Psychoterapia 2 (173) 2015

strony: 57-70

Maciej Załuski

THE WORLDVIEW CONTAINED IN DECLARATIONS OF POLICE OFFICERS SCHEDULED FOR PSYCHOTHERAPEUTIC TREATMENT

Faculty of Health Sciences, Jagiellonian University Medical College Health Psychology Unit, Institute of Nursing and Midwifery

Summary

Objectives. Appreciation of the average level of assumptions of policemen enrolled to psychotherapy. Explanation of the difference in level of assumptions to take into consideration the work place. Appreciation of the connections between the level of assumptions and depression.

Method. 80 police officers (M age = 40.81; SD = 5.54; M seniority = 18.94; SD = 4.89) at the top of psychotherapeutic treatment once and individually completed set of the research questionnaires. In the present article, research results obtained with The Life Events Checklist, The World Assumptions Scale and Beck Depression Inventory were presented.

Results. The data indicated that a longstanding exposure with existential stressor has representations in the subjective worldview and world assumptions. The worldview of the depressive person is less benevolent. In the group of assumptions about the distribution of outcomes there are weak beliefs in the principle of justice and controllability. The assumptions about oneself as an agent of life events are partially complementary with early and pertain to character weakness, weak belief in self-controllability and in luck.

Conclusions. The workplace's worldview may be generalized and contain the general life's attitude. The World Assumptions Scale may serve as a basis to conversation with patient and to complement the knowledge about the direction of his therapy.

Key words: critical life events, Assumptive World, depression

Introduction

The Shattered Assumptions Theory of Trauma [1, 2], advocated in 1980s by Ronnie Janoff–Bulman, is one of many theories which have been developed in an attempt to understand the behaviour of a person in a situation challenging the fundamental aspects of his existence and disturbing his inner peace. The theory relies on the assumption that incoming information from the outer reality accumulates in the human mind in the form of a world view and generalised assumptions. The information which is contained in those assumptions has come from culture, religion, parables and the emotional experience of the person, creating so-called assumptive world models [3]. The person's inner vision of the world and the self, through simplifying reality, makes it easier for a person to direct, plan and effectively adjust their own behaviour. This is because, although the aforesaid models do not exist in human consciousness, their structures are activated automatically and become apparent in experience and behaviour. Fundamental assumptions integrate knowledge about life, making it more stable and resistant to extraordinary events. They are a psychological projection of three basic needs of a human being that are crucial for maintaining inner wellbeing. This is the need for safety, understood by Janoff-Bulman as the person's conviction that such a person is safe no matter the situation, the need for trust, resulting from the belief that any action taken yields

the desired outcome, as well as the need for strength, resulting from the belief that the mental core of a person is not easily disintegrated [2].

Janoff-Bulman compiled a list of 8 fundamental assumptions falling into three groups. The first regards the favour of natural and social world. The assumptions in the second group serve a person in understanding the causes of negative events in life. The third group is made up of convictions explaining a person's own input in events. The groups are named: the world's benevolence, the world's meaningfulness and self-worth. The name of the third group might by slightly misleading. The assumptions it is made up of, though comprised of judgments regarding oneself, pertain solely to the method in which people make events clear to themselves whilst relying on a self-selected aspect of themselves. They relate to what they do and what they are like in terms of character and luck in life.

The Theory assumes the complementarity of the assumptions from the second and third group. A person exhibiting faith in the just world order may have strong convictions regarding the goodness of their own character; people convinced that events and the world can be controlled may believe that they take protective measures, and a person who emphasizes the role of chance in life may believe they are lucky. In fact, as Janoff-Bulman advocates, each of the above listed assumptions participate to various extents in the process of the attribution of causes of events.

The content of the eight assumptions is: the conviction that the natural world is characterised by more good than evil, society is populated by persons inherently good, benevolent and ready to help, whilst negative occurrences in a person's life is the consequence of wrong and ineffective preventive measures; the world impartially distributes the trials of life to people, whilst rewarding them for goodness and nobility, the human life is not solely preconditioned by fate and chance and the inner belief that I have an inherently good character, a good opinion of myself and I am happy with myself, I am lucky in life, because unfortunate occurrences turn out well in the end and I can guard against misfortunes and take action for my own good.

