In [60]:
```
import pandas as pd
import numpy as np
import plotly.express as px
import seaborn as sb

depressed = pd.read_csv(r'C:/Users/Master/Desktop/Jupyter/depressed.csv')

#depressed: [ Zero: No depressed] or [One: depressed]
#married_zero : No married  or 1: Married
# Sex 0: Man 1:Women
```

In [61]:
```
depressed
```

Out[61]:

	Survey_id	Ville_id	sex	Age	Married	Number_children	education_level	total_members	gained_asset	durable_asset	...	incoming_salary	incoming_own_farm	incoming_business	incoming_no
0	926	91	1	28	1	4	10	5	28912201	22861940	...	0	0	0	
1	747	57	1	23	1	3	8	5	28912201	22861940	...	0	0	0	
2	1190	115	1	22	1	3	9	5	28912201	22861940	...	0	0	0	
3	1065	97	1	27	1	2	10	4	52667108	19698904	...	0	1	0	
4	806	42	0	59	0	4	10	6	82606287	17352654	...	1	0	0	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1424	255	22	1	25	1	1	7	5	28912201	22861940	...	0	0	0	
1425	547	69	1	28	1	4	10	6	15711078	24023054	...	0	1	0	
1426	893	184	1	66	0	0	1	1	42440731	22861940	...	0	1	0	
1427	363	75	1	51	1	1	12	5	28912201	22861940	...	0	0	0	
1428	231	12	1	33	0	4	8	5	81678391	22861940	...	0	1	0	

1429 rows × 23 columns

In [62]:
```
np.unique(depressed['sex'],return_counts=True)
```

Out[62]:
```
(array([0, 1], dtype=int64), array([ 117, 1312], dtype=int64))
```

In [63]:
```
np.unique(depressed['Married'],return_counts = True)
#0  : No married  = 117
#1   Married = 1104
```

Out[63]:
```
(array([0, 1], dtype=int64), array([ 325, 1104], dtype=int64))
```

In [64]:
```
depressed['Number_children'].mean()
```

Out[64]:
```
2.8831350594821554
```

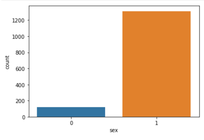
In [65]:
```
depressed['gained_asset'].mean()
```

Out[65]:
```
33634477.7396781
```

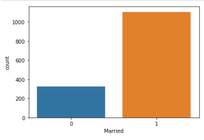
In [66]:
```
np.unique(depressed['depressed'],return_counts= True)
#[ Zero: No depressed]  = 1191
#[One: depressed] = 238
```

Out[66]:
```
(array([0, 1], dtype=int64), array([1191,  238], dtype=int64))
```

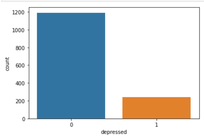
In [67]:
```
sb.countplot(x=depressed['sex']);
```



In [68]:
```
sb.countplot(x=depressed['Married']);
```



In [69]:
```
sb.countplot(x=depressed['depressed']);
```



In [70]:
```
#Man with depression
man = depressed.query('sex==0" & depressed=="1"')
man
```

Out[70]:

	Survey_id	Ville_id	sex	Age	Married	Number_children	education_level	total_members	gained_asset	durable_asset	...	incoming_salary	incoming_own_farm	incoming_business	incoming_no
6	849	130	0	34	0	1	9	3	41303144	21925041	...	0	0	0	
60	210	27	0	48	0	5	9	6	17142671	12235743	...	1	0	0	
69	164	15	0	19	1	1	10	5	28912201	22861940	...	0	0	0	
72	634	48	0	37	0	0	12	5	28912201	22861940	...	0	0	0	
81	145	30	0	28	1	1	10	3	41303144	41800116	...	0	1	0	
83	85	17	0	25	1	1	8	3	28912201	12091605	...	0	0	0	
92	349	27	0	43	0	0	6	5	28912201	22861940	...	0	0	0	
106	394	60	0	42	0	3	14	4	16521257	11739266	...	1	0	0	
201	1120	85	0	51	0	2	8	5	28912201	22861940	...	0	0	0	
250	264	39	0	43	1	2	10	6	82606293	10563738	...	0	1	0	
266	1340	78	0	73	0	3	10	5	28912201	22861940	...	0	0	0	
398	291	44	0	36	1	4	10	5	28912201	22861940	...	0	0	0	
458	473	60	0	52	0	2	9	4	28912201	53571411	...	1	0	0	
704	817	80	0	41	0	0	14	5	28912201	22861940	...	0	0	0	
740	345	73	0	22	1	2	11	5	28912201	22861940	...	0	0	0	
1076	1125	70	0	52	1	0	8	5	28912201	22861940	...	0	0	0	
1081	835	168	0	39	1	5	8	7	17968733	30188971	...	0	0	0	
1310	285	15	0	71	0	3	17	5	88885307	22861940	...	0	1	0	
1330	382	33	0	31	1	2	11	5	28912201	22861940	...	0	0	0	
1331	779	49	0	70	0	0	4	1	96092224	22861940	...	0	0	0	

