

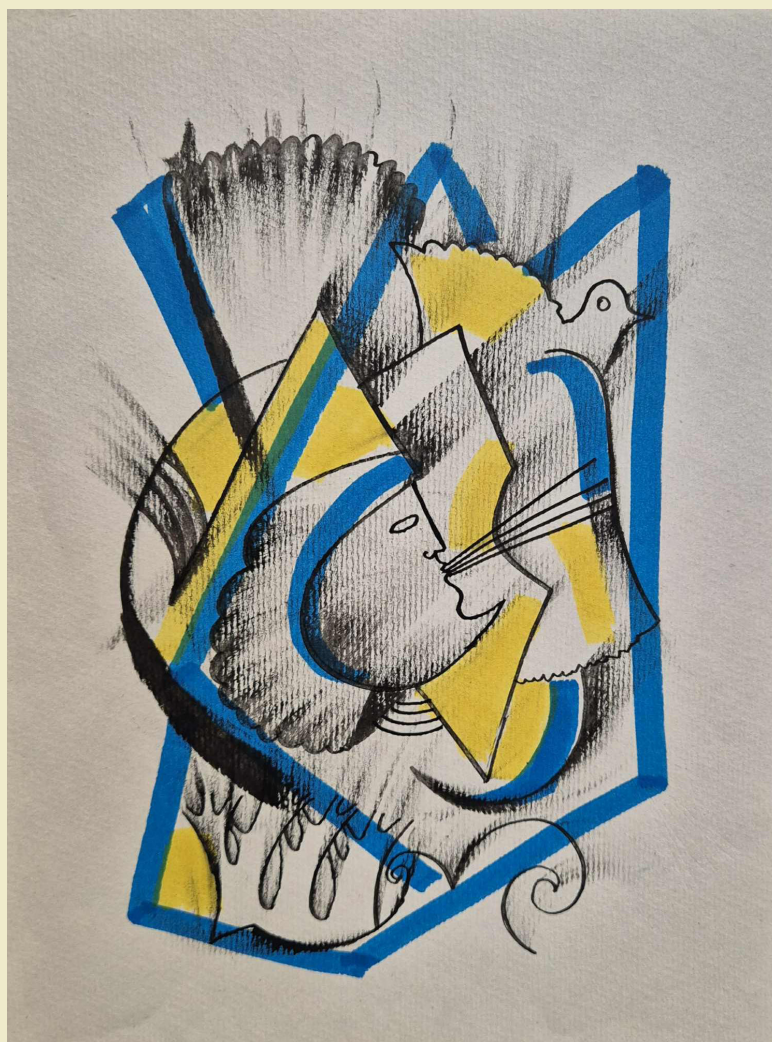
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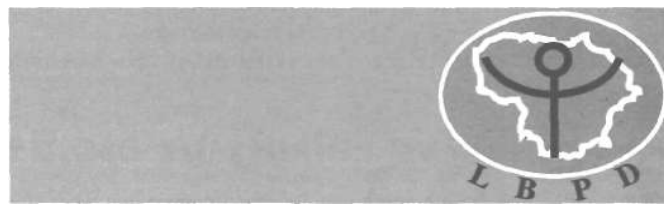
BIOLOGICAL PSYCHIATRY AND PSYCHOPHARMACOLOGY

BIOLOGINĖ PSICHIATRIJA IR PSICHOFARMAKOLOGIJA

Vol. 27, No 1–2, 2025, December

T. 27, Nr. 1–2, 2025 m. gruodis





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PUSLAPIS INTERNETE <http://biological-psychiatry.eu>

As we present this new issue of *Biological Psychiatry and Psychopharmacology*, we are reminded of the vital role that rigorous, biologically grounded research plays in advancing our understanding of psychiatric disorders and therapeutic interventions. The journal continues its mission to publish high-quality original research and integrative reviews that deepen insight into the etiology, biology, genetics, treatment, and prevention of mental and behavioral disorders, thereby bridging clinical practice with cutting-edge scientific inquiry.

Over recent years, the field of biological psychiatry has undergone rapid evolution, driven by advances in neuroimaging, genomics, psychopharmacology, and computational neuroscience. These developments are transforming not only how we conceptualize brain–behavior relationships but also how we design targeted, evidence-based interventions. In parallel, psychopharmacological research continues to refine our understanding of pharmacodynamics and personalized medicine approaches, with an emphasis on safety, efficacy, and translational impact. *Biological Psychiatry and Psychopharmacology* remains committed to highlighting research that meaningfully contributes to these domains.

In this double issue (Volume 27, Numbers 1–2, December 2025), the journal presents a diverse collection of original research reports, reviews, assessment tools, and a thematic supplement reflecting current priorities in biological and translational psychiatry.

The first research report, “Reasons for Having Sex and Relationship Satisfaction: How Are They Related?”, by Saulė Zaveckaitė and Dr. Justė Lukoševičiūtė-Barauskienė (Department of Health Psychology, Faculty of Public Health, Lithuanian University of Health Sciences), examines how different sexual motivations relate to relationship satisfaction across gender and age groups. Autonomous sexual motives were positively associated with relationship satisfaction, whereas non-autonomous motives were linked to lower satisfaction, particularly in individuals aged 31–50 years.

The second research report, “Factors Contributing to Adolescent Academic Anxiety and the Role of Perceived Social Support: Gender and Age Perspectives”, by Paulina Statkevičiūtė and Dr. Justė Lukoševičiūtė-Barauskienė (Department of Health Psychology and Health Research Institute, Faculty of Public Health, Lithuanian University of Health Sciences), addresses academic anxiety among senior secondary school students in Lithuania. Average or above-average academic anxiety was identified in 40% of respondents, with higher levels among girls and younger students. Support from family and friends was associated with lower anxiety levels.

The review article, “The Association Between Joint Hypermobility and Anxiety”, by Ernesta Aukštuolytė-Bačienė (Department of Sports Medicine, Faculty of Nursing, Medical Academy, Lithuanian University of Health Sciences), synthesizes evidence demonstrating an increased risk of anxiety disorders among individuals with joint hypermobility across the lifespan.

This issue also includes the World Health Organization Adult ADHD Self-Report Scale (ASRS), prepared by Aistė Pranckevičienė, Karolina Reinytė, Julius Burkauskas, and Vesta Steiblienė (Department of Health Psychology; Behavioral Medicine Laboratory, Neuroscience Institute, Lithuanian University of Health Sciences). The ASRS is presented as a standardized screening instrument facilitating early detection of adult ADHD and supporting evidence-based clinical practice.

The issue is complemented by a supplement containing abstracts from the scientific conference “Addiction Management Through Harm Reduction Approaches: Clinical, Evidence-Based Solutions for Professionals”, organized by the Department of Health Psychology and the Neuroscience Institute of the Lithuanian University of Health Sciences. The supplement reflects contemporary European priorities in addiction psychiatry and public health.

We hope that this issue will stimulate further research, interdisciplinary dialogue, and thoughtful reflection among clinicians and researchers. *Biological Psychiatry and Psychopharmacology* remains dedicated to advancing ethically grounded, clinically meaningful, and biologically informed psychiatric research.

Prof. Vesta Steiblienė, MD, PhD
Editor-in-Chief
Biological Psychiatry and Psychopharmacology

Reasons for having sex and relationship satisfaction: how are they related?

Priežastys, dėl kurių mylimės ir pasitenkinimas romantiniais santykiais: kaip tai susiję?

Saule ZAVECKAITE, Juste LUKOSEVICIUTE-BARAUSKIENE

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SUMMARY

Introduction. Scientific literature indicates that for women, engaging in sexual activity out of a sense of obligation may be associated with lower relationship satisfaction (RS). Research on sexual motives has primarily focused on student samples, while studies on relationship satisfaction often involve married couples. Therefore, it remains unclear how different sexual motivations (SM) relate to relationship satisfaction across genders and age groups.

Aim. To examine the associations between sexual motives and relationship satisfaction.

Methods. The study included participants aged 18 to 50 ($n = 205$) who had been in a romantic relationship for at least one year (regardless of whether they were cohabiting, married, or not living with their partner). The research was conducted via public-space surveying across Lithuania. Data were collected through an anonymous questionnaire comprising the CSI scale (to measure relationship satisfaction), the SexMS scale (to assess sexual motives), and questions about socio-demographic variables. Data analysis was conducted using both univariate and bivariate methods.

Results. Among participants aged 18–30, no significant associations between sexual motives and relationship satisfaction were observed ($p > 0.05$). However, among women aged 31–50, lower satisfaction was associated with External sexual motives or Amotivation, while higher satisfaction was associated with Intrinsic sexual motives ($p < 0.05$). In the same age group, men reported lower satisfaction when more strongly endorsing Introjected motives, and higher satisfaction when more strongly endorsing Identified, Intrinsic, or Integrated sexual motives ($p < 0.05$).

Conclusions. Autonomous sexual motives (Intrinsic, Identified, Integrated) are associated with higher relationship satisfaction, while non-autonomous motives (External, Introjected, Amotivation) are associated with lower satisfaction. However, these associations were observed only within the 31–50 age group.

Keywords: couple, relationship, relationship satisfaction, sexual motives.

SANTRAUKA

Įvadas. Mokslinėje literatūroje pastebima, kad moterims lytiniai santykiai dėl jaučiamos pareigos gali būti susiję su mažesniu pasitenkinimu santykiais. Seksualinių motyvų tema daugiausia nagrinėjama studentų imtyse, o pasitenkinimas romantiniais santykiais – susituokusių porų imtyse. Todėl vis dar nėra aišku, kaip skirtingi seksualiniai motyvai susiję su pasitenkinimu romantiniais santykiais skirtingoms lytims ir amžiaus grupėms.

Tikslas – nustatyti seksualinių motyvų ir pasitenkinimo romantiniais santykiais sąsajas.

Metodai. Tyrime dalyvavo 18–50 m. amžiaus tiriamieji ($n = 205$), kurie bent metus turėjo romantinius santykius (negyveno kartu su partneriu, gyveno kohabitacijoje arba santuokoje). Vykdytas tyrimas, apklausiant tiriamuosius viešose Lietuvos vietose. Tyrimo instrumentas – anoniminė anketinė apklausa, kurią sudarė CSI skalė (pasitenkinimui romantiniais santykiais vertinti), SexMS skalė (seksualiniams motyvams vertinti), klausimai apie socialinius-demografinius rodiklius. Duomenų analizė atlikta vienmatės ir dvimatės analizės lygmenyse.

Rezultatai. Pastebėta, kad 18–30 m. amžiaus tiriamųjų grupėje seksualiniai motyvai nesusiję su patiriamu pasitenkinimu ($p > 0,05$). Tačiau 31–50 m. moterys patiria mažesnę pasitenkinimą santykiais, kai mylisi dėl išorinių motyvų ar jaučia amotyvaciją. Didesnį – jei mylisi dėl vidinių priežasčių ($p < 0,05$). 31–50 m. vyrai mažiau patenkinti santykiais, kai jiems labiau būdingi įrodymo sau motyvai ir labiau patenkinti – kai būdingi asmeniniai, vidiniai, harmoningumo seksualiniai motyvai ($p < 0,05$).

Įšvados. Autonominiai seksualiniai motyvai (harmoningumo, asmeniniai ir vidiniai) yra susiję su didesniu patiriamu pasitenkinimu santykiais, o neautonominiai (įrodymo sau, išoriniai ir seksualinė amotyvacija) – su mažesniu. Tačiau šios sąsajos būdingos tik 31–50 m. amžiaus grupei.

Raktažodžiai: pora, romantiniai santykiai, pasitenkinimas romantiniais santykiais, seksualiniai motyvai.

INTRODUCTION

Over the past decade, an increasing number of studies have highlighted the connection between relationship satisfaction (RS) and various dimensions of a couple's sexual life, including sexual frequency, behavior, satisfaction, and related factors [1, 2, 3, 4]. In this context, sexual motivation (SM) – defined as the reasons individuals engage in sexual activity – has emerged as a key construct [3, 5]. These motivations can be categorized into six types: intrinsic, integrated, identified, introjected, external, and amotivated [5]. Relationship satisfaction (RS), in turn, involves elements such as conflict resolution, time spent together, communication, and emotional and physical intimacy [6].

Although prior literature demonstrates that couples' sexual dynamics are closely associated with their perceived RS [1, 2, 3, 4] and that RS is linked to both partners' physical and emotional well-being [7, 8, 9, 10], the nature of the associations between specific types of SM and RS remains insufficiently explored. This gap is particularly evident when considering different age groups and gender. Most existing studies on SM have been conducted with university students or young adults aged 18–30 [8, 11], while RS has been more extensively examined among married couples [9, 12, 13]. As a result, there is a lack of research addressing how SM are associated with RS among individuals aged 30–50 who are in long-term or committed relationships. Furthermore, the limited data that do exist tend to focus primarily on women, often emphasizing sex performed out of obligation in marital contexts and its link to women's RS. In contrast, the associations between men's SM and their RS remain poorly understood [7].

These demographic gaps are particularly important to address, as both gender and age may be associated with distinct patterns of SM and relationship experiences. Life routines, social roles, and relationship expectations often differ between younger and middle-aged adults, just as sexual motives and relational priorities may differ between men and women. However, studies that explore these associations comparatively across age and gender remain scarce, and existing findings often vary by subgroup.

This study aims to address these gaps by examining the associations between SM and RS across different gender and age groups. It contributes scientifically by expanding our understanding of how different types of SM relate to RS in underrepresented populations. Additionally, the study offers new insights into how these associations vary across socio-demographic groups, contributing to the broader field of sexuality research beyond young adult and student samples.

From a practical perspective, the findings may be valuable to mental health professionals, especially psychologists and couples' therapists, by offering a clearer understanding of how SM relate to RS in diverse populations. This knowledge can support more nuanced and effective approaches in therapy. Moreover, individuals in long-term romantic relationships may benefit from these insights by gaining a deeper awareness of their own relational experiences, potentially encouraging self-reflection and guiding solutions to personal or relational challenges.

Research aim – to identify the associations between sexual motivations and relationship satisfaction.

RESEARCH MATERIAL AND METHODS

Research procedure

When constructing the study questionnaire, the Couples Satisfaction Index (CSI) and Sexual Motivation (SexMS) scales were translated into Lithuanian. Both scales are permitted for use in academic research without additional authorization from the authors [15, 16]. The translation was verified and refined using the back-translation method. On January 10, 2025, approval for the main study was obtained from the Lithuanian University of Health Sciences (LSMU) Bioethics Center (approval no. 2025-BEC2-0026).

Study, a convenience sampling method was employed. Participants were recruited in Kaunas city's Kalniečiai and Draugystė parks, Laisvės Avenue, and in Vilnius city's Vingis, Reformatų, and Ozas parks, as well as Vinco Kudirka, Cathedral, and Town Hall squares, and Gediminas Avenue. Additionally, data were collected in the Legends and Tales Park in the city of Varėna. The study was conducted between January 10 and February 18, 2025. All potential participants were asked whether they had a romantic partner, and only those who responded affirmatively were provided with the questionnaire. Completion of the questionnaire was considered as informed consent to participate in the study. Participants filled out printed questionnaires, which included questions from the relationship satisfaction and sexual motivation scales, as well as socio-demographic items.

Study sample

The study sample consisted of adults over the age of 18 who, at the time of the study, had been in a romantic relationship with their partner for at least one year. Only individuals theoretically within reproductive age (up to 50 years old) were included. All participants were required to be able to read and complete the questionnaire in Lithuanian. Upon agreeing to participate, each individual independently completed the survey. Out of 293 people invited, 205 agreed to participate, resulting in a response rate of 70.2%.

The final sample consisted of 205 participants with a mean age of 30.14 ± 9.04 years. The majority of respondents were female (51.7%), aged 18–30 (57.1%), held higher education degrees (48.3%), were employed (64.4%), did not have children (65.4%), and were married (38.4%). Among those with children, most were raising minors (85.9%). A more detailed description of the study sample is presented in Table 1.

Assessment methods

Participants completed anonymous paper-based questionnaires consisting of 47 items. The questionnaire included a standardized relationship satisfaction scale (16 items), a standardized sexual motivation scale (24 items), and socio-demographic indicators (7 items). Each participant completed the questionnaire independently, selecting the responses that they felt best represented their experiences. Completion of the questionnaire took approximately 10–15 minutes.

Relationship satisfaction was assessed using the shortened version of the CSI. In this study, the CSI-16 was used – a modified

Table 1. Characteristics of the study sample (n = 205)

Variable	M	SD	Mdn	IQR	Skewness	Kurtosis
Age (years)	30.14	9.04	28.0	[22.0; 37.0]	0.66	-0.76
Relationship	7.47	7.00	5.5	[2.00 10.0]	1.45	1.71
Variable			n	%		
Gender	Female		106	51.7		
	Male		99	48.3		
Age group	18–30 years		117	57.1		
	31–50 years		88	42.9		
Relationship status	Not married, not cohabiting		50	24.4		
	Cohabiting		70	31.1		
	Married		79	38.5		
	Other		6	2.9		
Education	Primary		6	2.9		
	Secondary		63	30.7		
	Postsecondary non-tertiary		36	17.6		
	Higher		99	48.3		
Employment	Student		20	9.8		
	Employed and studying		46	22.4		
	Employed		132	64.4		
	Not employed, not studying		4	2.0		
	Other		3	1.5		
Children	None		134	65.4		
	Has children		71	34.6		
Children's age	Has only adult children		10	14.1*		
	Has minor children		61	85.9*		
Number of children	1		24	33.8*		
	2		35	49.3*		
	3		11	15.5*		
	4		1	1.4*		

*Among participants with children; M – mean; SD – standard deviation; Mdn – median; IQR – interquartile range; n – number of participants; % – percentage of participants.

version of the index consisting of 16 Likert-scale items [6, 14]. Each item on this scale had 6 response options on a Likert scale, with scores ranging from 0 to 5. A person's RS was represented by their total score on the scale, with a maximum possible score of 80 and a minimum of 0. According to the original authors [6, 14], the CSI-16 demonstrated excellent internal consistency with a Cronbach's alpha of .98, while in the present study, the scale also showed high reliability, with a Cronbach's alpha of 0.95.

