

Chapter # 4

ANXIETY, SOCIAL DESIRABILITY, COPING STRATEGIES AND DEFENSIVE STYLES OF COPING IN HYPERSEXUAL MEN BEFORE AND AFTER THERAPY: PRELIMINARY RESULTS

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ABSTRACT

Hypersexuality include intense focus on sexual fantasies, urges or behaviors that an individual cannot control. It was proved that people suffering compulsive sexual behaviors experience high levels of distress and anxiety, and report difficulties in personal and professional areas of their life. In order to verify whether the levels of anxiety, social desirability and preferred coping styles of hypersexual persons change after the therapeutic process the preliminary empirical study was conducted. In the presented project participated 8 volunteer hypersexual men who underwent six months long CBT-based group psychotherapy. In order to measure the levels of anxiety, social desirability, and coping styles Trait Anxiety Scale, Social Desirability Questionnaire and Mini-COPE were used. The results obtained in the study proved that respondents presented high levels of anxiety. The levels of maladaptive styles of coping presented by hypersexual men before the therapy were higher in comparison to the levels of these strategies after the therapy. The results obtained in the study might serve as a starting point for planning future research, since they are only preliminary, and collected in a small sample of volunteers.

Keywords: hypersexuality, anxiety, social desirability, coping with stress, repression, group therapy intervention.

1. INTRODUCTION

Hypersexuality corresponds with limited control over sexual impulses, and difficulties with coping with stress. It is probable that hypersexual persons engage themselves in unhealthy ways of coping with difficulties. Since hypersexuality is correlated with other problems such as elevated levels of negative emotionality, therefore it also might correspond with defensive styles of coping (i.e. proneness to repression or sensitization). Additionally, it is interesting whether preferred coping strategies or repression-sensitization proneness can be modified with therapeutic interventions.

In the following sections basic information on the concept of hypersexuality, coping with stress, defensive styles of coping, and psychotherapeutic interventions for hypersexual patients are given. Next the preliminary data based on the research conducted in the small group of volunteer hypersexual patients who participated in the six months long CBT-based group therapy program aimed at reduction of hypersexual behaviors is presented. The results gathered from the respondents before and after the psychological treatment are compared and discussed. It should be underlined that the data presented in the article is only preliminary, and further research in the above-mentioned area is needed.

1.1. Introduction to the Concept of Hypersexuality

Hypersexuality (compulsive sexual behavior or hypersexual behavior) is defined as overwhelming, uncontrollable, intense and repetitive sexual activities difficult to postpone or cease even when it is needed. In order to recognize hypersexuality certain criteria must be met, i.e. the problem has to be observed for at least six months, during which time an individual experiences high levels of distress, and/or reports experiencing significant impairments in the area of their personal, family, social, and/or educational life due to the excessive forms of sexual behaviors (Montgomery-Graham, 2017). Hypersexual behavior is accompanied with excessive autoerotic behaviors, often accompanied by problematic pornography consumption and promiscuity (Kafka, 2010; Markovic, 2019). The prevalence of compulsive sexual behavior is approximately between 1% and 10% (Grubbs et al., 2020).

Hypersexuality is correlated with general psychosocial problems (Koos et al., 2021), difficulties in relationships and problems with fulfillment of different types of personal obligations (Reid, Garos, & Fong, 2012). It correlates with high levels of neuroticism, hostility, and low levels of satisfaction with life (Böthe et al., 2018; Dhuffar, Pontes, & Griffiths, 2015; Kowalewska, Gola, Kraus, & Lew-Starowicz, 2020; Rettenberger, Klein, & Briken, 2016; Studer, Marmet, Wicki, & Gmel, 2019). It is connected with high levels of loneliness, and feelings of shame and guilt (Jennings, Lyng, Gleason, Finotelli, & Coleman, 2021). It often co-occurs with depression, eating disorders, substance abuse or other mental problems (Ballester-Arnal, Castro-Calvo, Gimenez-Garcia, Gil-Julia, & Gil-Llario, 2020). It is also associated with violence and sexual abuse (Jepsen, & Brzank, 2022).