The Theory assumes the decline of a person's set of assumptions as a consequence of an undesired and extraordinary stress factor of an existential nature, which takes place suddenly or over extended time, and its subsequent reconstruction or even improvement in the healing process. The changes in assumptions result from the sudden character of the occurrence and its disintegrating effect on the core of a person's inner self. The unexpected and exceptional situation may cause the fear of death and the feeling of the disintegration of the world model inconsistent with actual reality. Among the symptoms diagnosed in persons with adaptation problems after the occurrence are anhedonia, depression and isolation [1, 2].

The validity of this Theory is an open matter. The research carried out in different paradigms (comparative, with a control group, without a control group) have not yet yielded clear results validating or refuting Janoff-Bulman's assertions [4]. The recent years have shown that assumptions may serve as a mediator among the events disturbing the inner peace of a person and the presence of psychopathologic symptoms and the quality of life [5, 6]. Thus, a question arises whether the model can be applied when

The world to work and accumulate of points of

contact with the extraordinary stress factor is the effect of the independent decision of a person. This is the case, for example, in the case of people who work in the emergency professions. Can a subjective theory for the entire world be developed based on the projection of a fragment of reality created in the course of a person's professional life? Does the world picture created in this manner envisage the occurrence of mental disorders?

In an attempt to answer this question – a study was conducted on a group of active duty policemen who were, at the same time, patients beginning a 6-week treatment at the Day Care Department of Psychotherapy of MSW (Ministry of Internal Affairs). This article presents the results of part of the completed study. In order to simplify the line of reasoning, the authors have focused on discussing the interrelations between: age, length of service and place of work, the prevalence of exceptionally stress-inducing events, fundamental assumptions and symptoms of depression.

The study carried out in Poland by Bogdan Dudek [as in: 7] showed that, when on duty, 62% of policemen are involved in dramatic events, witness injury or death of other people, are exposed to gruesome sights, threat to theirs or their colleagues' lives. The place of work which exerts a particular emotional burden is the criminal investigation department. The nature of the work brings the policemen working there into contact with cases of most extreme human suffering caused by the intentional acts of others, even without apparent reasons, the distress of innocent people and often unforeseeable suffering. The work they perform exposes them to contact with hostile people, who flee from responsibility, physical hardship, unexpected situations and solitude. A police officer perceives the world through the lens of intentional evil and unfortunate accidents. Most of the policemen employed in the criminal investigations department participate in direct actions, and to a lesser extent in administrative work, which increases the risk of personal exposure to stress factors.

Policemen, in comparison to other professional groups, report more somatic and nervous disorders, whilst police officers hired in criminal investigation departments have one of the poorest overall health scores, which includes: symptoms of anxiety, insomnia and depression, as well as problems with daily functioning [7].

The aim of the study, research problems and research hypotheses

In the study the problem of the influence of the grounds of the circumstances in the work place on the level of fundamental assumptions about oneself, word and other people was examined. This problem was narrowed to the group of policemen – patients of the day-care ward. The study was to verify three goals. The first was determining the average level of assumptions of policemen. The second was explaining the differences in level of assumptions, what influence on level have the place and character of work? The third

aim of the study was answer to the question about the connection between the level of assumptions and intensity of depression. The study was to verify the following hypotheses.

Hypothesis I. The level of fundamental assumptions of policemen from the criminal investigations department is significantly lower than of policemen from the prevention and road traffic department.

Hypothesis II. Weaker assumptions coexist with a higher intensity of symptoms of depression.

Material

Subjects of the study

The study included 80 males – policemen in active duty. All of them were diagnosed with psychiatric disorders in the area of nervous disorders, stress-related and somatic symptoms. They worked in three departments: criminal investigations, prevention and road traffic. The criminal investigations department hired 26 subjects of the study, with mean age of 40.48 (SD = 6.16) and with a length of service of 18.61 years (SD = 5.29). The road traffic department hired 26 subjects of the study, with mean age of 41.38 (SD = 5.47) and with a length of service of 18.85 years (SD = 5.15). The prevention department hired 28 subjects of the study, with mean age of 40.67 (SD = 5.13) and with a length of service of 19.42 years (SD = 4.32). These groups did not differ significantly in terms of age and length of service. For 43.75% of subjects, this was the first therapeutic session at the psychotherapy department, for 25% the second, for 22.5% the third, and for 8.75% the fourth. The number of hospitalisations did not differentiate statistically the groups in terms of the used variables.

