

Drug Addiction and Manifestations of Indirect Self-Destructiveness

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Abstract

Use and particularly abuse of psychoactive substances is considered a typical form of self-destructive behaviour; addiction itself, meanwhile is regarded as one of the forms of self-destructiveness. Indirect self-destructiveness is considered behaviour whose negative consequences are mediated by additional factors, while the relationship between the behaviour and harm is considered probable. Indirect self-destructiveness understood in that way includes not only undertaking but also abandoning acts; that is related to engaging in dangerous and aggravated risk situations, or neglecting one's health and safety. The aim of this work was to explore the indirect self-destructiveness syndrome in a treatment population of drug addicts. The Polish version of the Chronic Self-Destructiveness Scale (CS-DS) was administered among 172 patients (116 males and 56 females) in drug addiction treatment centres. Results show that self-destructiveness as a generalised behavioural tendency, as well as its more specific manifestations, score within the upper range of the average. Increasing scores by CS-DS subscales were obtained in the following order: Helplessness and Passiveness, Nicotine, Lack of Planfulness, Alcohol, Transgression, Psychoactive Substances, Personal and Social Neglects and Poor Health Maintenance. It can be assumed that nicotine, a legal psychoactive substance, acts as a substitute. While a one-factor solution resulted from factor analysis for healthy people, the patient sample was best described by a two-factor solution (I: Risky Health Neglects, II: Helplessness). The intensity of the indirect self-destructiveness syndrome in individuals treated because of drug addiction was situated close to the upper limit of average results. The highest scores for subscales were related to Helplessness and Passiveness as well as Nicotine, and the lowest to Poor Health Maintenance. The index of Psychoactive Substances turned out to be low.

Keywords

Indirect self-destructiveness, Drug addiction, Treatment, Therapy

Introduction

Commonly known is the harmfulness (at least potential) of psychoactive substances, also common is their use [1-3]; it should be noted at this point that in many cases it occurs with the (greater or lesser) social consent. Regardless, however, of the prevalence of the phenomenon and the possible social consent, the use, and especially the abuse of psychoactive substances, is considered to be a typical self-destructive behaviour; and the addiction itself is regarded as one of the forms of self-destructiveness.

A majority of authors usually consider "self-destructive behaviours" to be behaviours categorised as directly self-destructive, most frequently self-

mutilation, self-inflicted injury, and attempted or committed suicide [4–8].

The concept of self-destructiveness is referred to, among others, an internal process involving the sense of guilt, the need for aggression and abasement. Self-destructiveness is also understood as every voluntary behaviour, undertaken by an individual, more or less consciously and intentionally, which generates a direct or indirect threat to health or life.

As can be seen there is a distinction between a direct and indirect threat and/or harm. The latter category is of interest to this work. It is important that indirectly self-destructive behaviours almost imperceptibly cause harmful side effects, although a great number of such behaviours are classified as being the (broader) standard or norm by most people [4, 5].

While the issue of directly self-destructive behaviours (suicides, self-inflicted injuries *etc.*) is clear and raises no doubt, less acute and “subtle” forms of self-harm or impairing the quality and/or shortening the length of one’s life are not immediately and directly noticeable (*e.g.* risky behaviours, addictions, neglects *etc.*). Less attention is usually paid to them, especially as many of them are treated as commonly (or at least often) occurring behaviours, and thus “normal” ones. Chronic or indirect self-destructiveness is described as a generalised tendency to undertake behaviours increasing the likelihood of negative consequences and decreasing the likelihood of positive consequences for a subject [6]. For the purposes of this study, it was assumed that indirect/chronic self-destructiveness comprises behaviours whose likely negative effect is intermediated by additional factors while the relationship between behaviour and harm is perceived as likely. Indirect self-destructiveness understood in such a way comprises both taking and abandoning (commission or omission of) specific actions; it concerns getting into hazardous and increased-risk situations (active form) or neglecting one’s safety or health (passive form). Whereas an acute self-destructive behaviour entails a conscious and purposeful intention to undertake painful and harmful acts against oneself, sometimes with the intention of killing oneself, chronic/indirect self-destructiveness is related to acts performed during a certain period of time and in some situations with the subject being unaware of or disregarding their long-term harmful effects. Moreover, indirect self-destructiveness is a form of self-destruction characterised by an increased temporal distance between an action and its effect [7, 8]. There are, in general, several categories of indirectly self-destructive behaviours, but most important in this work are: impulsive behaviours, succumbing to temptations, seeking risky excitation, substance (ab)use and addiction or dependence. Individuals who are primarily motivated by current emotional factors (“impulsive individuals”) are more likely to engage in self-destructive acts as opposed to those motivated by more distant cognitive considerations [6]. The ability to postpone impulses is closely linked with resistance to temptation. Succumbing to temptation, present in the syndrome of self-destructive behaviours, remains at the service of many purposes such as pleasure, reduction of tension, self-stimulation, avoiding efforts and many others. In turn, forms and objectives of using psychoactive substances can be described at both ends of dimensions of harmfulness and intentionality: from the socially acceptable form, incidental, not threatening health

