffin, 1985). As Diener, Suh and Oishi emphasize, life satisfaction is one of the factors in the general construction of subjective wellbeing of an individual (Diener, Suh, & Oishi, 1997), where positive emotions, lack of negative emotions and individual cognitive assessment of the current life situation play an important role (Arthaud-Day et al., 2005). Life satisfaction of particular individuals is determined by individual standards, and not by a set of commonly accepted criteria (e.g. material, health criteria) concerning quality of life. Therefore, a person who is sick, addicted or has a low material status has a certain sense of life satisfaction. An important role in shaping life satisfaction is played by internal conditions (personal resources) and external conditions (social resources). On the one hand, research indicates that a change in one of the factors of internal conditions, e.g. deterioration of health or lack of social support may lead to a decrease in life satisfaction (Nosek, Fuhrer, Potter 1995), while on the other hand, shaping behaviors such as coping skills may lead to an increase in life satisfaction (Buser & Kearney, 2017; Deniz, 2006).

The aim of the study is to determine the role of personality resources (mental resilience, causality, communality) and health behaviors as factors determining life satisfaction among alcohol and drug addicts. We present a model of such predictors based on psychological theories and results of previous research, in which resilience, communality, causality, health behaviors and life satisfaction are included in one model. Its suitability is tested, while at the same time analyzing a number of variables that have so far been studied separately: resilience, communality, causality and health behaviors as explanatory variables and life satisfaction as a variable to be explained. That is why we intend to gather the fragmented results of other research (see: Cohn et al., 2009; Samani, Jokar, Sahragard, 2007) into one model and determine which variables are not only correlates but also key predictors of life satisfaction among alcohol and drug addicts.

Resilience

In shaping life satisfaction, the so-called personal resources of the individual, which include, among others, resilience, self-efficacy and a sense of coherence, play a significant role (Ali, Dwyer, Vanner, & Lopez, 2010; Haddadi & Besharat, 2010; Jain & Cohen, 2013; Jessor, Turbin, & Costa, 1998; Lin, Ensel, Simeone, & Kuo, 1979). In the research we treat the resilience as a set of personality properties and skills and competencies that help to cope with stress, trauma, life problems and adversity. It can be seen not only as a personality trait, but also as complex processes that condition good adaptation and development of people and families experiencing various threats and adversities (Cechowski, Chodkiewicz, & Gąsior, 2016). Studies have found that resilience reduces the risk of food addiction, prevents the negative effects of experienced occupational stress, improves the quality of life or fosters adaptation to illness (Juczyński, 1999, 2012, Ogińska-Bulik, 2007, 2010a, 2010b; Ogińska-Bulik, Zadworna-Cieślak, & Rogala, 2015; Zadworna-Cieślak & Kaflik-Pieróg, 2010). Furthermore, research has shown that resilience is associated with the ability to cope with novelties in different areas of life and the ability of self-regulation (Artuch-Garde i in., 2017; Gardner, Dishion, & Connell, 2008; Veselska i in., 2009). It was also found that resilience improves well-being and facilitates regeneration after stressful situations (D. Catalano, Chan, Wilson, Chiu, & Muller, 2011; R. F. Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Konaszewski & Kwadrans, 2017; Surzykiewicz, Konaszewski, & Wagnild, 2019; Taku, 2014). It is also associated negatively with stress and depression, but positively with life satisfaction (Ahern, Kiehl, Sole, & Byers, 2006; Garmezy & Masten, 1986). Studies indicate that resilience eliminates symptoms of anxiety in general, post-traumatic stress and increases self-esteem, gratitude, optimism and mental well-being (Baldwin, Jackson III, Okoh, & Cannon, 2011; Campbell-Sills, Cohan, & Stein, 2006; Scali i in., 2012; Veselska i in., 2009). A higher degree of resilience can increase self-esteem, confidence and self-discipline (Luthar, 2003, 2015; Luthar, Cicchetti, & Becker, 2000). Numerous studies have confirmed a significantly positive correlation between resilience and self-efficacy and stable mental health (Nygren i in., 2005; Portzky, Wagnild, De Bacquer, & Audenaert, 2010; Pritzker & Minter, 2014; Svence & Greaves, 2013; Veselska i in., 2009). Based on the research, we assume that resilience will be positively linked to health behaviors and life satisfaction (hypothesis 1 and 2).