Applied research instruments

In order to verify whether the work of the policemen who were the subjects of the study is characterized by the occurrence of particularly negative and exceptional events, the Life Events Checklist (translated into Polish and adapted to fit the needs of the study) was applied [8]. This is a self-descriptive questionnaire, which makes it possible to evaluate the prevalence of 16 critical events, the occurrence of which combines the occurrence of post-trauma disorders and one very stress-inducing event or experience. The tool examines the prevalence of such events as: natural disasters, fires and explosions, traffic accidents and other serious accidents, contact with toxic substances, physical and armed assault, sexual abuse in various forms, active armed combat or staying in an area where such active combat is present, imprisonment, life-threatening disease or illness or physical injury, experiencing serious human suffering, harm, unexpected or violent death. The subjects of the study assessed the type of exposure to the occurrence of these events using 5 point nominal scale: 4 — it happened to me, 3 — I witnessed it, 2 — I have heard about it, 1— I am not sure, 0 — It does not apply to me. The questionnaire was adapted in such a way so as to let the subjects of the study speak only about the current situation in their professional life. The internal

consistency, calculated using the Cronbach's alpha coefficient for all the positions on the scale, amounted to 0.69 (Cronbach's alpha standard 0.70).

For the measurement of fundamental assumptions, the World Assumptions Scale was used, adapted to fit the Polish situation [9]. The tool analyses the strength of 8 fundamental assumptions according to Janoff-Bulman's typology, which provides results summed up individually for each of the assumptions. Moreover, there is the possibility of calculating the sum or the mean for each of the three groups of assumptions. The result can also be presented in the form of the sum of all the assumptions. The internal consistency of the scale, expressed using the Cronbach's alpha coefficient, amounted to 0.86 (Cronbach's alpha standard 0.86).

The level of depression was measured using Beck Depression Inventory (BDI). The questionnaire is one of the most frequently used tools applied for the measurement of the occurrence and intensity of symptoms of depression in line with the cognitive model of depression by Aaron Beck [10]. The internal consistency of the scale expressed using the Cronbach's alpha coefficient amounted to 0.87 (Cronbach's alpha standard 0.88).

Applied research methods

In the study evaluation and correlation procedure was used. The data were attained during individual and one-off measurement variables. The study was carried out during the first week of stay of the policemen in the day-care ward. Received data ware analysed statistically using the Statistica 10.0 programme. In the statistical analysis the parametric and nonparametric tests of the significance of the difference, Pearson's correlation coefficient, and the Fisher-Snedecor distribution test, to the assessment the significance of the multiple regression, were used.

Results

Hypothesis I. The level of fundamental assumptions of policemen from the criminal investigations department is significantly lower than of policemen from the prevention and road traffic department.

Let me start the presentation of the results with the information on the prevalence of particularly stress-inducing events in the studied group. The event most often reported by policemen was being involved in a traffic accident (93.75 subjects). 85% of the participants experienced serious mental suffering, 81.25% were part of a very stressful event, 80% were in a fire or explosion, 76.25% suffered life-threatening disease or physical injury, 74% were victims of physical assault, 73% witnessed serious injury or harm inflicted on a third person, 70% were in a natural disaster, 63.75% witnessed the unexpected and violent death of another person, 58% were involved in a serious accident at work, 49% witnessed or experienced the sudden death of a person they know, 38% were victims of an armed assault, 36% came into contact with toxic substances,

16% stayed in an area of active combat, 5% were victims of sexual violence or other undesired sexual experience, 5% were captured and kept as hostages. Because of non-equipotency of research groups and the order rating scale χ^2 test for independent variable was used. The use of Kruskal-Wallis test for unpaired test samples showed that it is impossible to prove a correlation between the place of work and a greater prevalence of a certain type of stress factor among the listed in the LEC questionnaire, with one exception. The participation in a road traffic accident was more often reported by policemen working in criminal investigations and road traffic departments ($\chi^2 = 6.393$; df = 2, p < 0.041).

The average intensity of symptoms of depression in the entire group of study subjects was 18.56 points. (SD = 8.52, range: 1–37), assuming the mild depression level. The distribution of results was normal (χ^2 = 36.32; df = 32; p < 0.05). The policemen working in the criminal investigation department reported a higher intensity of symptoms than those employed in the crime prevention department ($Z_{revised}$ = 1.94; p < 0.05; N_{crime_invest} = 26; N_{crime_prev} = 28; M_{crime_invest} = 20.19; SD = 8.37; M_{crime_prev} = 15.89; SD = 7.74).