(and undertaken in conditions of internal freedom of choice) through preferred, chronic responses (intentional, but in a varying degree autonomously) to its acute form, indirectly life-threatening, in which drinking or drugs are “the only and necessary” means of achieving an objective (and thus are the subject of desire or intention, but rarely of internally free choice). Many authors are inclined to regard the toxic preferences as one of the manifestations of a more general self-destructive tendency, despite the absence of other features of addiction [7]. Besides, according to many assumptions of psychoanalytic theories addiction is actually rooted in unconscious self-destructive tendencies [9].

Incidentally, to the largest degree, those particular categories of behaviour (risky behaviour, impulsive behaviour and succumbing to temptations, including psychoactive substance use) were the starting point for observing the phenomenon of indirect self-destructiveness.

It was found, for instance, that in six consecutive months there were positive correlations between indirect self-destructiveness and exhibiting risky behaviours, including drug abuse, aggressive and/or criminal behaviours, risky sexual behaviours, alcohol abuse and irresponsible behaviours as students or at work; while in females, indirect self-destructiveness was associated solely with the expected displaying of alcohol abuse and irresponsible behaviours as students or at work [10].

In further studies it has been stated that there was a significant organisation concerning adolescent health and problem behaviours [11]. A further study project, came up with similar results, which stated that smoking cigarettes was associated with a group of problem behaviours: drug and alcohol abuse, risky sexual behaviours and criminality [12].

In addition, relationships were found between drug (ab)use and direct self-destructiveness: suicidal ideation, suicide attempts and committed suicides [13].

Indirect self-destructiveness is a form of harming oneself that distinctly differs from direct self-destructiveness or self-aggression. The essence of indirect self-destructiveness is its trans-situational nature and the co-occurrence of various forms of behaviours that lead to adverse consequences. It is not a coincidence that indirect-self destructiveness is referred to as “slow” or “lingering” suicide.

It follows from the above that the phenomenon of indirect self-destructiveness in people addicted to psychoactive substances (drugs) has not been studied in a holistic (comprehensive) manner. The aim of this study was to explore the indirect self-destructiveness syndrome in drug addicts treated in drug addiction treatment centres.

Method

The study is part of two more extensive research projects (on indirect self-destructiveness and on drug addiction) and thus the applied methodology or some other parts may be similar. Preliminary results of this project have been published earlier [14].

In order to meet the research objectives, a population of 172 drug addicts (116 men and 56 women), charges of MONAR1* type centres for drug treatment was investigated.

The age of the respondents ranged from 19 to 28 years (mean age: 23.5); incomplete secondary education and secondary education prevailed. The largest part of the respondents were people addicted to opiates (98 individuals, *i.e.* 56.98%), sedatives and hypnotics (34 individuals, *i.e.* 19.77%), amphetamines (30 individuals, *i.e.* 17.44%) and cannabis (most frequently used) 10 people (5.81%). Addiction lasted approx. 3 years, and they have undergone examination in the 2nd-3rd month of treatment.

The examination was anonymous and the participation was voluntary. It is worth noting that there were no refusals. Informed consent, according to the Helsinki Declaration recommendations, was obtained from each participant and the centre management granted permission to perform the study on their patients.

