

Matplotlib.pyplot & Seaborn library was used, by using python.

import matplotlib.pyplot as plt

import seaborn as sns

# Publication Ready graph 1

from turtle import title

sns.catplot(x='Age\_group', hue="Gender", kind="count",

            palette="bright", edgecolor=".10",

            data=df\_shi, order=['16-20','21-25','26-30','31-35','36-40','41-45'])

plt.title('Age groups by Gender')

plt.ylim(0,120)

plt.ylabel('Number of people')

# Publication Ready Graph-1 (Statistics)

n\_by\_state = df\_shi.groupby(["Age\_group",'Gender'])["Gender"].count()

stat\_1 = n\_by\_state.unstack()

stat\_1

count() function is used to count values and group by function is used to group our data by age and gender.

|  |  |  |
| --- | --- | --- |
| Gender | Female | Male |
| Age Group |  |  |
| 16-20 | 52 | 72 |
| 21-25 | 85 | 103 |
| 26-30 | 78 | 83 |
| 31-35 | 71 | 52 |
| 36-40 | 52 | 49 |
| 41-45 | 49 | 55 |

# Publication Ready graph 2

from turtle import title

sns.catplot(x='Education\_lvl',hue = 'Career', kind="count",

            palette="bright", edgecolor=".10",

            data=df\_shi,order=['School','College','University','Islamic Scholar'])

plt.title('Education level and Career Distribution')

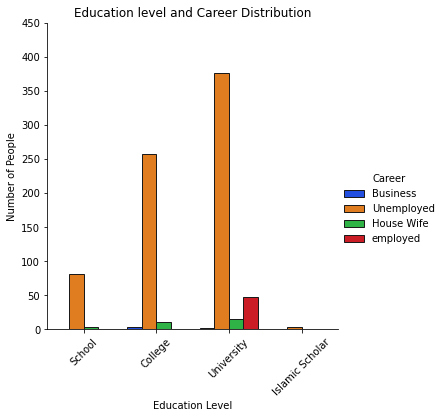
plt.ylim(0,450)

plt.xticks(rotation =45)

plt.ylabel('Number of People')

plt.xlabel('Education Level')

Matplotlib.pyplot & Seaborn library was used, by using python.



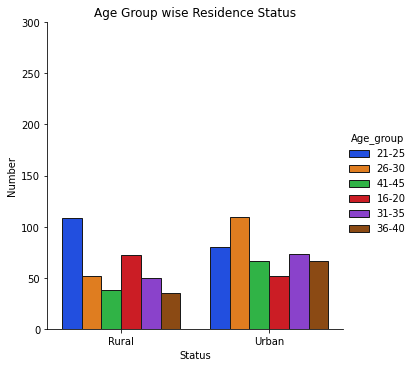
# Publication Ready Graph-2 (Statistics)

    n\_by\_state = df\_shi.groupby(["Education\_lvl",'Career'])["Career"].count()

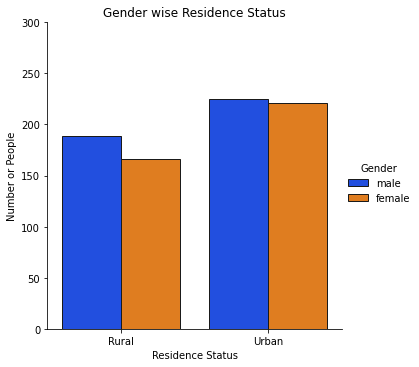
    n\_by\_state.unstack()

group by function is used to group our data into Education level and career, and then count values.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Career | Business | House Wife | Unemployed | Employed |
| Education Level |  |  |  |  |
| College | 3 | 11 | 257 | - |
| Islamic Scholar | - | 1 | 3 | - |
| School | - | 4 | 81 | - |
| University | 2 | 15 | 376 | 48 |



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Age Group | 16-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 |
| Residence Status |  |  |  |  |  |  |
| Rural | 72 | 108 | 52 | 50 | 35 | 38 |
| Urban | 52 | 80 | 109 | 73 | 66 | 66 |



# Publication Ready graph 4

from tkinter.font import BOLD

from tkinter.ttk import Style

from turtle import title

sns.catplot(x='Residence\_status', hue="Gender", kind="count",

            palette="bright", edgecolor=".10",

            data=df\_shi)

plt.title('Gender wise Residence Status')

plt.ylim(0,300)

plt.ylabel('Number or People')

plt.xlabel('Residence Status')

# Publication Ready Graph-4 (Statistics)

n\_by\_state = df\_shi.groupby(["Residence\_status",'Gender'])["Age\_group"].count()

n\_by\_state.unstack()

|  |  |  |
| --- | --- | --- |
| Gender | female | Male |
| Residence Status |  |  |
| Rural | 166 | 189 |
| Urban | 221 | 225 |