1.2. Strategies of Coping with Stress

Coping with stress is defined as a constantly changing self-regulatory process aimed at reduction of emotional tension. It occurs in reaction to the difficult or threatening situations that are subjectively perceived as exhausting and overwhelming (Lazarus, & Folkman, 1984). Coping with stress is understood as a self-defensive mechanism that constantly and dynamically changes due to an individual's activity.

Strategies of coping with stress are usually divided into three main categories of task-oriented coping, emotion-oriented coping and avoidance-oriented coping (Endler, & Parker, 1990). Task-oriented strategies aim at modification of the situation or individual's activity in order to change the stressful experience. Emotion-oriented strategies involve catastrophization or unrealistic optimism that aim to regulate an individual's emotional tension, while avoidance-oriented coping aims at diverting attention from stressful events. Additionally in the literature helplessness orientation is mentioned in which an individual, among others, engages themselves in substance abuse, or self-criticism (e.g. Mikulincer, 1989). It was proved that all of the above-mentioned coping strategies may be either adaptive or maladaptive dependable on the situation i.e. whether the stressful event is controllable or uncontrollable (Smith, Saklofske, Keefer, & Tremblay, 2016).

1.3. The Concept of Defensive Styles of Coping

Repression or sensitization defined as defensive styles of coping are the protective mechanisms introduced by an individual in any type of situations subjectively perceived as demanding or threatening for the self (Weinberger, Schwartz, & Davidson, 1979). Repression leads to the avoidance of unpleasant and/or threatening stimuli, while sensitization aims at approaching threatening stimuli (Myers, 2010; Myers, & Derakshan, 2004).

The individual's repression or sensitization proneness is estimated with self-descriptive measures of trait anxiety and social desirability. In order to identify repressors and sensitizers (i.e. persons with an inclination to repression or sensitization) the median split of the results obtained in the measures of trait anxiety and social desirability are calculated and then combined, resulting in formation of four independent groups: repressors, truly low-anxious, truly high-anxious, and sensitizers (e.g. Kleszczewska-Albińska, 2024).

1.4. Psychotherapeutic Methods used in Treatment of Hypersexual Patients

The diagnosis of hypersexuality is introduced in the International statistical classification of diseases and related health problems (WHO, 2020) in the impulse control chapter and it is called compulsive sexual behavior disorder (Code: 6C72) (WHO, 2020). There are no clear recommendations concerning evidence-based psychological support and psychotherapeutic interventions for hypersexual patients. Most professionals introduce some form of cognitive-behavioral therapy in which, among others, patients learn how to regulate their urges (e.g. Bóthe, Baumgartner, Schaub, Demetrovics, & Orosz, 2021; Hallberg et al., 2020), identify their values (e.g. Levin, Heninger, Pierce, & Twohig, 2017), restructure their thinking (e.g. Hardy, Ruchty, Hull, & Hyde, 2010), stimulate their motivation for change (e.g. Hallberg et al., 2019) or train their skills of problem-solving, conflict management, time management or coping (e.g. Hallberg, Kaldo, Arver, Dhejne, & Öberg, 2017; Wan, Finlayson, & Rowles, 2000). While working with hypersexual patients some specialists apply art therapy (Wilson, & Fischer, 2018), experiential therapy (Klontz, Garos, & Klontz, 2005) or 12-steps approach (Efrati, & Gola, 2018).

There is some evidence that receiving any form of treatment helps to reduce symptoms of compulsive sexual behavior disorder. Especially effective are the treatment methods in which cognitive-behavioral modules are present (Antons et al., 2022). At the same time the specificity of treatment effects described in the studies is dubious. In some cases studies lack rigorous, systematic methodological approaches. Additionally, application of different methodological approaches presents in different studies make it extremely difficult to compare the effectiveness of treatment methods obtained in different programs. At that moment strong conclusions considering the effectiveness of specific treatment methods in hypersexual patients cannot be drawn. Further research and the development of treatment programs devoted specifically for hypersexual patients is needed (Elrafeii, & Jamali, 2022).