Causality and communality

Communality and causality are the two main aspects of functioning of an individual. Man in the course of his life is, on the one hand, the agent of his own

goals (causality) and, on the other, a member of a social group (communality). Communality is therefore linked to the social and moral functioning of an individual and therefore activities are considered here in the category of profits or losses for other members of the social group. Causality, in other words, it is the effectiveness in achieving the goals set by an individual, taking into account the activities undertaken in the category of individual profits or losses (Wojciszke & Szendlak 2010). Thus, causality is defined as concentration on oneself and one's own goals, while communality is concentration on others and on interpersonal relations. Causality and communality are non-separable, contradictory cumulative categories. Causality does not determine being communal or lacking this trait, (Wojciszke & Cieślak, 2014). It has been established that an important personal resource conditioning life satisfaction and health behaviors is orientation towards causality and communality. Studies indicate a positive impact of orientation towards causality and communality on several aspects of the functioning of an individual while being healthy or sick. (Palladino & Helgeson, 2012; Wojciszke & Cieślak, 2014; Wojciszke & Szendlak, 2010). Studies conducted among chronically ill people (adults and adolescents) indicate a link between causative and communal orientation and their medical results and emotional well-being. Helgeson and Palladino (2012) in a study conducted in a group of diabetic adolescents indicate that causality and community as broadly defined personality traits were associated with positive relationships and medical results, with communality being a stronger predictor of positive relationships (Palladino & Helgeson, 2012). However, studies on the relationship between causality and communality and the psychosocial adaptation of women with breast cancer conducted by Piro and colleagues (Piro, Zeldow, Knight, Mytko, & Gradishar, 2001) have shown that: communality negatively correlates with emotional well-being, but does not significantly affect interpersonal well-being, and that the relationship between causality and communality and emotional and interpersonal well-being in women with diagnosed breast cancer is not very different from that of healthy women. Research on the relationship between causative and communal orientation with basic personality traits (masculinity and femininity), the Big Five traits (extroversion, neuroticism, conscientiousness, amicability, openness to experience), and mental health (tendency to depression, self-esteem, sense of happiness, type A behavior, way of responding to stress), dysfunctional attachment styles and functioning in close relationships conducted by Wojciszke and Cieślak (Wojciszke, Cieślak 2014) indicated that: causative orientation is a resource beneficial to its holders and positively correlates with mental health indicators, adaptive traits of personality and functioning in close relationships. Similar results have been obtained by examining the relationship between the causative and communal orientation and self-esteem. Causality turned out to be the predictor of self-esteem (Wojciszke, Baryla, Parzuchowski, Szymkow, & Abele, 2011). On the basis of the research, we assume that causality and communality will be positively linked to health behaviors and life satisfaction (Hypotheses 3, 4, 5 and 6).

Health behaviors

The project adopted a definition of health behaviors corresponding to the one presented by Gochman (1997a, 1997b). It is a very broad approach, extending beyond the sphere of visible actions, but consistent with contemporary knowledge developed by the psychology of health and taking into account the impact of beliefs and expectations, thought patterns and emotions on our health (Juczyński, 2012a). Health behaviors in this case include elements such as beliefs, expectations, motives, thinking and emotional mechanisms of the personality and internal behavior patterns related to maintaining, supporting and restoring health (Gochman, 1997b, 1997a). According to modern research, health behaviors are generally viewed in two categories: beneficial (pro-health) and harmful (anti-health) (Heszen & Sęk 2007). The choice of a specific health behavior is conditioned by both socialization processes and cultural conditions as well as individual awareness (Heszen & Sęk, 2007). The studies found that health behaviors and a lifestyle preferred by the individual have a significant impact on the individual's mental well-being. (Langford i in., 2014; Vasudevan, Chakrawarty, & Dhanalakshmi, 2014). On this basis it was assumed that health behaviors will be positively linked to life satisfaction (Hypothesis 7).

Method

Research subjects

The study was conducted in a group of 95 persons $M=39.97$; $SD=10.23$ (16 women and 79 men) addicted to psychoactive substances, including alcohol ($N=68$; 71.6%) and drugs ($N=27$; 28.4%) undergoing therapy. The research was carried out at MONAR Association Addiction Treatment, Therapy and Rehabilitation Centre (Stowarzyszenie Monar Ośrodek Leczenia, Terapii i Rehabilitacji Uzależnień) in Zaczerlany as well as in the alcohol addiction therapy unit for men and the alcohol addiction therapy unit for women in the Independent Public Psychiatric Health Care Facility (Samodzielny Publiczny Psychiatryczny Zakład Opieki Zdrowotnej) in Choroszcz. It was conducted between October and December 2017. The survey was conducted during direct contact with the respondents. The participants received from the researcher a paper version of the research sheet that explained the purpose of the study, informed about the voluntary participation and that each of the participants may withdraw from the study at any time. The researchers obtained a written consent of all participants in accordance with the Declaration of Helsinki as well as a consent of the facility managers to conduct the study.