Sexual motivations were assessed using the SexMS. The original SexMS, developed in 2016, consists of 24 Likert-scale items distributed across six subscales, aimed at identifying the prevalence of different types of SM by calculating the total score for each subscale [5, 15]. The maximum score for each subscale is 28, and the minimum is 4. According to the authors [5, 15], the subscales demonstrate sufficiently high Cronbach's alpha coefficients (0.80–0.90). In this study, high to moderate Cronbach's alpha coefficients were also obtained for the different subscales (0.73–0.83). The six subscales represent distinct motivational dimensions: Intrinsic SM, reflecting engagement in sexual activity due to internal desire and enjoyment (e.g., because sex is fun); Integrated SM, referring to sex as an integral part of one's identity and life values (e.g., sexuality is

an important part of my life or identity); Introjected SM, which captures motivation driven by internal pressures or the need to affirm self-worth (e.g., to prove being a good lover); External SM, describing sexual activity undertaken due to external demands or social contingencies (e.g., to avoid conflict with a partner); Identified SM, reflecting personally endorsed reasons, such as self-exploration and experimentation (e.g., because it is important to explore one's own body); and Amotivated SM, representing a lack of clear reasons for sexual activity, often associated with indifference, boredom, or perceiving sex as meaningless or a waste of time.

Participants were also asked to provide information about their socio-demographic characteristics, including gender, age, relationship status, relationship duration, education level, employment status, and the number and age of their children. The assessed variables and response options are presented in Table 1. Seven items in the questionnaire were used to evaluate socio-demographic indicators. Responses to the open-ended question about the age of children were categorized into two groups: minor children and adult children (Table 1). Responses to the question about the age of participants were categorized into two groups: 18–30 years old and 31–50 years old [16].

Data analysis

Data analysis was conducted using Office365 Excel [17] and IBM SPSS Statistics, version 30 [18], and the VassarStats online platform [19]. Results were considered statistically significant at $p < 0.05$.

Both univariate and bivariate statistical analyses were conducted. Spearman's rank-order correlation was used to assess associations between two continuous variables. To compare a continuous variable across different groups, the Mann-Whitney U test, Kruskal-Wallis test, Student's t-test, and one-way ANOVA were applied, depending on the distributional characteristics and assumptions of the data. The distribution of continuous variables was evaluated for normality using the Gaussian distribution criteria; skewness and kurtosis coefficients were calculated. Continuous variables were considered normally distributed if skewness and kurtosis values fell between -1 and 1, and the variable's histogram visually resembled a normal (Gaussian) distribution.

RESULTS

Statistically significant differences in experienced RS were observed between groups based on socio-demographic characteristics. Participants aged 18–30 and those without children reported significantly higher RS ($p < 0.05$) compared to those aged 31–50 and those with children, respectively. However, RS was similar between participants of different genders. In the total sample, the mean RS score was 62.38 (SD = 13.12) out of a possible 80 points. Detailed calculations are presented in Table 2.

Statistically significant differences in SM were identified when comparing participants across gender and age groups. It was observed that men aged 18–30 reported engaging in sexual activity significantly more often ($p < 0.05$) due to introjected SM compared to men aged 31–50 and less due to external SM. In addition, both men and women aged 31–50 reported engaging in sexual activity significantly less frequently ($p <$

Research report

Table 2. Comparison of RS scores between participant groups based on socio-demographic characteristics

Variable	Mean rank	Mdn	IQR	Min	Max	M	SD	U	p	
Total sample	–	65.00	[55.00; 73.00]	16.00	80.00	62.38	13.12	-	-	
Gender	Female	101.69	59.00	[51.50;68.00]	16.00	80.00	62.34	13.02	U=5180.0	0.939
	Male	102.32	60.00	[43.00;75.00]	29.00	80.00	62.42	13.29		
Age group	18–30 years	117.52	71.00	[56.00;76.25]	56.00	80.00	66.11	10.44	U=3275.0	<0.001
	31–50 years	81.72	59.00	[44.00;69.00]	16.00	80.00	57.50	14.63		
Children	None	109.63	66.00	[57.00;73.00]	35.00	80.00	64.58	10.78	U=3679.5	0.012
	Has children	87.82	60.00	[48.00;74.00]	16.00	80.00	58.30	15.91		

M – mean; SD – standard deviation; Mdn – median; IQR – interquartile range; Min – minimum value; Max – maximum value; U – Mann Whithney test statistic.

0.05) due to intrinsic SM compared to their counterparts aged 18–30 (Figure 1).

Furthermore, women in the older age group (31–50) reported engaging in sex less frequently for identified reasons and more frequently experienced amotivated sexual behavior ($p = 0.001$ and $p = 0.005$, respectively) compared to younger adult women (Figure 1).

Results also showed that young men (18–30) reported significantly more frequent introjected SM than young women ($p = 0.003$). However, among middle-aged adults (31–50), women showed significantly higher levels of introjected motivation than men ($p = 0.012$). Women aged 18–30 also reported significantly more frequent engagement in sex due to identified SM than men in the same age group ($p < 0.001$) (Figure 1).

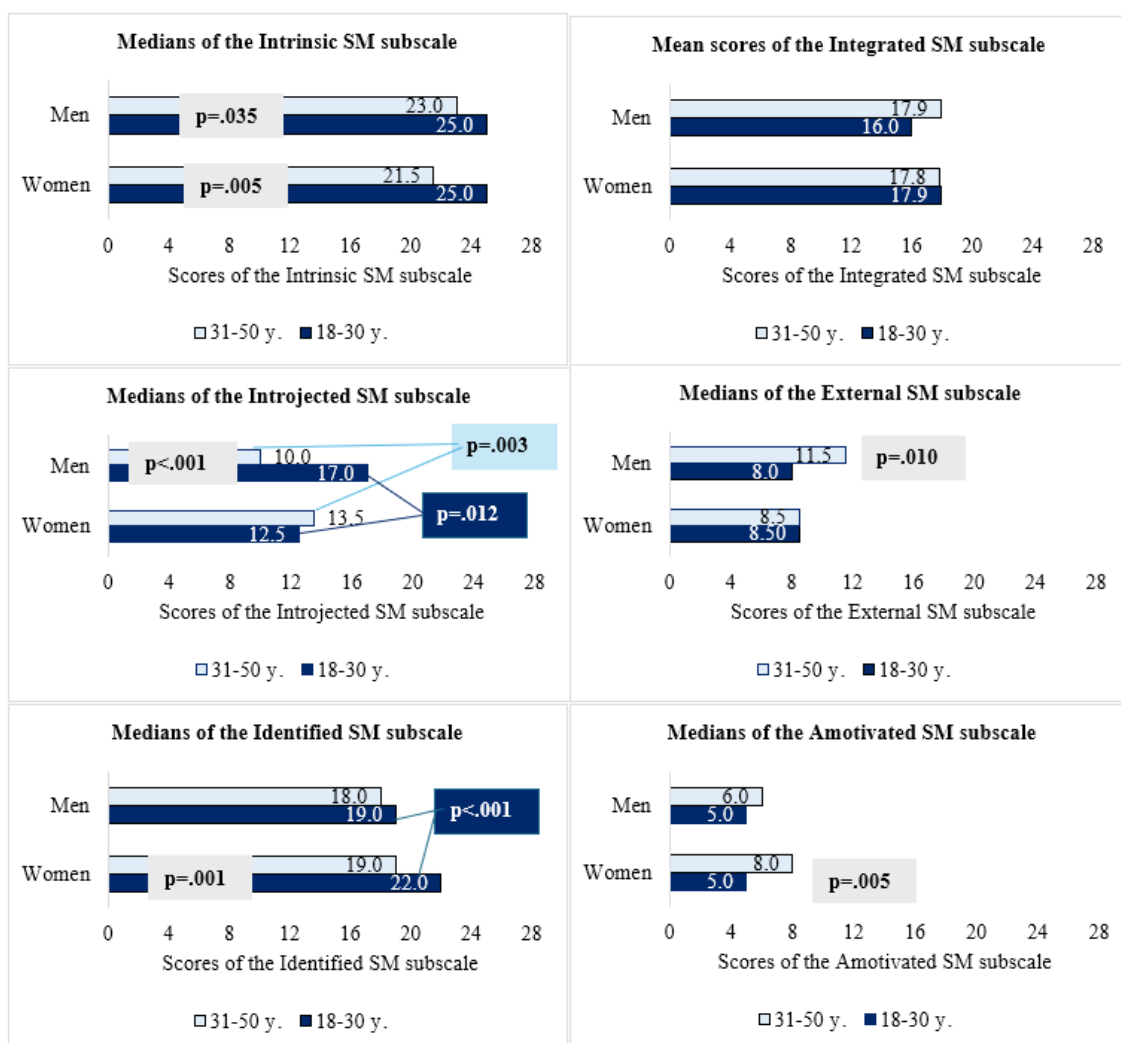


Figure 1. Subscales scores of sexual motivation across participant groups by age group and gender.

No statistically significant differences were found in integrated SM across gender or age groups ($p > 0.05$). This indicates that both young and middle-aged adults, regardless of gender, reported similar levels of engagement in sex due to integrated SM (Figure 1).

Correlations were calculated between the total scores of the RS scale and the total scores of the SM subscales. A significant positive correlation was found between Intrinsic SM and RS ($\rho = 0.34, p < 0.001$). Identified SM was also positively associated with RS ($\rho = 0.22, p = 0.002$). In contrast, significant negative correlations with RS were observed for Introjected SM ($\rho = -0.29, p < 0.001$), External SM ($\rho = -0.22, p = 0.002$), and Amotivated SM ($\rho = -0.26, p < 0.001$). The correlation between Integrated SM and RS was positive but not statistically significant ($\rho = 0.35, p = 0.624$).

In the group of women aged 18–30, one statistically significant correlation was found: intrinsic SM was weakly positively associated with RS ($p = 0.032$). In contrast, among men aged 18–30, no statistically significant correlations between SM subscales and RS were observed ($p > 0.05$). However, significant correlations observed in the total sample became more evident within the middle adulthood age group (Table 3).

Among women aged 31–50, higher RS was associated with engaging in sexual activity for intrinsic reasons ($p = 0.004$). Additionally, strong negative correlations were found between RS and both amotivated SM ($p = 0.003$) and external SM ($p < 0.001$) in this group. These negative correlations were not statistically significant in the group of men of the same age (Table 3).

However, results showed that men aged 31–50 experienced lower RS when they engaged in sex due to introjected SM ($p = 0.003$). This correlation was not statistically significant in the other three participant groups. Furthermore, in the 31–50 year-old male group, RS was positively correlated with intrinsic, integrated, and identified SM ($p > 0.05$). More detailed calculations are presented in Table 3.

DISCUSSION

The aim of this study was to identify the associations between SM and relationship satisfaction. The research problem was based on the observation that sexual activity is often an integral part of romantic partners' lives. Various studies have shown that sexual behavior, sexual satisfaction, and related aspects are associated with RS. However, SM – the reasons people engage in sexual activity – remain relatively underexplored. Some studies suggest that when individuals have sex due to societal or partner pressure, they tend to experience lower sexual satisfaction, which may also be linked to lower overall RS. Decreased RS can, in turn, contribute to depressive symptoms, low self-esteem, divorce, and other negative outcomes [20–22]. Therefore, it is important to investigate which aspects of sexuality are associated with experienced RS.

The results of this study provided insights into how SM relate to RS. Findings indicated that RS was lower among aged 31–50 compared 18–30 years olds. Moreover, RS was associated with SM only within the 31–50 age group. This may be because younger couples are more likely to engage in sex to explore themselves (identified SM) or due to internal desire. In contrast, for older individuals – especially in the context of long-term relationships and daily life obligations – SM may become a more prominent factor in shaping the sexual relationship, and thus more closely linked to RS.

It is noteworthy that the correlations found in this study between RS and SM – positive correlations with intrinsic and identified SM, and negative correlations with external, introjected, and amotivated SM – are also observed in studies conducted by other authors [15]. However, the study by Gravel et al. (2016) included a much larger sample of over 2,000 participants, which may have contributed to their finding of positive correlations between integrated SM and both intrinsic and identified SM [15]. Additionally, their sample consisted primarily of women and included only students, which may explain some of the differences in the results [15]. In instance, their study found that, among women, intrinsic, identified, and

Table 3. Correlations between relationship satisfaction scale scores and sexual motivation subscale scores across participant groups by age and gender

Correlation		Group			
		Women aged 18–30	Men aged 18–30	Women aged 31–50	Men aged 31–50
Intrinsic SM and RS	ρ	0.28	0.12	0.43	0.35
	p	0.032	0.400	0.004	0.018
Integrated SM and RS	ρ	-0.04	-0.22	0.10	0.32
	p	0.769	0.124	0.519	0.031
Introjected SM and RS	ρ	-0.19	-0.04	-0.22	-0.42
	p	0.138	0.762	0.169	0.003
External SM and RS	ρ	-0.11	-0.07	-0.52	-0.01
	p	0.382	0.652	< 0.001	0.940
Identified SM and RS	ρ	0.12	0.02	0.25	0.29
	p	0.364	0.871	0.108	0.047
Amotivated and RS	ρ	-0.17	-0.11	-0.45	-0.05
	p	0.187	0.441	0.003	0.730

integrated SM were associated with higher sexual satisfaction, while external, introjected, and amotivated SM were associated with lower sexual satisfaction [15]. Among men, intrinsic, identified, and integrated SM were also associated with greater sexual satisfaction, whereas amotivation was linked to lower satisfaction [15].

In contrast, the correlations between SM subscales and RS observed in the present study varied not only by gender but also by age group. Such differences may be attributed to differences in sample characteristics, sample size, and the method of subgroup classification. Moreover, discrepancies could also arise from the use of different constructs: while this study examined RS, Gravel et al. (2016) focused on sexual satisfaction [15]. Although, according to various authors, these two constructs are positively related [9, 23, 24, 25].

Other scholarly works also emphasize that when sexual activity is driven by autonomous motivation – that is, a personal and voluntary desire – it may be associated with higher relationship quality and greater RS [7, 26]. In contrast, when sexual activity is initiated due to external influences rather than internal or personal desire, lower RS tends to be reported [7, 26]. However, in the study by Georgieva et al. (2022), the sample consisted solely of participants aged 40–59 [7], which aligns with the findings of the present study regarding participants in the 31–50 age group.

Another body of research highlights that while internal or external SM may be associated with RS, an important factor to consider is how couples communicate about their own and each other's needs [27]. Nevertheless, none of the studies mentioned above compared two different age groups in relation to RS and its correlations with various types of SM. Therefore, the results of this study suggest that when exploring SM, it is essential to examine the motivations of older adults and their associations with RS. Furthermore, the findings of this study demonstrate that different types of SM are associated with either lower or higher RS across different genders.

One of the main strengths of this study is its inclusion of not only young adults, but also middle-aged adults – a population rarely addressed in sexuality research. In fact, no comparable study was found in Lithuania. The results of this study provide a valuable foundation for future research directions, as notable differences were identified between genders and age groups – differences that had not been observed in previous studies. Another strength of the study is that all participants were surveyed in person. By completing printed questionnaires, participants had the opportunity to ask the researcher clarifying questions if needed. All scales and subscales used in the study demonstrated high internal consistency, which supports the reliability of the findings. The response rate of over 70% reflects strong participant engagement and reduces the likelihood of nonresponse bias. The study utilized standardized RS and SM questionnaires, allowing for comparison with other research. Data were collected in various regions of Lithuania, suggesting that the sample included residents from both large cities and smaller towns, contributing to its diversity. The instrument also included additional questions about relationship status, relationship duration, and number of children, which enabled more detailed comparisons across different subgroups and

yielded more nuanced results.

However, the study also has several limitations. The sample was unevenly distributed across certain socio-demographic variables (e.g., relationship status, child age, number of children, and whether participants had children), which made it more difficult to compare results between these groups. In the study, relationship duration was treated as a continuous variable, and associations were found with SM and RS. Still, future studies could consider grouping relationship duration into categories for more detailed analysis and include additional factors in the data analysis. The study did not include a question about the frequency of sexual activity, which means it was not possible to determine whether frequency influenced the correlation between different SM and RS. Therefore, in future research of a similar nature, it may be beneficial to include questions related to sexual behavior – such as frequency and duration of sexual activity – to allow for more precise interpretation of results. Furthermore, the current questionnaire did not include reproduction as a sexual motive. Including this item in future research would make the questionnaire more inclusive for participants who primarily engage in sex for the purpose of conceiving children. The study also did not assess whether participants had experienced negative sexual events or trauma, which could influence both their RS and SM. This should be considered in future studies on similar topics.

It is important to encourage intrinsic and identified SM, and to help partners better understand what they want from intimate relationships – what matters most to them during sexual encounters, and how to build closer emotional connections. Therapists can play a role in helping individuals recognize external or introjected motivations, especially when sex becomes a way to avoid conflict or affirm one's worth. These motivations should be openly explored, discussed, and – together with the development of sexual self-awareness – potentially modified. Additionally, promoting connection-enhancing strategies may help individuals shift the underlying reasons for their sexual behavior. More attention is recommended for couples aged 31–50 who are in long-term relationships, as they may face specific challenges in sustaining both sexual and relational satisfaction.

CONCLUSIONS

This study demonstrated that RS is positively associated with intrinsic and identified SM, whereas external, introjected, and amotivated SM are linked to lower RS. These associations were particularly evident among participants aged 31–50, suggesting that sexual motivation may play a more important role in sustaining RS in midlife. The findings highlight the importance of considering not only sexual behavior but also the underlying reasons for engaging in sexual activity when addressing relationship quality.

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*Received 01 July 2025, accepted 19 September 2025
Straipsnis gautas 2025-07-01, priimtas 2025-09-19*

Factors contributing to adolescent academic anxiety and the role of perceived social support: gender and age perspectives

Paauglių akademinio nerimo priežastys ir suvokiamos socialinės paramos vaidmuo: lyčių ir amžiaus aspektai

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SUMMARY

Introduction. In Lithuania, the relationship between academic anxiety and social support among 11th–12th grade students remain insufficiently studied.

Aim. To analyze the relationship between academic anxiety and perceived social support.

Methods. The study involved 422 respondents (response rate 86%). Of these, 46% (n=194) were boys and 56% (n=228) were girls, with a mean age of 17.4 years (SD=0.56). A quantitative method was used – an anonymous questionnaire. Academic anxiety was assessed using the Academic Anxiety Scale (11 items), and social support was measured using HBSC subscales (14 items). Added sociodemographic questions were created by the authors. The study was conducted during class in schools from Kaunas, Marijampolė, and Panevėžys.

Results. It was found that 40% of students experienced average or above-average academic anxiety. Girls and younger students reported significantly higher anxiety ($p<0.001$; $p<0.001$, respectively). It was found that most students received the greatest support from classmates and the least from teachers. Girls received the most support from friends and classmates ($p<0.001$; $p<0.001$, respectively). Older students reported more support from friends, family, and teachers mokytojų ($p<0.001$; $p=0.010$; $p=0.002$, respectively), while classmate support did not differ between age groups. The results revealed a statistically significant association between perceived social support and academic anxiety. Students who felt greater support from teachers and classmates experienced higher academic anxiety ($p<0.001$). Conversely, support from family and friends was negatively associated with anxiety ($p<0.05$). This means that students who felt greater support from family and friends experienced lower academic anxiety.