In order to examine indirect self-destructiveness and its manifestations, the Polish version of the "Chronic Self-Destructiveness Scale" by Kelley (CS-DS) was administered [6, 7].

In order to examine chronic (indirect) self-destructiveness as a generalised tendency, Kelley created a research tool comprising four categories of behaviour; the final version is a list of 52 statements [6]. The Polish version of the tool, as the original one, is characterised by high reliability and validity, and includes: Transgression and Risk (A1), Poor Health Maintenance (A2), Personal and Social Neglects (A3), Lack of Planfulness (A4), and Helplessness, Passiveness in the Face of Problems/Difficulties (A5) categories, whose scores are summed up to provide one total indirect self-destructiveness score [6, 7].

The statistical analysis of received scores applied descriptive methods and statistical inference methods. In order to describe the mean value for quantitative traits, the arithmetic mean (M) was calculated, while the standard deviation (SD) was assumed to be the dispersion measure. The conformity of distributions of quantitative traits with the normal distribution was assessed using the Shapiro-Wilk test. To examine the factor structure and the structure of relationships between variables, and possibly reduce the number of variables, exploratory factor analysis was performed employing the principal component analysis method and normalised varimax rotation. For all the analyses, the maximum acceptable type I error was assumed at $\alpha=0.05$. Asymptotic two-sided test probability p was calculated and $p \leq 0.05$ was considered statistically significant. The statistical analyses were performed by means of the *Statistica PL 12.5 for Windows* statistical package [15].

1* MONAR: The first Polish non-governmental organisation focused, initially, on helping drug addicts, later the homeless, those who are HIV positive or who have AIDS, and many other groups of people who need help. It was formally established as an association in 1981, but its origins go back to 15 October 1978.

Results and Discussion

Since literature offers a scarce number of studies into relationships between manifestations of indirect self-destructiveness and drug addiction, it will be difficult to refer to results of other studies.

Table 1 and Figure 1 show the scores obtained by drug addicts treated in addiction treatment centres for the individual CS-DS scales, *i.e.* for the various forms of indirect self-destructiveness. In order to enable profile comparisons on a figure, raw scores obtained by the subjects were converted into standardised scores.

Table 1: Addicted individuals' scores in the CS-DS.

VARIABLE	M	SD
Indirect Self-Destructiveness	159.517	24.792
A1-Transgression, Risk	55.572	10.982
Alcohol	8.192	3.257
Psychoactive Substances	6.22	2.412
Nicotine	11.857	3.944
A2-Poor Health Maintenance	31.573	7.648
A3-Personal and Social Neglects	35.527	6.885
A4-Lack of Planfulness	25.652	5.733
A5-Helplessness, Passiveness	8.310	2.422

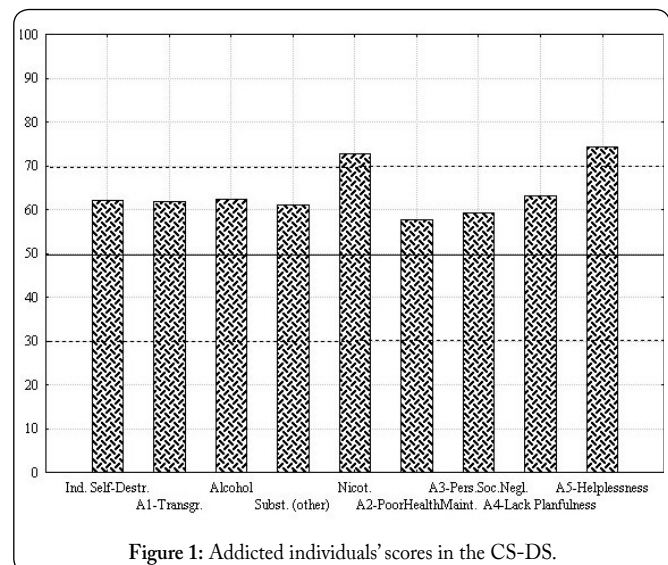


Figure 1: Addicted individuals' scores in the CS-DS.