Measurement of variables

Life satisfaction. The Satisfaction with Life Scale (SWLS) by Diener et al. (1985) is designed to measure the sense of life satisfaction. The author of its Polish adaptation is Juczyński. This scale is designed to examine both healthy and sick adults. The instrument consists of 5 statements assessed on a seven-stage scale. The scores after summing up give an overall score, which indicates the degree of satisfaction with one's life. The scores range from 5 to 35 points. The higher the score, the greater the sense of life satisfaction. The indicator of reliability (Cronbach's alpha) of the SWLS, was 0.81. The stability with a group of 30 people in 6 weeks interval – 0.86 (Juczyński, 2012a).

Healthy Behaviors. The Health Behavior Inventory – HBI (Inwentarz Zachowań Zdrowotnych – IZZ) by Z. will be used to measure the dependent variable, i.e. health behaviors. It contains 24 statements describing different types of health-related behavior (6 in each category). The respondent assesses the severity of the behaviors in question, using a rating scale from 1 (almost never) to 5 (almost always). After summing up the frequency of individual behaviors, an overall health behavior indicator and the degree of intensity of the four categories of behaviors, i.e. proper eating habits, prophylactic behaviors, health practices and positive mental attitudes, is determined. The proper eating habits mainly take into account the type of food consumed (e.g. wholemeal bread, vegetables and fruit). The prophylactic behavior mainly concerns observing health recommendations and obtaining information about health and illness. The health practices include habits related to sleep, recreation or physical activity, while the positive mental attitudes concern the avoidance of excessive emotions, tensions and stress. The value of the overall health behavior index is between 24 and 120 points. The higher the score, the higher the intensity of certain health behaviors. The results of the overall index can be converted into stens. The Cronbach's alpha index for the whole Inventory is 0.85 (Juczyński, 1999).

Causality and Communalilty The scale of the causative and community orientation by B. Wojciszke and M. Szlendak (Wojciszke & Szlendak, 2010) is a self-description questionnaire, which consists of 30 definitions of different characteristics. The task of the respondent is to indicate how far each of these characteristics describes them or not. The surveyed person answers using the 7-point Likert scale, where “1” means that a given characteristic definitely does not characterize them, “7” means that it definitely characterizes them. The scale of the causative and communal orientation is characterized by relatively high discriminatory power. It ranges from 0.51 to 0.75 for the Communalilty Scale and from 0.45 to 0.68 for the Causality Scale. The scale is characterized by high internal compliance indexes (measured by Cronbach's α coefficient), which is 0.92 for the Communalilty Scale and 0.90 for the Causality Scale (Wojciszke & Szlendak 2010)

Resilience. The Velocity Assessment Questionnaire – VAQ (Kwestionariusz Oceny Prężności – KOP) developed by K. Gašior, J. Chodkiewicz and W. Cechowski (Cechowski i in., 2016) is designed for the examination of adults. It consists of 26 statements on family relationships (FR), personal competences (PC) and social competences (SC). The agreement by the respondent with the statement is expressed on a 5-point Likert scale, where “1” means that I do not agree with the statement and “5” means that I agree with the statement. The Velocity Assessment Questionnaire has a satisfactory internal compliance (Cronbach’s $\alpha = 0,81$) (Gašior, Chodkiewicz, Cechowski 2016)

Statistical analyses

Prior to the statistical analysis regarding the search for the predictors of the construct under study, we examined the co-occurrence of the analyzed variables using the r-Pearson’s coefficient. We then used Structural Equation Modeling (SEM) to look for relationships between variables. The analyses of the structural equations were carried out using the AMOS 24 program. The model parameters were estimated using the maximum likelihood method. In order to assess the goodness of fit of the model to the data, the GFI (*goodness-of-fit index*), CFI (*comparative fit index*), RMSEA (*root-mean-square error of approximation*) and relative χ^2/df indexes were used. The values of $GFI \geq 0.90$ and $CFI \geq 0.95$ indicate a good and adequate fit of the model to the data (Hu & Bentler, 1999). The values of $\chi^2/df < 2$ also suggest a good fit between the model and the data. The values of $RMSEA < 0.08$ can also be interpreted as a good fit to the data (Brown, 2015; Byrne, 2016; Kline, 2015).

