Music & Mental Health Survey Results

In [ ]:
```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

load dataset

In [ ]:
```
data=pd.read_csv('mxmh_survey_results.csv')
```

In [3]:
```
data
```

Out[3]:

	Timestamp	Age	Primary streaming service	Hours per day	While working	Instrumentalist	Composer	Fav genre	Exploratory	Foreign languages	...	Frequency [R&B]	Frequency [Rap]	F
0	8/27/2022 19:29:02	18.0	Spotify	3.0	Yes	Yes	Yes	Latin	Yes	Yes	...	Sometimes	Very frequently	
1	8/27/2022 19:57:31	63.0	Pandora	1.5	Yes	No	No	Rock	Yes	No	...	Sometimes	Rarely	
2	8/27/2022 21:28:18	18.0	Spotify	4.0	No	No	No	Video game music	No	Yes	...	Never	Rarely	
3	8/27/2022 21:40:40	61.0	YouTube Music	2.5	Yes	No	Yes	Jazz	Yes	Yes	...	Sometimes	Never	
4	8/27/2022 21:54:47	18.0	Spotify	4.0	Yes	No	No	R&B	Yes	No	...	Very frequently	Very frequently	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
731	10/30/2022 14:37:28	17.0	Spotify	2.0	Yes	Yes	No	Rock	Yes	Yes	...	Never	Rarely	
732	11/1/2022 22:26:42	18.0	Spotify	1.0	Yes	Yes	No	Pop	Yes	Yes	...	Never	Never	S
733	11/3/2022 23:24:38	19.0	Other streaming service	6.0	Yes	No	Yes	Rap	Yes	No	...	Sometimes	Sometimes	
734	11/4/2022 17:31:47	19.0	Spotify	5.0	Yes	Yes	No	Classical	No	No	...	Never	Never	
735	11/9/2022 1:55:20	29.0	YouTube Music	2.0	Yes	No	No	Hip hop	Yes	Yes	...	Very frequently	Very frequently	

736 rows × 33 columns

In [15]:
```
data.shape
```

Out[15]:
```
(736, 33)
```

In [4]:
```
data.head()
```

Out[4]:

	Timestamp	Age	Primary streaming service	Hours per day	While working	Instrumentalist	Composer	Fav genre	Exploratory	Foreign languages	...	Frequency [R&B]	Frequency [Rap]	Frequ [R
0	8/27/2022 19:29:02	18.0	Spotify	3.0	Yes	Yes	Yes	Latin	Yes	Yes	...	Sometimes	Very frequently	N
1	8/27/2022 19:57:31	63.0	Pandora	1.5	Yes	No	No	Rock	Yes	No	...	Sometimes	Rarely	frequ
2	8/27/2022 21:28:18	18.0	Spotify	4.0	No	No	No	Video game music	No	Yes	...	Never	Rarely	R
3	8/27/2022 21:40:40	61.0	YouTube Music	2.5	Yes	No	Yes	Jazz	Yes	Yes	...	Sometimes	Never	N
4	8/27/2022 21:54:47	18.0	Spotify	4.0	Yes	No	No	R&B	Yes	No	...	Very frequently	Very frequently	N

5 rows × 33 columns

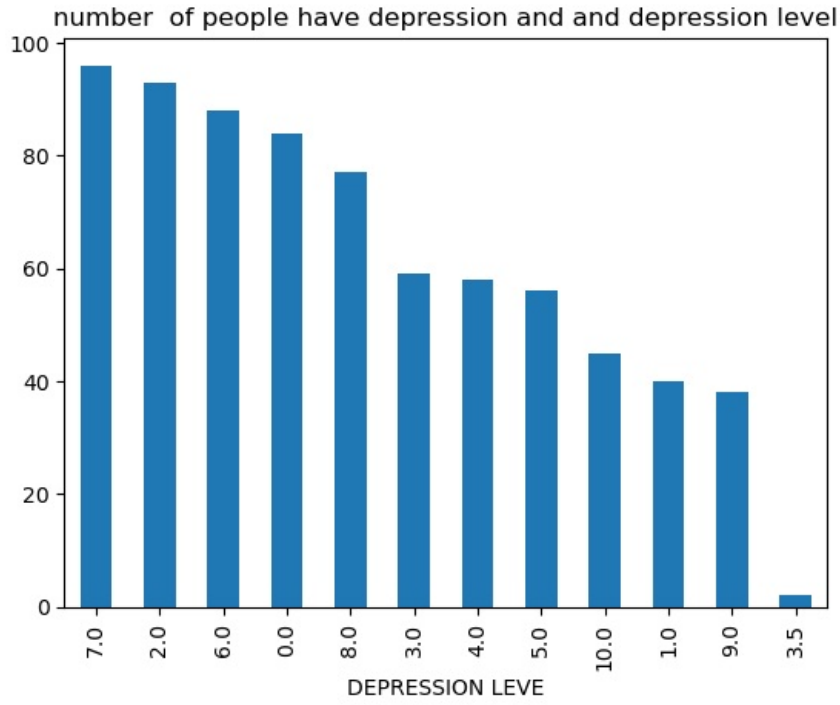
information about the dataset

In [13]:
```
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 736 entries, 0 to 735
Data columns (total 33 columns):
 #   Column                        Non-Null Count  Dtype
---  ------                        --------------  -----
 0   Timestamp                     736 non-null    object