**Question Wise analysis**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Question | Agree | % age | Disagree | %age | Not Aware | %age |
| 1. Do you think adults are more likely to have amental illness? | 516 | 64.41 | 216 | 26.96 | 69 | 8.61 |
| 1. Some people relate Schizophrenia with spirituality, do you think it’s spiritual condition? | 267 | 33.33 | 417 | 52.05 | 117 | 14.60 |
| 1. Do you think a Schizophrenic patient can harm you? | 384 | 47.94 | 304 | 37.95 | 113 | 14.11 |
| 1. Do you think men are more susceptible to Schizophrenia? | 305 | 38.07 | 322 | 40.19 | 174 | 21.72 |
| 1. Do you think women are more susceptible to Schizophrenia? | 328 | 40.94 | 307 | 38.32 | 166 | 20.72 |
| 1. Can you judge a person by his/her physical appearance that he/she is suffering from Schizophrenia? | 280 | 34.95 | 361 | 45.06 | 160 | 19.97 |
| 1. Do you think schizophrenic patients are physically and emotionally calm? | 258 | 32.21 | 388 | 48.44 | 155 | 19.35 |
| 1. Do you think Schizophrenia is inherited or not? | 268 | 33.45 | 363 | 45.31 | 170 | 21.22 |
| 1. Hallucination, delusion & aggression are sign of Schizophrenia. | 382 | 47.69 | 221 | 27.59 | 198 | 24.72 |
| 1. Do you know any diagnostic test about Schizophrenia? | 264 | 32.95 | 314 | 39.20 | 223 | 27.84 |
| 1. Do you think Schizophrenia is cure-able? | 547 | 68.28 | 167 | 20.84 | 87 | 10.89 |
| 1. Do you think Medication is the best treatment for Schizophrenia? | 469 | 58.55 | 220 | 27.46 | 112 | 13.98 |
| 1. Does Schizophrenia can be healed with religious teachings? | 329 | 41.07 | 290 | 36.20 | 182 | 22.72 |
| 1. Should the society accept schizophrenic patient? | 554 | 69.16 | 183 | 22.84 | 64 | 7.99 |
| 1. Can you marry a person who is suffering from Schizophrenia? | 213 | 26.59 | 464 | 57.93 | 124 | 16.48 |
| 1. Is it true that people consider schizophrenic person as someone who is suffering from black magic? | 350 | 43.69 | 265 | 33.08 | 186 | 23.22 |
| 1. Is a schizophrenic patient burden on his/her family? | 264 | 32.95 | 451 | 56.30 | 86 | 10.73 |
| 1. Do you think schizophrenic patient can work & perform jobs as a normal individual? | 341 | 42.57 | 320 | 39.95 | 140 | 17.47 |
| 1. Do you feel embarrassed, if you have any Schizophrenic patient in your family? | 177 | 22.09 | 519 | 64.79 | 105 | 13.12 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| General Category | | | | | | |
| Question | **Agree** | **% age** | **Disagree** | **%age** | **Not Aware** | **%age** |
| 1. Do you think adults are more likely to have amental illness? | 516 | 64.41 | 216 | 26.96 | 69 | 8.61 |
| 1. Some people relate Schizophrenia with spirituality, do you think it’s spiritual condition? | 267 | 33.33 | 417 | 52.05 | 117 | 14.60 |
| 1. Do you think a Schizophrenic patient can harm you? | 384 | 47.94 | 304 | 37.95 | 113 | 14.11 |
| 1. Do you think men are more susceptible to Schizophrenia? | 305 | 38.07 | 322 | 40.19 | 174 | 21.72 |
| 1. Do you think women are more susceptible to Schizophrenia? | 328 | 40.94 | 307 | 38.32 | 166 | 20.72 |
| 1. Can you judge a person by his/her physical appearance that he/she is suffering from Schizophrenia? | 280 | 34.95 | 361 | 45.06 | 160 | 19.97 |
| 1. Do you think schizophrenic patients are physically and emotionally calm? | 258 | 32.21 | 388 | 48.44 | 155 | 19.35 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Medical Category | | | | | | |
| Question | **Agree** | **% age** | **Disagree** | **%age** | **Not Aware** | **%age** |
| 1. Do you think Schizophrenia is inherited or not? | 268 | 33.45 | 363 | 45.31 | 170 | 21.22 |
| 1. Hallucination, delusion & aggression are sign of Schizophrenia. | 382 | 47.69 | 221 | 27.59 | 198 | 24.72 |
| 1. Do you know any diagnostic test about Schizophrenia? | 264 | 32.95 | 314 | 39.20 | 223 | 27.84 |
| 1. Do you think Schizophrenia is cure-able? | 547 | 68.28 | 167 | 20.84 | 87 | 10.89 |
| 1. Do you think Medication is the best treatment for Schizophrenia? | 469 | 58.55 | 220 | 27.46 | 112 | 13.98 |
| 1. Does Schizophrenia can be healed with religious teachings? | 329 | 41.07 | 290 | 36.20 | 182 | 22.72 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Social Category | | | | | | |
| Question | **Agree** | **% age** | **Disagree** | **%age** | **Not Aware** | **%age** |
| 1. Should the society accept schizophrenic patient? | 554 | 69.16 | 183 | 22.84 | 64 | 7.99 |
| 1. Can you marry a person who is suffering from Schizophrenia? | 213 | 26.59 | 464 | 57.93 | 124 | 16.48 |
| 1. Is it true that people consider schizophrenic person as someone who is suffering from black magic? | 350 | 43.69 | 265 | 33.08 | 186 | 23.22 |
| 1. Is a schizophrenic patient burden on his/her family? | 264 | 32.95 | 451 | 56.30 | 86 | 10.73 |
| 1. Do you think schizophrenic patient can work & perform jobs as a normal individual? | 341 | 42.57 | 320 | 39.95 | 140 | 17.47 |
| 1. Do you feel embarrassed, if you have any Schizophrenic patient in your family? | 177 | 22.09 | 519 | 64.79 | 105 | 13.12 |