1.5. A Foundation for Current Research

As it was stated above, hypersexuality, among others, is connected with emotional difficulties (Dhuffar, Pontes, & Griffiths, 2015), and maladaptive coping strategies (Cristoi, & Delcea, 2022). Due to therapeutic interventions there were observed some changes in symptoms severity (e.g. Holas, Draps, Kowalewska, Lewczuk, & Gola, 2020), typical behaviors (e.g. frequency of engagement in sexual activities) (e.g. Bóthe et al., 2021), levels of obsessive sexual thoughts (Hardy, Ruchty, Hull, & Hyde, 2010), self-regulation (Efrati, & Gola, 2018), levels of psychological distress (Hallberg et al., 2019) or anxiety (Klontz, Garos, & Klontz, 2005) of hypersexual patients. Therefore, it is interesting to verify whether short-term group therapy can modify the levels of anxiety, social desirability, and coping strategies including defensive styles of coping observed in hypersexual patients.

The main aim of the study described in the article was to verify the levels of anxiety, social desirability and preferred coping styles of hypersexual persons before and after six months of intensive CBT-based short-term group therapy program. It was also checked whether respondents have a tendency to use defensive styles of coping (i.e. whether there are repressors or sensitizers among hypersexual patients) and whether their preferences in that matter change after the therapy.

2. METHOD

2.1. Participants

In the study described in the article participated 8 volunteer hypersexual patients who completed the six months long CBT-based therapeutic program aimed at reduction of their hypersexual behaviors. The group included men aged 18-47 ($M=32.63$; $SD=10.25$). Four of these men were single, whereas the other four were involved in romantic relationships. Prior to the current psychotherapy, all of the respondents participated in some form of group therapies for addictions and Sexaholics Anonymous for a varied time of 1-25 years ($M=6.31$; $SD=7.98$). In order to maintain the anonymity of patients who took part in the study no additional qualitative sociodemographic details will be given in the description.

All of the men were diagnosed based on the criteria of compulsive sexual behavior disorder (WHO, 2020). It means they presented persistent problems with controlling intense, repetitive sexual impulses and urges that resulted in repetitive sexual behaviors. They neglected other important areas of life due to the central focus they gave to sexual activity. They also made unsuccessful attempts to reduce or stop the sexual activity. They experienced adverse consequences in that matter or reported deriving little or no satisfaction from sexual activity. The problem they suffered caused significant distress or impairments in important areas of their life. All the symptoms reported by individuals were present for at least six months. All diagnoses were given based on individual interviews by qualified clinical psychologist working at a counseling center for hypersexual persons.

2.2. Procedure

The study reported in the article is part of a bigger research program on emotion regulation, coping with stress and defensive coping. There were two modules of the project in which hypersexual patients took part – one devoted to the comparison of general functioning of hypersexual patients and general population, and the other concentrated on the changes observed in hypersexual patients who underwent six months long CBT-based group therapy. The therapeutic program offered to the patients was based on the method described by Hallber and colleagues (2019) except it lasted 24 weeks instead of 7 weeks. It consisted of all the modules offered by Hallber and colleagues (2019), i.e.: basic psychoeducation of CBT and hypersexual disorder, psychoeducation of surplus and deficits of behaviors, basic behavioral/functional analysis, stimulation of motivation, urge surfing techniques, identification of values, behavioral activation, advanced functional analysis, psychoeducation on the influence of dysfunctional thoughts and beliefs, process of challenging dysfunctional thoughts and beliefs, design and implementation of behavioral experiments, cognitive restructuring, problem-solving techniques, interpersonal behavioral activation through assertiveness skill, conflict management, identification and engagement of interpersonal goals, implementation of the individual maintenance program. In the presented article only the part of research aimed at describing the functioning of volunteer patients who participated in the therapy program is described.

