

Temperamental Basis of Sexual Behavior in Polish Men

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Abstract

Aim: The primary function of temperament is to adapt the strength and frequency of stimulation to the individual's processing capacity. The purpose of this study was to determine the differences in temperamental traits in men with risky sexual behavior (RSB) and compulsive sexual behavior disorder (CSBD).

Subjects and methods: Data were collected from December 2019 to January 2021. The analysis included 425 men: 63 with RSB (M=35.70 years), 98 with CSBD (M=37.99 years), and 264 in the control group – CG (M=35.08 years). The following methods were applied: Temperament Inventory, Sexual Addiction Screening Test, Risky Sexual Behavior Scale, and self-report survey.

Results: Higher intensity of emotional reactivity ($p<0.001$), sensory sensitivity ($p=0.034$), and a lower intensity of endurance ($p=0.032$) and briskness ($p<0.001$) were found in the CSBD group compared to the CG. In the CSBD group, the intensity of emotional reactivity was higher ($p<0.001$), the intensity of briskness ($p<0.001$), and activity ($p=0.017$) were lower compared to RSB group. No differences were found between the RSB group and the CG.

Discussion: Effective self-regulation results from a specific temperament profile which is the relationship between individual temperament characteristics, with primary emphasis on the relationships between the intensity of behavioral energy levels, including endurance, emotional reactivity, and activity.

Conclusions: Patients with CSBD show a lower need for stimulation and a greater tendency to avoid it, compared to men with and without RSB. The men with RSB need to consider the current pleasures of life more than the other groups studied, but their temperamental structure is similar to those without RSB.

**risky sexual behavior; compulsive sexual behavior disorders;
Regulatory Theory of Temperament; behavioral addictions**

INTRODUCTION

Human sexuality encompasses behavior, cognition, and emotional-motivational processes, that support health. The determinants of sexual behaviors include cultural, social, environmental, and individual factors, with biological predispositions and psychological factors often playing significant roles. It is important to accurately diagnose and treat underlying disorders that may lead to risky sexual behaviors.

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Risky sexual behavior (RSB) typically involves: having multiple sexual partners throughout life, engaging in concurrent sexual relationships, having casual sex without specific partner preferences, and engaging in unprotected sex or sex under the influence of psychoactive substances or chemsex [1,2]. Risk factors for engaging in RSB include: being male [3], being younger [4], having mental and personality disorders [5], using psychoactive substances [3], or experiencing physical or sexual violence [6]. Genetic factors may also play a role, particularly when combined with environmental factors [7–9]. Certain temperamental and personality traits, such as sensation seeking, impulsivity, high levels of extraversion, and psychoticism, are also associated with a tendency towards engaging in RSB [1,9]. RSB is a significant risk factor for sexually transmitted infections (STIs) and unplanned pregnancy [9], and can have negative impacts on social and interpersonal relationships, as well as causing financial and legal problems [10]. It also increases the likelihood of developing certain cancers, including those affecting the head and neck, cervix, vulva, vagina, prostate, and oral cavity [11,12]. Therefore, RSB has become one of the leading causes of health burden worldwide [13].

RSB often occurs in people with compulsive sexual behavior disorder (CSBD) [14,15], although its presence is not necessary for the diagnosis of CSBD. According to ICD-11, CSBD is characterized by a persistent and prolonged pattern of lack of control over intense, repetitive sexual impulses or urges lasting six months or more. This results in repetitive sexual behaviors that cause significant distress or impairment in personal, family, social, educational, occupational, or other important areas of functioning. Symptoms of CSBD may include (1) repetitive sexual activity that becomes the focal point of the person's life, to the point of neglecting health, personal care, interests, activities, and responsibilities; (2) numerous unsuccessful attempts to significantly reduce the repetitive sexual behavior; (3) continuing repeated sexual behaviors despite negative consequences; (4), receiving little or no satisfaction from them [16]. According to the latest data from 42 countries, that 4.8% of people are at high risk of experiencing CSBD. However, only 14% of individu-