**Libraries:**

**Seaborn:**

Seaborn is a library for making statistical graphics in Python. It provides a high-level interface to matplotlib and integrates closely with pandas data structures. Functions in the seaborn library expose a declarative, dataset-oriented API that makes it easy to translate questions about data into graphics that can answer them

**Source:** [**https://joss.theoj.org/papers/10.21105/joss.03021**](https://joss.theoj.org/papers/10.21105/joss.03021)

**Pandas**

Pandas is a Python library for data analysis. Pandas is built on top of two core Python libraries—matplotlib for data visualization and NumPy for mathematical operations. Pandas acts as a wrapper over these libraries, allowing you to access many of matplotlib's and NumPy's methods with less code.

Source: <https://mode.com/python-tutorial/libraries/pandas/>

**Matplotlib: Visualization with python**

Matplotlib is a comprehensive library for creating static, animated, and interactive visualizations in Python. Matplotlib makes easy things easy and hard things possible.

* Create publication quality plots.
* Make interactive figures that can zoom, pan, update.
* Customize visual style and layout.
* Export to many file formats.
* Embed in JupyterLab and Graphical User Interfaces.
* Use a rich array of third-party packages built on Matplotlib.

**Source:** [**https://matplotlib.org/**](https://matplotlib.org/)

**Numpy**

NumPy is a Python library used for working with arrays. It also has functions for working in domain of linear algebra, fourier transform, and matrices. NumPy was created in 2005 by Travis Oliphant. It is an open source project and you can use it freely. NumPy stands for Numerical Python.

**Source:** [**https://www.w3schools.com/python/numpy/numpy\_intro.asp#:~:text=NumPy%20is%20a%20Python%20library,you%20can%20use%20it%20freely**](https://www.w3schools.com/python/numpy/numpy_intro.asp#:~:text=NumPy%20is%20a%20Python%20library,you%20can%20use%20it%20freely)**.**

|  |  |
| --- | --- |
| Gender | %age |
| Male | 51.68 |
| Female | 48.31 |

|  |  |
| --- | --- |
| Career | %age |
| Unemployed | 89.51 |
| Employed | 5.99 |
| House Wife | 3.8 |
| Business | 0.62 |

|  |  |
| --- | --- |
| Education Level | %age |
| University | 55.05 |
| College | 33.83 |
| School | 10.61 |
| Islamic Scholar | 0.49 |

|  |  |
| --- | --- |
| Residence Status | %age |
| Rural | 55.68 |
| Urban | 44.32 |