Conclusions. Higher academic anxiety was characteristic of girls and younger students. Sources of social support varied according to age and gender: girls typically received support from classmates and

SANTRAUKA

Įvadas. Lietuvoje akademinio nerimo ir socialinės paramos sąsajos tarp 11-12 klasių moksleivių dar nėra išsamiai ištyrinėtos.

Tikslas. Išanalizuoti akademinio nerimo ir jaučiamos socialinės paramos sąsajas.

Metodai. Šiame tyrime dalyvavo 422 respondentai (atsakymų dažnis 86 proc.). Iš jų 46 proc. (n=194) vaikinių ir 56 proc. (n=228) merginų, vidutinis amžius buvo 17,4 metų (SN=0,56). Tyrimui pasirinktas kiekybinis metodas – anoniminė anketinė apklausa. Akademinis nerimas buvo matuojamas 11 teiginių Akademinio nerimo skale, AAS, socialinė parama buvo matuojama pasitelkiant tarptautinio HBSC tyrimo skales (viso 14 teiginių). Papildomai buvo užduodami straipsnio autorių sukurti klausimai (socialiniai–demografiniai rodikliai ir kt.). Tyrimas buvo vykdomas Kauno, Marijampolės ir Panevėžio miestų ir rajonų mokyklose, pamokų metu.

Rezultatai. Nustatyta, kad 40 proc. moksleivių jautė didesnę nei vidutinę arba vidutinę akademinę nerimą. Merginos ir jaunesni moksleiviai jautė didesnę akademinę nerimą (atitinkamai $p<0,001$; $p<0,001$). Nustatyta, kad didžioji dalis moksleivių daugiausiai paramos patyrė iš bendraklasių, o mažiausiai iš mokytojų. Merginos daugiausiai palaikymo sulaukė iš draugų ir bendraklasių (atitinkamai $p<0,001$; $p<0,001$). Vyresni moksleiviai jautė paramą iš draugų, šeimos ir mokytojų (atitinkamai $p<0,001$; $p=0,010$; $p=0,002$), o bendraklasių parama tarp amžiaus grupių nesiskyrė ($p>0,05$). Tyrimo rezultatai atskleidė, kad socialinė parama statistiškai reikšmingai siejosi su akademinio nerimu. Nustatyta, kad moksleiviai, kurie jautė didesnę mokytojų ir bendraklasių paramą, patyrė didesnę akademinę nerimą ($p<0,001$). Priešingai, draugų ir šeimos parama buvo neigiamai, silpnai susijusi ($p<0,05$) su akademinio nerimu. Tai reiškia, kad moksleiviai, kurie jautė didesnę šeimos ir draugų paramą, patyrė mažesnę akademinę nerimą.

Išvados. Aukštesnis akademinis nerimas buvo būdingas merginoms ir jaunesniems moksleiviams. Socialinės paramos šaltiniai skyrėsi pagal amžių ir lytį: merginos jautė bendraklasių ir draugų paramą, vyresni moksleiviai – iš šeimos, mokytojų ir draugų. Mokytojų ir

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friends, while older students received support from family, teachers, and friends. Support from teachers and classmates was associated with higher academic anxiety, while greater support from family and friends was associated with lower levels of anxiety.

Keywords: academic anxiety, social support, senior high school students.

bendraklasių paramą siejosi su aukštesniu akademinu nerimu, tuo tarpu didesnė šeimos ir draugų – su mažesniu nerimo lygiu.

Raktažodžiai: akademinis nerimas, socialinė parama, 11–12 klasių moksleiviai.

INTRODUCTION

Adolescence, spanning ages 10 to 19, is a period of rapid physical, cognitive, and psychosocial development [3]. In Lithuania and across Europe, increasing attention is given to adolescent mental health. Recent HBSC (Health Behavior in School-aged Children) data show declining emotional well-being among Lithuanian adolescents, with girls reporting emotional difficulties more often than boys [4]. International studies also show similar trends. According to systematic analyses, between 20% and 40% of students in various countries experience academic anxiety, and this indicator is usually higher among girls than among boys [5, 6, 7, 8]. One study revealed that academic anxiety tends to intensify in older grades as exams approach and the workload increases [6]. This suggests that the deterioration in adolescents' emotional well-being observed in the HBSC in Lithuania [4] reflects a broader international phenomenon.

Academic anxiety is one of the most common psychological difficulties among upper-grade students. It is an emotional reaction to academic pressure, such as fear of failure or poor evaluations [9]. Studies indicate that academic anxiety not only hinders achievement but also negatively affects physical and mental health, especially in students preparing for final exams [5]. The prevalence of academic anxiety varies across countries depending on the cultural and social context. For example, in India, greater anxiety is driven by pressure from teachers and complex subjects [10], whereas in China, it is driven by fear of not meeting set goals or parental expectations [11]. In these countries, students often associate anxiety with the academic system and intense competitive pressure, suggesting that the problem is widespread globally, but its manifestation depends on social conditions.

Social support – defined in this study as perceived social support – refers to feeling valued and cared for. It may come from family, friends, teachers, classmates, or other social groups [12]. The adolescent social environment significantly influences health and well-being [13]. HBSC studies in Lithuania reveal that upper-grade students often lack perceived social support, which is linked to emotional and behavioral problems [4]. Similar trends can be observed in other countries. Data from 42 European and North American countries show that the experience of social support depends on gender and age: girls are more likely to feel support from friends, while boys are more likely to feel support from family and teachers [14]. However, both Lithuanian and international studies show that older students often report a lack of social support, which is associated with poorer emotional well-being and higher levels of anxiety.

This study is relevant due to rising academic pressure, particularly with the 2024 introduction of a new national exam

system in Lithuania, where 40% of the final score is based on 11th-grade results. Thus, academic anxiety is a concern for both 11th- and 12th-grade students [9]. Academic anxiety arises from the interaction of internal and external factors. External factors include expectations set by parents, teachers, and schools, exam pressure, or a conflictual learning environment [15, 16]. Internal factors are associated with perfectionism, low self-esteem, and lack of confidence in one's abilities [1]. Research also shows that higher academic anxiety is associated with symptoms of depression, poorer learning outcomes, and long-term emotional difficulties [1, 17]. This makes academic anxiety an increasingly relevant problem as pressure mounts on students.

The aim of this study is to analyze the relationship between academic anxiety and perceived social support among 11th- and 12th-grade students in Lithuania.

STUDY MATERIAL AND METHODS

Study procedure. Approval for the study was obtained from the Bioethics Committee of the Lithuanian University of Health Sciences (No. 2024-BEC2-1110). The study was conducted from December 3 to 11, 2024, during lessons in schools in Kaunas, Marijampolė, and Panevėžys.

An anonymous questionnaire survey was used in the study. Questionnaires were completed during lessons and took about 10 minutes. Before answering, participants were informed about the purpose, objectives, and the option to withdraw at any time. The preamble explained the study, its aim, data confidentiality, use for summarized analysis, and the right to withdraw. Participants were told that by continuing, they consented to participate and authorized the use of the information they provided.

Study participants. A total of 440 respondents participated in this study (response rate 86.9%). Of these, 45% (n=198) were boys and 55% (n=242) were girls. The mean age was 17.4 years (SD=0.56).

However, during data processing, 18 participants were excluded from the analysis due to missing most responses. Therefore, the final analysis included data from 422 participants: 46% were boys (n=194) and 54% were girls (n=228).

Assessment methods. The questionnaire included 30 items measuring academic anxiety, perceived social support, socio-demographic indicators, and academic performance.

Academic anxiety was assessed using the 11-item Academic Anxiety Scale (AAS), which reflects anxiety in academic settings [1]. Items were rated on a 4-point Likert scale (1 – “not at all typical of me” to 4 – “very typical of me”). Scores were summed and classified as: 11–14 – “no anxiety”, 15–20 – “moderate”, 21–29 – “above moderate”, 30–44 – “high” [1]. Permission to use the scale was obtained. Cronbach's alpha value for the Academic Anxiety Scale in this

study was 0.86.

Perceived social support was measured using validated HBSC subscales (14 items) assessing support from parents, teachers, classmates, and friends. Teacher and classmate support were rated on a 5-point Likert scale (1 – “strongly agree” to 5 – “strongly disagree”); family and friend support was rated on a 7-point scale (1 – “strongly disagree” to 7 – “strongly agree”). Mean scores were calculated. Use and translation permissions were granted by the HBSC national coordinator. Cronbach’s alpha values in this study were 0.78 for classmate support, 0.77 for teacher support, 0.89 for friend support, and 0.94 for family support.

Additional items included socio-demographic data, number of planned final exams, average semester grades, and one open-ended question: “What causes you the most anxiety at school?”

Data analysis. Data were processed in Microsoft Excel [18] and further analyzed in IBM SPSS Statistics 30.0.0.0 [19]. Results were considered statistically significant when $p < 0.05$.

Univariate analysis included mean, standard deviation, percentages, and n (number of respondents). Bivariate analysis applied the Mann-Whitney test, Pearson and Spearman correlations, and Student’s t test. Normality was assessed using the Gaussian distribution. Scale reliability was evaluated with Cronbach’s alpha.

In this study, the open-ended question was analyzed using inductive content analysis, based on the qualitative methodology of Elo and Kyngäs (2008) [20]. Themes emerged from participants’ responses rather than predefined categories. First, codes were assigned, followed by subthemes, which were grouped into main themes. Since responses could include several anxiety sources, the frequency of each theme was counted and calculated as a percentage of all included responses ($n = 379$).

RESULTS

Analysis of academic anxiety showed that most participants experienced above-moderate anxiety; about one in three reported moderate anxiety, and one in ten reported no anxiety (see Figure 1).

Comparing academic anxiety by gender revealed that girls had higher levels of academic anxiety than boys ($p < 0.001$)

(see Table 1). To assess anxiety by age, participants were divided into two groups: the first ($n=254$) included those aged 16–17, and the second ($n=168$) those aged 18–19. Significant differences were found between groups – younger participants reported higher academic anxiety compared to older ones ($p < 0.001$) (see Table 1).

To further assess academic anxiety, its associations with academic performance were examined. A very weak positive correlation was found between academic anxiety and the number of planned exams, and a very weak negative correlation between anxiety and average grades from the previous semester. These results suggest that students taking more exams experienced more anxiety, while higher achievement was linked to lower anxiety. However, neither association reached statistical significance ($p > 0.05$) (see Table 2).

To better understand students’ academic anxiety, the study included an open-ended question: “What causes you the most anxiety at school?” A total of 404 students (95.7%) responded. Of these, 25 (6.2%) reported no anxiety, and 18 (4.3%) left the question unanswered; therefore, these 43 responses were excluded. Qualitative content analysis was conducted on the remaining 379 answers (89.9%). Since a single response could include multiple sources of anxiety, frequencies and percentages were calculated. Three main themes emerged: academic challenges, interpersonal difficulties, and external or psychological stressors (Figure 2).

Students identified academic challenges as one of the main sources of anxiety. These were most associated with exams (19.6%), assessments (18.7%), public speaking (7.1%), grades (5.9%), and heavy workload (13.8%). Less frequently mentioned were the lack of learning resources (1.1%) and the new exam procedure (1.7%). Interpersonal challenges included teacher behavior – disrespect, strictness, and intimidation (10.2%) – as well as expectations from teachers and parents (1.7%). Some responses noted lack of support, bullying (2%), and peer relationships (1.2%). Psychological difficulties included low self-confidence (2.5%), fear of the future or career (7.5%), lack of motivation, and negative emotions (2.2%).

After analyzing students’ perceived social support, it was found that most received support from friends, classmates, and family, while teacher support was least common (Figure 3).

When analyzing social support by gender, girls reported

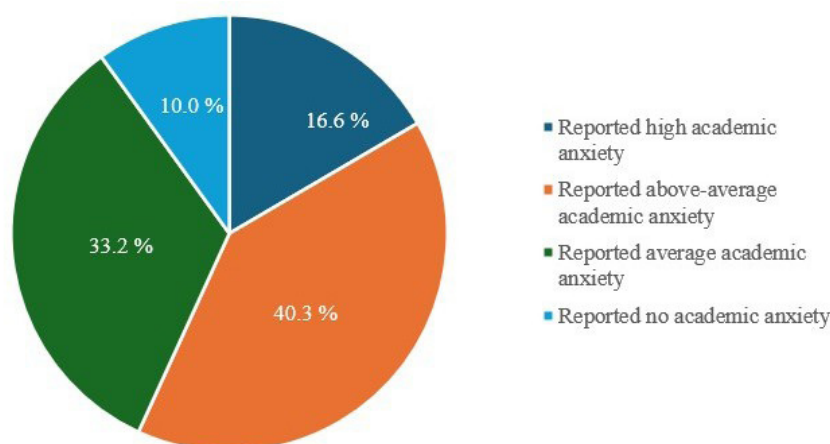


Figure 1. Distribution of academic anxiety levels in the study sample.

Table 1. Comparison of academic anxiety by participants' age and gender

Overall experienced academic anxiety					
Variable		Mean (SD)	Median	U	p-value
Gender	Girls	2.9±0.83	3.0	30183.0	<0.001
	Boys	2.3±0.82	2.0		
Age	16-17 years	2.8±0.86	3.0	17094.0	<0.001
	18-19 years	2.4±0.87	2.0		

Table 2. Association between academic anxiety and the number of planned exams and average grades

	Criterion	p-value
Number of planned exams	rho=0.04	0.379
Average grade (previous semester)	rho=-0.05	0.302

greater support from friends and classmates than boys ($p < 0.001$). No significant gender differences were found in family or teacher support ($p > 0.05$) (Table 3).

Social support was evaluated by age. Older students (18–19 years) reported significantly more support from friends ($p < 0.001$), family ($p = 0.010$), and teachers ($p = 0.002$) than younger students (16–17 years). Classmate support did not differ significantly between the groups ($p > 0.05$) (Table 4).

To better understand the link between social support and academic achievement, students' last-semester grade averages and the number of planned graduation exams were analyzed across different sources of support. A weak but statistically significant negative correlation was found between teacher support and grade average ($r = -0.27$, $p < 0.001$), and between classmate support and grade average ($\rho = -0.11$, $p = 0.031$). This indicates that students who reported stronger support from teachers and classmates tended to have slightly lower academic averages. In contrast, no statistically significant relationship was found between academic achievement and support from family ($\rho = 0.09$, $p = 0.074$) or friends ($\rho = 0.05$, $p = 0.340$).

The number of planned graduation exams was analyzed in relation to sources of social support. A statistically significant

Table 3. Distribution of social support by participants' gender

Social support type	Gender	Mean (SD)	Median	Criterion	p-value
Friend support	Boys	5.1±1.44	5.50	U=26498.5	<0.001
	Girls	5.6±1.23	5.75		
Family support	Boys	5.7±1.23	6.00	U=19722.0	0.053
	Girls	5.2±1.77	5.75		
Teacher support	Boys	2.9±0.87	3.00	t=-0.69	0.491
	Girls	3.0±0.77	3.00		
Classmate support	Boys	2.2±0.86	2.00	U=26221.0	<0.001
	Girls	2.4±0.74	2.33		

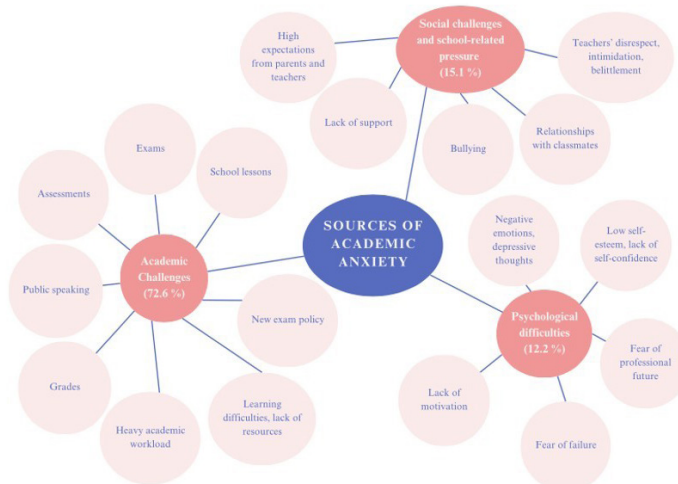
correlation was found only for teacher support. A weak negative correlation ($r = -0.13$, $p = 0.008$) indicated that students planning fewer exams reported greater teacher support. No significant differences were found for support from classmates ($\rho = -0.09$, $p = 0.073$), friends ($\rho = 0.06$, $p = 0.235$), or family ($\rho = 0.01$, $p = 0.877$) in relation to the number of planned graduation exams.

The results showed that social support was significantly related to academic anxiety. A weak positive correlation was found between anxiety and support from teachers and classmates ($p < 0.001$), meaning students who felt more support from them experienced higher anxiety. In contrast, support from family and friends had a weak negative correlation with anxiety, indicating that those who received more support from these sources reported lower academic anxiety ($p < 0.05$) (Table 5).

DISCUSSION

An analysis of academic anxiety revealed that 40% of participants experienced above-average anxiety, one in three reported moderate anxiety, and one in ten did not experience anxiety at all. Similar findings were observed in other studies. Research has shown that students most often experienced moderate academic anxiety, and less frequently high anxiety [21, 22, 23]. These results suggest that academic anxiety is common among older students and may stem from academic achievement, exams, and high expectations.

Girls and younger participants (aged 16–17) experienced



Note: percentage of all mentions

Figure 2. A scheme of themes and subthemes revealing sources of anxiety at school.