Study results

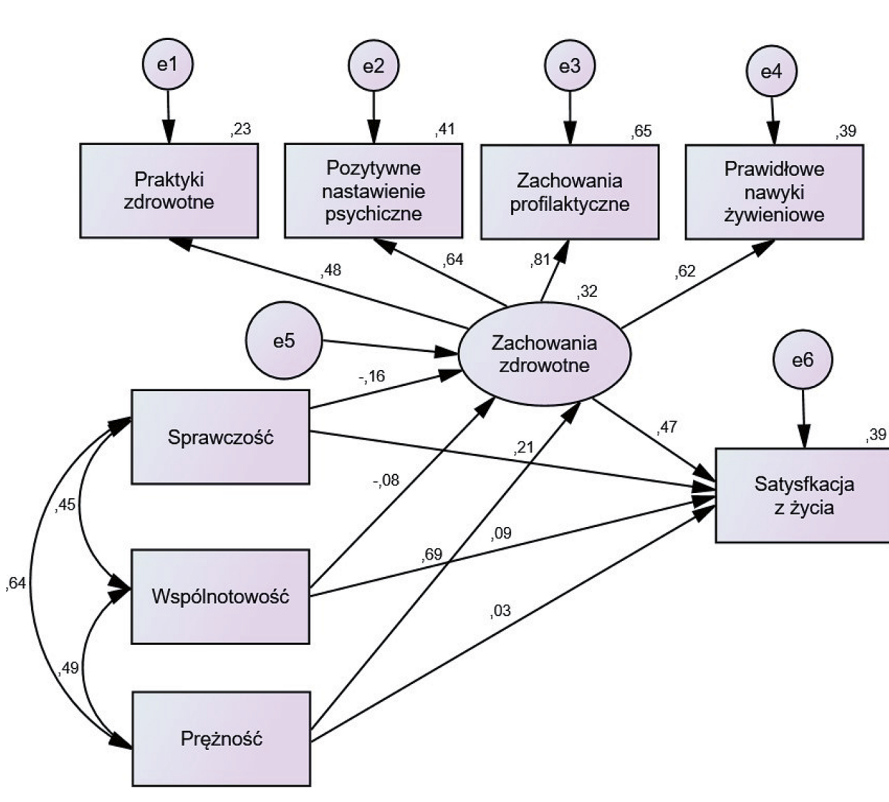
Table 1 presents descriptive statistics and values of correlation coefficients in the group of alcohol and drug addicts. The correlation analysis revealed significant interconnections between personality resources – causality, communality and resilience. The interconnections between health behaviors and its 4 factors (proper eating habits, health practices, prophylactic behaviors, positive attitude) were also noted. In addition, the correlation analysis demonstrated a significant relationship between resilience, communality and causality with health behaviors. It was noted that health behaviors and all 4 factors, causality, communality and resilience are linked to life satisfaction (Table 1).

Table 1. Descriptive statistics and correlations of life satisfaction (SWLS) with health behaviors (HBI), resilience (VAQ), causality and communality

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.
SATISFACTION WITH LIFE	18.60	5.54	1							
HEALTH BEHAVIORS	59.37	15.50	.47**	1						
PROPER EATING HABITS	2.45	.76	.47**	.64**	1					
PROPHYLACTIC BEHAVIORS	2.62	.81	.38**	.71**	.54**	1				
POSITIVE ATTITUDE	3.03	.81	.32**	.57**	.30**	.55**	1			
HEALTH PRACTICES	2.70	.93	.36**	.65**	.40**	.34**	.35**	1		
CAUSALITY	4.85	.85	.38*	.27**	.24*	.15	.27**	.23*	1	
COMMUNITY	5.28	.82	.27*	.25*	.15	.12	.25*	.18	.55**	1
RESILIENCE	99.56	15.05	.45**	.46**	.21*	.41**	.47**	.29**	.64**	.42**

*. Correlation is significant at the level 0.05 (two-sided); ** Correlation is significant at the level 0.01 (two-sided).