**Drill Down:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q1 | | | | | |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 2 | 0.25 | 9 | 1.12 | 41 | 5.12 |
|  | **male** | 12 | 1.50 | 23 | 2.87 | 37 | 4.62 |
| 21-25 | **female** | 4 | 0.50 | 21 | 2.62 | 60 | 7.49 |
|  | **male** | 8 | 1.00 | 20 | 2.50 | 75 | 9.36 |
| 26-30 | **female** | 6 | 0.75 | 28 | 3.50 | 44 | 5.49 |
|  | **male** | 7 | 0.87 | 32 | 4.00 | 44 | 5.49 |
| 31-35 | **female** | 7 | 0.87 | 22 | 2.75 | 42 | 5.24 |
|  | **male** | 6 | 0.75 | 9 | 1.12 | 37 | 4.62 |
| 36-40 | **female** | 4 | 0.50 | 14 | 1.75 | 34 | 4.24 |
|  | **male** | 7 | 0.87 | 18 | 2.25 | 24 | 3.00 |
| 41-45 | **female** | 2 | 0.25 | 9 | 1.12 | 38 | 4.74 |
|  | **male** | 4 | 0.50 | 11 | 1.37 | 40 | 4.99 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q2 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 7 | 0.87 | 26 | 3.25 | 19 | 2.37 |
|  | **male** | 10 | 1.25 | 41 | 5.12 | 21 | 2.62 |
| 21-25 | **female** | 15 | 1.87 | 45 | 5.62 | 25 | 3.12 |
|  | **male** | 12 | 1.50 | 59 | 7.37 | 32 | 4.00 |
| 26-30 | **female** | 11 | 1.37 | 38 | 4.74 | 29 | 3.62 |
|  | **male** | 14 | 1.75 | 46 | 5.74 | 23 | 2.87 |
| 31-35 | **female** | 8 | 1.00 | 33 | 4.12 | 30 | 3.75 |
|  | **male** | 7 | 0.87 | 24 | 3.00 | 21 | 2.62 |
| 36-40 | **female** | 12 | 1.50 | 25 | 3.12 | 15 | 1.87 |
|  | **male** | 7 | 0.87 | 26 | 3.25 | 16 | 2.00 |
| 41-45 | **female** | 6 | 0.75 | 31 | 3.87 | 12 | 1.50 |
|  | **male** | 8 | 1.00 | 23 | 2.87 | 24 | 3.00 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q3 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 7 | 0.87 | 22 | 2.75 | 23 | 2.87 |
|  | **male** | 6 | 0.75 | 15 | 1.87 | 51 | 6.37 |
| 21-25 | **female** | 15 | 1.87 | 32 | 4.00 | 38 | 4.74 |
|  | **male** | 17 | 2.12 | 38 | 4.74 | 48 | 5.99 |
| 26-30 | **female** | 10 | 1.25 | 24 | 3.00 | 44 | 5.49 |
|  | **male** | 7 | 0.87 | 38 | 4.74 | 38 | 4.74 |
| 31-35 | **female** | 18 | 2.25 | 28 | 3.50 | 25 | 3.12 |
|  | **male** | 11 | 1.37 | 17 | 2.12 | 24 | 3.00 |
| 36-40 | **female** | 8 | 1.00 | 26 | 3.25 | 18 | 2.25 |
|  | **male** | 7 | 0.87 | 19 | 2.37 | 23 | 2.87 |
| 41-45 | **female** | 3 | 0.37 | 25 | 3.12 | 21 | 2.62 |
|  | **male** | 4 | 0.50 | 20 | 2.50 | 31 | 3.87 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q4 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 12 | 1.50 | 17 | 2.12 | 23 | 2.87 |
|  | **male** | 21 | 2.62 | 23 | 2.87 | 28 | 3.50 |
| 21-25 | **female** | 25 | 3.12 | 36 | 4.49 | 24 | 3.00 |
|  | **male** | 13 | 1.62 | 34 | 4.24 | 56 | 6.99 |
| 26-30 | **female** | 17 | 2.12 | 37 | 4.62 | 24 | 3.00 |
|  | **male** | 17 | 2.12 | 31 | 3.87 | 35 | 4.37 |
| 31-35 | **female** | 19 | 2.37 | 28 | 3.50 | 24 | 3.00 |
|  | **male** | 9 | 1.12 | 21 | 2.62 | 22 | 2.75 |
| 36-40 | **female** | 11 | 1.37 | 25 | 3.12 | 16 | 2.00 |
|  | **male** | 12 | 1.50 | 21 | 2.62 | 16 | 2.00 |
| 41-45 | **female** | 8 | 1.00 | 20 | 2.50 | 21 | 2.62 |
|  | **male** | 10 | 1.25 | 29 | 3.62 | 16 | 2.00 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q5 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 11 | 1.37 | 21 | 2.62 | 20 | 2.50 |
|  | **male** | 19 | 2.37 | 34 | 4.24 | 19 | 2.37 |
| 21-25 | **female** | 19 | 2.37 | 22 | 2.75 | 44 | 5.49 |
|  | **male** | 12 | 1.50 | 47 | 5.87 | 44 | 5.49 |
| 26-30 | **female** | 17 | 2.12 | 33 | 4.12 | 28 | 3.50 |
|  | **male** | 17 | 2.12 | 32 | 4.00 | 34 | 4.24 |
| 31-35 | **female** | 21 | 2.62 | 26 | 3.25 | 24 | 3.00 |
|  | **male** | 10 | 1.25 | 18 | 2.25 | 24 | 3.00 |
| 36-40 | **female** | 12 | 1.50 | 22 | 2.75 | 18 | 2.25 |