The mean strength of assumptions in the analysed group was 113.87 points. (SD = 17.32), and the distribution was normal (χ^2 = 27.50; df = 42; p < 0.05). In line with the existing standards developed for healthy males (N = 374; M = 132.78; SD = 18.32; range: 81–188) the result is within the range of sten score of 3.

In order to assess the weight of differences in the results achieved by persons coming from the three departments, Mann-Whitney U test and the Student's t-test were utilized. The assumptions of people working in the crime prevention and road traffic departments were of similar strength. Significant differences were noted in the case of those working in the crime investigation dept. Table 1 presents the mean values of assumptions, the weight of the differences and the size effect of difference in mean values calculated for the policemen employed in the crime investigation department and the two other groups of subjects. The table shows the assumptions whose values in the studied groups significantly differed among themselves.

The assumptions declared by the criminal investigation officers were weaker than in the other groups. The differences included the sum of all assumptions and the sum of the assumptions making the group of "the benevolence of the world, nature and people". The persons from the group which was studied exhibited a less positive view of the world, indicating the deteriorating principles of justice as the causes of negative occurrences. They explained their participation in the occurrences as a failure to take the proper preventive measures (self-control).

Table 1. The average values of assumptions, the weight of differences and the strength of difference, according

to the department

Variable	Criminal inv N = 2		Prevention dep. N = 28				
	M	SD	M	SD	Z revised	Significance	
Justice	11.80	2.93	13.92	3.24	2.178	0.028*	
Controllability	14.07	3.91	16.00	3.38	1.84	0.06	
Self-Controllability	15.11	2.85	16.96	3.07	2.218	0.026*	
Sum of the benevolence of the world and people	26.80	8.71	31.17	6.56	2.080	0.037*	
Sum of the assumptions	106.58	21.90	118.17	13.83	1.91	0.05*	
		riminal invest. dep. N = 26		Road traffic dep. N = 26			
	М	SD	M	SD	t	Significance	Cohens' d
Benevolence of the world	13.26	5.44	16.26	3.49	2.37	0.021*	0.66

*p < 0.05

Hypothesis II. Weaker assumptions coexist with a higher intensity of symptoms of depression.

The assessment of the relations between the strength of fundamental assumptions and the symptoms of depression was carried out using Pearson's r correlation analysis (Table 2). The interrelations proved to be essential and moderately strong in the case of 4 assumptions, and the correlation was negative in form. The strongest relation pertained to 2 assumptions. The first explains the existence of negative occurrences with the character of the person (self-worth), the second - with being lucky in life. The two other assumptions pertained to the world's benevolence. No interrelations were found between the symptoms of depression and the principles of the distribution of phenomena all over the world (control, justice, chance). The depression symptoms appear to be more related to how a person implements the claims which explain the presence of negative events than to their own professed principles. Noteworthy interrelations existing in the area of assumptions. The results in the case of one pair of assumptions confirmed the hypothesis of complementarity in the occurrence of assumptions regarding oneself and the world. Those who had strong faith in the controllability of negative events equally strongly believed that they themselves take preventive measures (r = 0.439; p < 0.01). The same correlation was not found in the pairs of the principles of justice and fortuity. On the other hand, people certain of man's ability to control negative occurrences were, at the same time, strongly convinced of the second type of assumptions: faith in a just world (r = 0.480; p < 0.01). Their conviction could be conveyed in the statement: misfortune can be prevented through taking proper action, which is, in general, connected with being a good human being.

The participants who considered the world to be favourable to them also believed that negative events can be forestalled with preventive measures or explained using the principle of fairness, which was followed by a more positive assessment of their own character and belief in luck in their lives.

More prevalent occurrences with existential stress factors were accompanied by symptoms of depression.

Table 2. The matrix of the co-occurrence of independent variables with symptoms of depression

Variables	1	2	3	4	5	6	7	8	9	10
1. Depression	-									
2. Benevolence of the world	-0.300**	-								
3. Benevolence of the people	-0.318**	0.682**	-							
4. Self-Worth	-0.574**	0.385**	0.243*	-						
5. Luck	-0.485**	0.455**	0.313**	0.494**	-					
6. Self- Controllability	-0.014	0.190	0.168	0.334**	0.320**	-				
7. Controllability	0.013	0.356**	0.336**	0.187	0.365**	0.439**	-			
8. Justice	0.061	0.341**	0.160	0.006	0.261*	0.283*	0.480**	-		
9. Randomness	-0.144	0.214	0.282*	0.208	0.017	-0.241*	0.104	-0.059	-	
10. Critical events	0.297**	0.006	0.069	-0.187	0.016	0.164	0.159	0.144	-0.048	-