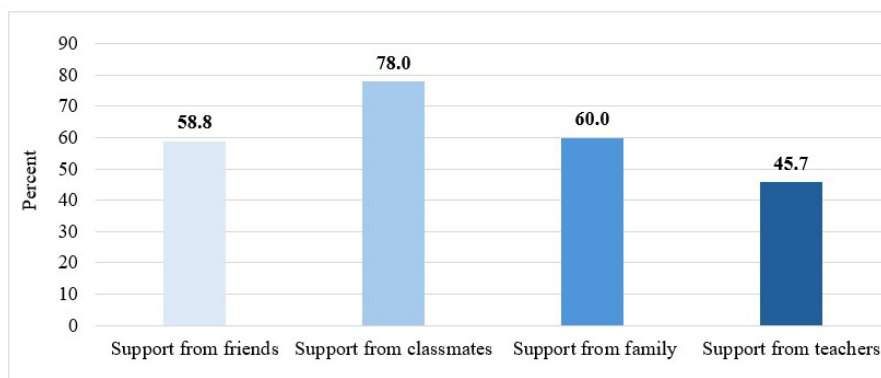


Figure 3. Distribution of perceived social support in the study sample.

higher levels of academic anxiety. These findings are consistent with many previous studies showing that girls are more likely than boys to experience academic anxiety [7, 8, 21, 22, 23, 24]. Such results may be linked to social expectations and girls' higher internal demands. It is assumed that girls tend to strive for better academic results and worry more about academic success, because others place higher expectations on them. This interpretation is supported by a 2025 qualitative study, which revealed that girls' low mood and anxiety were related to school pressure, strict gender norms, and peer relationships characterized by conflict and comparison [19]. Another study further supported these findings, showing that although girls experienced more academic anxiety, they achieved better academic results than boys [7]. However, several studies reported no significant gender differences in academic anxiety [25, 26, 27]. These discrepancies may be due to different measurement tools, cultural contexts, or similar levels of anxiety across genders that made differences undetectable.

Differences in academic anxiety by age were found. Although a systematic review reported that older students experience more anxiety [5], this study showed the opposite – higher levels were seen in younger students. One reason may be the new exam system, which requires 11th-grade students to take part in their final exams earlier. These changes may increase pressure on younger students. Cultural differences or variations in the education system may also explain the inconsistent findings.

An analysis of social support revealed that most students felt the greatest support from classmates and the least from teachers. In other studies, the overall distribution of social support was often reported, and only one study examined

support from different sources. That study found that most participants reported moderate levels of social support, some reported high levels, and fewer reported low levels [28]. Another study showed an even distribution among support levels [29]. One more study found that students rated family support highest, followed by friends, and teachers lowest [30]. This study highlights the role of classmates, likely because peers are important during adolescence.

Analysis of gender differences showed that girls received the most support from friends and classmates, while no significant differences were found in perceived support from family and teachers. Similar results have been reported in previous studies [14, 30]. It may be that girls rely more on emotional support from friends. In this study, teacher support was not associated with gender, possibly because it was evenly distributed. However, some studies showed the opposite, with girls receiving more support from teachers [21, 31, 32] or family [33, 34]. These differences may result from various assessment tools or cultural settings. A meta-analysis in China found no association between gender and social support [35]. In Lithuania, where individualism dominates, experiences of support may differ from those in collectivist cultures.

Social support assessment by age showed that older students reported greater support from friends, family, and teachers, while classmate support did not differ across age groups. Other studies show mixed results; some found more support among younger students [28, 30], while others found no differences [29]. These variations may result from different instruments, cultural or educational contexts, or the pandemic's influence, particularly on younger students' social well-being.

Social support was significantly associated with academic anxiety. Students who perceived greater support from teachers and classmates reported higher academic anxiety, while stronger family and friend support was linked to lower anxiety levels. Most studies confirm the protective role of social support [36, 37]. However, in some cases, higher support may relate to increased responsibility, causing more anxiety. These

Table 4. Distribution of perceived social support by participants' age

Social support type	Age group	Mean (SD)	Median	Criterion	p-value
Friend support	16-17 y.o.	5.2±1.41	5.50	U=25480.0	<0.001
	18-19 y.o.	5.6±1.27	6.00		
Family support	16-17 y.o.	5.3±1.67	5.50	U=24461.0	0.010
	18-19 y.o.	5.7±1.40	6.00		
Teacher support	16-17 y.o.	5.3±1.67	3.00	t=3.12	0.002
	18-19 y.o.	5.7±1.40	2.66		
Classmate support	16-17 y.o.	2.3±0.83	2.33	U=19646.0	0.163
	18-19 y.o.	2.2±0.80	2.00		

Table 5. Associations between social support and academic anxiety

Social support type	rho	p-value
Friend support	-0.11	0.025
Family support	-0.27	<0.001
Teacher support	0.31	<0.001
Classmate support	0.32	<0.001

results may be explained by recent changes to Lithuania's final exam system, which introduced more uncertainty and pressure for students.

Based on the results of the study, it would be advisable to strengthen the social support that adolescents receive both at home and at school. It would be beneficial for parents to provide balanced emotional support, avoid excessive academic expectations, and encourage open communication about learning difficulties. Schools are recommended to create a safer and more supportive environment, implement stress management and emotion recognition activities, and strengthen teachers' communication skills. Future research would benefit from collecting broader sociodemographic data and analysing students' experiences related to academic pressure and changes

in exam procedures in greater depth.

CONCLUSIONS

About 40% of students experienced above-average academic anxiety, which was higher among girls and younger students. Most students felt most supported by classmates and least by teachers. Family and friend support was linked to lower anxiety, while teacher and classmate support was related to higher anxiety.

Acknowledgements. This research was not funded by any external institution.

Conflicts of interest. The authors declare no conflicts of interest.

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Received 24 July 2025, accepted 09 December 2025
Straipsnis gautas 2025-07-24, priimtas 2025-12-09

The association between joint hypermobility and anxiety: a systematic review

Sąnarių hiperomobilumo ir nerimo ryšys: sisteminė apžvalga

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SUMMARY

Joint hypermobility is a condition in which one or more joints move beyond their normal range of motion. If joint hypermobility is accompanied by pain, recurrent subluxations and musculoskeletal overload injuries, such joint hypermobility may be classified as symptomatic. Increased joint mobility has been associated with spinal and peripheral joint pain and postural disturbances, flat-foot or impaired proprioception, balance and coordination. There is growing evidence of a high prevalence of psychiatric disorders, including anxiety disorders, depression and neurodevelopmental disorders such as attention deficit hyperactivity disorder, as well as other clinical manifestations associated with joint hypermobility, in cases of syndromic joint hypermobility. The aim of this systematic review was to determine whether there is an association between joint hypermobility and anxiety.

This systematic review is based on the PRISMA guidelines. PubMed, EBSCO, Cochrane Library, ClinicalTrials.gov, MedlinePlus and UpToDate databases were searched for research articles. Key search terms were “joint hypermobility” and “anxiety”. The search was conducted between 1 and 20 May 2025.

After applying the inclusion/exclusion criteria, the number of studies finally included in the review was 16. All of the studies reviewed found a statistically significant association between joint hypermobility and anxiety.

All analyzed studies have found a relationship between anxiety symptomatology and joint hypermobility therefore, it can be concluded that individuals with joint hypermobility are at an increased risk for developing anxiety disorders. Children, adolescents, and adults with joint hypermobility may all exhibit vulnerability to anxiety. Both generalized joint hypermobility and syndromic forms of joint hypermobility are associated with an increased predisposition to anxiety.

Keywords: generalized joint hypermobility, joint hypermobility, joint hypermobility syndrome, anxiety, anxiety disorders.

SANTRAUKA

Sąnarių hiperomobilumas – tai būklė, kai vienas ar daugiau sąnarių juda virš normalios judesių amplitudės ribų. Jei sąnarių hiperomobilumas pasireiškia kartu su skausmu, pasikartojančiomis subliuksacijomis ir griaučių-raumenų sistemos perkrovos sužalojimais, toks sąnarių hiperomobilumas gali būti priskirtas prie simptominio. Stebima padidėjusio sąnarių mobilumo sąsaja su stuburo ir periferinių sąnarių skausmais bei laikysenos sutrikimais, plokščiapėdyste ar sutrikusia propriocepcija, pusiausvyra ir koordinacija. Daugėja įrodymų, kad tarp sindrominio sąnarių hiperomobilumo atvejų labai paplitę psichikos sutrikimai, įskaitant nerimo sutrikimus, depresiją ir neurologinius raidos sutrikimus, tokius kaip dėmesio trūkumo ir hiperaktyvumo sutrikimas, taip pat kitos klinikinės apraiškos, susijusios su sąnarių hiperomobilumu. Šios sisteminės apžvalgos tikslas nustatyti, ar yra sąsaja tarp bendro sąnarių hiperomobilumo ir nerimo.

Ši sisteminė apžvalga parengta pagal PRISMA rekomendacijas. Mokslinių straipsnių paieška buvo atlikta PubMed, EBSCO, Cochrane Library, ClinicalTrials.gov, MedlinePlus ir UpToDate duomenų bazėse. Pagrindinės paieškos sąvokos: „sąnarių hiperomobilumas“ ir „nerimas“. Paieška atlikta 2025 m. gegužės 1–20 d.

Pritaikius straipsnių įtraukimo/neįtraukimo kriterijus, į apžvalgą galutinai įtrauktų tyrimų buvo 16. Visuose apžvelgtuose tyrimuose nustatytas statistiškai reikšmingas sąnarių hiperomobilumo ir nerimo ryšys.

Analizuotos studijos parodė ryšį tarp nerimo simptomatikos ir sąnarių hiperomobilumo, todėl galima daryti išvadą, kad asmenims, turintiems sąnarių hiperomobilumą, yra didesnė rizika patirti nerimo sutrikimus. Vaikams, paaugliams ir suaugusiesiems, turintiems sąnarių hiperomobilumą, gali būti būdingi nerimo sutrikimai. Tiek bendras sąnarių hiperomobilumas, tiek sindrominės sąnarių hiperomobilumo formos yra susijusios su padidėjusiu polinkiu į nerimą.

Raktažodžiai: bendras sąnarių hiperomobilumas, sąnarių hiperomobilumas, sąnarių hiperomobilumo sindromas, nerimas, nerimo sutrikimai.

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INTRODUCTION

Joint hypermobility (JH) is a condition in which one or more joints move beyond their normal range of motion [1]. Joint hypermobility is a multifactorial condition caused by a combination of environmental and genetic factors. Joint hypermobility may also be part of a variety of inherited genetic syndromes, such as those affecting neuromuscular control, ligament laxity and bone disorders [1]. Joint hypermobility is considered an advantage in some sports, but is often a symptom of inherited connective tissue disorders such as Ehlers-Danlos syndrome (EDS) or hypermobility spectrum disorder (HDS) [2]. Researchers report that the prevalence of joint hypermobility in the general population ranges from 2% to 57%, depending on age, gender and race [3].

Generalized joint hypermobility (GJH) is the term used to describe an asymptomatic population. Research suggests that asymptomatic joint hypermobility can become symptomatic due to certain risk factors. The symptomatic threshold can be reached when several risk factors for the occurrence of pain are present in or near the hypermobile joint: muscle weakness, reduced mobility, insufficient muscle length, hypertonicity of the muscles near the hypermobile joint, obesity and altered movement patterns. If hypermobility is accompanied by pain, recurrent subluxations and musculoskeletal overload injuries, such hypermobility may be classified as symptomatic [4]. Researchers confirm the association of increased joint mobility with spinal and peripheral joint pain [5], as well as with posture disorders, flatfoot or impaired proprioception, balance and coordination [6]. Evidence is growing that psychiatric disorders are highly prevalent among individuals with EDS, including anxiety disorders, depression and neurodevelopmental disorders such as attention deficit hyperactivity disorder, as well as other clinical manifestations associated with JH [7].

The common way to determine joint hypermobility is by physical examination using the Beighton Scale [8]. The Beighton scale consists of 9 movements, which are measured in points. The following movements are assessed: passive extension of the fifth finger of both hands measured with a goniometer ≥ 90 degrees, passive opposition of the thumbs of both hands towards the forearms when the thumb reaches the forearm, hyperextension of both elbows and knees measured with a goniometer ≥ 10 degrees, forward bending of the trunk with the knees extended and the palms reaching the ground. A performed movement is scored 1 point and a non-performed movement is scored 0 points. The maximum possible score is 9. For adults aged 50 years and under, a score of 5 or more determines generalized joint hypermobility [9].

Depression and anxiety are prevalent mental health disorders, with global rates in 2023 estimated at 5% for depression and 4% for anxiety [10, 11]. Anxiety disorders, similar to other mental health conditions, arise from a complex interplay of social, psychological, and biological factors. Individuals with an anxiety disorder may experience intense fear or worry related to specific situations such as during a panic attack or in social settings or, in the case of generalized anxiety disorder, across a wide range of everyday circumstances. These symptoms often persist for several months or longer, and affected individuals frequently avoid situations that trigger

their anxiety [11].

Anxiety disorders are often accompanied by comorbid conditions, as evidenced by the rising lifetime prevalence of additional mental health diagnoses among individuals with anxiety disorders. Comorbidity in the context of anxiety disorders denotes the co-occurrence of one or more distinct mental or somatic health conditions alongside the primary anxiety diagnosis. Empirical evidence indicates that the prevalence of comorbid psychiatric conditions is significantly higher among individuals with anxiety disorders compared to those without such comorbidities [12]. The relationship between hypermobility spectrum disorder, hypermobile Ehlers-Danlos syndrome (hEDS) and anxiety disorders has been studied in various populations, including children and the elderly [13].

Over the last decade, there has been a growing interest in joint hypermobility in the research community. Studies have been carried out to investigate the link between joint hypermobility and anxiety, but the significance of this link has not yet been fully elucidated. The aim of this systematic review is to determine whether there is an association between anxiety and joint hypermobility. The objectives are to determine whether individuals with joint hypermobility are at increased risk for developing anxiety disorders compared to those without hypermobility; examine the current research on the link between joint hypermobility and anxiety disorders across various age groups; to examine whether the type or severity of joint hypermobility (e.g., generalized joint hypermobility or hypermobile Ehlers-Danlos syndrome) influences the strength of the association with anxiety.

METHODS

This systematic review is based on the PRISMA guidelines. The sourcing was carried out by researchers.

Data sources and search strategy

PubMed, EBSCO, Cochrane Library, ClinicalTrials.gov, MedlinePlus and UpToDate databases were used for searching scientific articles. Key search terms: “joint hypermobility” and “anxiety”. The search was conducted between 1 and 20 May 2025.

Selection of studies

The analysis includes cohort, cross-sectional, expert studies published in English assessing the relationship between joint hypermobility and anxiety.

Inclusion criteria:

The studies had to investigate the relationship between joint hypermobility and anxiety;

The scientific articles have been published in English;

Sources open access;

Samples of at least 30 subjects;

The studies provide primary data;

Studies are not older than 15 years;

Research conducted on human subjects;

Joint hypermobility is assessed through the Beighton scoring system.

Exclusion criteria:

systematic review or meta-analysis;

case control studies.

The titles and abbreviations of the articles were analysed according to the selection criteria. Duplicate research was removed. The full texts of all selected studies were reviewed and the selection criteria were reapplied. Key data were extracted from the final articles, including study design, participant characteristics, sample size and main conclusions. All relevant research data were imported into a Microsoft Excel database. The following variables were extracted: authors, title, journal, year of publication, country of study, sample size, gender, age of subjects, main results.

RESULTS

A keyword search of scientific articles in databases returned a total of 166 results. The titles and abstracts of the following articles have been revised. Systematic reviews, meta-analyses, case control studies, duplicates, off-topic articles, articles with experiments on animals, were excluded. The total number of rejected records at this stage was 140. The remaining 26 sources were read and the selection criteria were reapplied to them. It was decided to exclude 10 of the 26 sources from the review because three articles were not open access and one article was written in Spanish. 16 eligible scientific articles were included in the analysis. A flow chart of the selected articles is presented in Figure 1.

The main characteristics of the 22 included studies are summarised in Table 1. The studies were conducted on four continents, with the largest number of studies in Europe (18), North America (1), South America (1) and Western Asia (2).

The selected studies examined the association between joint hypermobility and anxiety. The selected studies were published between 2006 and 2025. The number of subjects ranged from $n = 33$ to $n = 6105$. In two of the twenty-two sources, the subjects were exclusively female, while in the remaining sources, the subjects were female and male. The age of the subjects in the selected articles ranged from 1 to 79 years.

Nearly all of the studies reviewed found a statistically significant association between joint hypermobility and anxiety. Only two sources showed no association. Mallorquí-Bagué et al. [14] demonstrated a significant association between joint hypermobility and elevated state anxiety scores in women aged 21–45 years. Individuals with hypermobility exhibited increased neural activation in response to sad and angry stimuli within brain regions implicated in the processing of anxiety-related affective states, relative to non-hypermobile controls. A study by Baeza-Velasco et al. [15] provides evidence that women with joint hypermobility experience significantly higher levels of anxiety compared to non-hypermobile people. Moreover, they rely more on emotion-focused coping strategies to regulate emotional reactions to manage stress than other forms of coping. The results of studies by van de Vries et al. [16, 17] further support a link between generalised joint hypermobility and increased anxiety levels. Bulbena-Cabré et al. [18] identified a significant association between joint hypermobility and anxiety symptoms in an older adult population. Meanwhile, Parvaneh et al. [19] studied the link between joint hypermobility and anxiety in a population of children, adolescents, and Ezpeleta et al. [20] in 9-year-old children, and these authors similarly confirm this association. Eccles and colleagues' [21] large-sample study in 2022 revealed that, across genders, the diagnosis of joint hypermobility syndrome at age 18 years was associated with the presence of depressive disorder (adjusted OR: 3.53 (95% CI: 1.67 to 7.40); $p=0.001$), anxiety disorder (adjusted OR: 3.14 (95% CI: 1.52 to 6.46); $p=0.002$), level of anxiety ($B=8.08$, $t(3278)=3.95$; $p<0.001$) and degree of psychiatric symptomatology ($B=5.89$, $t(3442)=5.50$; $p<0.001$). Consistent with this, Csecs and colleagues' [22] 2021 study reported that the odds of experiencing generalized joint hypermobility compared to the general population was 5.05 times higher (95% CI: 3.21, 7.95) if a person was diagnosed with anxiety. Similar findings by other authors are shown in Table 1.

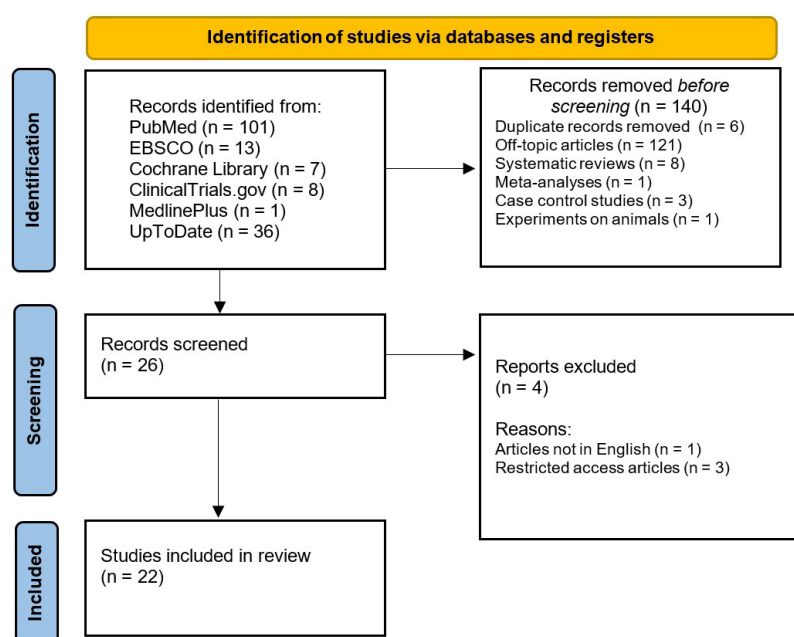


Figure 1. Flow diagram of the selection process.