All of the respondents of the study described in the article were approached by psychology student trained in data collection individually during their visits to the counseling center. They were informed about the ongoing psychological study aimed at describing the general functioning and coping with stress typical for different groups of people. Next, men who expressed their interest in learning more about the project were given details about the aim and procedure of the research. After giving an informed consent, respondents who volunteered to participate in the study were given sets of questionnaires that included Mini-COPE, Trait Anxiety Inventory and Social Desirability Questionnaire, and were asked to fill them in, and to return them to the person collecting the data. The same men were approached by the experimenter again, after they finished their six months long therapy course. In order to maintain anonymity of respondents during the data collection process they were asked to generate individual codes that they used both during the first and the second data collection. It was decided to invite males only to participate in the study, since the statistics prove that the hypersexual behaviors are present in approximately 3% of men and 1% of women (Kürbitz, & Briken, 2021; Slavin et al., 2020). The study was conducted in compliance with ethical principles.

2.3. Materials

Three standardized psychological tests were used in the study. In order to assess styles of coping with stress Mini-COPE in Polish adaptation authored by Juczyński and Ogińska-Bulik (2009) was used. Polish adaptation of State Trait Anxiety Inventory (Wrześniewski, Sosnowski, Jaworowska, & Fecenec, 2011) was used for assessing the levels of trait anxiety. Social Desirability Questionnaire (Drwal, & Wilczyńska, 1980) was applied for measuring the levels of social desirability. Two latter tests were also used in order to identify defensive styles of coping.

The Mini-COPE questionnaire assesses 14 different coping strategies, which include: active coping, planning, positive reframing, acceptance, humor, religion, searching for emotional support, searching for instrumental support, self-distraction, denial, venting, substance use, behavioral disengagement, and self-blame (Carver, 1997). The tool consists of 28 statements with a 4-point Likert scale. The reliability of most of the scales in the conducted study was satisfactory, ranging from $\alpha=.46$ to $\alpha=.89$.

Polish adaptation of State Trait Anxiety Inventory (STAI) was used as an instrument indicating the levels of anxiety. The questionnaire includes 20 questions assessing anxiety understood as a temporary state, and 20 other questions for estimation of a relatively stable trait. Answers in the questionnaire are assessed with a 4-point Likert scale. In the described study only the scale for trait anxiety was used, and it reached a satisfactory reliability of Cronbach's alpha $\alpha=.84$.

The Social Desirability Questionnaire (KAS) was used for an assessment of the level of social desirability understood as an indicator of an individual's defensiveness level. The questionnaire consists of 29 questions with a true/false response sequence. It includes items that are socially desirable but rather uncommon in society (e.g. "I am never late for my work"), and other features that are quite frequent in the society, but socially undesirable at the same time (e.g. "I remember I was pretending to be sick in order to avoid something"). The reliability of the test in the conducted study equals $\alpha=.77$.

3. RESULTS

Before conducting the analyses the normality of the distribution of analyzed variables was verified with the Shapiro-Wilk test combined with an analysis of indexes for skewness and kurtosis. Gathered results met the criteria for normal distribution (e.g. Field, 2018; George & Mallery, 2019; Hasiloglu & Hasiloglu-Ciftciler, 2023) therefore in order to analyze the differences in the mean levels of anxiety, social desirability, and preferences for coping strategies before and after the therapy course it was decided to use parametric tests (Field, 2018).

3.1. Preliminary Data Organization

Four independent groups varied in their tendency for defensive coping were formed. For that reason medians for the STAI ($Me=47$) and KAS ($Me=13$) questionnaires were calculated, and based on the median split groups that differ in the levels of anxiety and social desirability were identified. Detailed information concerning classification of respondents in the presented study is given in Table 1.

Table 1.
Groups identified according to their tendency for defensive style of coping.