^{*}p < 0.05 (two-tailed); **p < 0.01 (two-tailed)

In order to learn more about the relations existing between the studied variables, the results obtained from people with a similar intensity of symptoms of depression were arranged into groups. Standards prepared by Parnowski and Jernajczyk were utilised [10]. Three groups of various sizes were distinguished: those without symptoms of depression (22.5%), those with a mild form of depression (61.25%) and those with a moderately severe form of depression (16.25%). The use of Kruskal-Wallis test confirmed the significance of intra-group differences in the degree of the severity of symptoms of depression (k = 58.581; df = 2; p < 0.000). For each group, mean values of fundamental assumptions were calculated. The obtained mean values were compared to one another and then the significance of differences between mean values was calculated using the one-way analysis of variance for groups of different sizes. The difference in the strength of the assumptions of patients without depression and patients with depression of moderate severity was large k (2.77) = 7.938, p < 0.01) (see Table 3).

The obtained results partly confirmed the validity of the advocated hypothesis. The strength of assumptions in the group of people without symptoms of depression was greater and was contained within the limits for sten score of 5, for those with mild to moderately severe depression being lower – at a level of sten score of 3. The world vision in patients with depression was characterized by a weaker belief in benevolence, willingness to help and the goodness of other people. When explaining the occurrences, the patients relied on the conviction of the defectiveness of their own character and no luck in life. The assumptions regarding control over negative events, justice and fate did not differ between the analysed groups.

Table 3. The significance of differences between the analysed independent variables in terms of the severity of symptoms of depression in the analysed group

-	-	-		-					
Variable	Without depression N = 18		Mild depression N = 49		Moderately sev. dep. N = 13				Significance
	М	SD	М	SD	М	SD	df	k	
Benevolence of the world	17.77	4.35	14.48	4.21	14.00	4.96	2	5.532	0.063
Benevolence of the people	16.72	3.04	14.00	3.43	14.07	3.14	2	7.881	0.01**
Controllability	16.33	2.89	14.79	3.89	16.30	3.88	2	1.766	0.414
Justice	13.16	3.71	13.32	3.76	13.46	3.92	2	0.177	0.915
Randomness	14.00	3.80	11.89	2.98	12.07	4.69	2	2.986	0.225
Self-Worth	19.38	3.10	15.61	2.85	12.92	4.23	2	21.363	0.000***
Luck	12.66	2.76	10.89	2.66	7.84	2.67	2	17.212	0.000***
Self-Controllability	15.88	4.02	16.28	2.55	16.15	3.15	2	0.318	0.853
Benevolence the world and people	34.41	7.18	28.56	6.87	28.07	7.47	2	7.072	0.029*
Meaningful of the world	43.00	6.38	40.26	7.14	41.84	9.50	2	2.050	0.359
Worthiness of self	48.06	7.86	42.86	6.11	36.92	7.95	2	15.360	0.000***
Sum of assumptions	125.94	15.80	111.30	14.82	106.84	21.06	2	7.398	0.01**
Sum of depression	7.27	3.44	19.16	3.98	31.92	3.47	2	58.581	0.000***
Critical events	36.64	7.60	40.52	7.83	43.69	8.84	2	5.300	0.071

^{*}p < 0.05; **p < 0.01; ***p < 0.001. Note: the responses regarding the belief in "chance and fate" are reversely coded, therefore the lower result indicates the greater strength of the belief.

In order to estimate the share of variables in explaining the variability of symptoms of depression, a hierarchical analysis of linear regression, according to progressive selection was performed. Because the age, length of service, place of work and number of hospitalizations did not differentiate the subjects of the study, they were disregarded, and the following predictors were left: the presence of stress-inducing and trauma-triggering events and 8 assumptions about the world, people and oneself. A model containing 5 predictors, which explained 50% of the variability of the dependent variable (the corrected R^2 explained 46.2% of variability) was obtained. The model fitted the data well, better than the average values envisaged in the dependent variable. There was no multi-collinearity between the predictors $F_{(5.74)} = 14.58$, p < 0.0000; standard estimation error 5.77. The obtained models were presented in Table 4.