als with CSBD have ever sought treatment for this disorder [17]. High rates of co-occurrence of CSBD with other mental disorders [18] suggest that this constellation is more typical than pure CSBD. It is necessary to determine the basis, complex mechanisms of etiology, maintenance, and adaptive and maladaptive functions of CSBD is necessary for its correct diagnosis and treatment. First, it is about clarifying whether CSBD is more similar to addictions or impulse control disorders, such as explosive disorders or kleptomania [19]. In this regard, it may be helpful to assess the importance of temperamental factors by comparing the results of people with CSBD with previous results in various clinical groups and those with RSB and without any of these characteristics.

The Regulatory theory of temperament (RTT) defines temperament as relatively stable personality traits that are present in a person from early childhood. These traits are primarily determined by innate neurobiochemical mechanisms, but are subject to slow changes and individual interactions between genotype and environment [20]. RTT focuses solely on the formal characteristics of behavior, while energetic characteristics refer to the accumulation and discharge of stored energy. The difference between the level of arousal resulting from stimulation and the optimal state of arousal for an individual can motivate them to engage in behaviors aimed at regulating this difference. The concept of energetic performance encompasses several features, including [21,22]: endurance (the ability to respond adequately in situations requiring long-lasting or highly stimulating activity and in conditions of external solid stimulation), emotional reactivity (the tendency to overreact to stimuli evoking emotions, expressed in high sensitivity and low emotional resistance), activity (the tendency to engage in behaviors that have a high stimulating value or provide external stimulation), sensory sensitivity (ability to respond to stimuli of low stimulating value). Features that describe the course of behavior (reaction) over time include [21,22] briskness (the tendency to react quickly and maintain a high pace of action and easily change from one behavior to another in response to changes in the environment), and perseverance (the tendency to continue and repeat behavior after the stimulus (stimulation)

that caused the behavior ceases). Temperament's regulatory function modifies the stimulating value of an individual's behaviors, reactions, and situations [23].

When summarizing the conclusions from studies involving clinical groups, both increased rates of emotional reactivity and perseverance, and decreased endurance and briskness, as well as disharmonized temperament structure, are related factors predisposing to somatic and mental disorders, including addictions [24–26]. On the other hand, high endurance, briskness, and activity can be considered protective factors against the harmful effects of stress and are therefore health-protective resources [23,27]. Previous research has demonstrated that the intensity of individual temperament traits or specific temperament structures is significant for risky (anti-health) behavior among young people [28,29], including risky driving [30], and alcohol consumption [29].

Although there are good theoretical foundations and encouraging research results regarding substance use disorder [25,26], mental disorders [24–26,31,32], and some risky behaviors [28,30], to the best of the authors' knowledge, no research has been conducted to assess the importance of the features RTT in CSBD or RSB. It is desirable to fill this gap due to the need to clarify the new clinical category of CSBD and to supplement knowledge about RSB. This analysis will support the effectiveness of preventive, diagnostic, and therapeutic activities for individuals with unhealthy sexual behavior. Considering the above, the main objective of our study was to analyze the relationship between temperamental traits and risky sexual behavior and compulsive sexual behavior disorder.

METHOD

Participants and Procedure

The presented material is a segment of a broader research project that examines the psychosocial and clinical differences between CSBD and RSB, as well as selected risk factors for these behaviors. A previous publication [33] provided detailed description of the group selection process, as well as the demographic and clinical charac-

teristics of the respondents. The current work includes only the most relevant information.

To compare the temperamental characteristics of men with CSBD, men with RSB, and people from the control group (CG), the study included three groups mentioned above. All participants were required to meet the standard inclusion criteria of being over 18 years of age and providing consent to participate in the study. The exclusion criteria for the study were as follows: confirmation of a diagnosis of a severe mental illness, dementia, or mild cognitive impairment; use of dopaminergic drugs; withdrawal of consent to participate in the study; incomplete completion of the research questionnaire, which would make analysis impossible; and gender other than male. The criterion of male gender was included because CSBD is more commonly diagnosed in men than in women, and initial inquiry indicated that almost exclusively men were attending therapies.