Group	Number of hypersexual people before the therapy	Number of hypersexual people after the therapy
low-anxious (↓STAI ↓KAS)	1	2
high-anxious (↑STAI ↓KAS)	4	4
repressors (↓STAI ↑KAS)	3	2
sensitizers (↑STAI ↑KAS)	0	0

According to the data given in Table 1. it might be noted that half of the respondents were identified as truly high-anxious persons. It means that they experience a high level of anxiety that they adequately recognize, since they are characterized by low levels of social desirability. Before the therapy three of the respondents were identified as repressors, which means they underestimated their levels of anxious arousal. After the therapy the level of social desirability of one of the respondents dropped, and at the same time his anxiety level stayed low, so he was identified as a truly low-anxious person during the second measurement. It was also possible to identify truly low-anxious individual in the analysed group. There were no sensitizers among the respondents, which means that none of the members of the research group overestimated their anxiousness.

3.2. Anxiety, Social Desirability and Styles of Coping in Hypersexual Men Before and After the Therapy

In order to verify whether there are any differences in the analyzed variables before and after six months of therapy aimed at reduction of hypersexual behaviors repeated measures t-test were conducted. The results obtained in the study are presented in Table 2.

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Table 2.
The differences between the levels of anxiety, social desirability and styles of coping with stress before and after the six months of therapy.

	before		after		<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
STAI	51.25	7.83	49.38	8.09	.96	.184	.03
KAS	12.13	6.66	11.88	6.31	.28	.392	.01
active coping	3.38	1.69	3.63	1.19	.61	.282	-.02
planning	3.5	1.77	3.75	.89	.61	.282	-.02
positive reframing	3.13	1.89	3.13	1.96	0	.500	0
acceptance	3.13	1.36	3.74	1.19	1	.175	-.04
humor	1.88	.64	1.5	.53	2.05	.040	.07
religion	2.5	1.93	2	2.2	1.53	.085	.05
emotional support	3.38	1.3	2.75	1.67	3.42	.006	.01
instrumental support	3.25	1.16	2.63	.74	1.67	.070	.06
self-distraction	3.13	1.46	2.5	1.07	1.36	.108	.05
denial	1.63	1.3	1	1.41	1.67	.070	.05
venting	3.13	.83	3.25	.71	.31	.381	-.01
substance use	.25	.71	.25	.71	0	.500	0
behavioral disengagement	2.38	1.85	1.5	1.6	2.2	.032	.08
self-blame	.5	1.77	3.5	1.41	0	.500	0

According to the data presented in the table there are three statistically significant differences in the coping styles before and after the therapy. The mean level of coping styles with humor, emotional support and behavioral disengagement decreased significantly after the six months of therapy. There was also a statistical tendency for the decrease in the levels of instrumental support, denial, and religion after six months of therapy. Other results weren't statistically significant.

Additional analyses for generalized preferences for coping strategies, divided into active strategies (i.e. active coping, planning, positive reframing), avoidant coping (i.e. self-distraction, denial, venting) and searching for support (i.e. emotional support, instrumental support) before and after therapy were conducted with repeated measures t-tests. Obtained results are presented in Table 3.

Table 3.
The differences between the levels of preferred generalized coping strategies before and after the six months of therapy.

	before		after		<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
active coping	10	4.81	10.5	3.46	.53	.307	-.02
avoidant coping	7.88	3.60	6.75	1.16	1.29	.120	.05
searching for support	6.63	2.33	5.38	1.92	1.84	<.001	.18

According to the data presented in Table 3. only one result was statistically significant proving the mean level of searching for support decreased after the therapy. No differences in the mean levels of active coping and avoidant coping before and after the therapy were found.

4. DISCUSSION

There were no respondents identified as sensitizers, whereas most of the persons who took part in the study were identified as high-anxious individuals. This result stays in congruence with previous studies showing that hypersexual patients present high levels of negative emotionality, neuroticism (Engel et al., 2023), and anxiety (Coleman, 1992; Scanavino et al., 2018). It is therefore possible that hypersexual respondents participating in the study described above do not use defensive coping strategies. Probably the excessive sexual behaviors present in that group serve a regulative function similar to defensive coping styles. This hypothesis should be empirically verified in future studies.