Table 4. Summary of the model with 5 predictors. Dependent variable: BDI

	Variable	Beta	R	Rev. R ²	Change R ²	Change's F	Significance
Model 1	Self-Worth	-0.573**	0.573	0.321	0.329	38.31	0.0000***
Model 2	Self-Worth	-0.442***	0.619	0.267	0.054	6.74	0.044**
	Luck	-0.266**	0.619	0.367	0.054	6.71	0.011**
Model 3	Self-Worth	-0.501***			0.056	7.65	
Model 3	Luck	-0.318**	0.663	0.417			0.007**
	Self-Controllability	0.255**					
	Self-Worth	-0.443***					
Model 4	Luck	-0.336**	0.685	0.441	0.031	4.34	0.041*
	Self-Controllability	0.211*					
	Critical events	0.184*					
	Self-Worth	-0.421***					
Model 5	Luck	-0.295**					
Model 3	Self-Controllability	0.217*	0.705	0.462	0.026	3.92	0.05*
	Critical events	0.199*					
	Benevolence of the people	-0.173*					

^{*}p < 0.05; ** p < 0.01; *** p < 0.001

variable was exposure to stress-inducing and trauma-triggering events.

The strength of four of the eight fundamental assumptions significantly influenced the level of symptoms of depression. These were 3 assumptions making the group called self-worth: connecting the events with one's own defective character, failure to take preventive measures and no luck in life. The fourth belief was lack of faith in the benevolence and goodness of other people, whilst the fifth explanatory

Discussion of results

The 1st research hypothesis provided that the conditions of professional work may by generalised in the employee in the form of assumptions constructing the whole world view and the explanation of the causes of the events of life. This is especially the case when work confronts a person with principal existential matters, such as: fragility of human life, responsibility for one's own deeds, control or lack of it and world benevolence. The analysis which was carried out showed that the vision of reality in policemen on active duty and requiring psychotherapy was characterised by assumptions of a strength below the average for healthy males. The difference was in the range of 1–1.5 of standard deviation (9% of population, sten score of 3). The assumptions of the criminal investigations department were even weaker (on the border of sten score of 3 and 2). The results indicate the presence of a negative vision of the world, in which prevail attributions different to those for healthy males.

The group of policemen from the criminal investigation department was more certain that life unfairly portions fate, and man does not get from life what they deserve (being a good-natured man will not save you from misfortune). In the case of this belief, the policemen shared the same opinions. The declarations of lack of any possibility of controlling negative events by people, or preventing them with proper actions were prevalent. The natural consequence was a weak belief in taking preventive measures and actions resulting in advantageous results (they were quite unanimous about this).

If the world view does not allow the explanation of the events in line with the principle of justice (everybody gets from life what they deserve) and control (every effect has its cause), is there any other possibility? Janoff-Bulman's theory accounts for fate and chance. This could be observed in case of this study group. Although the differences present in the strength of conviction regarding the random distribution of negative occurrences in the group of people with depression and without symptoms of depression were not of a statistical significance, those with symptoms of depression were more inclined to believe in fate (stronger faith in fortuity) as compared to their colleagues. Overestimating the role of chance in the explanation of the causes of events in life makes a person more helpless, which adds to a resignation attitude and the conviction that a person is more vulnerable or prone to injury [1]. As Janoff-Bulman notes, a person strongly believing in chance does not treat the principle of control and justice as an explanation of the causes of events in life. Such a person thinks that there is nothing that can be done or there is no way to be, that may prevent misfortune [1, p. 119]. However, if the principle of the random distribution of events is

complemented by a strong belief in world benevolence, the feeling of elevated vulnerability will be lower. Unfortunately, this belief was lacking in the studied group of policemen.

On the other hand, overestimating the role of chance makes it possible to create a vision of reality in which there is place for non-culpable harm, inexplicable evil and unforeseeable misfortune. If this is followed by a weaker conviction of the world benevolence and less faith that, despite all, in the end good will prevails over evil and people's nature is inherently good, one is left with a negative vision of the world, fuelling the depressive thoughts.

Whilst positing hypothesis II, the researchers expected that weaker assumptions would be present more often in those diagnosed with stronger symptoms of depression. The assumptions proved to be correct in the case of 4 of the 8 fundamental assumptions. The normalised value of the assumptions in the entire group of policemen participating in the study had sten score of 5, and the results of people with symptoms of depression were by 2 sten scores lower than the average for healthy males.