The clinical group was included if they had a specialist diagnosis of CSBD and were currently receiving treatment for it. The RSB group was included if they had a high severity of RSB (RSBs score from 5 to 10 points), and the CG was included if they had no RSB (RSBs score below 5 points). The RSB group and CG were required to confirm their diagnosis of CSBD or problems with controlling addictive sexual behaviors (SAST-R score from 5-20 points). Initially, 1150 individuals qualified for the study. However, after applying general and group-specific inclusion and exclusion criteria, the results of 425 men were finally included in the analysis: 98 with CSBD, 63 with RSB, and 264 in CG.

The diagnostic survey method was utilized in this study. All participants completed the same research questionnaire that included screening and standardized psychological tests, as well as a self-report survey questionnaire. The research questionnaire included:

The formal characteristics of behavior – Temperament inventory (FCZ-KT) [27] which consist of 6 scales covering energetic and temporal characteristics of behavior. The measurement reliability in our research was satisfactory, ranging from $\alpha = 0.79$ for the emotional reactivity scale to $\alpha = 0.85$ for activity and sensory sensitivity.

The sexual addiction screening test–Revised (SAST-R) [34] in the Polish adaptation [35], which consists of 20 items. The optimal cut-off

point is 5 points, with a sensitivity of 99.1% and a specificity of 78.3%. In our study the test was used to exclude people from the control and RSB groups, rather than to qualify for the clinical group. The psychometric parameters of the original tool are comparable to those of the Polish version. In our study and in the Polish adaptation, the Cronbach's alpha coefficient values are similar, amounting to $\alpha = 0.90$.

Risky sexual behavior scale (RSBs) – set of questions by Verweij et al. [8,9] in own translation with language correction. The scale comprises 8 statements that pertain to various behaviors, including not using condoms or other contraceptive methods despite the absence of reproductive plans, engaging in parallel sexual relationships, having sexual intercourse with more than one person in a day after consuming large amounts of alcohol, and having sexually transmitted infections. Furthermore, the number of sexual partners throughout one's life is taken into account. Individuals who report having had three to ten partners receive an additional point, while those who report having had more than ten partners receive two points. Therefore, the total scores of RSBs range from 0 to 10 points [8,9]. The Cronbach's alpha reliability index in our study is $\alpha = 0.76$, which is satisfactory. RSBs have the advantage of being previously verified in two extensive studies in behavioral genetics [8,9].

The self-report questionnaire comprised 14 items, consisting of open and closed questions. It allowed for the collection of information on demographic data such as age, gender, education, professional activity, relationship, and psychosexual orientation. Clinical data, such as diagnosed substance and behavioral addictions, other mental disorders, somatic diseases, and medications taken were also collected. Additionally, the questionnaire gathered information on dominant sexual behaviors, including sexual contacts and pornography use.

Study organization

In January and February 2019, a pilot study was conducted with 19 male participants aged 23 to 52 years ($M=37.5$; $SD=9.6$), 15 of whom had been diagnosed with CSBD. Data for the main study

was collected from December 2019 to January 2021, with periodic interruptions due to the Covid-19 pandemic. The participants in the clinical group were patients from 5 centers specializing in the treatment of behavioral addictions. Participants for both the RSB and control groups were recruited using the snowball method, starting with friends, family, and acquaintances of students from the Medical University of Silesia in Katowice (SUM) and deliberately at the Consultation and Diagnostic Point at the AIDS Diagnostics and Therapy Center and the Infectious Diseases Clinic. The survey was conducted anonymously, confidentially and voluntarily, and participants did not receive any remuneration. At the beginning of the survey, participants were provided with information about the study's purpose, procedures, and the option to directly contact with the researcher. Those who agreed to participate checked the appropriate item in the survey. Each survey was assigned a code and its contents were recorded in a Microsoft Excel spreadsheet.

