発表成果報告書

国際学術交流助成金に採択された方は，学会参加後１か月以内（ただし，助成決定時にすでに発表済みの場合は通知から１か月以内）に以下の資料をご提出ください。

① 発表成果報告書（本様式），②発表抄録（英文），③発表実績（ポスターやスライド等の写し）

【発表概要】（400 字程度）

本研究の目的は，日本国内の高校生を対象に CBT に基づく薬物乱用防止教室の効果検証を行うことであった。効果検証においては，高校生の対人依存傾向に着目し，仲間関係であるピアの影響性の心理教育を行う介入と誘いを受けた際の具体的な断り方に焦点を当てた介入の２つの介入の比較を行なった。また，これらの介入の効果性の違いについて，物質使用リスクとなるパーソナリティ傾向との関連について記述的な検討を行なった。本研究の結果，薬物に関する知識，有害性・危険性について時期の主効果が確認され（p<.05），いずれの介入も薬物乱用への態度の改善が確認された。断る自信の変化やパーソナリティ傾向による介入効果の差異は確認されなかった。なお，２つの介入ともに心理的ストレス反応の増加が確認され（p<.05），薬物の危険性を伝える教育そのものがストレッサーとして作用した可能性が示唆された。

【参加体験記】（800 字程度）

アメリカ合衆国のサンフランシスコで開催された 11th World Confederation of Cognitive and Behavioural Therapies Congress にて，『Effects of CBT-Based Drug Abuse Prevention Classes on High School Students' Attitudes Toward Drug Abuse and Stress Responses: A Focus on Individual Differences in Substance Use Risk』の研究発表を行なった。国際学会への参加は初めての機会であり，自身の研究領域やそれらに関連する分野の国外の知見を得ることは自身の研究活動において貴重な経験となった。また，世界各国の研究者が集まる学会ならではの多様な視点や研究手法に触れることができ，ポスター発表を通じたディスカッションでは，自身の研究を客観的に捉え直す良い機会となった。

発表内容は覚醒剤や大麻など違法薬物の内容に触れるものであったため，ポスター発表では日本の薬物に関する法律についての質問や，日本で現在問題視されている事柄に関する質問が寄せられた。質疑応答場面では思うようにコミュニケーションをとることのできない場面があったが，翻訳ツール等を使用することでコミュニケーションをとることができた。この体験を通して，より国際的な視点から物事を考える重要性を実感するとともに自身の知識量の乏しさを痛感した。

本学会での発表および交流を通して，言語の面など至らない部分はあったものの，工夫しながら他の研究者とコミュニケーションとることができ，充実した時間を過ごすことができた。今回の成果発表で得られた経験や学びを今後の研究活動や学会発表に積極的に生かしていきたいと感じ，また，今後は自身の視野を広げるためにも海外の研究から知見を得て，学会参加時は積極的にコミュニケーションをとるなど，より能動的に活動していくことの重要性を再認識した。

Title: Effects of CBT-Based Drug Abuse Prevention Classes on High School Students' Attitudes Toward Drug Abuse and Stress Responses: A Focus on Individual Differences in Substance Use Risk

Abstract Body:

Introduction: Since 2016, psychiatric facilities nationwide have reported a steady increase in the abuse of over-the-counter medications among adolescent patients receiving treatment for substance dependence (Matsumoto et al., 2020). Sinha (2007) revealed that the risk of relapse in substance dependence increases with elevated levels of behavioral distress. Consequently, substance-abuse prevention classes grounded in cognitive-behavioral therapy (CBT) are considered effective forms of stress management. Furthermore, peer relationships, such as modeling popular or high-status peers, underlie substance abuse among young people (Angela et al., 2019). Therefore, this study compared the effects of two types of psychoeducational approaches in CBT-based drug abuse prevention classes for high school students. One approach focused on peer influence, whereas the other focused on personal refusal strategies when confronted with drug offers. Additionally, personality factors associated with drug use risk were examined to describe the differences in the influence of two types of psychoeducational approaches.