|  | **male** | 11 | 1.37 | 23 | 2.87 | 15 | 1.87 |
| 41-45 | **female** | 8 | 1.00 | 15 | 1.87 | 26 | 3.25 |
|  | **male** | 9 | 1.12 | 14 | 1.75 | 32 | 4.00 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q6 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 3 | 0.37 | 27 | 3.37 | 22 | 2.75 |
|  | **male** | 6 | 0.75 | 31 | 3.87 | 35 | 4.37 |
| 21-25 | **female** | 8 | 1.00 | 36 | 4.49 | 41 | 5.12 |
|  | **male** | 12 | 1.50 | 53 | 6.62 | 38 | 4.74 |
| 26-30 | **female** | 24 | 3.00 | 31 | 3.87 | 23 | 2.87 |
|  | **male** | 28 | 3.50 | 33 | 4.12 | 22 | 2.75 |
| 31-35 | **female** | 24 | 3.00 | 30 | 3.75 | 17 | 2.12 |
|  | **male** | 10 | 1.25 | 25 | 3.12 | 17 | 2.12 |
| 36-40 | **female** | 9 | 1.12 | 23 | 2.87 | 20 | 2.50 |
|  | **male** | 14 | 1.75 | 20 | 2.50 | 15 | 1.87 |
| 41-45 | **female** | 10 | 1.25 | 27 | 3.37 | 12 | 1.50 |
|  | **male** | 12 | 1.50 | 25 | 3.12 | 18 | 2.25 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q7 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 4 | 0.50 | 28 | 3.50 | 20 | 2.50 |
|  | **male** | 15 | 1.87 | 40 | 4.99 | 17 | 2.12 |
| 21-25 | **female** | 11 | 1.37 | 52 | 6.49 | 22 | 2.75 |
|  | **male** | 12 | 1.50 | 42 | 5.24 | 49 | 6.12 |
| 26-30 | **female** | 15 | 1.87 | 36 | 4.49 | 27 | 3.37 |
|  | **male** | 25 | 3.12 | 43 | 5.37 | 15 | 1.87 |
| 31-35 | **female** | 20 | 2.50 | 24 | 3.00 | 27 | 3.37 |
|  | **male** | 11 | 1.37 | 20 | 2.50 | 21 | 2.62 |
| 36-40 | **female** | 9 | 1.12 | 29 | 3.62 | 14 | 1.75 |
|  | **male** | 7 | 0.87 | 25 | 3.12 | 17 | 2.12 |
| 41-45 | **female** | 12 | 1.50 | 20 | 2.50 | 17 | 2.12 |
|  | **male** | 14 | 1.75 | 29 | 3.62 | 12 | 1.50 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q8 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 13 | 1.62 | 21 | 2.62 | 18 | 2.25 |
|  | **male** | 18 | 2.25 | 42 | 5.24 | 11 | 1.37 |
| 21-25 | **female** | 20 | 2.50 | 37 | 4.62 | 28 | 3.50 |
|  | **male** | 15 | 1.87 | 43 | 5.37 | 45 | 5.62 |
| 26-30 | **female** | 21 | 2.62 | 35 | 4.37 | 22 | 2.75 |
|  | **male** | 20 | 2.50 | 28 | 3.50 | 35 | 4.37 |
| 31-35 | **female** | 21 | 2.62 | 27 | 3.37 | 23 | 2.87 |
|  | **male** | 10 | 1.25 | 22 | 2.75 | 20 | 2.50 |
| 36-40 | **female** | 7 | 0.87 | 27 | 3.37 | 18 | 2.25 |
|  | **male** | 10 | 1.25 | 23 | 2.87 | 16 | 2.00 |
| 41-45 | **female** | 6 | 0.75 | 22 | 2.75 | 21 | 2.62 |
|  | **male** | 8 | 1.00 | 36 | 4.49 | 11 | 1.37 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q9 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 18 | 2.25 | 11 | 1.37 | 23 | 2.87 |
|  | **male** | 23 | 2.87 | 19 | 2.37 | 30 | 3.75 |
| 21-25 | **female** | 20 | 2.50 | 23 | 2.87 | 42 | 5.24 |
|  | **male** | 17 | 2.12 | 33 | 4.12 | 53 | 6.62 |
| 26-30 | **female** | 20 | 2.50 | 10 | 1.25 | 48 | 5.99 |
|  | **male** | 32 | 4.00 | 20 | 2.50 | 31 | 3.87 |
| 31-35 | **female** | 10 | 1.25 | 18 | 2.25 | 43 | 5.37 |
|  | **male** | 7 | 0.87 | 19 | 2.37 | 26 | 3.25 |
| 36-40 | **female** | 16 | 2.00 | 17 | 2.12 | 19 | 2.37 |
|  | **male** | 13 | 1.62 | 12 | 1.50 | 24 | 3.00 |
| 41-45 | **female** | 12 | 1.50 | 15 | 1.87 | 22 | 2.75 |
|  | **male** | 10 | 1.25 | 24 | 3.00 | 21 | 2.62 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q10 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 7 | 0.87 | 21 | 2.62 | 24 | 3.00 |
|  | **male** | 20 | 2.50 | 36 | 4.49 | 16 | 2.00 |
| 21-25 | **female** | 26 | 3.25 | 38 | 4.74 | 21 | 2.62 |
|  | **male** | 29 | 3.62 | 25 | 3.12 | 49 | 6.12 |
| 26-30 | **female** | 25 | 3.12 | 24 | 3.00 | 29 | 3.62 |
|  | **male** | 27 | 3.37 | 38 | 4.74 | 18 | 2.25 |