The study's procedures involving human participants adhered to the ethical standards of the institutional and/or national research committee and followed the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The position of the Bioethics Committee at the Medical University of Silesia in Katowice (KNW/0022/KB/303/18) has determined that the proposed research procedure is not a medical experiment and therefore does not require an assessment by the SUM Bioethics Committee.

Statistical analysis

Statistical analyses were conducted using the IBM SPSS Statistics 25 package to verify the research hypotheses. Descriptive statistics were analyzed, and the normality of the distributions of the studied quantitative variables was checked using the Kolmogorov-Smirnov test [36]. To assess differences in the intensity of temperamental traits, the Kruskal-Wallis test was performed due to the non-equal size of the studied groups. If the result statistically significant, post-hoc analysis using Dunn-Sidak tests

was conducted. The level of significance was set at the classic threshold of $p = 0.05$.

RESULTS

Characteristics of the studied groups

The analysis included 425 men who could be assigned to one of the groups based on a constellation of three criteria: confirmation of CSBD diagnosis, SAST-R result, and RSBs result. The RSB group consisted of 63 individuals aged 20 to 63 ($M = 35.70$; $SD = 10.57$), while the CG group consisted of 264 men aged 20 to 64 ($M = 35.08$; $SD = 11.26$). The clinical (CSBD) group comprised 98 individuals aged 20 to 61 ($M = 37.99$; $SD = 9.08$).

The groups did not differ significantly in age ($F(2, 422) = 2.65$; $p = 0.072$). Over 50% of individuals in all groups had higher education, over 90% were professionally active, over 65% were in stable relationships, and over 85% identified as heterosexual. In each group, over 80% did not have a diagnosed chronic somatic disease. The most common diagnosis was hypertension (CSBD: 6.1%; RSB: 6.3%; CG: 9.1%). In all groups, the majority of individuals did not re-

port psychoactive substance or behavioral addictions (over 74.5%). Among those who did report addiction, the highest percentage was found in the CSBD group, with alcohol use being the most commonly reported (21.4%), while the RSB group and CG reported nicotine use (14.1% and 5.7%, respectively). A higher percentage of individuals in the CSBD group (25%) reported a diagnosis of mental disorders compared to the other groups (RSB: 6.4%; CG: 4.5%). Depression was the most commonly reported diagnosis in the clinical group (16.3%). None of the respondents confirmed taking dopamine precursors or agonists.

The dominant behavior associated with CSBD was sexual intercourse (43.9%), sexual intercourse and pornography use (42.9%), pornography use alone (11.2%), and sexual intercourse, pornography use, and other unspecified sexual behaviors (2%).

Characteristics of the studied variables

Table 1 presents the basic descriptive statistics and distribution of the measured quantitative variables.

Table 1. Basic descriptive statistics and distribution of the studied quantitative variables for all respondents.

	M	Me	SD	Sk.	Kurt.	Min.	Maks.	K-S	P
FCZ-KT									
Endurance	10.69	11	4.87	-0.12	-0.75	0	20	0.12	<0.001
Sensory sensitivity	14.12	15	3.93	-0.75	-0.02	2	20	0.07	<0.001
Activity	8.70	8	4.57	0.27	-0.59	0	20	0.13	<0.001
Emotional reactivity	8.70	9	4.83	0.04	-0.81	0	20	0.09	<0.001
Briskness	15.09	16	4.06	-1.07	0.75	1	20	0.07	<0.001
Perseverance	11.20	12	4.61	-0.35	-0.71	0	20	0.16	<0.001
SAST-R	3.98	2	5.05	1.51	1.13	0	19	0.06	0.002
RSBs	2.63	2	2.37	0.78	-0.31	0	10	0.23	<0.001

M – mean; Me – median; SD – standard deviation; Sk. – skewness; Kurt. – kurtosis; Min and Max – the lowest and highest value of the distribution; K-S – result of the Kolmogorov-Smirnov test; p – significance

Comparison of the intensity of temperamental traits in the studied groups

Table 2 shows five statistically significant differences were confirmed between the study groups

in terms of the intensity of temperamental traits. These differences are related to the level of endurance, sensory sensitivity, activity, emotional reactivity, and briskness.

