data.groupby(['hS3\_age\_group'])['Q1ra\_is\_stressed'].mean().plot()

ods rtf file='Age\_group\_Stress\_ChiSquared';

proc freq data=srg\_data;

tables hS3\_age\_group\*Q1ra\_is\_stressed/ChiSq;

run;

ods rtf close

ODS RTF File = 'Stressed.rtf';

PROC FREQ DATA=srg\_data NLEVELS;

TABLE Q1rb\_Work\_too\_much\*Q1ra\_is\_stressed \*S2;

RUN;

ODS RTF CLOSE;

ODS RTF File = 'Work to much.rtf';

PROC FREQ DATA=srg\_data NLEVELS;

TABLE Q1rb\_Work\_too\_much\*Q1ra\_is\_stressed\*Q25 \*S2;

RUN;

ODS RTF CLOSE;

ODS RTF FILE = 'Snack Histogram.rtf';

PROC sgplot data=srg\_data;

histogram numofSnacks / scale = count binstart = 0 binwidth = 1 transparency=0.5 group =Q1ra\_is\_stressed;

density numofSnacks / type = normal;

title '# of Snacks Eaten last 24hrs Histogram';

run;

ODS RTF CLOSE;

mport matplotlib.pyplot as plt

import seaborn as sns

from matplotlib.ticker import PercentFormatter

dinner\_list = ['Plated\_entrée','Pasta','Pizza','Salad','Sandwich','Grilled\_Products','Meatloafs\_Roasts']

x, y, hue = "dinner\_with","prop","last\_remmbered\_dinner"

from matplotlib.pyplot import show

f, axes = plt.subplots(ncols=1, nrows=2,sharey=True,figsize=(30,30))

prop\_df = (data[hue]

.groupby(data[x])

.value\_counts(normalize=True)

.rename(y)

.reset\_index())

sns.barplot(x=x, y=y, hue=hue, data=prop\_df[prop\_df['last\_remmbered\_dinner'].isin(dinner\_list)], ax=axes[1])

data[data['dinner\_with'] == 'Children\_aged\_5\_12']['last\_remmbered\_dinner'].value\_counts(normalize=True)

data[data['dinner\_with'] == 'ate\_alone']['last\_remmbered\_dinner'].value\_counts(normalize=True)

data[ (data['dinner\_with'] == 'ate\_alone')]['last\_remmbered\_dinner'].value\_counts(normalize=True)

data[(data['hS3\_age\_group'].isin(['18-24','35-39'])) & (data['dinner\_with'] == 'ate\_alone') ]['last\_remmbered\_dinner'].value\_counts(normalize=True)

data['last\_remmbered\_dinner'].value\_counts(normalize=True)

data[(data['hS3\_age\_group'].isin(['18-24','35-39'])) & (data['dinner\_with'] == 'ate\_alone') ]['last\_remmbered\_dinner'].value\_counts(normalize=True)

print('Avg Cooking time overall :' ,data['total\_time\_spent\_cooking\_int'].mean())

print('Avg Cooking time for people who had dine with family with children:',data[data['dinner\_with'] == 'Significant\_other\_and\_children']['total\_time\_spent\_cooking\_int'].mean())

print('Avg Cooking time for people who had dine with family without children:',data[data['dinner\_with'] == 'Significant\_other']['total\_time\_spent\_cooking\_int'].mean())

def create\_y\_label(x):

profile\_1 = x['Q30rbb\_food\_price\_shopper'] + x['Q30ram\_prefer\_store\_brand'] + x['Q30rbm\_prefer\_taste\_to\_health']

profile\_2 = x['Q30rbc\_prefer\_quality']+x['Q30rae\_prefer\_natural\_product']+x['Q30rao\_calorie\_conscious']

if profile\_1 > profile\_2:

return "Tasty\_Pizza"

elif profile\_1 < profile\_2:

return "Healthy\_sandwich"

else:

return "Unsure"

data['choice'] = data.apply(lambda x: create\_y\_label(x),axis=1)

/\*

S2 - Gender

D6 - income group

S3 - age

\*/

ods rtf file='Choice Intention Generalized Logit regression';

proc logistic data=srg\_filtered\_data;

class S2(ref='Female') D6(ref='Less than $15,000') Q1ra\_is\_stressed /param = ref;

model choice(event='Tasty\_Pizza') = S2 D6 S3 Q1ra\_is\_stressed S3\*Q1ra\_is\_stressed / link=glogit;

run;

ods rtf close;

x, y, hue = "Gender","percentage","Price\_Sense"

from matplotlib.pyplot import show

f, axes = plt.subplots(ncols=1, nrows=2,sharey=True,figsize=(15,15))

prop\_df = (df5[hue]

.groupby(df5[x])

.value\_counts(normalize=True)

.rename(y)

.reset\_index())

sns.barplot(x=x, y=y, hue=hue, data=prop\_df, ax=axes[1])

x, y, hue = "Married","percentage","Price\_Sense"

from matplotlib.pyplot import show

f, axes = plt.subplots(ncols=1, nrows=2,sharey=True,figsize=(15,15))

prop\_df = (df5[hue]

.groupby(df5[x])

.value\_counts(normalize=True)

.rename(y)

.reset\_index())

sns.barplot(x=x, y=y, hue=hue, data=prop\_df, ax=axes[1])

x, y, hue = "Education","percentage","Price\_Sense"

from matplotlib.pyplot import show

f, axes = plt.subplots(ncols=1, nrows=2,sharey=True,figsize=(30,30))

prop\_df = (df5[hue]

.groupby(df5[x])

.value\_counts(normalize=True)

.rename(y)

.reset\_index())

sns.barplot(x=x, y=y, hue=hue, data=prop\_df, ax=axes[1])

x, y, hue = "Work","percentage","Price\_Sense"

from matplotlib.pyplot import show

f, axes = plt.subplots(ncols=1, nrows=2,sharey=True,figsize=(30,30))

prop\_df = (df5[hue]

.groupby(df5[x])

.value\_counts(normalize=True)

.rename(y)

.reset\_index())

sns.barplot(x=x, y=y, hue=hue, data=prop\_df, ax=axes[1])