Method: A total of 162 high school students were randomly assigned to either a peer-focused group (n = 82) or an individual-focused group (n = 80). The participants in the peer-focused group received psychoeducation on the risks of modeling behaviors within peer relationships. In contrast, those in the individual-focused group received psychoeducation on personal refusal strategies for drug use solicitations. All participants completed self-report questionnaires pre and post of the intervention. The questionnaires included the Tri-Axial Coping Scale (Kamimura et al., 1995), the Stress Response Scale-18 (Suzuki et al., 1997), and the Substance Use Risk Profile Scale-Japanese version (Omiya et al., 2015). Confidence in refusing drug offers was measured using a Visual Analog Scale. Furthermore, participants were asked to rate their “awareness” and “perceived harmfulness/risk” of five drugs using a five-point Likert scale. This study was approved (2023-026) by the Research Ethics Review Committee of the Kitasato University School of Medicine and Health Sciences.

Results: A two-way analysis of variance (ANOVA) with time (pre, post) × group (peer, individual) as independent variables revealed significant main effects of time on psychological stress responses (depression/anxiety), knowledge about drugs, and perceived harmfulness/risk of drugs. However, no significant difference was observed in the confidence to refuse drug offers between the two groups. Additionally, cluster analysis was performed to examine individual factors related to the effectiveness of drug-abuse prevention classes; however, no significant differences were identified.

Discussion: In this study, participation in drug-abuse prevention classes was associated with increased levels of psychological stress responses, such as depression and anxiety, suggesting that the content conveying the dangers of drugs may have functioned as a stressor. Furthermore, because no significant differences were observed in analyses focusing on

individual factors, it is necessary to further examine interventions tailored to various risks in the future.

Effects of CBT-Based Drug Abuse Prevention Classes on High School Students' Attitudes Toward Drug Abuse and Stress Responses: A Focus on Individual Differences in Substance Use Risk

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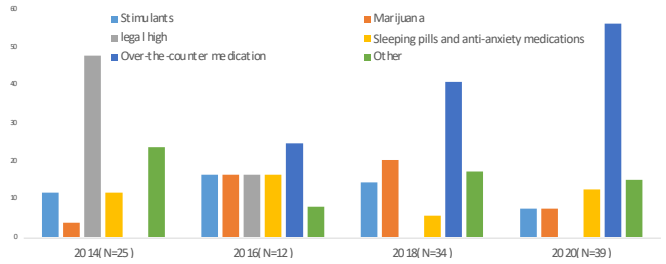
Introduction

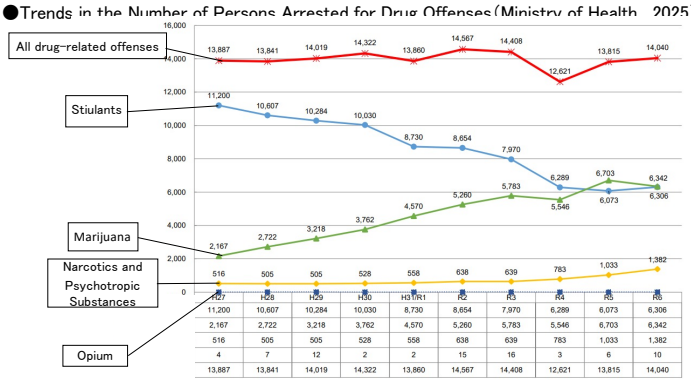
- Since 2016, psychiatric facilities nationwide have reported a steady increase in the abuse of over-the-counter medications among adolescent patients receiving treatment for substancedependence (Matsumoto et al., 2020).



- Sinha (2007) revealed that the risk of relapse in substance dependence increases with elevated levels of behavioral distress.

⇒ Therefore, based on CBT and taking into account **stress management** perspectives, drug abuse prevention classes are considered to be effective.

- Furthermore, **peer relationships**, such as modeling popular or high-status peers, underlie substance abuse among young people (Angela et al., 2019).
- Trends in the Number of Persons Arrested for Drug Offenses (Ministry of Health 2025)



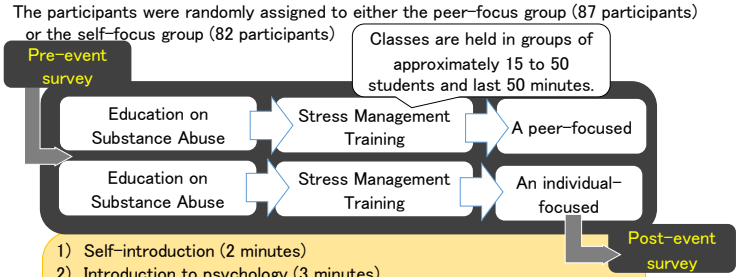
	H27	H28	H29	H30	H31/R1	R2	R3	R4	R5	R6
All drug-related offenses	13,887	13,841	14,019	14,322	13,860	14,567	14,408	12,621	13,815	14,040
Stiulants	11,200	10,607	10,284	10,030	8,730	8,654	7,970	6,289	6,073	6,306
Marijuana	2,167	2,722	3,218	3,762	4,570	5,260	5,783	5,546	6,703	6,342
Narcotics and Psychotropic Substances	516	505	505	528	558	638	639	783	1,033	1,382
Opium	4	7	12	2	2	15	16	3	6	10

Therefore, **this study compared the effects of two types of psychoeducational approaches in CBT-based drug abuse prevention classes for high school students.** One approach focused on **peer influence**, whereas the other focused on **personal refusal strategies** when confronted with drug offers. Additionally, personality factors associated with drug use risk were examined to describe the differences in the influence of two types of psychoeducational approaches.

Method

●Study Participants

169 high school students: 95 males, 72 females, and 2 others
Average age: 15.6 years, SD = ±0.48
The participants were randomly assigned to either the peer-focus group (87 participants) or the self-focus group (82 participants)



1) Self-introduction (2 minutes)
2) Introduction to psychology (3 minutes)
3) Teaching about substance abuse (15 minutes)
4) Stress management (15 minutes)
5) Paying attention to peer relationships (peer-focus group) (10 minutes)
6) How to decline invitations (self-focus group) (10 minutes)
7) Summary and request for participation in the survey (5 minutes)

● Measures

- The questionnaires included the Tri-Axial Coping Scale (Kamimura et al., 1995)
- The Stress Response Scale-18 (Suzuki et al., 1997)
- Substance Use Risk Profile Scale-Japanese version (Omiya et al., 2015).
- Confidence in refusing drug offers was measured using a Visual Analog Scale.

Furthermore, participants were asked to rate their "awareness" and "perceived harmfulness/risk" of five drugs using a five-point Likert scale.)

●Ethical considerations

This study was approved (2023-026) by the Research Ethics Review Committee of the Kitasato University School of Medicine and Health Sciences.

This presentation was supported by the International Academic Exchange Grant of the Japanese Association of Behavioral and Cognitive Therapies.

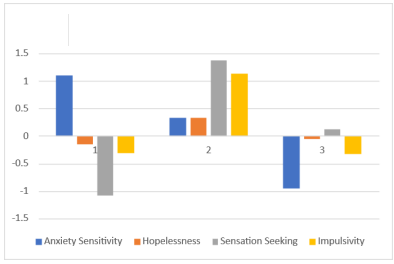
Result

We conducted a two-way analysis of variance (ANOVA) using "time (pre, post)" × "group (the peer-focus group, the self-focus group)" as independent variables.

			peer-focus group (n=82)			self-focus group (n=87)			main effect (group) F	main effect (time) F	interaction effect F
			pre	post	pre-post within d	pre	post	pre-post within d			
SRS	Depression and Anxiety	Mean (SD)	3.89 (4.25)	4.90 (4.97)	−0.22	3.88 (3.84)	4.26 (4.54)	−0.09	0.26	6.84*	1.36
	Bad mood and Anger	Mean (SD)	2.68 (3.19)	3.35 (3.90)	−0.19	3.03 (3.47)	3.14 (3.42)	−0.03	0.02	2.22	1.13
	Lethargy	Mean (SD)	4.67 (4.16)	5.18 (4.61)	−0.12	4.86 (4.35)	4.99 (4.40)	−0.03	0	1.42	0.52
	Total	Mean (SD)	11.24 (10.32)	13.44 (12.43)	−0.19	11.76 (10.64)	12.39 (11.11)	−0.06	0.03	4.33**	1.34
Awareness	Stimulants	Mean (SD)	3.46 (0.61)	3.60 (0.58)	−0.24	3.46 (0.73)	3.60 (0.65)	−0.20	0.0001	7.59*	0.0012
	Marijuana	Mean (SD)	3.49 (0.63)	3.60 (0.58)	−0.18	3.44 (0.73)	3.60 (0.65)	−0.23	0.07	6.97*	0.26
	Legal high	Mean (SD)	3.29 (0.75)	3.38 (0.73)	−0.12	3.26 (0.82)	3.45 (0.71)	−0.25	0.04	5.45**	0.76
	Sleeping pills and anti-anxiety medications	Mean (SD)	3.02 (0.82)	3.26 (0.73)	−0.31	2.91 (0.87)	3.31 (0.72)	−0.50	0.07	20.23*	1.44
	Over-the-counter medication	Mean (SD)	2.93 (0.83)	3.46 (0.65)	−0.71	2.9 (0.89)	3.48 (0.66)	−0.74	0.0061	62.57*	0.07
Hazards and Risks	Stimulants	Mean (SD)	3.57 (0.59)	3.70 (0.56)	−0.23	3.41 (0.71)	3.65 (0.60)	−0.36	1.50	14.12*	1.46
	Marijuana	Mean (SD)	3.56 (0.59)	3.70 (0.56)	−0.24	3.4 (0.69)	3.65 (0.57)	−0.40	1.57	16.37*	1.49
	Legal high	Mean (SD)	3.44 (0.70)	3.48 (0.72)	−0.06	3.21 (0.81)	3.5 (0.71)	−0.38	0.94	10.11**	6.06*
	Sleeping pills and anti-anxiety medications	Mean (SD)	3.04 (0.87)	3.38 (0.66)	−0.44	2.85 (0.89)	3.35 (0.73)	−0.61	1.09	36.28**	1.29
	Over-the-counter medication	Mean (SD)	2.80 (0.85)	3.43 (0.67)	−0.82	2.7 (0.88)	3.43 (0.71)	−0.91	0.31	78.77**	0.46
confidence to refuse drug offers		Mean (SD)	81.17 (33.62)	86.76 (29.10)	−0.18	91.51 (18.97)	92.78 (18.44)	−0.07	5.58*	2.53	1.01

Significant main effects of time were observed regarding **psychological stress responses** (depression and anxiety), **knowledge about drugs**, and **awareness of the harmfulness and risks of drugs.**

●Cluster



●Confidence

		peer-focus group (n=82)			self-focus group (n=87)			main effect (group) F	main effect (time) F	interaction effect F
		pre	post	pre-post within d	pre	post	pre-post within d			
CL1	Mean (SD)	89.31 (23.12)	93.42 (14.02)	-0.21	90.59 (20.63)	92.70 (19.22)	-0.11	0.0033	2.17	0.22
CL2	Mean (SD)	76.63 (37.71)	73.63 (40.60)	0.08	89.68 (16.23)	92.37 (16.28)	-0.17	3.98	0.0007	0.24
CL3	Mean (SD)	77.7 (37.32)	87.68 (29.95)	-0.29	93.26 (19.42)	93.06 (19.44)	0.01	3.61	1.87	2.03

Cluster 1 (53 participants; hereinafter CL1) was a group with high "anxiety sensitivity" and low "stimulus seeking"; Cluster 2 (35 participants; hereinafter CL2) was a group with high "stimulus seeking" and "impulsivity"; and Cluster 3 (74 participants; hereinafter CL3) was a group with low "anxiety sensitivity."

Based on these results, it was revealed that high school students' personalities can be broadly classified into three main types: (1) **those who are prone to anxiety and prefer calm environments**; (2) **those who prefer stimulating environments and exhibit high impulsivity**; and (3) **those who are not easily anxious.**

We performed a cluster analysis to identify individual factors, but no significant differences were found.

Discussion

● The Effects of Stress Management Education on Over-the-Counter Medication Abuse

While participants' knowledge of over-the-counter medication abuse increased and their stress coping improved, their stress responses actually increased.

→ Although the results were largely as intended, it is possible that the content conveying the dangers of medication acted as a stressor; therefore, adjustments such as changing the timing of measurements are considered necessary.

●Results of the Peer-Focused Psychological Education Program

While it boosted participants' confidence in saying "no," no significant differences were observed compared to the control group.

→ The results of this study suggest that a peer-focused approach is not necessarily effective.However, since both groups scored highly, it is possible that a ceiling effect occurred.

In this study, participation in drug-abuse prevention classes was associated with increased levels of psychological stress responses, such as depression and anxiety, **suggesting that the content conveying the dangers of drugs may have functioned as a stressor.** Furthermore, because no significant differences were observed in analyses focusing on individual factors, it is necessary **to further examine interventions tailored to various risks in the future.**

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