Table 2. Comparison of temperament traits in the studied groups.

	CSBD group (n = 98)		RSB group (n = 63)		CG (n = 264)		H	P
	M	SD	M	SD	M	SD		
Endurance	9.50	5.19	11.13	4.83	11.03	4.70	6.89	0.032
Sensory sensitivity	14.86	3.90	14.25	3.84	13.81	3.93	6.44	0.040
Activity	7.87	4.50	9.97	4.96	8.71	4.44	7.70	0.021
Emotional reactivity	10.76	5.27	7.48	4.72	8.23	4.47	22.53	<0.001
Briskness	13.23	4.75	16.19	3.42	15.52	3.70	23.36	<0.001
Perseverance	12.07	4.47	10.40	4.77	11.07	4.59	5.64	0.060

M – mean; SD – standard deviation; H – Kruskal-Wallis test result; p – significance

The study found statistically significant differences in emotional reactivity and briskness between the CSBD group, the RSB group, and the CG. The CSBD group exhibited higher level of emotional reactivity and lower briskness compared to the RSB group ($p < 0.001$) and CG ($p < 0.001$). No significant differences were observed between the RSB group and CG in emotional reactivity ($p = 0.573$) and briskness ($p = 0.535$).

Statistically significant differences were found between the CSBD group and the CG in terms of endurance and sensory sensitivity. The CSBD group exhibited lower endurance ($p = 0.032$) and higher sensory sensitivity ($p = 0.034$) compared to the CG. However, no statistically significant differences were observed between the RSB group and the CG in relation to these variables ($p = 1$). Similarly, the comparison of the results between CSBD and RSB subjects did not reveal any statistically significant differences, both in terms of endurance scale results ($p = 0.176$) or sensory sensitivity ($p = 0.723$).

The activity level was significantly lower in the CSBD group, compared to the RSB group ($p = 0.017$). Additionally, there were no statistically significant differences between the CG and the RSB ($p = 0.242$) and CSBD groups ($p = 0.267$).

DISCUSSION

The objective of our study was to identify temperamental characteristics in individuals with CSBD who engage in RSB. The results obtained demonstrated the differences between the groups studied. The characteristics that most clearly differentiate individuals with CSBD from both the CG and the RSB group are a higher level of emotional reactivity and lower briskness.

Regarding emotional reactivity, the results suggest that individuals with CSBD have lower capacity and opportunities to process stimulation compared to respondents from the other two groups. This leads to a more intense reaction to emotional stimuli, higher sensitivity, and lower emotional resistance. However, this result does not allow for an inference of the specific meaning of emotional reactivity in people with CSBD. Previous studies have consistently shown that emotional reactivity is a significant factor in the intensification of psychopathological symptoms, distinguishing clinical groups from healthy individuals, and predicting various disorders. Studies have also demonstrated a correlation between emotional reactivity and the severity of post-traumatic stress disorder (PTSD) symptoms [31,37,38]. Groups of patients with affective disorders [25,26], alcohol addiction [25], and personality disorders [24,39] exhibited a higher level of emotional reactivity.

Regarding briskness, our study has shown that men with CSBD exhibit slower reactions and a slower pace of performing activities, as well as weaker abilities to modify behavior and react in response to changing external conditions, compared to subjects from the control and RSB groups. Briskness appears to have an inverse relationship with the development and severity of psychopathological symptoms, while emotional reactivity may have a different effect. Several studies have confirmed a correlation between a lower intensity of briskness in clinical groups and an increased probability or severity of psychopathological symptoms [31,37,38,40]. In the context of our research, interesting results were noted in studies that included multiple clinical groups. Patients with affective disorders [25,26] or obesity [26] have been identified as having a lower level of briskness, but not those with alcohol dependence [25,26]. As with emotional reactivity, briskness is negatively correlated with beliefs typical of almost all personality disorders [39]. Briskness modulates the inflow of stimulation, and its gains and losses depend on its adaptation to the features determining the stimulation processing capabilities [23,27].