 1   Age                           735 non-null    float64
 2   Primary streaming service     735 non-null    object
 3   Hours per day                 736 non-null    float64
 4   While working                 733 non-null    object
 5   Instrumentalist               732 non-null    object
 6   Composer                      735 non-null    object
 7   Fav genre                     736 non-null    object
 8   Exploratory                   736 non-null    object
 9   Foreign languages             732 non-null    object
 10  BPM                           629 non-null    float64
 11  Frequency [Classical]         736 non-null    object
 12  Frequency [Country]           736 non-null    object
 13  Frequency [EDM]               736 non-null    object
 14  Frequency [Folk]              736 non-null    object
 15  Frequency [Gospel]            736 non-null    object
 16  Frequency [Hip hop]           736 non-null    object
 17  Frequency [Jazz]              736 non-null    object
 18  Frequency [K pop]             736 non-null    object
 19  Frequency [Latin]             736 non-null    object
 20  Frequency [Lofi]              736 non-null    object
 21  Frequency [Metal]             736 non-null    object
 22  Frequency [Pop]               736 non-null    object
 23  Frequency [R&B]               736 non-null    object
 24  Frequency [Rap]               736 non-null    object
 25  Frequency [Rock]              736 non-null    object
 26  Frequency [Video game music]  736 non-null    object
 27  Anxiety                       736 non-null    float64
 28  Depression                    736 non-null    float64
 29  Insomnia                      736 non-null    float64
 30  OCD                           736 non-null    float64
 31  Music effects                 728 non-null    object
 32  Permissions                   736 non-null    object
dtypes: float64(7), object(26)
memory usage: 189.9+ KB
```

number of people have in depression and its level

In [6]:
```
plt.title("number  of people have depression and and depression level")
plt.xlabel("DEPRESSION LEVE")
data["Depression"].value_counts().plot(kind="bar");
```



if age is increase and also hours of listen a music is decreased.

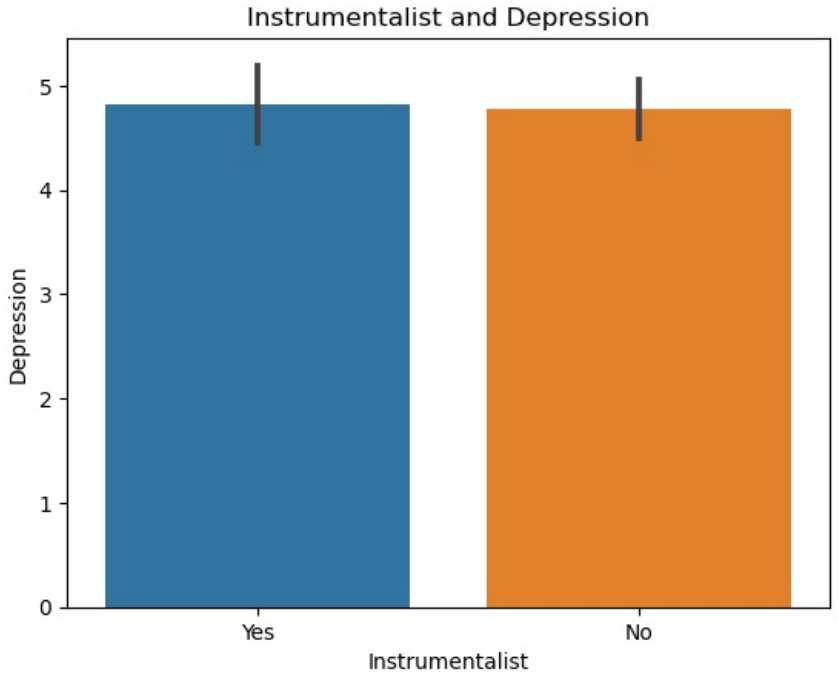
In [7]:
```
data.groupby("Age")["Hours per day"].mean()
```

Out[7]:
```
Age
10.0     2.000000
12.0     1.500000
13.0     3.687500
14.0     4.647059
15.0     3.857143
          ...