Due to the fact that the use of drugs is a type of behaviour widely occurring, but not necessarily considered to be potentially self-destructive, those items of CS-DS were separated, which include the use of psychoactive substances (legal and illegal). Those categories are particularly important for the population studied in this work, because they are people who have become addicted to drugs, and nowadays addiction/dependence (or at least abuse) is often "cross" or "mixed": the simultaneous use of many psychoactive substances (polysubstance ab/use).

As can be seen from the data, the subjects' "profile" or "psychogram" in CS-DS is high, and their scores indicate that indirect self-destructiveness as a generalised behavioural tendency is located in the upper limit of the average scores; the scores are so high despite the fact that the subjects are

in places where they receive specialist care (psychotherapy, pharmacotherapy and other forms of psychosocial support). The same applies to the individual categories of indirectly self-destructive behaviours, whose intensity is above average scores too.

The results obtained by subjects for the scales of CS-DS are as follows (in order of intensity of the categories): Helplessness and Passiveness (A5), Nicotine, Lack of Planfulness (A4), Alcohol, Transgression and Risk (A1), Psychoactive Substances, Personal and Social Neglects (A3) and Poor Health Maintenance (A2).

Subjects gained the highest score, and it was with considerable difference, for the scale of Helplessness in the Face of Problems/Difficulties (A5). This result may indicate that drug (ab)use by subjects could be related to the lack of ability to cope with problems, as well as with not taking action against difficulties posed by life, despite knowing that it causes harm. That result may reflect the life situation in which the participants were: the sense of lack of influence on life events and no exit or solution to the situation in which they found themselves. In fact, the strength of addiction/dependence is after all immense, which deprives the individual of ability to influence his/her life (or drastically reduces it).

The next among the CS-DS scales, with a slight difference, are: Lack of Planfulness (A4) and Transgression and Risk (A1).

Lack of Planfulness (A4) may be related to adverse events, seemingly not related to the behaviour of the individual. Planning is a type of action to a great extent dependent on cognitive and motivational processes, in respect of which (according to many authors) dysfunctions occur in addicts (e.g. amotivational syndrome) [16]. On the other hand, desire to use and search for the drug in addicts absorbs almost all their psychological resources, so they may no longer be sufficient for a planned and organised action.

Another category of self-destructive behaviours, for which subjects gained high scores (although slightly lower than for the previous one) are transgressive and risky behaviours (A1), or behaviours that violate social norms and behaviours that may lead to a real threat. Drug use epitomises that type of behaviours, reflecting all aspects of that category of indirectly self-destructive behaviours: impulsive behaviours, succumbing to temptations and dependence or addiction. On the one hand, they are behaviours that transgress certain social norms (drugs); on the other hand, they are behaviours that contain a certain degree of risk resulting from the essence of use of such substances, but also from behaviours undertaken under the influence of those substances.

Poor Health Maintenance (A2) has the lowest intensity, which becomes clear in view of the situation in which the subjects were: a stay in an addiction treatment centre, in many cases preceded by a stay in a detoxication ward, is the beginning of recovery, hence care of that is the minimum that the subjects can do.

Regarding the psychoactive substances (legal and illegal), the results were diversified: indices of Alcohol and Psychoactive Substances were lower than the index of Nicotine, which

was the second highest index, a little lower than the index of Helplessness (A5), which was the highest. Alcohol, drugs and medications (for non-medical purposes; the lowest index) are substances used outstandingly for intoxication, and perhaps that is why the results for those scales were relatively low: a stay in an addiction treatment centre excludes the use of such substances. In contrast, a strikingly high index of nicotine can be associated, on the one hand, with the need for sensations, which hitherto the drugs provided, on the other hand with the fact that nicotine is a legal psychoactive substance. Therefore, it can be assumed that in this case, nicotine is a legal psychoactive substance, acting as a substitute (replaces drugs).

In order to explore the factor structure of the indirect self-destructiveness syndrome in that group of patients the scores they obtained for the tools scales were analyzed by using factor analysis by the principal components method with varimax normalised rotation and eigenvalue $\geq 1,00$.

Table 2: Factor analysis results of addicted individuals' scores in the CS-DS.