Regarding endurance, our research demonstrated that men with CSBD exhibit lower endurance levels than those in the control group. This indicates that they are less likely to respond effectively to highly stimulating or require long-term activity situations and have weaker resistance to fatigue and distractions. This may result in weaker immunity in everyday work or family situations, particularly in unfavorable environmental conditions or during times of poor well-being, pain, or fatigue. Patients with various mental problems or with the severity of psychopathological symptoms often exhibit lower levels of endurance. However, this rarely increases the risk of these disorders [24–26,32,38,39]. Only in a study of people with alcohol dependence, no differences in the intensity of endurance were found compared to the control group [26], and an even higher level of this feature was observed in this clinical group [25]. Endurance is crucial for effectively regulating of stimulation, as it determines the demand and ability to process stimuli [23,27,41]. While low endurance alone may not increase the risk of health problems, it may constitute a temperamental health

risk factor when combined with other specific features [23,41].

When it comes to sensory sensitivity, our study found that men with CSBD exhibit greater vigilance and are more able to detect low-intensity sensory stimuli and minor differences in changes in this intensity compared to the control group. This may manifest in their ability to perceive nuances, subtle changes in intensity, and subtle sensory stimuli that signal sexual activity. Individuals with CSBD may experience a cascade of reactions leading to sexual activity triggered by single stimuli that are imperceptible to others or the broader situational context. Previous studies have observed a negative correlation between sensory sensitivity and psychoticism, although the relationship is not strong enough to consider these features equivalent [27]. A research summary comparing several groups of people exposed to trauma concludes that temperamental traits may be an endophenotype for anxiety disorders. However, doubts arise regarding sensory sensitivity [32]. For instance, in some studies of patients with alcohol dependence, a higher level of sensory sensitivity was recorded in some studies [25], while in other studies, it was lower than the control group [26]. Due to the unclear status of this feature in RTT itself [27,41], providing coherent explanations for our results is challenging. Sensory sensitivity is comparable to openness to experience [27,39,42]. However, research does not confirm the relationship of this feature with behavioral addictions, including CSBD [43–46].

In relation to activity, in our study individuals with RSB exhibited a higher activity level compared to men with CSBD. Activity is a crucial determinant of behavior, driven by the need for stimulation [21,22]. Considering that people with RSB exhibit a lower level of emotional reactivity than those with CSBD, this result probably reflects adequate regulatory mechanisms in both groups. However, it does not necessarily indicate an exceptionally high intensity of activities in men with the RSB. Previous research has suggested that a high activity level may promote good health [37]. Therefore, we interpret the results in our study similarly. Individuals with RSB do not form a clinical group, but rather a group with distinct characteristics who, despite engaging in RSB, did not develop CSBD. It

is possible that a properly adjusted level of activity served as a protective factor against the development of CSBD.

Considering perseverance, our study found no statistically significant differences in perseverance between the study groups. However, it is important to note the raw results and size differences between groups. Previous studies have indicated increased perseverance scores in clinical groups [25–27,39], which is understandable due to their potential to lower the level of stimulation. To avoid ignoring any statistical trends, it is recommended to pay special attention to the measurement of this feature in subsequent studies, preferably with large and equal groups. This is essential because the role of a similar perseverance intensity will differ for people with weaker versus greater stimulation processing abilities.