In the world vision of patients with depression, the prevailing conviction was that people are not that good, benevolent and willing to help, as people without depression would think. In the case of this belief, those with depression were in agreement. Another difference was in definitely lower self-esteem and self-satisfaction. In this case, the group of people with depression was not in agreement, not all of them were equally unsatisfied with themselves as human beings. The third belief, definitely weaker in patients with depression, was the belief in the happy conclusion of unfortunate events in life. The similarity of opinion in this matter was comparable in patients with and without depression. In the analysed group of depressed policemen, a vision of a hostile world emerged, in which negative occurrences do not have positive conclusions. In the opinions about themselves prevailed embarrassment and dissatisfaction. As the convictions of the most depressed people were characterised by the highest differentiation, it can be assumed that the dependencies connecting stress-inducing events, fundamental assumptions and symptoms of depression are more complex. Moreover, it appears that in order to get to know the world vision, more beneficial is the individual approach than group analysis.

Conclusions

The gathered data showing the correlation between the events containing existential stress-inducing factors, fundamental assumptions and symptoms of depression proved to be in line with the scientific publications in this field. The review of research shows the existence of weak, although significant, negative relations between the strength of assumptions and depression and anxiety symptoms [4]. Gray with the team [8] in the research designed to validate LEC inventory, carried out in a group of 131 war veterans, observed the relation between the exposure to negative life events and the symptoms of depression at a level of r = 0.32 (p < 0.01), and the anxiety symptoms at a level of r = 0.27 (p < 0.01). Similarly, Wang [11] researching

the predictors of the occurrence of symptoms of depression in a group of 119 police officers (M age = 26.7 years.; SD = 4.1; males 86.6%, no information about the place of work) calculated the level of correlation between the symptoms of depression and the prevalence of negative life events r = 0.252 (p < 0.01) and assumptions about self-worth r = -0.381 (p < 0.01).

The question arises, which world vision better protects a person against adaptation problems, mental disorders or even permanent changes of personality caused by a particularly negative stress factor. In the reference publications there is no agreement as to whether strong assumptions are the resource of a person coming into contact with particularly negative life events, or the risk of their disintegration, and thus the occurrence of problems with adaptation is greater in them than in people with more middle-ground convictions. There are research results indicating that people with strong faith in the just world, in which there are stable and foreseeable interrelations between events, convinced that they can control events in their life, find it more difficult to adapt [12]. However, there also are opposing results. In his research, Wang, with a team of researchers, [13] verified the effectiveness of the intervention of a preventive character, whose aim was reinforcing the human resources in a group of 233 police officers. The conclusions from longitudinal research showed that the increased strength of convictions about world benevolence and the share of one's own behaviour in the events taking place was connected with the lower intensity of posttrauma symptoms in the next two years of service. Also Brown [14] notes that a strong belief in a fair world reduces the probability of stress symptoms in British policemen. There is also a third point of view. Policemen on active duty are thought to become mentally indifferent to the events around them. The repeating situations erode the earlier assumptions and result in a more negative vision of the world [15]. Such a vision is not so easily disintegrated because it minimises the discrepancy between the world representation and the reality.

This explanation might best fit the research results described in the article. According to Foa [16], more important than the content of the assumptions is the flexibility, because fixed judgments coexist with symptoms of post-trauma disorders. The assumptions existing in a person before an event, occurred in the course of the event and after its completion, enter into interactions, reinforcing negative emotions.

Can therefore the Shattered Assumptions Theory of Trauma be utilised for diagnosing and treating the people who are not merely inadvertent victims of extremely stress-inducing events and the resultant mental disorders? This article intentionally avoids the use of the term trauma-triggering stress factor, instead using the term existential stress factor. Is there a possibility of applying the Theory to people experiencing existential crises, illness crises, occupational burnout syndrome and other conditions of reactive character as well? At this point, it is difficult to give an answer to such a question. Nevertheless, the results presented in the article are not exceptional. In the comparative study carried out on a group of 30 cardiology nurses employed in a department with a very high patient mortality rate (M age = 42.9 years; SD = 7.87; M length of service = 21.9 year; SD = 8.94), the following results of the measurement of the strength of assumptions

were achieved [17]. Cardiology nurses, as compared to a group of 256 nurses not working in similar wards, showed definitely weaker assumptions with regards to the benevolence of people (Cohen's d = 0.81), the ability of a person to control negative events by way of preventive measures (Cohen's d = 0.47), and definitely a stronger conviction of the role of chance in human life (Cohen's d = 1.09). The vision of society in the analysed group of nurses appears to be less friendly, and the events occurring in it are less controllable, because they are random. Among the assumptions regarding one's own participation in the life events, cardiology nurses definitely assessed their own character lower (Cohen's d = 1.64), reported less faith in a happy ending in unfortunate events of their own life (Cohen's d = 1.09) and less conviction regarding the ability to guard against the negative occurrences of life and taking actions bringing positive results (Cohen's d = 0.65). The world vision in the aforesaid group does not differ from the world vision represented by the group of policemen with symptoms of depression.