Table 1. Characteristics of the studies

Author, year, country	Design	Sample	Gender	Age	Anxiety assessment	Main results
Parvaneh et al., 2020 [18]	Cross-sectional study	93	m, f	8–15 yrs	Spence Children Anxiety Scale (SCAS)	Found a significant association between generalized joint hypermobility and anxiety disorders in children, so that this phenotype was three times more prevalent in children with anxiety disorders.
van Die-de Vries et al., 2022 [16]	Prospective study	101	m, f	16–30 yrs	Hospital Anxiety and Depression Scale (HADS)	A significantly lower odds ratio (β (95% CI) 0.4 (0.2–0.9); p-value 0.039) for participating in the second assessment was present in high-performing adolescents and young adults (HPAA) with generalized joint hypermobility (GJH) and anxiety with a 55% dropout rate after one year. This confirms the segregation between GJH combined with anxiety and GJH alone. This study confirms the association between GJH and anxiety but especially emphasizes the disabling role of anxiety.
de Vries et al., 2021 [17]	Cross-sectional study	168	m, f	16–29 yrs	Hospital Anxiety and Depression Scale (HADS)	Adolescents and young adults with the combination of generalized joint hypermobility (GJH) and anxiety were significantly more impaired, showing decreased physical and psychosocial functioning with decreased workload, increased fatigue, and pain catastrophizing.
Eccles et al., 2022 [20]	Prospective study	6105	m, f	14–18 yrs	Self-administered computerised version of the CIS-R	In males, generalized joint hypermobility at age 14 years was associated with depression at 18 years (OR: 2.10 (95% CI: 1.17 to 3.76); p=0.013). Across genders, the diagnosis of joint hypermobility syndrome at age 18 years was associated with the presence of depressive disorder (adjusted OR: 3.53 (95% CI: 1.67 to 7.40); p=0.001), anxiety disorder (adjusted OR: 3.14 (95% CI: 1.52 to 6.46); p=0.002), level of anxiety (B=8.08, t(3278)=3.95; p<0.001) and degree of psychiatric symptomatology (B=5.89, t(3442)=5.50; p<0.001).
Ezpeleta et al., 2018 [19]	Cross-sectional study	336	m, f	9 yrs	Children Manifested Anxiety Scale	Children in the high hypermobility group scored higher in separation anxiety, social phobia, physical injury fears, and total anxiety than did those in the low group.
Kampourelis et al., 2025 [22]	Cross-sectional study	63	m, f	42.93 (2.24) yrs	Beck Anxiety Inventory (BAI)	Participants with joint hypermobility syndrome (JHS) showed attenuated neural reactivity to emotional faces in specific frontal (inferior frontal gyrus, pre-supplementary motor area), midline (anterior mid and posterior cingulate cortices) and parietal (precuneus and supramarginal gyrus) regions. Notably, interaction between JHS and anxiety was expressed in reactivity of the left amygdala (a region implicated in threat processing) and mid insula (primary interoceptive cortex) where activity was amplified in people with JHS with generalized anxiety disorder. Severity of hypermobility in anxious, compared with non-anxious, individuals correlated with activity within the anterior insula (implicated as the neural substrate linking anxious feelings to physiological state). Amygdala-precuneus functional connectivity was stronger in participants with JHS, compared with non-hypermobile participants.
Mallorquí-Bagué et al., 2015 [14]	Cross-sectional study	33	f	21–45 yrs	Spielberg state-trait anxiety inventory (STAI)	Trait anxiety scores did significantly correlate with both state anxiety and hypermobility scores. Blood-oxygen-level dependence signals of the hippocampus did positively correlate with hypermobility scores for the crying faces versus neutral faces contrast in ROI analyses.

Table 1 continues. Characteristics of the studies

Author, year, country	Design	Sample	Gender	Age	Anxiety assessment	Main results
Bulbena et al., 2011 [23]	Prospective study	158	m, f	16–20 yrs	Goldberg Health Questionnaire (GHQ-28); Anxiety Sensitivity Index (ASI); State–Trait Anxiety Inventory (STAI); Liebowitz Social Anxiety Scale (LSAS)	Joint hypermobility syndrome (JHS) at baseline was found in 29 of 158 subjects (21.1%). Cumulative incidence of panic/agoraphobia disorder at follow-up, as main diagnosis, was significantly higher for the JHS group (41.4%) than for the control group (1.9%), with a relative risk of 22.3 [95% confidence interval (CI) 4.6–108.7, $p < .0001$] (Number Needed to Treat [NNT] 3, 95% CI 2.9–2.3). Moreover, anxiolytic drug use was nearly fourfold higher among JHS compared to non-JHS subjects.
Mallorquí-Bagué et al., 2014 [24]	Cross-sectional study	36	m, f	20–42 yrs	Spielberger State-Trait Anxiety Inventory (STAI)	Confirmed a significant relationship between state anxiety score and joint hypermobility. Interoceptive sensitivity mediated the relationship between state anxiety and hypermobility. Hypermobile, compared to non-hypermobile, participants displayed heightened neural reactivity to sad and angry scenes within brain regions implicated in anxious feeling states, notably insular cortex.
Gulsun et al., 2007 [25]	Prospective study	92	m	21.9 (1.3) yrs	Hamilton Anxiety Scale (HAM-A)	Anxiety scores of the males with thorax deformity and joint hypermobility were found higher than males with thorax deformity without joint hypermobility.
Bejerot et al., 2021 [26]	Cross-sectional study	105	m, f	4–40 yrs	MINI-KID (version 6)	Although generalized joint hypermobility is associated with several psychiatric conditions, such as ADHD and anxiety, this does not seem to be the case for Paediatric acute-onset neuropsychiatric syndrome according to this preliminary study.
Csecs et al., 2021 [21]	Cross-sectional study	377	f	38.9 (11.9) yrs	n/a	Patients with mental health disorders and/or neurodevelopmental conditions have high rates of joint hypermobility. Accompanying autonomic dysfunction mediates the association between joint hypermobility and clinical anxiety status. The odds ratio of having generalized joint hypermobility (GJH) was 2.54 times higher (95% CI: 2.05, 3.16) if individuals had diagnoses of mental health disorders and/or neurodevelopmental conditions compared to those in the general population sample. The odds of experiencing GJH compared to the general population was 5.05 times higher (95% CI: 3.21, 7.95) if someone had a diagnosis of anxiety, 3.9 times higher (95% CI: 1.26, 5.54).
Eccles et al., 2012 [27]	Cross-sectional study	72	m, f	no data	Beck Anxiety Inventory (BAI)	Within the hypermobile group, degree of hypermobility correlated positively with the volume of left lateral occipital cortex and negatively with right superior temporal cortex and bilateral inferior parietal cortices. Interestingly, this group scored significantly higher for interoceptive sensitivity (mean PBPQ scores: non-hypermobile 88.4, s.d. = 31.0; hypermobile 104.3, s.d. = 32.2; $t(1,70) = 2.13$, $p = 0.018$) and showed a trend towards higher anxiety (non-hypermobile 6.47, s.d. = 7.0; hypermobile 9.31, s.d. = 9.7; $t(1,70) = 1.42$, $p = 0.08$). The relationship between hypermobility and interoceptive sensitivity persisted after controlling for anxiety differences ($p = 0.041$).
Pasquini et al., 2014, [28]	Prospective study	92	m, f	31 (13) yrs	Hamilton Anxiety Rating Scale (HAM-A); the Hamilton Depression Rating Scale (HAM-D)	The joint hypermobility syndrome/Ehlers-Danlos hypermobile type (JHS/EDS-HT) group had a 4.3 higher risk of being affected by any psychiatric disorder, and in particular, a 5.8 higher risk of having a personality disorder. In particular, 5 JHS/EDS-HT suffered from obsessive–compulsive personality disorder with an observed prevalence rate of 10.6 % (3.6–23.1).

Table 1 continues. Characteristics of the studies

Author, year, country	Design	Sample	Gender	Age	Anxiety assessment	Main results
García Campayo et al., 2010, [29]	Cross-sectional study	55	m, f	18–65 yrs	Hamilton Anxiety Rating Scale (HAM-A)	Joint hypermobility syndrome (JHS) was more frequent among panic-disorder than among psychiatric patients, the healthy group, or the fibromyalgia group. In the panic-disorder group, there was a significant correlation between severity of JHS and anxiety.
Bulbena et al., 2006 [30]	Cross-sectional study	1665	m, f	16–79 yrs	Anxiety Disorders Interview Schedule (ADIS)	Concerning the fear survey, when we compared the groups with and without joint hypermobility (JH), the mean total scores for both genders were significantly higher for the hypermobile group. These results show that the association of joint laxity and phobic anxiety is sustained for intense fears and might represent a susceptibility factor for these anxiety conditions.

Importantly, Kampourelis et al. [22] observed an interaction between joint hypermobility syndrome and anxiety in reactivity of the left amygdala-known for its role in threat processing-and the mid-insula, the primary interoceptive cortex. In individuals with both joint hypermobility syndrome and generalized anxiety disorder, these regions showed heightened activation. Furthermore, among anxious individuals, the severity of hypermobility was positively correlated with activity in the anterior insula, a region implicated in linking subjective anxiety to physiological states. Enhanced functional connectivity between the amygdala and precuneus was also observed in joint hypermobility syndrome participants relative to non-hypermobile controls.

DISCUSSION

This systematic review has narratively synthesised the evidence on the association between joint hypermobility and anxiety. All 16 sources included in the systematic review confirmed an association between joint hypermobility and anxiety. Based on the analyzed studies comparing the propensity for anxiety between individuals with and without joint hypermobility, it is evident that those with joint hypermobility are more likely to experience anxiety or have an anxiety disorder. In five sources, the study participants were children and adolescents, while in the remaining sources, the participants were adults. However, despite the different age categories of the participants, an association was found between anxiety and joint hypermobility. This review included individuals with generalized joint hypermobility as well as those diagnosed with joint hypermobility syndrome. Both generalized joint hypermobility and syndromic forms of joint hypermobility were associated with an increased propensity for anxiety.

Other authors have previously published systematic reviews on this topic. A systematic review conducted in 2015 found that a total of 21 studies investigated the link between generalized joint hypermobility or joint hypermobility syndrome/EDS hypermobile type and anxiety disorders. Thirteen gave positive results with respect to various anxiety disorders [31]. Ishiguro, Yagasaki and Horiuchi's systematic review published in 2022 states, that a high prevalence of

anxiety was found in patients with EDS and concluded, that patients with joint hypermobility syndrome are more anxious than those without joint hypermobility syndrome [32].

One of the strengths of this systematic review is, that it included two studies, that provided objective evidence of altered neural reactivity in brain regions among individuals with joint hypermobility. In the studies included in this systematic review, joint hypermobility among participants was objectively assessed using the Beighton scale, which to date is the most widely used tool for identifying this clinical feature. However, this review has some limitations. The clinical samples included in this review demonstrated considerable variability in study settings, with three studies characterized by small sample sizes. Despite the small sample sizes, these studies still reported a significant association between joint hypermobility and anxiety. Some authors used a different cut-off point on the Beighton scale or other instruments for joint hypermobility. The analyzed surveys were conducted in different continents, diverse populations with varying age ranges and gender distributions, which may introduce bias in the estimated prevalence of joint hypermobility.

Based on the findings of this systematic review, anxiety appears to be a significant concern among individuals with joint hypermobility, highlighting the need for further research in this area. Considering that a one-size-fits-all approach does not work for many groups experiencing anxiety, we believe there is a need for research exploring different anxiety management techniques for individuals with joint hypermobility.

CONCLUSION

All analyzed studies have found a relationship between anxiety symptomatology and joint hypermobility therefore, it can be concluded that individuals with joint hypermobility are at an increased risk for developing anxiety disorders. Children, adolescents, and adults with joint hypermobility may all exhibit vulnerability to anxiety. Both generalized joint hypermobility and syndromic forms of joint hypermobility are associated with an increased predisposition to anxiety.

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Received 04 June 2025, accepted 20 June 2025
Straipsnis gautas 2025-06-04, priimtas 2025-06-20

Pasaulio sveikatos organizacijos suaugusiųjų aktyvumo ir dėmesio sutrikimo savižinos skalė (angl. *The World Health Organization Adult ADHD Self-Report Scale*)

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Aktyvumo ir dėmesio sutrikimas (ADS) yra raidos sutrikimas, ilgą laiką sietas tik su vaikystės amžiaus tarpsniu. Visgi, šiuo metu yra pripažįstama, kad dalis vaikų ADS sunkumų neišauga; apie pusė jų patiria ADS simptomus ir suaugę [1]. Bendrai paskutiniu metu stebima tendencija, kad ADS pirmą kartą suaugusiojo amžiuje nustatomas vis dažniau [2]. Tam yra keletas priežasčių. Visų pirma ADS yra santykinai nauja diagnozė, tik palyginti neseniai buvo sutarta, kad ADS simptomai gali būti būdingi ir suaugusiems žmonėms, taigi populiacijoje išlieka gana daug nedidžiųjų atvejų, t.y. tam tikras diagnozės rezervas [3]. Didėjantis informacijos prieinamumas ir visuomenės sąmoningumas taip pat dažniau skatina kreiptis ir siekti diagnozės. Šiuo metu jau pakanka įrodymų, kad ADS eiga nebūtinai yra tolygi, simptomų intensyvumas ir jų keliami adaptacijos sunkumai gali svyruoti nuo minimalių iki stipriai trikdančių adaptaciją priklausomai nuo gyvenimiškosios situacijos, aplinkos palaikymo, socialinių struktūrų, asmens individualių asmenybės savybių ir intelektinių gebėjimų [3–5]. Struktūruota ir palaikanti šeimos ir mokyklos aplinka gali lemti, kad nepaisant tam tikrų dėl ADS kylančių sunkumų, vaikas ar jaunuolis sėkmingai susitvarko su socialiniais ir akademiniais iššūkiais, bet dezadaptacija išryškėja tuomet, kai suaugusiojo amžiuje išorinės palaikančios struktūros nebelieka.

ADS sutrikimo paplitimas suaugusiųjų populiacijoje yra mažesnis nei vaikystėje – remiantis metaanalize, apibendrinusia 20 tyrimų vykdytų 13 pasaulio šalių, kuriuose iš viso dalyvavo daugiau nei 26 000 asmenų, sutrikimo paplitimas suaugusiųjų populiacijoje yra apie 2.8 proc. [6]. Tačiau ADS keliami našta suaugusiojo amžiuje yra didelė [7]. ADS yra susijęs su daugybe neigiamų psichologinių, socialinių, sveikatos ir ekonominių pasekmių [5], todėl psichikos sveikatos priežiūros specialistams svarbu turėti instrumentus, kurie padėtų atpažinti ADS sunkumus ne tik vaikų, bet ir suaugusiųjų grupėse.

Vienas tokių instrumentų, naudingų ADS sunkumų atrankai, yra Pasaulio sveikatos organizacijos Suaugusiųjų ADS savižinos skalė (angl. *The World Health Organization Adult ADHD Self-Report Scale, ASRS*, Kessler, Adler, Ames ir kt., 2005), skirtas greitai asmenų, turinčių padidintą ADS riziką, atrankai [8]. Klausimą kūrė du sertifikuoti psichiatrai ir PSO klinikinių ekspertų dirbančių suaugusiųjų ADS srityje

patiriamoji grupė. Kuriant klausimą buvo siekta parinkti po vieną informatyvų teiginį kiekvienam iš 18 DSM-IV A kriterijaus simptomų. Klausimai apima paskutinių 6 mėn. laikotarpį; teirujamasi, kaip dažnai simptomas pasireiškė per pastaruosius šešis mėnesius, naudojant 0–4 skalę su atsakymais: niekada (0), retai (1), kartais (2), dažnai (3) ir labai dažnai (4).

Sukurto klausimyno validacija atlikta lyginant jo rezultatus su ADS vertinimo skalės retrospektyviems vaikystės simptomams vertinti (ADHD-RS) įverčiais ir informacija, surinkta pusiau struktūruotu klinikiniu interviu, vertinančiu suaugusiųjų DSM-IV ADS simptomus per pastaruosius šešis mėnesius. Tyrimo rezultatai atskleidė, kad 18 klausimų ASRS klausimynu vertinami nusiskundimai reikšmingai koreliavo su klinikiniu simptomų vertinimu, visgi pastebėta, kad atskirų klausimų suderinamumo su klinikiniu sindromu sklaida buvo labai didelė (Cohen k svyravo nuo 0,16 iki 0,81), o suminio įverčio jautrumas ir specifiskumas neoptimalūs (jautrumas 56,3 proc. specifiskumas 98,3 proc.) [8]. Todėl pasitelkus žingsninę logistinę regresiją buvo analizuojama, ar įmanoma klausimą efektyviai trumpinti, neprarandant, o gal ir gerinant psichometrines charakteristikas. Atlikta analizė parodė, kad ASRS gali būti sutrumpintas iki 6 klausimų, neprarandant diagnostinio tikslumo, tad kartu su 18 klausimų ASRS skale, sukurtas ir trumpesnis, 6 klausimų ASRS atrankos klausimynas (angl. *Adult ADHD Self-Report Scale (ASRS) Screener*). ASRS atrankos klausimynas pasižymėjo 68,7 proc. jautrumu, 99,5 proc. specifiskumu ir 97,9 proc. bendru klasifikavimo tikslumu [8]. Šis įrankis plačiai taikomas tarptautiniuose moksliniuose tyrimuose ir yra išverstas į daugelį kalbų, tarp jų ir lietuvių. Tarptautiniame 42 šalyse vykdytame tyrime lietuviškoji ASRS atrankos klausimyno versija buvo naudota 1 813 suaugusiųjų imtyje, iš kurių 14,6 proc. pasiekė ar viršijo ADS rizikos ribą, Lietuvą priskiriant prie žemesnio ADS paplitimo šalių [9].