What is interesting is that one of the respondents who was identified as a repressor during the first measurement after the therapy declared a low level of social desirability, which means that during the therapy process his level of social desirability decreased. This result is very interesting and should be investigated more carefully in a larger group of patients during next studies. It is important especially since previous studies have shown that the social desirability level is positively correlated with high indicators of hypersexual behaviors (Bóthe et al., 2019; Lampalzer, Tozdan, von Franqué, & Briken, 2021). Possibly during the therapeutic process hypersexual patients learn to accept themselves and in effect they do not need to present themselves in a socially desirable manner, but this hypothesis needs further empirical verification.

Studies published up to date prove that hypersexuality corresponds with maladaptive coping strategies, such as withdrawal or self-blaming (Elrafei, & Jamali, 2022; Reid, Harper, & Anderson, 2009), which only partially corresponds to the results obtained in the presented study. It was observed that after the therapy the tendency for maladaptive strategies such as behavioral disengagement and humor as well as searching for emotional support decreased significantly. It is possible that mostly due to the psychoeducation and cognitive restructuring methods patients started to apply more diversified coping strategies that are more adequate to specific situations they are dealing with, but this hypothesis should be verified in future studies.

Surprisingly patients declared to use coping strategies aimed at searching for any type of support less often after the therapy in comparison to the time before the therapy. It is possible that this is an adaptive effect of being engaged in therapeutic processes in which patients learn how to effectively cope with different types of problems (Lampalzer et al., 2021), but this hypothesis also needs an empirical verification in future research.

It should be underlined that the data presented in the article is preliminary and therefore the findings should be interpreted with caution. There were only eight volunteer patients participating in this study, so it is not possible to generalize obtained results. Also the time frame for the study was relatively short – data was collected right before the therapy started and six months later, right after the therapeutic program was completed, so there is no information on the long-term effects of the therapy. In other words, the study described above can serve as an interesting starting point for future research, but there is a need for careful consideration when drawing conclusions from presented research.

5. FUTURE RESEARCH DIRECTIONS

In the future studies it should be verified whether there are any correlations between social desirability and proneness to hypersexual behaviors. Is it possible that high levels of social desirability corresponding to high levels of anxiety serve as a protective factor from hypersexuality development?

Also it is important to analyze in depth the relationships between hypersexuality and styles of coping. Is it possible to identify adaptive coping strategies that are especially helpful for hypersexual patients? Is seeking for social support an adaptive or maladaptive behavior for hypersexual individuals? What is the short-term and long-term effectiveness of psychotherapeutic interventions offered to this group of patients?

Another important factor that should be addressed carefully in the future studies is the motivation of hypersexual patients for seeking professional help. How different types of motivation distinguish coping strategies preferred by individuals and how it affects the overall effect of the treatment process? Is the level of individual motivation to therapy influenced by social desirability level? Is there any correspondence between defensive styles of coping, motivation to therapy, and its effectiveness in a group of hypersexual patients?

It is crucial to collect data from large groups of patients attending different types of therapy and support groups. It is important to collect and analyze data from hypersexual patients with diverse social, economic, and emotional backgrounds. It is desirable to plan a longitudinal research in which the data will be collected before the therapeutic process, several times during the therapy (e.g. after completion of each module of therapy) and several times after full completion of therapy (e.g. right after, one month later, six months later, one year later).

6. CONCLUSIONS

The study described in the article included preliminary results of eight hypersexual patients who underwent a six months long group CBT-based therapeutic process that aimed at reduction of the intensity of hypersexual behaviors. In the study the levels of anxiety, social desirability, preferred styles of coping and defensive styles of coping were assessed. Based on the gathered results it was proved that hypersexual patients presented high levels of anxiety, and a tendency to use maladaptive coping strategies. Their engagement in maladaptive coping decreased after implementation of a group therapy. Although it is unclear how long this effect lasts, since the effectiveness of the therapeutic process was measured only right after the completion of therapeutic treatment. The significance of defensive styles of coping for hypersexual patients is also unclear at the moment. Further research is still needed.

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