According to RTT, effective self-regulation results from a specific temperament profile. In other words, it is based on a specific relationship between scales, specifically individual temperament features, with primary emphasis on the relationships between the intensity of behavior's energy level, including endurance, emotional reactivity, and activity. Temporal parameters, which modify stimulation availability, are considered secondary. Briskness was identified as increasing supply by reacting quickly and maintaining a high pace of action, while perseverance was found to lead to a lower activation level by relieving excessive arousal [27,41]. In our study, it was found that individuals with CSBD exhibited higher emotional reactivity than both comparison groups, lower endurance than the CG, and lower activity than individuals with RSB. No differences in temperamental traits' intensity were noted between men with RSB and the CG, suggesting lower demand and processing ability for stimuli in people with CSBD [23,27]. This profile (also after converting individual raw scores into stanines) aligns with a harmonized structure indicating low stimulation processing capabilities, suggests a preference for avoiding stimulation and discharging arousal with relatively low adaptability. The main argument is that men with CSBD have a lower briskness score compared to both groups, in the context of the energetic characteristics described above.

Although lower briskness has been observed in clinical groups before, interpreting it in iso-

lation from the overall profile may suggest preserved adaptability to lower stimulation processing capabilities. It is considered risky to isolate this result, especially in individual diagnoses, as it may lead to artifacts. It is expected that individuals with CSBD may not only achieve higher results in the field of briskness but may also show no significant differences between the studied groups, indicating a greater tendency towards overstimulation [27]. These results do not hinder optimal activation by individuals with CSBD in the overall context. Additionally, caution is necessary when interpreting perseverance results. The temperament profile of the CSBD group is similar to that of individuals with affective disorders, bipolar disorder, or PTSD, rather than those with alcohol dependence or HIV infection [25,26,47]. This suggests that the mechanisms underlying CSBD are more aligned with mood and anxiety disorders than with addictions. Comparisons with other studies and theoretical concepts suggest that individuals with CSBD exhibit temperamental differences, including higher activity levels, lower stimulation processing ability, and effective regulation. However, the temperament structure does not resemble that of impulsive individuals, a trait that has been repeatedly linked to addiction and is considered a potential mechanism for CSBD [14,43,48].

In summary, the results of our research confirmed the differences in the intensity of temperamental traits between men with CSBD and men without this disorder, both with and without RSB. Moreover, the temperament profile of the RSB group was more similar to that of the control group than that of men with CSBD. The above information may be helpful to clinicians in distinguishing diagnosis between people with RSB and CSBD. Meanwhile, amidst ongoing debates about the similarity and mechanism of the image of CSBD to other disorders [19,49–52], it can be useful to note that the intensity of individual temperament traits renders individuals with CSBD most similar to those with anxiety disorders, and least similar to those with impulsive disorders. Research confirms stronger and more frequent associations of CSB with neuroticism than with extraversion [46,48]. Some authors and research results suggest that the mechanism of emotion regulation may be fundamen-

tal and at the same time underestimated in the current ICD 11 classification [51,53]. If subsequent studies confirm our results, they could be considered as a basis for constructing therapeutic programs. When planning therapy for patients with CSBD, it is important to consider their lower resilience, need for stimulation, and limited tendencies to reduce it. The same applies to preventive activities aimed at men with risky sexual behavior. Considering the temperamental structure of this group, which indicates good processing capabilities and a tendency to seek stimulation, may increase the effectiveness of interventions.

Our research also has several significant limitations. The clinical and demographic assessment of the subjects was based on their declarations rather than data from medical records. In the group of people with CSBD, more mental disorders and addictions to psychoactive substances were reported. This distribution is consistent with predictions and characteristics of patients with CSBD. It should be considered in research and treatment [54], as well as in study conclusions. The study was unable to ensure equal comparison groups due to the limited number of individuals with RSB but without a diagnosis of CSBD. Future research should consider ways to reduce or eliminate these limitations.

CONCLUSIONS

The research indicates that men with CSBD exhibit stronger emotional reactivity and sensory sensitivity, as well as lower endurance and briskness compared to men without CSBD and RSB, suggesting a weaker ability to process stimulation. Additionally, the temperamental traits do not differentiate men with RSB from those without CSBD and RSB, indicating similarities in temperament structure, including resilience and harmonization. However, men with RSB exhibit lower emotional reactivity and greater briskness and activity than men with CSBD. Their temperament structure suggests superior processing capabilities and a stronger inclination towards seeking stimulation compared to men with CSBD.

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