ASRS atrankos klausimą sudaro 4 klausimai vertinantys nedėmesingumą ir 2 klausimai hiperaktyvumą-impulsyvumą [8]. Įrankis, pildomas paties tiriamojo ir vertina simptomų dažnį šešių mėnesių laikotarpiu skalėje Niekada, Retai, Kartais, Dažnai, Labai dažnai. Klausimyno autoriai siūlo dvi galimas klausimyno įverčio skaičiavimo sistemas: dichotominę ir suminio įverčio.

Taikant dichotominę sistemą, už kiekvieną klausimą skiriama 0 arba 1 balas, jei tiriamojo pažymėtas įverti viršija nustatytą simptomų dažnio ribą. Riba kiekvienam klausimui skiriasi: pirmame – trečiame klausime 1 balas skiriamas, jei tiriamojo atsakymas yra kartais/dažnai/labai dažnai; 4–6 klausimuose, jei tiriamojo atsakymas yra dažnai/labai dažnai (atsakymų intervalas, už kurį skiriami balai, žemiau pateikiamama klausimyne pažymėti kita spalva). Taikant dichotominę sistemą bendras balų skaičius gali svyruoti nuo 0 iki 6. Autorių teigimu, 4 ar daugiau balų laikoma teigiamu rezultatu, rodančiu padidintą ADS riziką. Dichotominis vertinimas pasižymi geru suderinamumu su klinikinio simptomų vertinimu ir yra rekomenduojamas klausimyną taikant klinikiniam kontekste [10].

Moksliniuose tyrimuose labiau rekomenduotina taikyti alternatyvų 0–24 balų vertinimo metodą, kur sumuojami atsakymų skaičiai priskirti įverčiai 0 – Niekada iki 4 – Labai

dažnai. 14 ir daugiau balų rodo teigiamą atrankos rezultatą. Rezultatai taip pat gali būti suskirstyti į keturias kategorijas: 0–9 = žemas neigiamas intervalas, 10–13 = aukštas neigiamas intervalas, 14–17 = žemas teigiamas intervalas, 18–24 = aukštas teigiamas intervalas (daugiau informacijos: <https://www.hcp.med.harvard.edu/ncs/asrs.php>).

6 klausimų trumpoji ASRS versija skirta atrankai, tad teigiamas įvertis nebūtinai reiškia ADS diagnozę – tokie simptomai, kaip nedėmesingumas, impulsyvumas ar hiperaktyvumas nėra specifiški ADS ir gali būti susiję su kitais sutrikimais; be to, kaip ir kitos panašios ADS vertinimo priemonės, ASRS atrankos įrankis nevertina simptomų raiškos vaikystėje, kuri, nepaisant galimo ADS simptomų atsiradimo tik suaugusiojo amžiuje, vis dar reikalinga ligos diagnozei [9]. Dėl šių priežasčių, esant teigiamam skalės įverčiui, rekomenduojama atlikti išsamų klinikinį vertinimą.

Pastaba: ASRS atrankos klausimynas yra nemokamas ir gali būti laisvai naudojamas tiek klinikiniam, tiek moksliniam darbe, tačiau publikuojant yra prašoma įtraukti nuorodą į klausimyno bibliografinę informaciją (Kessler, R.C., Adler, L., Ames, M., Demler, O., Faraone, S., Hiripi, E., Howes, M.J., Jin, R., Secnik, K., Spencer, T., Ustun, T.B., Walters, E.E. (2005). The World Health Organization Adult ADHD Self-Report Scale (ASRS). *Psychological Medicine*, 35(2), 245-256) ir autorines teises (Copyright © New York University and President and Fellows of Harvard College. All rights reserved). Daugiau informacijos apie ASRS atrankos klausimyno validumą ir adaptacijas galima rasti klausimynui skirtame interneto puslapyje: <https://www.hcp.med.harvard.edu/ncs/asrs.php>

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Suaugusiųjų aktyvumo ir dėmesio sutrikimo savižinos skalės atrankos klausimynas
(ang. *Adult ADHD Self-Report Scale (ASRS) Screener*)

Nurodykite, kaip dažnai per pastaruosius 6 mėnesius patyrėte nurodytus simptomus.

	Niekada	Retai	Kartais	Dažnai	Labai dažnai
1. Kaip dažnai įveikus iššūkių sukėlusias projekto dalis Jums iškilo sunkumų suderinant konkrečias jo detales?					
2. Kaip dažnai Jums buvo sudėtinga susitvarkyti, atliekant organizacinių gebėjimų reikalaujančią užduotį?					
3. Kaip dažnai vengėte ar atidėliojote pradėti užduotį, reikalaujančią daug apmąstymų?					
4. Kaip dažnai patyrėte problemų prisimindamas (-a) susitikimus ar įsipareigojimus?					
5. Kaip dažnai turėdamas (-a) ilgai sėdėti atlikote nervingus judesius rankomis ar pėdomis?					
6. Kaip dažnai jautėtės pernelyg aktyvus (-i) ir priverstas (-a) kažką daryti, lyg būtumėte veikiamas (-a) variklio?					

BIOLOGICAL PSYCHIATRY AND PSYCHOPHARMACOLOGY

BIOGINĖ PSICHIATRIJA IR PSICHOFARMAKOLOGIJA

Vol. 27, No 1–2, Supplement 1, 2025, December

T. 27, Nr. 1–2, Priedas Nr. 1, 2025 m. gruodis



2025 Rugsėjo 18

Sveikatos psichologijos katedra ir Neuromokslų institutas
Priklausomybės valdymas per žalos mažinimo metodus: klinikiniai, įrodymais grįsti sprendimai specialistams

Konferencijos organizatorius

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Recenzuotas konferencijos santraukų leidinys.

Už pranešimų turinį atsako autoriai.

ISSN 1822-3702

Leidinių sudarė lekt. Aušra Norė

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Aušra NORĖ

Konferencijos organizacinio komiteto vadovė

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Šiuolaikinė priklausomybių supratimo ir jų gydymo raida žymi esminį pokytį – nuo ilgą laiką dominavusios abstinencijos paradigmos pereinama prie platesnio, lankstesnio ir įvairovę apimančio požiūrio [4]. Pastaraisiais dešimtmečiais žalos mažinimo grįsta filosofija tapo ne tik alternatyva, bet ir lygiaverte priklausomybių pagalbos kryptimi, ypač išryškėjusia reaguojant į XX a. pabaigos ir XXI a. pradžios visuomenės sveikatos iššūkius [2]. ŽIV/AIDS epidemija, opioidų perdozavimo krizės bei didėjantys sveikatos netolygumai socialiai pažeidžiamose visuomenės grupėse paskatino permąstyti priklausomybės kaip sudėtingo biopsichosocialinio reiškinio sampratą ir pagalbos tikslus [3].

Žalos mažinimo strategijos, akcentuojančios žmogaus saugumą, orumą ir prieigą prie kontekstui jautrios pagalbos, sudaro galimybę teikti veiksmingas intervencijas net ir tais atvejais, kai visiškas susilaikymas nuo psichoaktyviųjų medžiagų vartojimo nėra iš karto pasiekiamas ar nebūtinai yra pirmasis pagalbos žingsnis [5]. Ši paradigma ypač aktuali elgesio priklausomybių srityje – lošimo sutrikimo, perteklinio interneto ar išmaniųjų technologijų naudojimo, kompulsyvaus pirkimo ar kitų impulsyvaus elgesio formų valdyme. Žalos mažinimo taikymas šiose situacijose skatina ne patologizuoti žmogaus patirčių, bet kurti aplinką, kurioje jis gali saugiai tyrinėti, reguliuoti ir transformuoti savo elgesį nepraradamas orumo ir prieigos prie pagalbos [1, 6].

Šiam kontekstui skirta konferencija suburia priklausomybių, psichikos sveikatos, socialinių paslaugų ir visuomenės sveikatos specialistus bei visus besidominčius priklausomybės reiškiniais. Renginio metu analizuojamos šiuolaikinės žalos mažinimo sampratos, pristatomi naujausi moksliniai įrodymai bei aptariamos jų taikymo galimybės įvairiuose praktiniuose kontekstuose – nuo žemo slenksčio paslaugų iki integruotų gydymo modelių.

Konferencijos tikslai apima tris pagrindines kryptis. Pirmiausia siekiama išsamiai aptarti santykių tarp žalos mažinimo ir abstinencijos orientuotų strategijų, išryškinant jų galimą dermę ir sinergiją kuriant veiksmingas pagalbos sistemas. Antra, remiantis naujausiais tyrimais ir moksliniais įrodymais, kritiškai nagrinėjami žalos mažinimo metodai ir jų veiksmingumas priklausomybių gydyme. Trečia, konferencija skatina tarpdisciplininį dialogą – telkiant klinikinį praktikus, mokslininkus, politikos formuotojus ir paslaugų vartotojus, kuriant bendradarbiavimą, grįstą įrodymais, etišku ir žmogaus orumo puoselėjimu. Tikimasi, kad ši konferencija taps platforma dalijimuisi žiniomis, kuriant tvaresnes ir įtraukesnes priklausomybių prevencijos ir gydymo strategijas, atliepančias šiuolaikinius visuomenės poreikius ir profesinių praktikų iššūkius.

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Žalos mažinimas priklausomybių gydymo kontekste: istorija ir prasmė

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Žodinis pranešimas

Ižanga

Žvelgiant plačiau ir prisimenant, kad žmogus biologijos kontekste yra priskiriamas gyvūnams [6], psichoaktyvių medžiagų vartojimas nėra tik mūsų rūšies reiškinys – jį stebime ir tarp kitų, aukštesnį mąstymą turinčių, gyvūnų rūšių [3]. Nuo neatmenamų laikų žmonės vartojo psichoaktyvias medžiagas [7], ir tai ilgą laiką nekėlė didelio susirūpinimo. Tačiau šiuolaikinėje visuomenėje vartojimas tapo reikšminga visuomenės sveikatos problema. Industrializacija sudarė sąlygas lengvesniam psichoaktyvių medžiagų išgavimui bei prieinamumui, o tai prisidėjo prie nuolat augančio priklausomų asmenų skaičiaus [11]. Šiame kontekste tampa aktualu ieškoti efektyvesnių, realistiškesnių ir žalos mažinimu grįstų priklausomybės valdymo būdų. Šio teksto tikslas – pristatyti svarbiausius literatūros duomenis, atskleidžiančius žalos mažinimo metodų reikšmę ir būtinybę.

Rezultatai

Pranešėjas pažymi, kad alkoholio vartojimo mažinimo modeliai nebūtinai tinka nikotino vartojimui mažinti [5]. Vienas iš paaiškinimų – didelė dalis alkoholio vartotojų nėra nuo jo priklausomi, o tai reiškia, kad PSO priemonės, pavyzdžiui, kainų didinimas, gali paveikti paklausa: nepriklausomi asmenys tiesiog vartoja rečiau ar mažiau. Nikotino atveju situacija priešinga: didžioji dalis rūkatorių yra priklausomi [4, 14], todėl kainų augimas ar prieinamumo ribojimai mažai veikia paklausa. Nikotino vartojimą lemia ne laisvas pasirinkimas, o priklausomybė.

Draudimai ar produktų įperkamumo mažinimas priklausomybės neišgydo. Neišgydo jos ir terapijos, vaistai ar alternatyvūs nikotino produktai – tačiau jie gali sumažinti žalą. Nors galutinis tikslas yra visiškai psichoaktyvių medžiagų vartojimo nutraukimas, JAV Nacionalinis narkotikų vartojimo institutas nurodo, kad abstinenciją iš pirmo karto pasiekia tik keli procentai asmenų [12]. Todėl alternatyvų paieška ir jų efektyvumo tyrimai tampa esminiai įgyvendinant žalos mažinimo strategijas.

Žalos mažinimo tikslas – padėti asmeniui patirti kuo mažiau žalos net ir tuo atveju, jei jis nesiliauja vartoti [12]. Metadono programa priklausomiems nuo heroino suteikė galimybę gyventi visavertiškiau ir sumažino nusikalstamumą [2]. Nikotino srityje mažiau kenksmingos alternatyvos – kaitinamas tabakas, elektroninės cigaretės ir nikotino maišeliai – davė teigiamų rezultatų Švedijoje, Japonijoje ir Jungtinėje Karalystėje [1, 8, 9]. Alkoholio vartojime žalos mažinimas gali pasireikšti mažesnio stiprumo gėrimų vartojimu ar mažesniais kiekiais [13]. Azartinių lošimų srityje žalos mažinimas reiškia pralošiamų sumų ar lošimo laiko ribojimą [10].

Išvados

1. Psichoaktyvių medžiagų vartojimas yra ilgaamžis ir plačiai paplitęs reiškinys, kurį šiandien stiprina didelis prieinamumas ir augantis priklausomybių mastas.
2. Alkoholio ir nikotino vartojimo mažinimo modeliai veikia skirtingai, nes nuo nikotino priklausomų asmenų proporcija gerokai didesnė, todėl tradicinės vartojimo mažinimo priemonės šioje srityje mažiau efektyvios.
3. Priklausomybės negali būti eliminuojamos vien draudimais ar prieinamumo ribojimu; būtina remtis žalos mažinimo principais.
4. Žalos mažinimo metodai – metadono programos, mažiau kenksmingos nikotino formos, vartojimo kiekių mažinimas ar lošimo ribojimai – jau įrodė savo veiksmingumą įvairiose srityse.
5. Atsižvelgiant į tai, kad tik mažas procentas asmenų pasiekia abstinenciją iš pirmo karto, realistiškas ir įrodymais grįstas priklausomybės valdymas turi apimti alternatyvių priemonių taikymą.

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Psichoaktyviųjų medžiagų vartojimo žalos mažinimas: gydytojo psichiatro refleksijos

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Ižanga

Sveikatos profesionalų nuostatos į psichoaktyviųjų medžiagų vartojimo žalos mažinimą yra įvairialypės ir priklauso nuo asmeninių įsitikinimų, profesinės patirties, visuomenės bei medicinos bendruomenės požiūrio, taip pat nuo teisinių ir socialinių aplinkybių. Žalos mažinimo metodai – nuo opioidų agonistų terapijos iki adatų-švirkštų keitimo programų ir perdozavimo prevencijos centrų – yra pripažįstami efektyviais mažinant su psichoaktyviųjų medžiagų vartojimu susijusias pasekmes. Tačiau praktikoje kyla ir iššūkių, susijusių su profesinės pareigos ir asmeninių vertybių dermėmis. Šio teksto tikslas – apžvelgti sveikatos profesionalų santykį su žalos mažinimo principais ir išryškinti veiksnius, darančius įtaką šių nuostatų formavimuisi.

Rezultatai

Daugelis žalos mažinimo priemonių, įskaitant farmakoterapiją opioidų agonistais, yra pagrįstos tvirtais moksliniais įrodymais [1–3]. Adatų-švirkštų keitimo programos ir perdozavimo prevencijos centrai taip pat pripažįstami veiksmingais visuomenės sveikatos įrankiais [4]. Nepaisant to, sveikatos profesionalai susiduria su dilema, kaip praktiškai taikyti žalos mažinimo principus taip, kad būtų saugoma paciento sveikata ir gerovė, tačiau kartu nepažeidžiamos profesinės etikos ribos.

Pranešime aptartos gydytojo patirtys iš vizitų žalos mažinimo paslaugas teikiančiose įstaigose Lietuvoje ir užsienyje. Šie apsilankymai ir pokalbiai su paslaugų teikėjais bei gavėjais formavo požiūrį į pacientų poreikius ir į tai, kokia pagalba jiems yra iš tiesų prasminga.

Tyrimai rodo, kad žalos mažinimo principai yra nepakankamai integruoti į medicinos studijų programas [6]. Tai riboja būsimų gydytojų galimybes įgyti praktinių įgūdžių, reikalingų efektyviam šių strategijų taikymui. Pedagogai ir medicinos edukacijos tyrėjai pažymi, kad žalos mažinimo įtraukimas į studijų programas gali mažinti stigmatizaciją ir didinti sveikatos specialistų pasirengimą dirbti su priklausomybės ligomis sergančiais pacientais [7].

Nepaisant didelio psichoaktyviųjų medžiagų vartojimo paplitimo tarp kitų sveikatos sutrikimų turinčių asmenų [5], praktiniai žalos mažinimo įgūdžiai vis dar menkai išplėtoti, o tai apsunkina veiksmingą ir įrodymais grįstą pagalbą.

Išvados

1. Sveikatos profesionalų požiūris į žalos mažinimą priklauso nuo asmeninių, profesinių ir socialinių veiksnių, todėl jis dažnai nėra vienalytis.
2. Moksliniai įrodymai patvirtina žalos mažinimo intervencijų veiksmingumą, tačiau jų praktinis taikymas sveikatos priežiūroje susiduria su etinėmis dilemomis ir kompetencijų trūkumu.
3. Žalos mažinimo principų integravimas į medicinos studijų programas ir profesinį rengimą yra būtinas, siekiant mažinti stigmatizaciją ir gerinti specialistų pasirengimą dirbti su priklausomybės ligomis sergančiais pacientais.

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Neurostimuliacijos vaidmuo priklausomybės gydyme/ The role of neurostimulation in addiction treatment

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Introduction

Addictive disorders are chronic, relapsing conditions associated with substantial disability, comorbidity, and mortality, and conventional treatments often show limited effectiveness [12]. Consequently, there is growing interest in personalized neurobiological approaches that may complement pharmacological and psychotherapeutic methods. Neurostimulation techniques aim to target dysfunctional brain circuits underlying the core domains of addiction: binge/intoxication, withdrawal/negative affect, and preoccupation/anticipation [5]. The overarching goal is to restore neural balance and reduce compulsive drug-seeking, emotional dysregulation, and impaired executive control.

Results

Neurostimulation methods influence networks involving the basal ganglia, extended amygdala, and prefrontal regions, which together constitute the “addiction phenotype” [12]. Neuromodulation seeks to alter cortical excitability and synaptic plasticity; regions such as the prefrontal cortex (PFC), anterior cingulate cortex (ACC), and orbitofrontal cortex (OFC) are central due to their roles in reward processing, inhibitory control, and decision-making [6].