| 31-35 | **female** | 21 | 2.62 | 31 | 3.87 | 19 | 2.37 |
|  | **male** | 15 | 1.87 | 19 | 2.37 | 18 | 2.25 |
| 36-40 | **female** | 14 | 1.75 | 24 | 3.00 | 14 | 1.75 |
|  | **male** | 17 | 2.12 | 13 | 1.62 | 19 | 2.37 |
| 41-45 | **female** | 7 | 0.87 | 25 | 3.12 | 17 | 2.12 |
|  | **male** | 15 | 1.87 | 20 | 2.50 | 20 | 2.50 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q11 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 6 | 0.75 | 15 | 1.87 | 31 | 3.87 |
|  | **male** | 12 | 1.50 | 16 | 2.00 | 44 | 5.49 |
| 21-25 | **female** | 14 | 1.75 | 25 | 3.12 | 46 | 5.74 |
|  | **male** | 10 | 1.25 | 21 | 2.62 | 72 | 8.99 |
| 26-30 | **female** | 12 | 1.50 | 16 | 2.00 | 50 | 6.24 |
|  | **male** | 3 | 0.37 | 15 | 1.87 | 65 | 8.11 |
| 31-35 | **female** | 6 | 0.75 | 18 | 2.25 | 47 | 5.87 |
|  | **male** | 3 | 0.37 | 9 | 1.12 | 40 | 4.99 |
| 36-40 | **female** | 7 | 0.87 | 6 | 0.75 | 39 | 4.87 |
|  | **male** | 6 | 0.75 | 10 | 1.25 | 33 | 4.12 |
| 41-45 | **female** | 3 | 0.37 | 4 | 0.50 | 42 | 5.24 |
|  | **male** | 5 | 0.62 | 12 | 1.50 | 38 | 4.74 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q12 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 4 | 0.50 | 12 | 1.50 | 36 | 4.49 |
|  | **male** | 13 | 1.62 | 24 | 3.00 | 35 | 4.37 |
| 21-25 | **female** | 22 | 2.75 | 21 | 2.62 | 42 | 5.24 |
|  | **male** | 11 | 1.37 | 46 | 5.74 | 46 | 5.74 |
| 26-30 | **female** | 7 | 0.87 | 22 | 2.75 | 49 | 6.12 |
|  | **male** | 11 | 1.37 | 18 | 2.25 | 54 | 6.74 |
| 31-35 | **female** | 9 | 1.12 | 15 | 1.87 | 47 | 5.87 |
|  | **male** | 6 | 0.75 | 15 | 1.87 | 31 | 3.87 |
| 36-40 | **female** | 7 | 0.87 | 10 | 1.25 | 35 | 4.37 |
|  | **male** | 5 | 0.62 | 12 | 1.50 | 32 | 4.00 |
| 41-45 | **female** | 6 | 0.75 | 11 | 1.37 | 32 | 4.00 |
|  | **male** | 11 | 1.37 | 14 | 1.75 | 30 | 3.75 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q13 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 21 | 2.62 | 16 | 2.00 | 15 | 1.87 |
|  | **male** | 26 | 3.25 | 31 | 3.87 | 15 | 1.87 |
| 21-25 | **female** | 14 | 1.75 | 37 | 4.62 | 34 | 4.24 |
|  | **male** | 18 | 2.25 | 37 | 4.62 | 48 | 5.99 |
| 26-30 | **female** | 23 | 2.87 | 22 | 2.75 | 33 | 4.12 |
|  | **male** | 16 | 2.00 | 32 | 4.00 | 35 | 4.37 |
| 31-35 | **female** | 18 | 2.25 | 24 | 3.00 | 29 | 3.62 |
|  | **male** | 8 | 1.00 | 18 | 2.25 | 26 | 3.25 |
| 36-40 | **female** | 9 | 1.12 | 21 | 2.62 | 22 | 2.75 |
|  | **male** | 14 | 1.75 | 18 | 2.25 | 17 | 2.12 |
| 41-45 | **female** | 4 | 0.50 | 17 | 2.12 | 28 | 3.50 |
|  | **male** | 11 | 1.37 | 17 | 2.12 | 27 | 3.37 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q14 | | | | |  |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 1 | 0.12 | 13 | 1.62 | 38 | 4.74 |
|  | **male** | 4 | 0.50 | 29 | 3.62 | 39 | 4.87 |
| 21-25 | **female** | 6 | 0.75 | 22 | 2.75 | 57 | 7.12 |
|  | **male** | 17 | 2.12 | 25 | 3.12 | 61 | 7.62 |
| 26-30 | **female** | 6 | 0.75 | 8 | 1.00 | 64 | 7.99 |
|  | **male** | 5 | 0.62 | 10 | 1.25 | 68 | 8.49 |
| 31-35 | **female** | 5 | 0.62 | 21 | 2.62 | 45 | 5.62 |
|  | **male** | 6 | 0.75 | 12 | 1.50 | 34 | 4.24 |
| 36-40 | **female** | 4 | 0.50 | 8 | 1.00 | 40 | 4.99 |
|  | **male** | 2 | 0.25 | 13 | 1.62 | 34 | 4.24 |
| 41-45 | **female** | 1 | 0.12 | 11 | 1.37 | 37 | 4.62 |
|  | **male** | 7 | 0.87 | 11 | 1.37 | 37 | 4.62 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q15 | | | | | |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 8 | 1.00 | 32 | 4.00 | 12 | 1.50 |
|  | **male** | 11 | 1.37 | 41 | 5.12 | 20 | 2.50 |
| 21-25 | **female** | 17 | 2.12 | 49 | 6.12 | 19 | 2.37 |