20 rows × 23 columns

In [71]:
```
man['Age'].value_counts()
```

Out[71]:
```
43    2
52    2
31    1
36    1
37    1
70    1
39    1
73    1
42    1
22    1
28    1
48    1
51    1
19    1
41    1
71    1
25    1
34    1
Name: Age, dtype: int64
```

In [72]:
```
woman = depressed.query('sex=="1" & depressed=="1"')
woman
```

Out[72]:

	Survey_id	Ville_id	sex	Age	Married	Number_children	education_level	total_members	gained_asset	durable_asset	...	incoming_salary	incoming_own_farm	incoming_business	incoming_no
1	747	57	1	23	1	3	8	5	28912201	22861940	...	0	0	0	
10	540	52	1	84	0	0	1	5	28912201	22861940	...	0	0	0	
14	603	100	1	56	1	0	12	2	93596368	21140288	...	0	1	0	
20	1001	207	1	40	0	0	7	5	28912201	22861940	...	0	0	0	
21	1356	198	1	55	0	0	6	1	17142671	83440079	...	0	0	0	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1387	1062	214	1	28	1	4	12	6	30108896	22861940	...	0	0	0	
1396	28	3	1	49	1	2	5	4	12652142	22861940	...	0	1	0	
1407	201	12	1	59	0	0	7	5	28912201	22861940	...	0	0	0	
1415	1408	93	1	34	1	3	10	5	28912201	22861940	...	0	0	0	
1426	893	184	1	66	0	0	1	1	42440731	22861940	...	0	1	0	

218 rows × 23 columns

In [78]:
```
womandepre = woman['Age'].value_counts()
womandepre
```

Out[78]:
```
25    15
24    11
23    11
22    10
27     9
29     8
31     8
43     7
35     7
26     6
28     6
36     6
30     6
21     5
39     5
34     5
32     5
37     5
49     5
20     4
33     4
42     4
48     4
38     3
40     3
51     3
52     3
53     3
56     3
61     3
67     2
81     2
18     2
47     2
17     2
41     2
80     2
50     2
55     2
58     2
73     2
66     2
69     1
19     1
78     1
77     1
74     1
70     1
65     1
46     1
63     1
62     1
60     1
59     1
54     1
84     1
87     1
Name: Age, dtype: int64
```

In [77]:
```
depressed.drop('labor_primary', axis=1)
```

Out[77]:

	Survey_id	Ville_id	sex	Age	Married	Number_children	education_level	total_members	gained_asset	durable_asset	...	other_expenses	incoming_salary	incoming_own_farm	incoming_busin
0	926	91	1	28	1	4	10	5	28912201	22861940	...	28203066	0	0	
1	747	57	1	23	1	3	8	5	28912201	22861940	...	28203066	0	0	
2	1190	115	1	22	1	3	9	5	28912201	22861940	...	28203066	0	0	
3	1065	97	1	27	1	2	10	4	52667108	19698904	...	44042267	0	1	
4	806	42	0	59	0	4	10	6	82606287	17352654	...	74503502	1	0	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1424	255	22	1	25	1	1	7	5	28912201	22861940	...	28203066	0	0	
1425	547	69	1	28	1	4	10	6	15711078	24023054	...	71588707	0	1	
1426	893	184	1	66	0	0	1	1	42440731	22861940	...	56534257	0	1	
1427	363	75	1	51	1	1	12	5	28912201	22861940	...	28203066	0	0	
1428	231	12	1	33	0	4	8	5	81678391	22861940	...	10730298	0	1	

1429 rows × 22 columns