Current techniques include transcranial direct current stimulation (tDCS), repetitive transcranial magnetic stimulation (rTMS), and deep brain stimulation (DBS).

tDCS applies low-intensity electrical currents that increase or decrease neuronal excitability [7]. Most tDCS studies target the dorsolateral prefrontal cortex (DLPFC). A review of 18 studies found that 16 stimulated this region, with eight reporting reductions in craving for substances such as alcohol, nicotine, cocaine, and cannabis [2]. Nonetheless, effects were modest and inconsistent due to small samples, heterogeneous protocols, and short intervention durations, making conclusions limited [11].

rTMS effects depend on stimulation frequency: low-frequency (≤ 1 Hz) exerts inhibitory effects, whereas high-frequency (≥ 5 Hz) enhances cortical excitability. Advanced H-coils allow stimulation up to 3 cm deep, influencing mesolimbic nodes. Theta burst stimulation (TBS) protocols – intermittent (iTBS) and continuous (cTBS) – mimic long-term potentiation and depression [4]. Clinical evidence indicates that high-frequency rTMS over the DLPFC can reduce craving and alcohol consumption, particularly when bilateral or deep-coil stimulation is used [8]. Results for tobacco use disorder remain mixed [1]. Strongest evidence exists for stimulant use disorders: high-frequency left-DLPFC rTMS reduces craving in cocaine and methamphetamine users [11].

A clinical case described by Lõokene illustrates that an intensive 15 Hz rTMS protocol – 40 trains twice daily for five days with weekly maintenance – was associated with sustained six-month abstinence and improved emotional stability in a patient with alcohol and cocaine use disorders and comorbid ADHD. This aligns with prior studies showing that cumulative rTMS exposure correlates with better outcomes [10].

Dr. Lõokene recommends rTMS particularly for alcohol and stimulant use disorders (but not nicotine dependence due to consistently negative findings), and advises avoiding stimulation during acute withdrawal. Personalization based on psychiatric comorbidity and neurophysiological mapping (e.g., qEEG) may improve outcomes. Evidence also suggests that maintenance stimulation for up to three months, combined with psychotherapy, may enhance relapse prevention.

Conclusions

1. Neurostimulation represents a promising adjunctive approach targeting dysfunctional neural circuits that underlie addiction symptoms.
2. tDCS may offer modest benefits for craving and cognitive control, but current evidence is limited and does not support its use as a stand-alone anti-craving intervention.
3. rTMS – especially high-frequency stimulation of the DLPFC and deep-coil protocols – shows stronger evidence, particularly for alcohol and stimulant use disorders.
4. Treatment personalization, including assessment of comorbid psychiatric conditions and neurophysiological mapping, may enhance clinical effectiveness.
5. Future research should refine stimulation parameters, develop individualized targeting methods, and evaluate combined neuromodulation-psychotherapy protocols.

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Ilgalaikis benzodiazepinų vartojimas – žalos mažinimas ar žalos didinimas?

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Ižanga

Psichiatrijoje vartojami vaistai dažniausiai veikia aktyvindami tam tikrus galvos smegenų neuromediatorių receptorių (agonistai) arba juos blokuodami (antagonistai). Tačiau benzodiazepinų (BDZ) veikimo mechanizmas skiriasi – jie priskiriami alosteriniams receptorių modulatoriams, t. y. vaistams, keičiantiems receptorių struktūrą ir aktyvumą [6]. Šis veikimo pobūdis gali būti viena iš priežasčių, lemiančių dažnai ilgai trunkantį, iki kelių mėnesių pasireiškiantį BDZ nutraukimo sindromą.

Nors oficialiose BDZ vartojimo instrukcijose (preparato charakteristikų santraukose, PCS) nurodoma, kad šie vaistai skiriami tik trumpalaikiam – ne ilgesniam nei 4 savaitėms – nerimo ar miego sutrikimų gydymui, klinikinėje praktikoje jie neretai vartojami metais ar net dešimtmečius. Kyla esminis klausimas: ar ilgalaikis BDZ vartojimas, neatitinkantis PCS rekomendacijų, sukelia žalą, ar tam tikrais atvejais gali būti laikomas žalos mažinimo priemone?

Šio teksto tikslas – apžvelgti literatūros duomenis apie ilgalaikį BDZ vartojimą, jo rizikas, galimas naudas ir diagnostines dilemas, susijusias su priklausomybės BDZ diagnostika.

Rezultatai

Ilgalaikio BDZ vartojimo klinikiniai atvejai labai įvairūs: skiriasi vartojamos dozės, trukmė, įsigijimo šaltiniai, vartojimas kartu su kitomis psichoaktyviosiomis medžiagomis (PAM) ir kt. [1]. Dalis pacientų daugelį metų vartoja mažesnes nei vidutinės terapinės dozės, ir ši dozė nedidėja. Kiti pacientai vartoja ženkliai didesnes dozes nei PCS rekomenduojama, taip pat – įvairius BDZ ir kitų PAM „mišinius“. Literatūroje nurodoma, kad polinkį ilgalaikiam BDZ vartojimui ar piktnaudžiavimui PAM gali sąlygoti tam tikri asmenybės bruožai [4, 5].

Pasaulyje pereinama prie naujesnės TLK-11 klasifikacijos, kuri, kaip ir TLK-10, nurodo, kad priklausomybės diagnozei būtini neuropsichiatriniai simptomai: tolerancijos didėjimas ir somatiniai abstinencijos simptomai. Klinikoje neretai nustatoma „priklausomybė nuo BDZ“ net ir nesant šių kriterijų – be tolerancijos didėjimo ar aiškių abstinencijos simptomų. Priklausomybės diagnostika nesiremiant TLK kriterijais gali paskatinti pernelyg griežtą ir neretai nepagrįstą BDZ ribojimą [3].

Sprendžiant dėl ilgalaikio BDZ vartojimo, kyla argumentų „už“ ir „prieš“.

Prieš: gydytojas neturėtų paskatinti priklausomybės nuo PAM ar tapti PAM „tiekėju“.

Už: esant lėtiniais, metų metais trunkantiems nerimo ar miego sutrikimams, gydymo alternatyvos ne visada yra pakankamai efektyvios ar prieinamos (ypač ilgalaikė psichoterapija). Tokiais atvejais ilgalaikis BDZ vartojimas gali būti laikomas žalos mažinimo strategija.

Ilgalaikį BDZ skyrimą reglamentuoja Lietuvos Respublikos sveikatos apsaugos ministro 2020 m. liepos 3 d. įsakymas Nr. V-1610 [2], kuriame nurodyta, kad tokį gydymą leidžiama taikyti tik tam tikrais klinikiniais atvejais, įvertinus naudos ir rizikos santykį.

Pažymėtina, kad BDZ nėra vienintelė psichoaktyvioji medžiaga, skiriama ilgalaikiam gydymui medicinoje. Ilgalaikio gydymo tikslams taip pat taikomi metadonas, kiti opioidai, amfetaminų grupės preparatai ADHD gydymui, kanabinoidai raumenų spastiškumui mažinti ir kt.

Išvados

1. BDZ alosterinė GABA receptorių moduliacija gali lemti ilgesnius ir sudėtingesnius nutraukimo simptomus, o ilgalaikis jų vartojimas klinikoje išlieka dažnas ir įvairialypis, nulemtas medicininių, asmenybės ir socialinių veiksnių.
2. Priklausomybės nuo BDZ diagnostika turi remtis TLK-10 ir TLK-11 kriterijais, nes netikslī diagnostika gali sukelti perteklinius ir nepagrįstus BDZ vartojimo ribojimus klinikinėje praktikoje.
3. Ilgalaikis BDZ vartojimas tam tikrais atvejais gali būti laikomas žalos mažinimo priemone, ypač esant lėtiniais ir sunkiai gydomiems sutrikimams; sprendimas turi būti individualizuotas, pagrįstas naudos ir rizikos santykiu ir atitikti galiojančius teisės aktus.

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Tyloji pagalba: kaip žemo slenksčio kabinetai saugo visuomenės sveikatą

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Tema ir aktualumas

Žalos mažinimas yra viena svarbiausių šiuolaikinės visuomenės sveikatos strategijų, siekianti apsaugoti tiek narkotikus vartojančius asmenis, tiek visą visuomenę nuo neigiamų narkotikų vartojimo padarinių [1,2]. Ši politika, pagrįsta žmogaus teisių ir visuomenės sveikatos principais, akcentuoja pagalbą, o ne bausmę. Lietuvoje ypač reikšmingą vaidmenį atlieka žemo slenksčio kabinetai – vietos, kur narkotikus vartojantys asmenys gali gauti saugias, anonimiškas ir nemokamas paslaugas [4]. Šių paslaugų reikšmė išaugo siekiant mažinti ŽIV ir virusinių hepatitų paplitimą, perdozavimo atvejų skaičių bei stiprinti visuomenės atsparumą infekcinėms ligoms [6].

Tyrimo tikslas ir klausimai

Šios apžvalgos tikslas – atskleisti, kaip žemo slenksčio kabinetai prisideda prie žalos mažinimo politikos įgyvendinimo Lietuvoje ir kokią reikšmę šis modelis turi visuomenės sveikatos stiprinimui. Keliami pagrindiniai klausimai: kokias paslaugas teikia žemo slenksčio kabinetai ir kokią naudą jos duoda? Kaip šių paslaugų prieinamumas veikia infekcinių ligų tarp švirkščiamųjų narkotikų vartotojų mažėjimą? Kokie yra pagrindiniai iššūkiai ir ateities plėtros kryptys?

Pagrindinės idėjos

Lietuvoje žemo slenksčio kabinetai šiuo metu veikia 12-oje savivaldybių. Juose teikiamos tokios paslaugos kaip adatų ir švirkštų keitimas, dezinfekcijos priemonių, prezervatyvų, tvarsliaivos dalijimas, žaizdų perrišimas, asmens higienos paslaugos, konsultavimas bei atrankiniai ŽIV, hepatito B ir C, sifilio tyrimai [4]. Šios paslaugos yra nemokamos, anonimiškos ir prieinamos visiems, nepriklausomai nuo asmens socialinės padėties ar psichoaktyviųjų medžiagų vartojimo situacijos.

Iš viso 2024 m. žemo slenksčio kabinetuose užregistruota beveik 80 tūkst. apsilankymų, t. y. 31 proc. daugiau nei 2023 m., ir išdalinta daugiau kaip 669 tūkst. švirkštų su adatomis (40 % daugiau nei 2023 m.), taip pat beveik 62 tūkst. prezervatyvų (10 proc. daugiau nei 2023 m.) [5].

Žalos mažinimo paslaugos remiasi pripažinimu, kad narkotikų vartojimas yra sudėtingas reiškinys, susijęs su elgesio, socialiniais ir teisiniais veiksniais. Todėl tik kompleksinis požiūris leidžia sumažinti vartojimo žalą ir užkirsti kelią infekcijų plitimui. Moksliniai tyrimai rodo, kad adatų ir švirkštų keitimo programos yra veiksminga priemonė mažinant ŽIV ir kitų infekcijų paplitimą tarp švirkščiamųjų narkotikų vartotojų [1-3].

Ateities tikslai apima adatų ir švirkštų išdavimo masto didinimą iki PSO rekomenduojamų rodiklių, naloksono (perdozavimo priešnuodžio) prieinamumo užtikrinimą, mobiliųjų paslaugų plėtrą bei integruotos atvejo vadybos sistemos kūrimą [1,2]. Šios priemonės leistų dar labiau sumažinti infekcijų ir perdozavimo mirčių skaičių bei didinti galimybes vartotojus nukreipti į sveikimo ir socialinės integracijos programas.

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(Ne)veikianti alkoholio kontrolės politika Lietuvoje

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Aktualumas. Alkoholio kontrolės politika ne vienerius metus Lietuvoje buvo tema lengvai įžiebianti aktyvias diskusijas visuomenėje ir vertinama nevienareikšmiškai. Vieniems alkoholiniai gėrimai yra laisvosios rinkos prekė, antriems – visuomenės sveikatos rizikos veiksnys, o trečiuoju – gyvenimo tragedija.

Tikslas. Šio pranešimo tikslas apibendrinti pastarųjų metų Lietuvos alkoholio kontrolės politikos rezultatus žvelgiant iš visuomenės sveikatos perspektyvos, laviruojant tarp mokslinių tyrimų atlikimo bei jų panaudojimo viešojoje erdvėje bei politikos formavime.

Pranešimo rezultatai. Lietuva vis dar yra tarp ES šalių turinčių žemiausią tikėtiną gyvenimo trukmę. Taip pat, skirtumas tarp vyrų ir moterų tikėtinos gyvenimo trukmės siekia apie 9 metus ir tai yra vienas didžiausių atotrūkių ES [1]. Žema tikėtina vyrų gyvenimo trukmė didele dalimi įtakojama gyvenamos rizikos veiksnių, tarp kurių didelį svorį turi aukštas alkoholio suvartojimas Lietuvoje [2]. Nuo 2017 m. kovo padvigubinus akcizą vynui ir alui bendras mirtingumas Lietuvoje mažėjo sparčiau nei iki tol. Vertinama, kad per vienerius metus po akcizo padidinimo galėjo būti išvengta/atidėta daugiau kaip 1000 mirčių susijusių su alkoholio vartojimu [3]. Nuo 2018 m. apribojus alkoholio prekybos laiką (ypač sekmadieniais) – mažėjo vyrų mirčių nuo išorinių priežasčių sekmadieniais bei mirtingumas nuo širdies ir kraujagyslių ligų pirmadieniais [4]. Alkoholio reklamos draudimo įsigaliojimas taip pat gali būti laikomas kaip svarbi ilgalaikė priemonė prisidedanti prie alkoholio vartojimo mažėjimo jaunimo tarpe. Lietuvoje įgyvendintas natūralus eksperimentas įgyvendinant visas Pasaulio sveikatos organizacijos (PSO) rekomenduojamas „best buys“ politikos priemones, jau yra tapęs pavyzdžiu dažnai minimu PSO leidiniuose ir forumuose [5]. Tačiau net ir diegiant efektyviausias („best buys“) alkoholio kontrolės politikos priemones svarbu neužmiršti, kad alkoholio kontrolės politika turi būti kompleksinė, kuri neapsiriboja PSO „best buys“ politikos priemonėmis ir apima visas gyvenimo sritis: į visą visuomenę orientuotas politikas, į bendruomenes, į atskiras gyventojų grupes (pvz. jaunimą, vairuotojus, priklausomybės turinčius asmenis ir t.t.). Pabrėžtina, kad nors konferencija buvo orientuota į žalos mažinimo strategijas, tačiau žalos mažinimas tėra nepirmas kompleksinės nacionalinės alkoholio kontrolės politikos dalelė.

Išvados. Svarbiausių PSO „best buys“ priemonių įgyvendinimas ir kompleksinės alkoholio kontrolės politikos vystymas sukuria prielaidas Lietuvoje suvaldyti su alkoholio vartojimu siejamų problemų mastą, tačiau būtina toliau išlaikyti esamą alkoholio kontrolės politiką bei plėtoti į specifines visuomenės grupes nukreiptas politikos priemones ir programas.

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Žalos mažinimas ir abstinencija: priklausomybių valdymas tarp klinikinės praktikos ir politikos“/ Harm Reduction and Abstinence: Complementarity in Addiction Policy and Extension to Online Addictions

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Introduction

Addiction policy has long been shaped by a perceived dichotomy between harm reduction and abstinence. Abstinence has traditionally been presented as the only acceptable outcome, while harm reduction has been dismissed as permissive or competing. This paper challenges that framing, arguing instead that harm reduction and abstinence are not mutually exclusive but complementary strategies within a continuum of care. Harm reduction preserves health, engagement, and dignity, while creating conditions that make abstinence more attainable for those who seek it.

Harm reduction is rooted in pragmatism, autonomy, and incremental change, focusing on minimising the immediate risks of harmful behaviours without necessarily requiring cessation (Harm Reduction, 1996). Abstinence, by contrast, prioritises complete elimination of harmful behaviours. Although often presented in opposition, growing evidence demonstrates that harm reduction can act as an effective pathway to abstinence rather than an alternative (Marlatt, 2003; Pauly, 2016).

This continuum model is particularly relevant to online and behavioural addictions – including gaming, social media, gambling, pornography, and compulsive browsing – where abstinence may be impractical given the ubiquity of digital technologies. Harm reduction therefore provides a pragmatic framework for reducing harms while also laying the groundwork for long-term abstinence where appropriate.

The analysis draws on evidence from public health research, clinical practice, and emerging digital interventions. It concludes with policy recommendations: recognising harm reduction and abstinence as complementary within national strategies; integrating harm reduction into responses to online addictions through digital interventions and regulation; building professional capacity to deliver harm reduction-informed care; and investing in longitudinal research to assess the effectiveness of digital harm reduction tools in supporting abstinence.

1. Misconception of mutual exclusivity

Policy debates often construct a binary between abstinence and harm reduction. Abstinence is portrayed as morally superior and decisive, while harm reduction is sometimes dismissed as permissive or enabling (Marlatt, 2003). This framing obscures evidence that harm reduction reduces immediate harms, preserves life, and increases the likelihood of eventual abstinence (Gradualism, 2003; Stockings et al., 2016). In practice, many individuals who begin with harm reduction strategies – such as opioid substitution therapy or needle exchange – transition into abstinence-based recovery once they are healthier and more stable (Pauly, 2016). The narrative of mutual exclusivity therefore fails to reflect the continuum of care already in operation within treatment systems.

2. Health and social consequences of abstinence-only models

Abstinence-only models carry significant risks when adopted as the sole framework for addressing addiction. While abstinence may be meaningful and desirable for many, its elevation as the exclusive recovery pathway marginalises those unable or unwilling to pursue immediate cessation. High entry barriers exclude individuals who are ambivalent about quitting or who require gradual, supportive approaches. As Becker and Fiellin (2005) observe, this exclusion leaves large segments of affected populations without care.

Relapse is typically framed as a moral or personal failure, fuelling cycles of shame and disengagement (Keene, 2019). Without complementary harm reduction measures, individuals are exposed to preventable harms such as overdose, infections, and other complications (Rhodes, 2009). In behavioural addictions, “digital detox” programmes similarly provide short-term withdrawal but fail to equip individuals with sustainable management tools.

The social impacts of abstinence-only approaches are equally concerning. These frameworks perpetuate stigma by portraying continued use as weakness, discouraging help-seeking and reinforcing marginalisation (Pauly, 2016). Incremental progress is neglected, alienating those whose recovery does not follow linear or binary models (Stockings et al., 2016). Vulnerable populations – including individuals with co-occurring mental health conditions, unstable housing, or trauma histories – are disproportionately disadvantaged, as abstinence-only systems often fail to accommodate complex needs. The result is deepened inequality and the systematic exclusion of those most at risk (Pauly, 2016).