Janoff-Bulman's theory shows a person's desire to understand the events taking place, using the culturally developed principles of fairness, control and fate, as well as the flexibility of the person's behaviour, which in certain cases can lead to negative adaptation. The research results discussed in the article seem to point to the fact that the principles serving the understanding of the fragment of professional life can be generalised and projected to the whole world vision, which can result in collision and failure to understand. The World Assumptions Scale, which although cannot serve as the only tool for diagnosing the mental state of a person subject to an existential stress factor, is the basis for an individual conversation with the patient about their world vision and the related symptoms.

References

- 1. Janoff-Bulman R. Assumptive worlds and the stress of traumatic events: Applications of the schema construct. Social Cogn. 1989; 7(2): 113–136.
- 2. Janoff-Bulman R. Shaterred assumptions: toward a new psychology of trauma. New York: The Free Press; 1992.
- 3. Parkes C. Psycho-social transitions: A field of study. Soc. Sci. Med. 1971; 5: 101–115.
- 4. Kaler M, Frazier P, Anders S, Tashiro T, Tomich P, Tennen H, Park C. Assessing the psychometric properties of the World Assumptions Scale. J. Trauma Stress 2008; 21:326–332.
- 5. Lilly M, Valdez Ch, Graham-Bermann S. The mediating effect of world assumptions on the relationship between trauma exposure and depression. J. Interpers. Violence. 2011; 26(12): 2499–2516.
- 6. Nygaard E, Heir T. World assumptions, posttraumatic stress and quality of life after a natural disaster: a longitudinal study. Health Qual. Life Outcomes. 2012; 28;10(76). doi:10.1186/1477-7525-10-76.
- 7. Ogińska-Bulik N. Stres zawodowy u policjantów. Lodz: WSHE Publishing House; 2009.
- 8. Gray M, Litz B, Hsu J. Psychometric properties of the life events checklist. Assessment 2004; 11(4): 330–341.
- 9. Załuski M, Gajdosz M. Skala Założeń wobec Świata polska adaptacja i analiza walidacyjna. Psychoter. 2012; 3(162): 17–
- 10. Parnowski T, Jernajczyk W. Inwentarz Depresji Becka w ocenie nastroju osób zdrowych i chorych na choroby afektywne (ocena pilotażowa). Psychiatr. Pol. 1977; 11: 417–425.
- 11. Wang Z, Inslicht S, Metzler T, Henn-Haase C, McCaslin S, Tong H, Neylan T, Marmar Ch. A prospective study of predictors of depression symptoms in police. Psychiatry Res. 2010; 175: 211–216.
- 12. Colwell L, Lyons P, Garner R. The world assumptions of police officers and academy cadets: implications for response to trauma. Appl. Psychol. Crim. Justice 2012; 8(1): 54–67.

- 13. Yuan C, Wang Z, Inslicht S, McCaslin S, Metzler T, Henn-Haase C, Apfel B, Tong H, Neylan T, Fang Y, Marmar C. Protective factors for posttraumatic stress disorder symptoms in a prospective study of police officers. Psychiatry Res. 2011; 188: 45–50.
- 14. Brown J, Fielding J, Grover J. Distinguishing traumatic, vicarious and routine operational stressor exposure and attendant adverse consequences in a sample of police officers. Work Stress. 1999; 13(4): 312–325.
- 15. Mitchell-Gibbs J, Joseph S. Occupational trauma in the British Police: Preliminary analysis. Iss. Criminol. Legal Psychol. 2001; 25: 54–58.
- 16. Foa E, Tolin D, Ehlers A, Clark D, Orsillo S. The Posttraumatic Cognitions Inventory (PTCI): development and validation. Psychol. Assessment 1999; 11(3): 303-314.
- 17. Załuski M. Przekonania na temat siebie, świata i innych ludzi w grupie pielęgniarek kardiologicznych. IX Ogólnopolska Konferencja Naukowa "Zdrowie i choroba w kontekście funkcjonowania społecznego i zawodowego". Warszawa 24–26 maja 2013. Program i streszczenia wystąpień, p. 84.

address: mzaluski@cm-uj.krakow.pl