The structural equation modeling was then applied to verify the hypotheses made. The relationships between the sense of family support, resilience, sense of coherence and strategies for coping with stress were analyzed. Causality, communality, resilience and life satisfaction were introduced into the model as observable variables. Health behaviors have been included as a latent variable. The tested model contained 7 regression paths included in the hypotheses. The model proved to be an acceptable fit for the data. $\chi^2(14)=22.85$; $p=0.063$; $\chi^2/df=1.63$; $RMSEA = 0.080$ [$LO=0.000$; $HI=0.155$]; $GFI = 0.93$; $CFI = 0.95$. We have noted weak positive direct effects of causality on life satisfaction ($\beta = .21$, $p<.05$) and strong positive direct effects of resilience on health behaviors ($\beta = .69$, $p<.01$). The direct relationship between communality ($\beta = -.08$, $p=.52$) and causality ($\beta = -.16$, $p=.28$) with health behaviors was insignificant. There were also moderate positive direct effects of health behaviors on life satisfaction ($\beta = .47$, $p<.01$). The direct effects of resilience ($\beta = .03$, $p=.85$) and communality ($\beta = .09$, $p=.39$) on life satisfaction were insignificant. Considering the indirect effects, the total effect of resilience (35, $p<.001$) on life satisfaction was moderate. However, taking into account the indirect effects, the effect of communality and causality on life satisfaction was insignificant. Figure 1 presents standardized path coefficients, for one-way arrows these are standardized regression coefficients, for two-way arrows these are correlation coefficients. In total, causality, communality, resilience and health behaviors explained 39% of the variance of life satisfaction.



Praktyki zdrowotne – Health practices; Pozytywne nastawienie psychiczne – Positive mental attitude; Zachowania profilaktyczne – Preventive behaviors; Prawidłowe nawyki żywieniowe – Correct eating habits; Zachowania zdrowotne – Health behaviors; Sprawczość – Causality; Wspólnotowość – Communality; Prężność – Resilience; Satysfakcja z życia – Satisfaction with life
Figure 1. Tested model: Resilience, causality, communality, health behaviors and life satisfaction

Discussion of the results

The aim of the study was to determine the role of personality resources (mental resilience, causality, communality) and health behaviors as factors determining life satisfaction among alcohol and drug addicts. The hypothesis assuming a positive dependence between health behaviors and life satisfaction was confirmed (Mahmoud, Staten, Hall, & Lennie, 2012; Samani, Jokar, & Sahragard, 2007). Moreover, it turned out that the strongest predictors of life satisfaction are health behaviors. At the same time, contrary to expectations and earlier findings (Kjeldstadli i in., 2006; Konaszewski 2016; Samani i in., 2007; Surzykiewicz i in., 2019), the relationship between resilience and life satisfaction

proved insignificant. Moreover, the relationship between communality and life satisfaction has not been confirmed, while causality, as expected, had a positive link with life satisfaction (Palladino & Helgeson, 2012; Piro i in., 2001; Wojciszke & Cieślak, 2014; Wojciszke & Szlendak, 2010). The links between communality, causality and health behaviors have also proved to be insignificant. The relationship between health behaviors and resilience proved to be significant, as predicted (Ali i in., 2010; Haddadi & Besharat, 2010; Juczyński, 2012b; Nygren i in., 2005; Portzky i in., 2010). Therefore, it can be concluded that health behaviors play a major role in building life satisfaction in the studied group. Shaping proper eating habits, learning appropriate prophylactic and health behaviors, as well as a positive attitude will contribute to life satisfaction, which may be helpful in therapeutic measures.

An addicted person is considered to be a sick person whose pathological dependence on psychoactive substances can be treated as a chronic disease, requiring a special approach and attitude (cooperation) towards therapeutic measures on the part of both the person and the therapist. We have assumed that personal resources can have a significant impact on the course of treatment of addicts. We assumed that causative and communal orientation, resilience and health behaviors as personal resources can be considered as factors influencing life satisfaction and, in consequence, the course of addiction therapy. Our research reveals that personal resources are determinants of life satisfaction, which can make a significant contribution to the fight against the disease, including addiction. Shaping them can “mobilize” people to actively (consciously) participate in therapy. They allow the individual to perceive the phenomena that surround them in a understandable, rational and controllable way. They give the possibility to believe in oneself and trigger perseverance and determination in difficult situations.

The research presented in this article is of a correlative nature and the collected data are self-descriptive; therefore, caution is required in interpreting the results obtained. Exceeding this limit requires the use of, for example, experimental methods in future research. The research was conducted in the group of alcohol and drug addicts undergoing therapy. This also results in a limitation concerning the small size of the group. Therefore, in subsequent studies, the specificity of the group should be taken into account and its size should be increased. It is also worth thinking about the analysis of personality traits or traits defined as positive personality traits, e.g. sense of coherence, toughness, self-efficacy.

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