3. Health and social consequences of harm reduction-only models

Harm reduction has proven indispensable in preserving health and preventing life-threatening consequences. However,

reliance on harm reduction alone, without pathways to abstinence, carries its own risks. A key concern is the potential normalisation of harmful behaviours: focusing on management rather than elimination may inadvertently convey that continued use is acceptable if controlled (Marlatt, 2003). In behavioural addictions, digital tools such as screen-time reminders, if not complemented by abstinence strategies, can reinforce the very environments that fuel compulsive use.

Harm reduction-only approaches can also delay treatment-seeking, especially for individuals with severe dependence who require structured abstinence-based support (Pauly, 2016). While harm reduction is effective for moderate use, it is often insufficient for entrenched addictions where abstinence may be the only sustainable outcome (Stockings et al., 2016).

Measuring success within harm reduction frameworks is difficult. Indicators such as reduced use or improved health do not always capture broader recovery outcomes such as social reintegration or long-term abstinence (Keene, 2019). Furthermore, harm reduction resources are unevenly distributed, often privileging more affluent groups while leaving marginalised populations underserved (Livingstone et al., 2017).

Finally, the public and political legitimacy of harm reduction-only models is fragile. Where abstinence is absent from policy, scepticism can erode support, leaving initiatives vulnerable to defunding or reversal (Rhodes, 2009). This can undermine system efficiency, as preventable harms escalate into costly crises requiring emergency intervention.

4. Limitations of single-model approaches

Both abstinence-only and harm reduction-only models present significant limitations when pursued in isolation. Abstinence-only systems exclude those unable to quit immediately, stigmatise relapse, and expose individuals to preventable harms. Harm reduction-only systems risk normalising harmful behaviours, delaying recovery, and inadequately supporting severe dependence. Both approaches also exacerbate inequities, either by excluding vulnerable groups (abstinence-only) or by privileging those with greater access to resources (harm reduction-only).

A balanced continuum of care – embracing both harm reduction and abstinence – offers a more realistic and adaptable response to the complexities of addiction. This continuum allows for immediate harm reduction to protect life and health while maintaining clear and accessible pathways to abstinence, especially for individuals with severe addictions. Such integration ensures that both short-term needs and long-term recovery goals are addressed.

5. Challenges for digital harm reduction development

Current policy frameworks addressing behavioural addictions face three systemic deficiencies. First, harm reduction is insufficiently integrated into digital well-being strategies, which often favour abstinence-based solutions such as “digital detox” over more nuanced approaches like monitoring technologies and peer support (Davitadze et al., 2020). Second, professional training remains underdeveloped; many frontline practitioners lack awareness of how harm reduction can be applied to behavioural addictions (BeHERE, 2024). Third, regulatory mechanisms are weak, with industry-driven design practices heightening addiction risks while policy responses lag behind technological innovation (Chakraborty et al., 2025).

The development of digital harm reduction also faces evidence, measurement, and equity challenges. Compared with substance use, the evidence base is limited. While internet-based interventions show promise in reducing gambling harms, findings are less conclusive for gaming, pornography, and social media use (Stevens et al., 2022). Research is typically short-term, self-reported, and methodologically weak, undermining confidence in scalability.

Measurement presents further difficulties. Substance use outcomes can be quantified through indicators like overdose reduction or infection control, whereas behavioural addiction outcomes – such as sleep quality, productivity, or screen time reduction – lack standardisation (Billieux et al., 2015). Digital well-being is multidimensional, and improvements in one domain may be offset by harms in another, complicating evaluation.

Equity concerns further undermine legitimacy. Many harm reduction tools require modern devices, stable internet, and digital literacy, excluding low-income and marginalised groups (Livingstone et al., 2017). Without explicit measures to address accessibility, digital harm reduction risks privileging the already advantaged while excluding those most vulnerable.

6. Complexities of addressing online and behavioural addictions

Behavioural addictions such as gaming, social media overuse, gambling, and compulsive browsing pose distinctive challenges for policymakers and clinicians. Unlike substance addictions, these behaviours are deeply embedded in daily life, blurring the line between healthy engagement and harmful dependency.

Diagnostic inconsistencies hinder recognition in policy frameworks (Billieux et al., 2015). Unlike substances, abstinence from digital technologies is rarely feasible, complicating treatment pathways (Derevensky & Griffiths, 2022). Further, platforms are often designed to maximise engagement through features such as infinite scrolling and reward notifications, shifting responsibility from individual self-control to structural factors (Montag et al., 2019).

Harms in this domain tend to be gradual rather than acute, manifesting as disrupted sleep, declining work or academic performance, and mental health deterioration (Kuss & Lopez-Fernandez, 2016). These harms are less visible, reducing public urgency. Compounding this, behavioural addictions are frequently trivialised, with individuals stigmatised as lacking self-control rather than recognised as experiencing legitimate health issues (Griffiths et al., 2016). This diminishes help-seeking and reduces political support for interventions.

Outcome measurement is problematic. Substance-related harm reduction can be assessed with clear indicators such as overdose reduction, whereas behavioural addictions rely on proxies like screen time reduction, which lack comparability (Stevens

et al., 2022). Gains in one area may also mask harms elsewhere, making outcomes ambiguous.

The digital divide exacerbates inequities. Tools such as monitoring apps or parental controls depend on reliable technology and literacy, privileging wealthier groups while excluding disadvantaged ones (Livingstone et al., 2017). Finally, technological innovation outpaces policy development, with new addictive behaviours – such as loot boxes or compulsive short-form video use – emerging faster than evidence-based responses (King & Delfabbro, 2019).

7. Balancing harm reduction and abstinence in online addictions

The rise of online addictions demands a nuanced policy framework. Abstinence-only and harm reduction-only approaches offer partial solutions but fail to address the complexities of digital dependence. The most effective response lies in an integrated continuum of care.

Abstinence-only frameworks promote clear behavioural goals but impose high entry barriers, particularly for individuals reliant on digital tools for work, education, or social connection. By framing relapse – such as returning to a platform – as failure, these models risk alienating users and reinforcing shame.

Harm reduction strategies, in contrast, provide pragmatic tools such as usage monitors, screen-time reminders, and digital hygiene education. While valuable for moderate users, these interventions risk normalising compulsive behaviours and delaying more intensive support for severe cases.

An integrated continuum model accommodates both strategies, recognising that recovery from online addictions is non-linear and requires flexibility. Harm reduction tools can stabilise behaviour, while abstinence pathways offer deeper behavioural change when needed. Implementation of this model requires systemic redesign, including professional training, robust evaluation frameworks, and digital-specific interventions.

Policy recommendations include formal adoption of the continuum approach within national digital well-being strategies, expansion of harm reduction interventions (including regulation of addictive design practices and the introduction of algorithmic friction), and integration of digital hygiene education into schools and workplaces.

Professional capacity should be strengthened through training platforms such as Learn Addiction and BeHERE, updated to address online addictions. Investment in research – particularly longitudinal studies and pilot interventions such as healthy recommender systems – is also critical (Chakraborty et al., 2025).

Equity must remain central. Digital divides limit access to harm reduction tools, and policies should ensure interventions are widely accessible, with additional protections for minors embedded into regulatory frameworks. Stakeholder engagement, including lived experience perspectives, is essential for relevance and legitimacy. Success metrics should extend beyond abstinence to include measures of well-being such as improved sleep, reduced anxiety, and healthier digital habits.

In conclusion, harm reduction and abstinence are not competing ideologies but complementary strategies within a continuum of care. Harm reduction safeguards health and autonomy, while abstinence provides a pathway to long-term change. By integrating these approaches and tailoring interventions to the realities of digital life, policymakers can create compassionate and effective responses to the challenges of online addiction.

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Motyvuojantis pokalbis kaip žalos mažinimo instrumentas

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Ižanga. Žalos mažinimo principai tampa vis aktualesni dirbant su asmenimis, patiriančiais priklausomybių keliamas problemas. Vienas esminių iššūkių šiame procese – kliento ambivalencija, pasireiškianti kaip dvejonė tarp troškimo keistis ir įpročio išlikti dabartinėje situacijoje. Motyvuojantis pokalbis (MP) – į asmenį orientuotas, bendradarbiavimu ir pagarba paremtas konsultavimo metodas – yra vienas veiksmingiausių įrankių šiai ambivalencijai tyrinėti ir mažinti, taip skatinti vidinę, o ne išorinę motyvaciją keistis [5].

Apžvalgos tikslas – pristatyti MP kaip žalos mažinimo instrumentą, aptariant jo teorinius pagrindus, santykio kūrimo svarbą ir taikymo galimybes dirbant su įvairiomis priklausomybės formomis.

Rezultatai. MP veiksmingumą lemia santykio „dvasia“, apibrėžiama partneryste, priėmimu, atjauta ir įgalinimu [5]. MP „dvasia“ kuria saugią erdvę, kurioje klientas gali dalintis savo paslaptimis, tyrinėti vidinius konfliktus ir jaustis išgirstas be vertinimo. Ambivalencijos išsamoninimas ir kliento įgalinimas ją tyrinėti yra viena pagrindinių MP strategijų, pagrįsta atspindėjimu, kryptingais klausimais, pokyčio kalbos stiprinimu [5]. Apsisprendimo teorija [2], kuri aiškina, kad vidinė motyvacija kyla tuomet, kai patenkinami trys pagrindiniai asmens poreikiai – autonomijos, kompetencijos ir ryšio, iš teorinės perspektyvos paaiškina MP veikimo mechanizmą. MP „dvasia“ užtikrina pagrindinių poreikių patenkinimą ne tik konsultacijų metu, bet ir formuojant pokyčio viziją, todėl pamažu mažinant riziką ir kliento žvilgsnį kreipiant į perspektyvą, kurioje matyti poreikių patenkinimas stiprina asmens motyvaciją ir išpareigojimą atsisakyti priklausomybę keliančios medžiagos. Tyrimai rodo, kad MP efektyviausiai taikomas dirbant su įvairiomis priklausomybėmis [3, 5, 6] – nuo alkoholio ir tabako [4] iki marihuanos [1], lošimų [7] ar kito elgesio.

Išvados. MP yra moksliskai pagrįstas ir praktiškai veiksmingas žalos mažinimo instrumentas, leidžiantis stiprinti kliento vidinę motyvaciją, mažinti pasipriešinimą pokyčiams ir kurti saugų, pagarba grįstą ryšį. MP išlieka vienu svarbiausių konsultavimo įrankių dirbant su priklausomybėmis įvairiuose sveikatos priežiūros ir socialinių paslaugų kontekstuose.

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Minesotos programos patirtis – ilgalaikės abstinencijos pagrindas

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Ižanga

Priklausomybių gydymas vis dažniau suprantamas kaip kompleksinis, ilgalaikis ir daugialypis procesas, reikalaujantis tiek medicininės, tiek psichosocialinės pagalbos [5]. Pastaraisiais dešimtmečiais pastebima, kad vien tik farmakoterapijos ar trumpalaikių psichologinių intervencijų nepakanka siekiant tvaraus sveikimo ir atkryčio prevencijos. Ilgalaikės abstinencijos išlaikymas yra vienas sudėtingiausių priklausomybės gydymo procesų etapų, kuriam būtinos tikslingos intervencijos, tęstinė pagalba ir socialinė parama [8]. Todėl daugelyje šalių vis aktyviau tyrinėjami integruoti, struktūruoti ir bendruomeniškumą stiprinantys gydymo modeliai [6]. Nepaisant kritikos ir šiuolaikinių alternatyvų, Minesotos modelis išlieka svarbia priklausomybių reabilitacijos sistemos dalimi daugelyje šalių [4]. Ši santrauka remiasi naratyvine literatūros apžvalga ir priklausomybės konsultanto asmenine patirtimi, siekiant atskleisti Minesotos programos efektyvumo ir patyrimo aspektus ilgalaikio sveikimo kontekste. Pranešimo tikslas – aptarti Minesotos programos taikymo principus ir jų reikšmę ilgalaikės abstinencijos palaikymui, integruojant mokslinius duomenis ir asmeninę sveikimo patirtį.

Rezultatai

Minesotos programa yra intensyvi 28 dienų stacionarinė gydymo forma, paremta biopsichosocialiniu modeliu, kuris priklausomybę supranta kaip kompleksinę lėtinę būseną [1, 4]. Tai programa jungianti biopsichosocialinį požiūrį, 12 žingsnių filosofiją, grupinę terapiją ir intensyvią emocinio sąmoningumo bei savirefleksijos ugdymo praktiką [2, 3, 5]. Esminis programos principas – sveikimas kaip procesas, o ne tik abstinencijos pasiekimas. Dalyviai ne tik įsisavina žinias apie priklausomybės ligos pobūdį, bet ir mokosi atpažinti savo emocijas, identifikuoti vidinius ir išorinius rizikos veiksnius, priimti kitų pagalbą ir ugdyti savireguliacijos gebėjimus. Programos dalyviai mokosi priimti atsakomybę, pripažinti bejėgiškumą prieš ligą, dirbti su gėdos ir kaltės jausmais bei formuoti naujus sveikimo įpročius. Ypač svarbus tęstinumas – grįžimas į bendruomenę, dalyvavimas savipagalbos grupėse ir struktūruotas tolimesnio sveikimo planavimas [1, 4].

Literatūra pabrėžia, kad Minesotos programos efektyvumas susijęs su daugiadiscipliniu požiūriu, pacientų motyvacijos stiprinimu, psichoedukacija ir tęstinės paramos sistemų integracija [1, 4, 7]. Asmeninė patirtis patvirtina, jog struktūruotos aplinkos sukuriama saugumas ir galimybė gauti grįžtamąjį ryšį skatina emocinį atvirumą, sąmoningumą ir naujų elgesio įgūdžių formavimąsi. Svarbus iššūkis – perėjimas į savarankišką gyvenimą po programos, kuris reikalauja stabilios paramos sistemos ir ilgalaikės motyvacijos.

Išvados

1. Minesotos programa yra vertingas ir mokslu pagrįstas ilgalaikio sveikimo modelis, padedantis asmenims ne tik siekti abstinencijos, bet ir ugdyti emocinį stabilumą, socialinius ryšius ir atsparumą atkryčiui. Nors metodas nėra universalus ir išlieka diskusijų dėl individualizavimo poreikio, Minesotos modelis išlieka reikšmingas kaip vienas struktūrinių sveikimo kelio etapų.
2. Programos veiksmingumą lemia biopsichosocialinis požiūris, 12 žingsnių integracija ir tęstinės paramos sistemos, kurios sustiprina asmens gebėjimą reflektuoti, priimti pagalbą ir kurti sveikimo bendruomenę.
3. Pabrėžiant priklausomybę kaip lėtinę ligą ir sveikimą kaip visą gyvenimą trunkantį procesą, ši programa sustiprina asmens gebėjimą priimti pagalbą, reflektuoti savo patyrimus ir formuoti sveikimo bendruomenę. Asmeninė autoriaus patirtis atskleidžia, kad programa ne tik suteikia žinių ir įgūdžių, bet ir padeda formuoti sveikimo tapatumą, priimti pagalbą ir išlaikyti įsipareigojimą sveikimo procesui.

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Fizinis aktyvumas probleminio interneto naudojimo žalai mažinti: naratyvinė apžvalga

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Probleminis interneto naudojimas (PIN) paauglystėje ir jaunystėje siejamas su psichikos sveikatos, miego ir akademiais sunkumais, todėl ieškoma veiksmingų žalos mažinimo priemonių.

Tikslas. Glaustai apibendrinti 2020–2025 m. sisteminių apžvalgų, metaanalizių ir atsitiktinių imčių kontroliuojamųjų tyrimų duomenis apie fizinio aktyvumo (FA) vaidmenį mažinant PIN žalą paaugliams ir jauniems suaugusiesiems.

Metodai. Atlikta tikslinga naratyvinė apžvalga; remtasi metaanalizėmis (įskaitant tinklines) ir pirminiais tyrimais (atsitiktinių imčių kontroliuojamaisiais tyrimais ir skerspjuvio tyrimais). Naudotas iš anksto sudarytas šaltinių sąrašas; nauja sisteminė paieška nebuvo vykdyta, todėl apžvalga nėra visuminė. Papildomai analizuotuose pirminiuose tyrimuose atsitiktinių imčių kontroliuojamuosiuose tyrimuose iš viso dalyvavo $n = 141$ tiriamasis [1, 2], o skerspjuvio tyrimuose – $n = 2\ 639$ tiriamieji [3, 4]. Dėl galimo tų pačių dalyvių pasikartojimo skirtinguose tyrimuose bendras unikalus tiriamųjų skaičius nebuvo skaičiuotas.

Rezultatai. Naujausios apžvalgos rodo, kad po FA programų PIN rodikliai dažniausiai sumažėja, tačiau efektų dydžiai ir tyrimų rezultatai skiriasi, o metaanalizėse dažnai fiksuojamas didelis heterogeniškumas. Daugiakomponentės intervencijos, derinančios FA su psichologinėmis ar elgesio keitimo priemonėmis, vertinamos kaip labiausiai perspektyvios [5, 6, 7]. Iš vieno komponento intervencijų išsiskiria organizuotas sportas, o kūną ir protą jungiantys pratimai kai kuriuose tyrimuose rodo panašų arba didesnę poveikį PIN sąlygotiems simptomams mažinti [1, 5, 6, 8, 9]. Atsitiktinių imčių tyrimuose nustatytas PIN balų sumažėjimas, o viename tyrime – ir slopinamosios kontrolės pagerėjimas po aerobinio fizinio aktyvumo programų [1,2].

Išvados. Paaugliams ir jauniems suaugusiesiems FA yra perspektyvi PIN žalos mažinimo priemonė, ypač integruojant daugiakomponentes psichologines ir elgesio intervencijas. Atsižvelgiant į didelį heterogeniškumą, metodologinius skirtumus ir selektyvią atranką, išvados taikytinos atsargiai; tikėtina, kad efektų dydžiai ir optimalūs parametrai skiriasi pagal populiaciją, pradinį rizikos lygį ir intervencijos kontekstą.

Praktinė reikšmė. Remiantis turimais duomenimis, orientacinės FA gairės PIN žalai mažinti galėtų būti tokios: dažnis 3–5 kartai per savaitę, vienos sesijos trukmė 30–60 min., intensyvumas vidutinio arba didesnio krūvio, programos trukmė 8–12 savaičių; daugumoje tyrimų taikyta aerobinė arba mišri veikla. Tolesniems tyrimams ir praktikai svarbu integruoti fizinio aktyvumo programas į ugdymo ir studijų aplinkas bei derinti jas su psichologinėmis intervencijomis [1, 2, 5–10].

Raktažodžiai: probleminis interneto naudojimas; fizinis aktyvumas; paaugliai; jauni suaugusieji; slopinamoji kontrolė.

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