INVESTIGATING UNDERGRADUATE STUDENTS' PERCEPTION ON SOCIAL DISTANCING AND INFLUENCING FACTORS: ASSOCIATION AND SENTIMENTAL ALANYSES

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INTRODUCTION

- The COVID-19 pandemic led to Korean government to enforce the social distancing policy as an effective prevention.
- Social distancing policy caused universities to transit to online class.
- Most undergraduate students had to face subsequent changes in their daily life such as the delay or cancellation of mid-term or final exam.
- The aim of this study was to assess the relationship between the perception on social distancing policy and its affected factors and to visualize COVID-19 social distancing-related discussion in Korea.

METHOD

- A survey was conducted in 2020 using an online platform (healthbit.com).
- The questionnaire comprised three parts: sociodemographic characteristics, participants' perception on social distancing, and five dimensions of daily life impacted by social distancing against COVID-19 pandemic.
- Data from 1276 undergraduate students were collected.
- Multivariate logistic regression was used to analyze the relationship between perception of social distancing and its affected factors.
  - The factors included gender, social network activities, exercise, access to health services, underlying diseases, and education.
- Word cloud and sentiment analyses were performed to visualize social distancing.

RESULTS

- The negative impact on social network activities was significantly related to answering that COVID-19 social distancing was not beneficial, feeling depressed/anxious, increased stress, and decreased quality of life.
- Females and negative changes in exercise patterns were also associated with feeling depressed/anxious.

Table 1. Association between perception on COVID-19 pandemic and social distance and its influencing factors

Variables (Influencing factors)	Descriptives	Answering that COVID-19 pandemic/social distance was not beneficial			Feeling depressed/anxious during pandemic over 5 week			Increased level of stress during pandemic over 5 week			Decreased level of quality of life during pandemic over 5 week		
		OR	95% C.I.	p	OR	95% C.I.	p	OR	95% C.I.	p	OR	95% C.I.	p
Gender, ref. Male													
Female	59.3%	1.124	0.749-1.687	0.5731	**1.668**	**1.110-2.506**	**0.0139**	0.779	0.521-1.164	0.2229	0.928	0.618-1.394	0.7185
Other	1.5%	0.545	0.124-2.401	0.4222	2.463	0.644-9.418	0.1877	1.511	0.352-6.480	0.5785	0.765	0.185-3.167	0.7118
Social network activities, ref. Neutral													
Positive	20.2%	0.672	0.382-1.183	0.1687	**0.498**	**0.278-0.894**	**0.0195**	**0.555**	**0.313-0.982**	**0.0433**	**0.461**	**0.252-0.842**	**0.0117**
Negative	45.7%	**1.948**	**1.254-3.027**	**0.0030**	1.478	0.955-2.286	0.0797	**1.619**	**1.051-2.496**	**0.0290**	**2.230**	**1.448-3.434**	**0.0003**
Exercise, ref. Neutral													
Positive	63.9%	0.640	0.358-1.142	0.1310	1.128	0.637-1.998	0.6802	0.964	0.545-1.706	0.9004	0.837	0.476-1.473	0.5366
Negative	22.0%	1.733	0.872-3.444	0.1167	**2.433**	**1.254-4.718**	**0.0085**	1.369	0.706-2.657	0.3524	**1.846**	**0.952-3.581**	**0.0697**
Access to health services, ref. Positive													
Negative	15.3%	1.130	0.657-1.945	0.6584	1.141	0.672-1.936	0.6260	1.066	0.635-1.790	0.8084	0.913	0.539-1.546	0.7352
Underlying diseases, ref. Yes[a)]													
No	24.1%	0.895	0.568-1.410	0.6316	0.916	0.589-1.424	0.6967	0.853	0.555-1.309	0.4658	0.983	0.635-1.522	0.9400
Education, ref. Yes[a)]													
No	89.2%	0.953	0.476-1.909	0.8916	0.591	0.301-1.158	0.1254	1.037	0.534-2.016	0.9139	1.090	0.541-2.195	0.8090

The bold indicates the significance of the result.

[a)] 'Yes' indicated that participants might be influenced in education by COVID-19 pandemic / social distancing.

- The results of word cloud and sentiment analyses were linked to majority of students perceiving social distancing negatively.

Figure 1. Word clouds showing the most frequently used words across open ended questions related to COVID-19 pandemic/social distancing

class
human
COVID19
crisis
online
thought
university
education
time
distancing
situation
government
stress
depression
society
importance
mask
isolation
infection
student
professor
experience
management
communication
enlargement
relationship
danger
necessity
effort
cope
life
family
social
understanding
progression
action
project
frustrated
deficiency
problem
daily
implement
benefit
learning
dimension
thank
freedom
part
help
symptom
safety
development
solution
spread
worry
place
world
work
job-seeking
normal
emotion
feedback
quarantine
improvement
variance
recommend
simplifier
work-out
increase
MVs
Korea
usage
go-out
discussion
including
entire
entertainment
hygiene
measure
administration
infectee
hearing
nearly
transportation
hospital
absolute
incident
emergency
medical
department
concentration
dormitory
restriction
test
enough
lethargy
investigation
necessary
dying
sleep
lethargic
pandemic
epidemic
mental
depressive
anxiety
stress
sleep
exercise
eat
drink
alcohol
smoking
drug
addiction
mental
health
psychiatric
psychiatry
pharmacy
sustainability
sustainable
sustain
sustainability
sustainable
sustain
sustainability
sustainable
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