72.0     6.000000
73.0     3.000000
74.0     1.000000
80.0     3.000000
89.0    24.000000
Name: Hours per day, Length: 61, dtype: float64
```

Instruments has no changes makeing in depression

In [8]:
```
plt.title("Instrumentalist and Depression")
sns.barplot(x=data["Instrumentalist"],y=data["Depression"]);
```

Out[8]:
```
'Instruments has no changes makeing in depression .so instruments and depression has no co-realations'
```



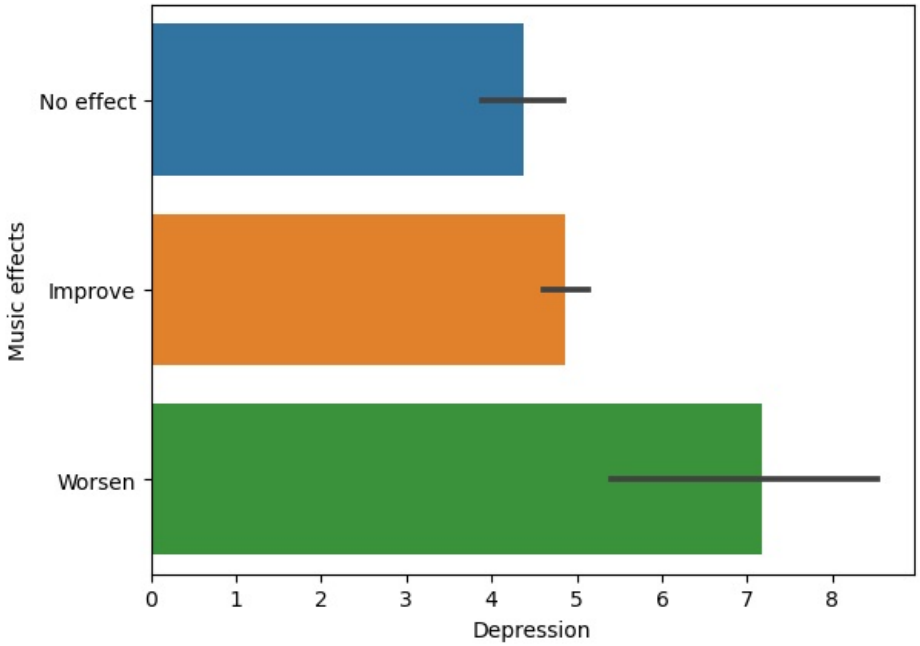
In [9]:
```
data[data["Instrumentalist"]=="Yes"]["Depression"]
```

Out[9]:
```
0      0.0
5      8.0
6      8.0
10     7.0
14     4.0
      ...
721    8.0
728    3.0
731    6.0
732    2.0
734    3.0
Name: Depression, Length: 235, dtype: float64
```

Music effects has to be change the depression level

In [10]:
```
sns.barplot(x=data["Depression"],y=data["Music effects"]);
```

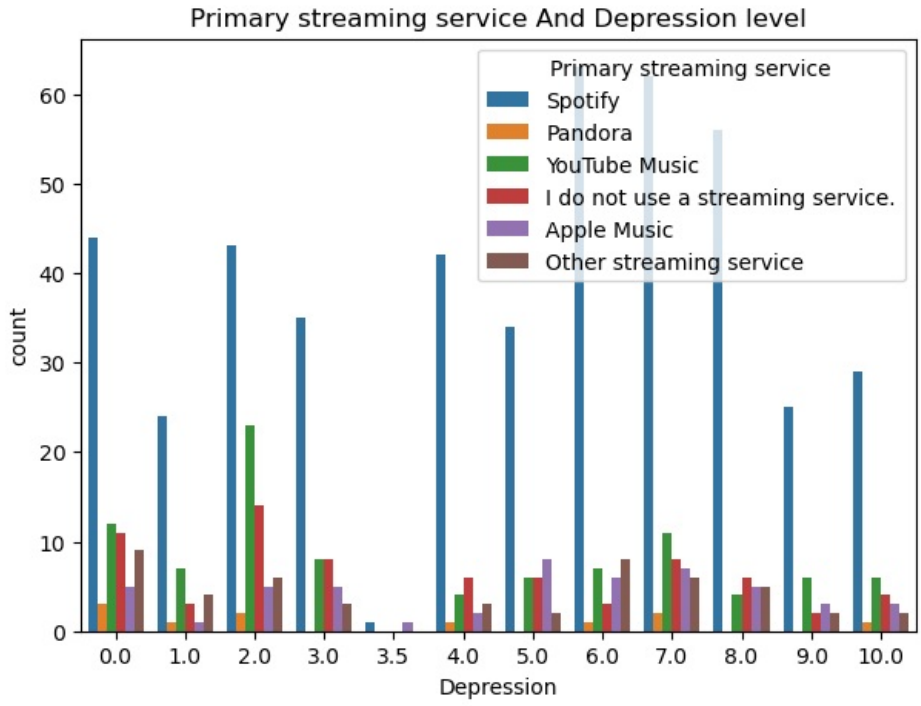
Out[10]:
```
'Music effects has to be change the depression levels its have corelation'
```



people have any depression time they are mosty listening music in spotify

In [11]:
```
plt.figure(figsize=(7,5))
plt.title("Primary streaming service And Depression level")
sns.countplot(x="Depression",hue="Primary streaming service",data=data);
```

Out[11]:
```
'people have any depression time they are mosty listening music in spotify even though non depression time also
'
```



summary:

- Music & Mental Health Survey data set have **(736, 33)** of rows and columns.
- people have in depresssion that time they listen **music**.
- Instrument has **no changes** in Mental health and depression .
- Music was **changes the depression** and **improve the mental health**.
- Primary streaming service of music most of them using **spotify** to change the mind set.

In [ ]: