健康福祉学専攻(博士後期課程) 英語試験問題(8枚の1)

共通問題(全員が解答用紙の所定欄に解答しなさい)

共通問題 以下は、ある研究論文の英文抄録である。これを読んで、設問1~設問4に答えなさい。

During the Coronavirus Disease 2019 (COVID-19) epidemic, many health professionals used social media to promote preventative health behaviors. We conducted a randomized controlled trial of the effect of a Facebook advertising campaign consisting of short videos recorded by doctors and nurses to encourage users to stay at home for the Thanksgiving and Christmas holidays. We randomly assigned counties to high intensity (n = 410 (386) at Thanksgiving (Christmas)) or low intensity (n = 410 (381)). (A) The intervention was delivered to a large fraction of Facebook subscribers in 75% and 25% of randomly assigned zip codes in high- and low-intensity counties, respectively. In total, 6,998 (6,716) zip codes were included, and 11,954,109 (23,302,290) users were reached at Thanksgiving (Christmas). The first two primary outcomes were (B) holiday travel and fraction leaving home, both measured using mobile phone location data of Facebook users. Average distance traveled in high-intensity counties decreased by -0.993 percentage points (95% confidence interval (CI): -1.616, -0.371; P = 0.002) for the 3 days before each holiday compared to low-intensity counties. The fraction of people who left home on the holiday was not significantly affected (adjusted difference: 0.030; 95% CI: -0.361, 0.420; P = 0.881). The third primary outcome was (C) COVID-19 infections recorded at the zip code level in the 2-week period starting 5 days after the holiday. Infections declined by 3.5% (adjusted 95% CI: -6.2%, -0.7%; P = 0.013) in intervention compared to control zip codes. Social media messages recorded by health professionals before the winter holidays in the United States led to a significant reduction in holiday travel and subsequent COVID-19 infections.

出典: Breza E, et al. Effects of a large-scale social media advertising campaign on holiday travel and COVID-19 infections: a cluster randomized controlled trial. Nature Medicine 27:1622-1628, 2021. より抜粋、一部改変.

- 設問1 下線部 (A) The intervention が本研究において意味する内容を日本語で説明しなさい。
- 設問2 下線部 (B) holiday travel に関する本研究の結果について日本語で説明しなさい。
- 設問3 下線部 (C) COVID-19 infections に関する本研究の結果について日本語で説明しなさい。
- 設問4 本研究の結論に相当する一文を日本語に訳しなさい。

健康福祉学専攻(博士後期課程) 英語試験問題(8枚の2)

選択問題(選択問題1~選択問題3の中から一つを選択し、解答用紙の所定欄に解答しなさい)

選択問題1 以下の英文を読んで、設問1~設問4に答えなさい。

Artificial intelligence (AI) is evolving and will transform healthcare. (A) Given the potential of this technology for patient care and its impact on clinical providers, it is essential for nurses to have a basic understanding of AI concepts. This article examines the technology and the role of nurses in incorporating it into the healthcare setting.

(途中省略)

(B) AI is defined as the theory and development of computer systems able to complete tasks that typically require human intelligence, such as visual perception, speech recognition, decision-making, and/or language translation. Simply put, it is the ability of a machine to emulate intelligent human behavior and represents an umbrella term for machine learning (ML), computer vision, and natural language processing (NLP) technologies. Each of these can be used individually or in combination to add intelligence to applications.

(途中省略)

Nurses should understand how AI is utilized in patient care. Some transformational uses of the technology include accelerating innovation, improving decision-making, automating and speeding up processes, and saving overall costs. In healthcare, AI is seen as a potential solution for handling massive increases in complex medical data, but (C) only 15% to 20% of end users are using it to drive changes in the delivery of patient care.

(途中省略)

AI is already present in healthcare. It can be utilized in clinical decision support, disease management, patient engagement, and operational improvements. By 2020, most organizations will use it, as this technology continues to be made readily available for everyone. That said, (D) healthcare organizations may be faced with several challenges as they begin to deploy AI.

出典: McGrow K. Artificial intelligence: Essentials for nursing. Nursing 49(9):46-49, 2019. より抜粋、一部改変.

設問1 下線部 (A) を日本語に訳しなさい。

設問2 下線部 (B) を日本語に訳しなさい。

設問3 下線部 (C) を、it の指す内容を含めて、日本語に訳しなさい。

設問4 下線部 (D) を日本語に訳しなさい。

健康福祉学専攻(博士後期課程) 英語試験問題(8枚の3)

選択問題2 以下の英文を読んで、設問1~設問4に答えなさい。

(A) Weiss described 'alienation' as the difficult situation that human beings living in the present age fall into. According to Weiss, the modern men and women fall into an identity crisis and a state of confusion, and they had to live with 'alienation' and friendlessness, plus insignificance and nothingness. Therefore, it was demanded that the modern social workers coped with this clients' situation, especially 'alienation.' Weiss considered the cause of the 'alienation' to be the mode of the modern society itself. "Man is numbered, counted and classified for his placement in the producer-consumer economy of the modern society." In other words, modern men and women lived in the socalled (B) 'I—it' relationship. That was when 'alienation' was often seen in the clients.

