libname a 'C:\Users\user\OneDrive\바탕 화면\논문조사\KYRBS\data'; /\*for new data\*/

libname b 'C:\Users\user\OneDrive\바탕 화면\논문조사\KYRBS\data'; /\*for new data\*/

/\*data preprocessing\*/

/\*columns extract\*/

**data** kyrbs2012; set a.kyrbs2012; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2013; set a.kyrbs2013; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2014; set a.kyrbs2014; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2015; set a.kyrbs2015; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2016; set a.kyrbs2016; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2017; set a.kyrbs2017; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2018; set a.kyrbs2018; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2019; set a.kyrbs2019; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2020; set a.kyrbs2020; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2021; set a.kyrbs2021; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

**data** kyrbs2022; set a.kyrbs2022; keep V\_TRT strata cluster w obs year ctype age sex ht wt ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad grade; **run**;

/\*total\*/

**data** kyrbs\_12\_22; set kyrbs2012 kyrbs2013 kyrbs2014 kyrbs2015 kyrbs2016 kyrbs2017 kyrbs2018 kyrbs2019 kyrbs2020 kyrbs2021 kyrbs2022; **run**;

/\*n=693,517\*/

/\*for checking\*/

**proc** **freq** data=kyrbs\_12\_22; table V\_TRT; **run**;

/\*checking missing data\*/

/\*continuous value about missing data\*/

**proc** **means** data=kyrbs\_12\_22 min max;

class sex;

var ht wt;

**run**;

/\*categorical value about missing data\*/

**proc** **freq** data=kyrbs\_12\_22; table ctype age sex ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad; **run**;

/\*age=3147, E\_EDU\_M=2, E\_EDU\_F=1, E\_SES(ecnomic)=3, E\_S\_RCRD(study)=2\*/

/\*residence\*/

**proc** **freq** data=b.kyrbs\_12\_22; table ctype; **run**;

**data** b.kyrbs\_12\_22; set kyrbs\_12\_22;

if ctype='대도시' then region=**1**;

else region=**2**; **run**;

**proc** **freq** data=b.kyrbs\_12\_22; table region; **run**;

/\*age\*/

**proc** **means** data=b.kyrbs\_12\_22 min max; var age; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if age in (**8888** **9999** **.**) then delete; **run**;

/\*n=693,517-->690,370\*/

**proc** **freq** data=b.kyrbs\_12\_22; table ctype age sex ac\_days tc\_lt e\_edu\_m e\_edu\_f e\_ses e\_s\_rcrd m\_sad; **run**;

/\*sex\*/

**proc** **freq** data=b.kyrbs\_12\_22; table sex; **run**;

/\*bmi\*/

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

h\_100=ht/**100**;

bmi=wt/(h\_100\*h\_100); **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

drop h\_100; **run**;

**proc** **means** data= b.kyrbs\_12\_22 min max; var bmi; **run**;

**proc** **sort** data= b.kyrbs\_12\_22; by bmi; **run**;

**proc** **means** data= b.kyrbs\_12\_22 p5 p95;

var bmi; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if **10**<=bmi< **16.4365549** then bmi\_g=**1**; \*underweight;

else if **16.4365549**<bmi<**24.524346347** then bmi\_g=**2**; \*normal;

else if **24.524346347**<=bmi<**27.6225028** then bmi\_g=**3**; \*overweight;

else if **27.6225028**<=bmi then bmi\_g=**4**; \*obese;

else bmi\_g=**0**; \*unknown;

**run**;

/\*drinking\*/

**proc** **freq** data=b.kyrbs\_12\_22; table AC\_DAYS; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if AC\_DAYS=**2** or AC\_DAYS=**3** then alcohol\_freq=**1**;

else if **4**<=AC\_DAYS<=**7** then alcohol\_freq=**2**;

else alcohol\_freq=**0**; **run**;

**proc** **freq** data=b.kyrbs\_12\_22; table alcohol\_freq; **run**;

/\*smoking\*/

**proc** **freq** data=b.kyrbs\_12\_22; table TC\_LT; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if TC\_LT=**1** then smoking =**0**;

else if TC\_LT=**2** then smoking=**1**;

**run**;

/\*economic status\*/

**proc** **freq** data=b.kyrbs\_12\_22; table e\_ses; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if e\_ses=**.** then delete; **run**;

**proc** **freq** data=b.kyrbs\_12\_22; table e\_ses; **run**;

/\*n=690,370-->690,367\*/

/\*academic\*/

**proc** **freq** data=b.kyrbs\_12\_22; table e\_s\_rcrd; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22; **run**;

/\*depression\*/

**proc** **freq** data=b.kyrbs\_12\_22; table m\_sad; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if m\_sad=**1** then depression=**0**;

else if m\_sad=**2** then depression=**1**;

**run**;

**proc** **freq** data=b.kyrbs\_12\_22; table depression; **run**;

/\*parents academic\*/

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if E\_EDU\_M=**1** or E\_EDU\_M=**2** then EDU\_M=**1**;

else if E\_EDU\_M=**3** then EDU\_M=**2**;

else EDU\_M=**0**;

**run**;

/\*unknown processing\*/

**proc** **freq** data=b.kyrbs\_12\_22; table EDU\_M; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if e\_edu\_f=**1** or e\_edu\_f=**2** then edu\_f=**1**;

else if e\_edu\_f=**3** then edu\_f=**2**;

else edu\_f=**0**;

**run**;

**proc** **freq** data=b.kyrbs\_12\_22; table edu\_f; **run**;

**proc** **freq** data=b.kyrbs\_12\_22; table EDU\_M edu\_f; **run**;

/\*parents academic setting using max\*/

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

PARENTS\_EDU=max(EDU\_M, edu\_f); **run**;

**proc** **freq** data=b.kyrbs\_12\_22; table PARENTS\_EDU; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

PARENTS\_EDU=max(EDU\_M, edu\_f); **run**;

/\*violence\*/

**proc** **freq** data=b.kyrbs\_12\_22; table V\_TRT; **run**;

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if V\_TRT=**1** then violence=**0**;

else violence=**1**;

**run**;

**proc** **freq** data=b.kyrbs\_12\_22; table violence; **run**;

/\*periods group 2012-2014 2015-2017 2018-2019 2020 2021 2022\*/

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if **2012**<=year<=**2014** then period=**1**;

else if **2015**<=year<=**2017** then period=**2**;

else if **2018**<=year<=**2019** then period=**3**;

else if **2020**=year then period=**4**;

else if **2021**=year then period=**5**;

else if **2022**=year then period=**6**; **run**;

/\*weight ratio\*/

**data** b.kyrbs\_12\_22; set b.kyrbs\_12\_22;

if period=**1** then do;

weight=w\*(**1**/**3**); end;

if period=**2** then do;

weight=w\*(**1**/**3**); end;

if period=**3** then do;

weight=w\*(**1**/**2**); end;

if period=**4** then do;

weight=w; end;

if period=**5** then do;

weight=w; end;

if period=**6** then do;

weight=w; end;

**run**;

/\*about pandemic\*/

**data** before\_pandemic; set b.kyrbs\_12\_22;

if period in (**1** **2** **3**) then output before\_pandemic; **run**;

**proc** **freq** data=before\_pandemic; table period; **run**;

**data** after\_pandemic ;set b.kyrbs\_12\_22;

if period in (**3** **4** **5** **6**) then output after\_pandemic; **run**;

**proc** **freq** data=after\_pandemic; table period; **run**;