|  | **male** | 18 | 2.25 | 49 | 6.12 | 36 | 4.49 |
| 26-30 | **female** | 9 | 1.12 | 53 | 6.62 | 16 | 2.00 |
|  | **male** | 14 | 1.75 | 44 | 5.49 | 25 | 3.12 |
| 31-35 | **female** | 10 | 1.25 | 41 | 5.12 | 20 | 2.50 |
|  | **male** | 10 | 1.25 | 26 | 3.25 | 16 | 2.00 |
| 36-40 | **female** | 6 | 0.75 | 31 | 3.87 | 15 | 1.87 |
|  | **male** | 6 | 0.75 | 28 | 3.50 | 15 | 1.87 |
| 41-45 | **female** | 5 | 0.62 | 34 | 4.24 | 10 | 1.25 |
|  | **male** | 10 | 1.25 | 36 | 4.49 | 9 | 1.12 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q16 | | | | | |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 18 | 2.25 | 11 | 1.37 | 23 | 2.87 |
|  | **male** | 20 | 2.50 | 16 | 2.00 | 36 | 4.49 |
| 21-25 | **female** | 19 | 2.37 | 33 | 4.12 | 33 | 4.12 |
|  | **male** | 31 | 3.87 | 32 | 4.00 | 40 | 4.99 |
| 26-30 | **female** | 26 | 3.25 | 22 | 2.75 | 30 | 3.75 |
|  | **male** | 16 | 2.00 | 40 | 4.99 | 27 | 3.37 |
| 31-35 | **female** | 9 | 1.12 | 23 | 2.87 | 39 | 4.87 |
|  | **male** | 10 | 1.25 | 19 | 2.37 | 23 | 2.87 |
| 36-40 | **female** | 11 | 1.37 | 23 | 2.87 | 18 | 2.25 |
|  | **male** | 9 | 1.12 | 20 | 2.50 | 20 | 2.50 |
| 41-45 | **female** | 6 | 0.75 | 14 | 1.75 | 29 | 3.62 |
|  | **male** | 11 | 1.37 | 12 | 1.50 | 32 | 4.00 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q17 | | | | | |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 7 | 0.87 | 32 | 4.00 | 13 | 1.62 |
|  | **male** | 4 | 0.50 | 46 | 5.74 | 22 | 2.75 |
| 21-25 | **female** | 16 | 2.00 | 36 | 4.49 | 33 | 4.12 |
|  | **male** | 9 | 1.12 | 56 | 6.99 | 38 | 4.74 |
| 26-30 | **female** | 6 | 0.75 | 54 | 6.74 | 18 | 2.25 |
|  | **male** | 8 | 1.00 | 55 | 6.87 | 20 | 2.50 |
| 31-35 | **female** | 10 | 1.25 | 33 | 4.12 | 28 | 3.50 |
|  | **male** | 8 | 1.00 | 23 | 2.87 | 21 | 2.62 |
| 36-40 | **female** | 3 | 0.37 | 32 | 4.00 | 17 | 2.12 |
|  | **male** | 6 | 0.75 | 27 | 3.37 | 16 | 2.00 |
| 41-45 | **female** | 2 | 0.25 | 32 | 4.00 | 15 | 1.87 |
|  | **male** | 7 | 0.87 | 25 | 3.12 | 23 | 2.87 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q18 | | | | | |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 9 | 1.12 | 20 | 2.50 | 23 | 2.87 |
|  | **male** | 7 | 0.87 | 38 | 4.74 | 27 | 3.37 |
| 21-25 | **female** | 15 | 1.87 | 41 | 5.12 | 29 | 3.62 |
|  | **male** | 18 | 2.25 | 31 | 3.87 | 54 | 6.74 |
| 26-30 | **female** | 21 | 2.62 | 24 | 3.00 | 33 | 4.12 |
|  | **male** | 18 | 2.25 | 24 | 3.00 | 41 | 5.12 |
| 31-35 | **female** | 15 | 1.87 | 27 | 3.37 | 29 | 3.62 |
|  | **male** | 10 | 1.25 | 23 | 2.87 | 19 | 2.37 |
| 36-40 | **female** | 5 | 0.62 | 18 | 2.25 | 29 | 3.62 |
|  | **male** | 8 | 1.00 | 26 | 3.25 | 15 | 1.87 |
| 41-45 | **female** | 5 | 0.62 | 23 | 2.87 | 21 | 2.62 |
|  | **male** | 9 | 1.12 | 25 | 3.12 | 21 | 2.62 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group | Gender | Q19 | | | | | |
|  |  | **Don't Know** | **%age** | **No** | **%age** | **Yes** | **%age** |
| 16-20 | **female** | 7 | 0.87 | 34 | 4.24 | 11 | 1.37 |
|  | **male** | 3 | 0.37 | 60 | 7.49 | 9 | 1.12 |
| 21-25 | **female** | 17 | 2.12 | 48 | 5.99 | 20 | 2.50 |
|  | **male** | 10 | 1.25 | 58 | 7.24 | 35 | 4.37 |
| 26-30 | **female** | 11 | 1.37 | 57 | 7.12 | 10 | 1.25 |
|  | **male** | 8 | 1.00 | 64 | 7.99 | 11 | 1.37 |
| 31-35 | **female** | 15 | 1.87 | 38 | 4.74 | 18 | 2.25 |
|  | **male** | 12 | 1.50 | 25 | 3.12 | 15 | 1.87 |
| 36-40 | **female** | 6 | 0.75 | 35 | 4.37 | 11 | 1.37 |
|  | **male** | 6 | 0.75 | 30 | 3.75 | 13 | 1.62 |
| 41-45 | **female** | 2 | 0.25 | 39 | 4.87 | 8 | 1.00 |
|  | **male** | 8 | 1.00 | 31 | 3.87 | 16 | 2.00 |