FACTORS/VARIABLES	FACTOR LOADINGS	Variance
I. RISKY HEALTH NEGLECTS		Explained = 57.15%
(Eigenvalue-3.575)		
A2-Por Health Maintenance	0,922	Cumul. Variance
A1-Transgression, Risk	0,696	Explained = 57.15%
II. HELPLESSNESS (Eigenvalue-1.196)		Variance
A5-Helplessness, Passiveness	0,854	Explained = 19.95%
A4-Lack of Planfulness	0,742	Cumul. Variance
A3-Personal and Social Neglects	0,675	Explained = 77.10%

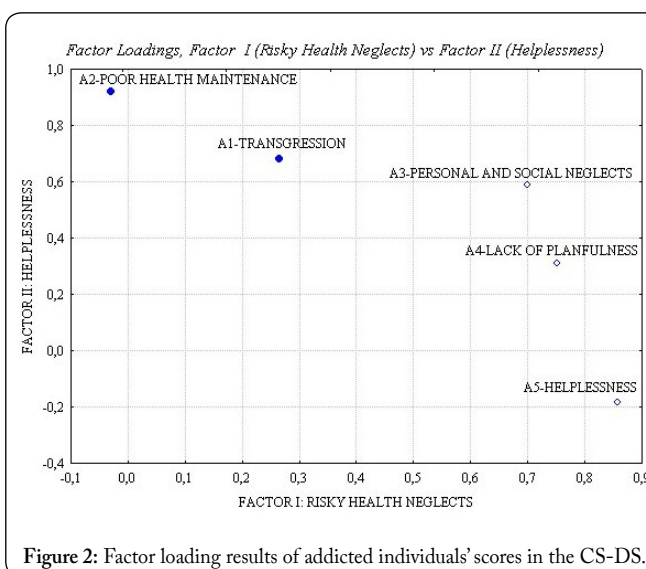


Figure 2: Factor loading results of addicted individuals' scores in the CS-DS.

Table 2 and Figure 2 show that the performed factor analysis extracted two factors. Factor I included the following variables (in order of the size of factor loading): Poor Health Maintenance (A2) and Transgression (A1), and therefore Factor I was named “Risky Health Neglects”; moreover, one of the traits of drug addicts is the need for stimulation and search for novelty and thrill [17]. Factor II included the following variables (in order of the size of factor loading):

Helplessness and Passiveness (A5), Lack of Planfulness (A4) and Personal and Social Neglects (A3); that factor was labelled "Helplessness". It is worth noting that in the case of healthy individuals only one factor was extracted [5, 6, 7], which would mean that the specificity of indirect self-destructiveness of addicts is different than in healthy individuals.

It should be noted that in the case of both factors, variables belonging to the passive form of indirect self-destructiveness have the greatest loadings, as is also indicated by the names of those factors.

The results of this study do not differ much from the results obtained at an earlier stage of the research project [14]. This may mean that the general regularities and direction of the relationships remain the same.

We hope that the results of this study will be helpful in prophylactic and therapeutic activities. Prognostic implications include the ability to identify people at risk; and therapeutic implications include areas such as feelings of helplessness and hopelessness, learned helplessness and how to cope with difficult situations.

Conclusion

Based on the above results and findings it can be stated that the intensity of indirect self-destructiveness syndrome in people treated for drug addiction is within the upper limit of the average scores. Helplessness and Passiveness (A5) and Nicotine show the greatest intensity of indices. The lowest intensity occurs in the case of indices of Personal and Social Neglects (A3) and Poor Health Maintenance (A2); also low intensity of index of Psychoactive Substances was found. It is possible that the use of psychoactive substances and drugs compensates for the reward deficiency [18], but does so in a self-destructive way, at least an indirectly self-destructive one.

Conflict of Interest

The authors declare that they have no conflict of interest.

Authors Contributions

K. Tsirigotis, Co-author of: query in the international literature, concepts, hypotheses, principles, methods, debate, implementation of research, calculation, interpretation and discussion of results and manuscript. Author of: database, statistical calculations, and preparation of the manuscript.

W. Gruszczyński, Co-author of: concepts, hypotheses, principles, methods, debate, interpretation and discussion of results and manuscript.

M. Tsirigotis-Maniecka, Co-author of: query in the literature, concepts, hypotheses, principles, methods, debate, implementation of research, calculation, interpretation and discussion of results and manuscript.

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