Martin Buber said there were two ways for the human to be; the one was expressed by the basic term 'I-it.' (C) This term represented namely 'the world as an object of experience.' It was "the world that is filled up with a non-personal thing, and the objective world that cause and effect inevitably rules." People considered "the world and others surrounding them by a theoretical observational manner to be an object, and remove the personal relationship from them." (D) Weiss said that social workers could not correspond to the 'alienated' people as long as they depended only on traditional diagnostic clinical social work, because the traditional theories of social work understood clients objectively. Weiss thought 'an existential encounter' was necessary to help 'alienated' people. That is to say, they need to form closer relationship with others, namely social workers. They could live with others in a so called 'I-thou (I-you)' relationship. This is another basic term put forward by Buber, and it means that people live together with interactive mutual relations based on their own personalities.

出典: Hideyuki Tajima. Examination of the Philosophical Diversity of Existential Approaches in Social Work Practice. Japanese Journal of Social Welfare, 54 (5), 23–30 2014. より抜粋、一部改変.

設問1 下線部(A)を翻訳しなさい。

設問2 二重下線部(B)にある'I—it'relationship の含意を日本語で説明しなさい。

設問3 下線部(C)を翻訳しなさい。

設問4 下線部(D)を翻訳しなさい。

健康福祉学専攻(博士後期課程) 英語試験問題 (8枚の4)

選択問題 3 以下は、ある研究について説明した英文である。これを読んで、設問 1~設問 4 に答えなさい。なお、①~④のパラグラフは、この研究の Background and purpose、Methods、Results、Conclusionsのいずれかを示している。

- ① Epileptiform discharges (EDs) in intracerebral electroencephalography were reduced by Mozart's music. Listening to Haydn's music led to reduced EDs only in women; in men, the EDs increased. The acoustic analysis revealed that nondissonant music with a harmonic spectrum and decreasing tempo with significant high-frequency parts has a reducing effect on EDs in men. To reduce EDs in women, the music should additionally be gradually less dynamic in terms of loudness. Finally, we were able to demonstrate that these acoustic characteristics are more dominant in Mozart's music than in Haydn's music.
- ② We confirmed the reduction of intracerebral EDs while listening to classical music. (A) An analysis of the musical features revealed that the acoustic characteristics of music are responsible for suppressing brain epileptic activity. Based on our study, we suggest studying the use of musical pieces with well-defined acoustic properties as an alternative noninvasive method to reduce epileptic activity in patients with epilepsy.
- ③ We aimed to confirm the Mozart effect in epileptic patients using intracerebral electroencephalography recordings and the hypothesis that the reduction of EDs can be explained by the music's acoustic properties.
- ④ Eighteen epilepsy surgery candidates were implanted with depth electrodes in the temporal medial and lateral cortex. Patients listened to the first movement of Mozart's Sonata for Two Pianos K. 448 and to the first movement of Haydn's Symphony No. 94. Musical features from each composition with respect to rhythm, melody, and harmony were analyzed.

注: epileptiform discharges (EDs); (脳波での) てんかん性放電、intracerebral electroencephalography; 脳内脳波、nondissonant; 非不協和音、high-frequency; 高周波、 temporal medial and lateral cortex; (脳の) 側頭葉内側部および外側部皮質

出典: Štillová K, et al. Mozart effect in epilepsy: Why is Mozart better than Haydn? Acoustic qualities-based analysis of stereoelectroencephalography. Eur J Neurol 2021(28):1463-1469, 2021. より抜粋、一部改変.

設問 1 上記 4 つのパラグラフを Background and purpose、Methods、Results、Conclusions の順に並び替え、その順番を①~④で示しなさい。 (例 ; ④→③→②→①)

設問2 この研究で明らかにしたい仮説(研究目的)は何か。日本語で説明しなさい。

設問3 この研究の対象者(患者)に聴かせた2種類の楽章は何か。日本語で説明しなさい。

設問4 下線部 (A) を日本語に訳しなさい。

健康福祉学専攻(博士後期課程) 英語試験問題 解答用紙(8枚の5)

			受験番号	
0		0		©
共通問題(解答は左端より (共通問題は、全員が解答) 設問 1				
			小計	
設問 2				•
		·	小計	
設問3		•		
				<u> </u>
設問4		<i>4</i>	小計	
		· · · · · · · · · · · · · · · · · · ·		
			小計	
	小 合 計		総合計	1

健康福祉学専攻(博士後期課程) 英語試験問題 解答用紙(8枚の6)

		受験番号	
©	©		0
選択問題1(解答は左端より横書き (選択問題は、選択問題1~選択問題 設問1	くで記入すること) 夏3の中から一つを選択し、解答しなさ	V ')	
	,	小計	
設問 2			
÷n.ee o		小計	
設問 3			
		小計	
設問 4			
			•
		小計	
		小合計	

健康福祉学専攻(博士後期課程) 英語試験問題 解答用紙(8枚の7)

N.		受験番号	
©	©		0
選択問題2(解答は左端より横書 (選択問題は、選択問題1〜選択問 設問1	うきで記入すること) 問題3の中から一つを選択し、解答しなる	さい)	
	N. Control of the Con	e e	
			1
-n.ee o		小計	·
設問 2			
·			
設問 3		小計	
設問 4	· .	小計	
		小計	
		小合計	

健康福祉学専攻(博士後期課程) 英語試験問題 解答用紙(8枚の8)

		受験番号	
©	©	©	
選択問題3(解答は左端より横書き (選択問題は、選択問題1〜選択問題 設問1	で記入すること) 13の中から一つを選択し、解答しな る	えい)	
		小計	
設問 2			
		小計	
設問3	<u>.</u> .		
	·		
		小計	
設問 4			r
	,	小計	
	Γ	小合計	