**23/9/2022 New Amendments:**

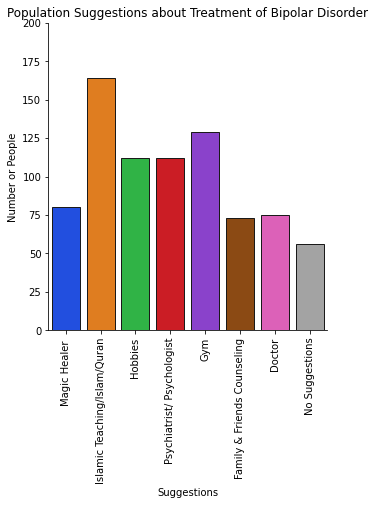
n\_by\_state = df\_shi.groupby(["Suggestion"])["Suggestion"].count()

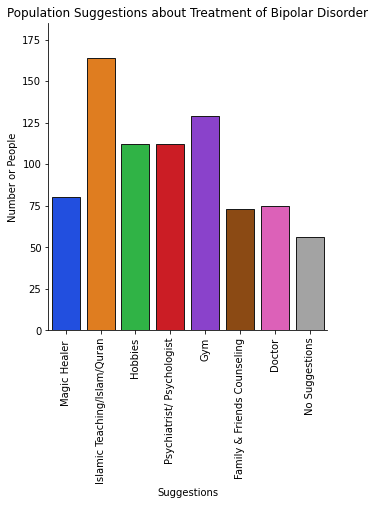
(n\_by\_state/801)\*100

n\_by\_state = df\_shi.groupby(["Suggestion"])["Suggestion"].count()

n\_by\_state

|  |  |  |
| --- | --- | --- |
| Suggestions | No. of People | %age |
| Doctor | 75 | 9.36 |
| Family & Friends Counseling | 73 | 9.11 |
| Gym | 129 | 16.10 |
| Hobbies | 112 | 13.98 |
| Islamic Teaching/Islam/Quran | 164 | 20.47 |
| Magic Healer | 80 | 9.99 |
| No Suggestions | 56 | 6.99 |
| Psychiatrist/Psychologist | 112 | 13.98 |

****

****

sns.catplot(x='Suggestion', kind="count",

            palette="bright", edgecolor=".10",

            data=df\_shi)

plt.title('Population Suggestions about Treatment of Bipolar Disorder')

plt.ylabel('Number or People')

plt.xlabel('Suggestions')

plt.ylim(0,185)

plt.xticks(rotation =90)

# plt.figure(figsize=(500,100))

|  |  |  |
| --- | --- | --- |
| Gender | No. of People | %age |
| Male | 414 | 51.68 |
| Female | 387 | 48.31 |
| Career |  |  |
| Unemployed | 717 | 89.51 |
| Employed | 48 | 5.99 |
| House Wife | 31 | 3.8 |
| Business | 5 | 0.62 |
| Education Level |  |  |
| University | 441 | 55.05 |
| College | 271 | 33.83 |
| School | 85 | 10.61 |
| Islamic Scholar | 4 | 0.49 |
| Residence Status |  |  |
| Rural | 355 | 55.68 |
| Urban | 446 | 44.32 |